AGENDA
CITY OF EL CENTRO
CITY COUNCIL
TUESDAY, JANUARY 20, 2026

City Hall | **Regular Meeting** | **3:30 PM**

CITY HALL
COUNCIL CHAMBERS
1275 MAIN STREET
EL CENTRO, CA 92243

The public may attend in person. Any member of the public attending in person and wishing to make a comment is asked to complete a speaker slip and follow the instructions below regarding "Notice to the Public". Any member of the public is invited to submit public comments in advance of the meeting to be answered at the meeting. Please email your questions to CityClerk@cityofelcentro.org or call 760-337-4515 by January 20, 2026.

COUNCIL MEMBERS, STAFF AND THE PUBLIC MAY ATTEND VIA ZOOM.

To participate and make a public comment in person, via Zoom or telephone, please raise your hand, speak up and introduce yourself.

Join Zoom Meeting:
https://us06web.zoom.us/j/4180375132?pwd=Rmo5UjZ1cWdyV1VoWUhSZWp6R0tVZz09&omn=83422979042

Optional dial-in number:
Meeting ID: 418 037 5132 Passcode: 5iHJYM

Public comments via Zoom are subject to the same time limits as those in person.

Mayor and Council Members may be reached at (760) 336-8989.

Mayor:	**Michael Crankshaw**	**City Manager: Robert Sawyer**
Mayor Pro-Tem:	**Claudia Camarena**	**City Attorney: Joanna Hoff**
Council Members:	**Sylvia Marroquin**	**City Clerk: Norma Wyles**
	Marty Ellett	
	Sonia Carter	

3:30 PM CLOSED SESSION - CONFERENCE ROOM "A":

ROLL CALL:

CLOSED SESSION PUBLIC MEETING:
Any member of the public wishing to address the City Council on any matter appearing in the closed session may do so at this time. Unless the Mayor extends the time limit, remarks shall be limited to three (3) minutes. Additional opportunities for Public Comment will be given at the end of the meeting.

CITY COUNCIL ADJOURNS INTO CLOSED SESSION:

CITY COUNCIL CLOSED SESSION:

PUBLIC EMPLOYEE APPOINTMENT
Pursuant to Government Code Section 54957
Title: City Attorney

CONFERENCE WITH LABOR NEGOTIATORS
Pursuant to Government Code Section 54957.6
Agency Designated Representatives: Patrick Clark
Employee Organization: Firefighters Association and General Employees Unit

NOTICE TO THE PUBLIC

This is a public meeting. If there is an item on the agenda on which you wish to be heard, you are asked to complete a blue speaker slip and submit it to the City Clerk prior to the start of the meeting. **Persons wishing to address the Council are not required to identify themselves (Gov't Code § 54953.3); however, this information assists the Mayor by ensuring that all persons wishing to address the Council are recognized and also assists the City Clerk in preparing the City Council meeting minutes.** When the item is announced and your name is called by the Mayor, please step to the podium and state your name for the record. Unless the Mayor extends the time, there is a three (3) minute time limit for each public presentation. If you wish to address the Council concerning any other matter not appearing on the agenda, you may do so during the public comment portion of the agenda. **However, you may not show a visual presentation without review of that material. If you do so, you will be considered out of order.**

* Any information provided on the "Speaker Slip" is voluntary and will be public record

6:00 OPEN SESSION

ALL TIMES ARE APPROXIMATE AND MAY VARY:

CALL TO ORDER:

ROLL CALL BY CITY CLERK:

INVOCATION:

PLEDGE OF ALLEGIANCE:

CITY ATTORNEY REPORT ON CLOSED SESSION:

(TIME MAY VARY) PUBLIC COMMENTS:

The City Council welcomes your input. At this time, members of the public may address the City Council on any matter not listed on the posted agenda. Pursuant to the Brown Act, no action will be taken on any issue brought forth under Public Comments. We ask that you please complete a "Speaker Slip" and submit it to the City Clerk prior to the start of the meeting. Although you are not required to identify yourself (Gov't Code §54953.3); this information on the "Speaker Slip" assists the Mayor that all persons wishing to address the Council are recognized and also assists the City Clerk in preparing the City Council meeting minutes. Unless the Mayor extends the time, there is a three (3) minute time limit for each public presentation. * Any information provided on the "Speaker Slip" is voluntary and will be public record.

CONSENT AGENDA (ITEMS 1-10):

1. Approve Warrant Registers for the Month of December 2025.

2. Approve Payroll Registers for the month of December 2025.

3. Approve the Treasurer's Report for the month of December 2025.

4. Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO TERMINATING RESOLUTION NO. 25-50 PROCLAIMING A LOCAL EMERGENCY FOR REPAIRS OF THE SEWER LIFT STATION AT 3RD STREET AND ROSS AVENUE IN THE CITY OF EL CENTRO.

5. Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH THE HOLT GROUP, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

6. Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH DYNAMIC CONSULTING ENGINEERS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

7. Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH NICKLAUS ENGINEERING, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

8. Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH PSOMAS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

9. 2026 Streets Overlay Project - Approval of Plans and Specifications.

10. Adopt Resolution 26- A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, APPROVING AN AGREEMENT BETWEEN THE CITY OF EL CENTRO AND BURKE, WILLIAMS, & SORENSEN, LLP FOR CITY ATTORNEY SERVICES.

NEW BUSINESS:

11. Presentation and Overview of Proposed Fiber Internet Services by Vero Fiber

    Presentation: Adriana Nava, Community Services Director

    Recommendation:

12. Updated Home Investment Partnership Program (HOME) Program Guidelines.

    Presentation: Adriana Nava, Community Services Director

    Recommendation:
    Approve Resolution No. 26- RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO ADOPTING THE UPDATED HOME INVESTMENT PARTNERSHIPS

PROGRAM (HOME) OWNER-OCCUPIED REHABILITATION PROGRAM GUIDELINES

13. Discussion and any necessary action regarding the approval of bid documents for the Veterans Wall Phase II Project.

    Presentation: Adriana Nava, Community Services Director

    Recommendation:
    Approve Bid Documents for the Veterans Wall Phase 2 and authorize the Community Services Department to send project out to bid.

14. Resolution Declaring Emergency - WWTP Bar Screen Failure

    Presentation: Abraham Campos, Public Works Director/City Engineer

    Recommendation:
    Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO DECLARING THE NEED FOR AND AUTHORIZING THE EMERGENCY REPAIR OF THE WASTEWATER TREATMENT PLANT BAR SCREEN

15. Adoption of the City's Water Master Plan and Sewer Master Plan

    Presentation: Abraham Campos, Public Works Director/City Engineer

    Recommendation:
    Adopt the Water Master Plan and Sewer Master Plan as presented, and authorize staff to utilize the plans as guiding documents for future capital improvement planning, budgeting, grant applications, and coordination with the City's water and sewer rate study.

LEGISLATIVE ACTION:

INFORMATIONAL ITEMS:

16. Received and referred to Community Development Department, Application for Alcoholic Beverage License — El Centro Fueling Inc., El Centro Fueling Inc. 3003 S 4th St. El Centro, Ca 92243

17. Received and referred to Community Development Department, Application for Alcoholic Beverage License — Casino Azul LLC 1510 Chophouse 1510 Adams Ave El Centro, CA 92243-1902

18. Certificate of Mailing Notice of Application to the City, County and Municipal Governmental Agencies. Southern California Gas Company.

TASK FORCE REPORTS AND MAYOR/CONFERENCE REPORTS - COUNCIL MEMBER REPORTS:

CITY MANAGER REPORT:

ADJOURNMENT:

Materials related to an item on this Agenda submitted to the City Council after distribution of the agenda packet will be available for public inspection at the Office of the City Clerk, 1275 Main Street, El Centro, California 92243, Monday-Friday during normal business hours.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, you should contact the office of the City Clerk at (760) 337-4515. Notification at least 48 hours prior to the meeting will enable the City to make reasonable arrangements to assure accessibility to this meeting.

Approve Warrant Registers for the Month of December 2025.

CITY MANAGER'S RECOMMENDATION:

FISCAL IMPACT:

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

BACKGROUND:

DISCUSSION:

CONCLUSION:

ATTACHMENTS:
1. December 2025

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 120525 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
7897	360 BUSINESS PRODUCTS									
	217878	11/06/25		22602997	102684	P	12/05/25	10111020 620101	OFFICE SUPPLIES	203.61
	INVOICE: WO-48839-1									
	VENDOR TOTALS		5,766.41 YTD INVOICED					3,911.56 YTD PAID		203.61
9324	ACE HARDWARE CORPORATION									
	217879	10/31/25		22602740	102685	P	12/05/25	10152020 620130	MAINTENANCE SUPPLIES	8.65
	INVOICE: J22028									
	217880	10/30/25		22602740	102685	P	12/05/25	10152050 620130	MAINTENANCE SUPPLIES	32.46
	INVOICE: J21579									
	217881	10/13/25		22602741	102685	P	12/05/25	10152110 630101	BUILDING MAINT	53.17
	INVOICE: J14966									
	217882	10/29/25		22602927	102685	P	12/05/25	10118010 620130	MAINTENANCE SUPPLIES	11.44
	INVOICE: J21149									
	217883	11/05/25		22602927	102685	P	12/05/25	10118010 620130	MAINTENANCE SUPPLIES	30.30
	INVOICE: J24264									
	217884	11/05/25		22602927	102685	P	12/05/25	10118010 620140	SMALL TOOLS	10.81
	INVOICE: J24152									
	217885	11/07/25		22603013	102685	P	12/05/25	10153010 630101	BUILDING MAINT.	8.19
	INVOICE: J24999									
	217886	11/07/25		22603013	102685	P	12/05/25	10153010 630101	BUILDING MAINT.	6.26
	INVOICE: J24848									
	217887	11/10/25		22603033	102685	P	12/05/25	10123010 630101	BUILDING MAINT.	103.90
	INVOICE: J24435									
	217888	11/15/25		22603033	102685	P	12/05/25	10123010 630101	BUILDING MAINT.	81.17
	INVOICE: J27747									
	217889	11/05/25		22603033	102685	P	12/05/25	10123010 630101	BUILDING MAINT.	13.61
	INVOICE: J24272									
	218107	11/20/25		22603117	102685	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	81.77
	INVOICE: J29676									
	218108	09/16/25		22603116	102685	P	12/05/25	50295250 610104	WATER	18.05
	INVOICE: J05602									
	VENDOR TOTALS		5,660.99 YTD INVOICED					3,559.64 YTD PAID		459.78
3933	ACME SAFETY & SUPPLY CO.									
	218109	10/31/25		22603083	102686	P	12/05/25	10132010 620121	TRAFFIC SIGN - HDW	649.50
	INVOICE: 171737-00									
	218110	11/07/25		22603083	102686	P	12/05/25	10132010 620119	TRAFFIC PAINT	137.91
	INVOICE: 171833-00									
	VENDOR TOTALS		.00 YTD INVOICED					925.32 YTD PAID		787.41
6143	ADVANCE SERVICE INC.									
	217890	10/01/25		22602925	102687	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	1,400.00
	INVOICE: 44249									
	217891	10/01/25		22602925	102687	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	900.00
	INVOICE: 44250									
	217892	11/05/25		22602979	102687	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	1,400.00
	INVOICE: 44343									

CITY OF EL CENTRO

PAID INVOICES REPORT

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	217893	11/05/25		22602979	102687	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	900.00
	INVOICE: 44344									
	VENDOR TOTALS		25,978.00 YTD INVOICED					4,600.00 YTD PAID		4,600.00
8025	AIR EXHAUST, CO.									
	217894	10/29/25		22602732	102688	P	12/05/25	10152050 610113	PROFESSIONAL FEES (O)	62.00
	INVOICE: 0523178									
	VENDOR TOTALS		104.00 YTD INVOICED					62.00 YTD PAID		62.00
10007	AMAZON CAPITAL SERVICES, INC.									
	217895	10/21/25		22602747	102689	P	12/05/25	29951010 610135	SPECIAL EVENTS	586.48
	INVOICE: 174X-QRVM-JV4F									
	217896	10/27/25		22602747	102689	P	12/05/25	29951010 610135	SPECIAL EVENTS	108.19
	INVOICE: 1CXK-PDML-N9JL									
	217897	10/28/25		22602747	102689	P	12/05/25	10152040 620115	ATHLETIC FIELD SUPP	333.76
	INVOICE: 11MF-WRGC-TLYT									
	217898	10/28/25		22602747	102689	P	12/05/25	29951010 610135	SPECIAL EVENTS	616.98
	INVOICE: 134X-R7CV-QG4V									
	217899	10/28/25		22602776	102689	P	12/05/25	10151010 610129	OTHER EXPENSE	231.31
	INVOICE: 11LC-9GXP-LW39									
	217900	10/20/25		22602776	102689	P	12/05/25	10151010 610129	OTHER EXPENSE	511.67
	INVOICE: 1NNR-PTPL-F4C1									
	217901	10/29/25		22602830	102689	P	12/05/25	29951010 610135	SPECIAL EVENTS	299.53
	INVOICE: 1DY6-93L4-4PGG									
	217902	10/21/25		22602830	102689	P	12/05/25	29951010 610135	SPECIAL EVENTS	178.59
	INVOICE: 1KPH-VPN3-J4PN									
	217903	10/21/25		22602830	102689	P	12/05/25	29951010 610135	SPECIAL EVENTS	83.88
	INVOICE: 1LHV-HWFN-PNXX									
	217904	11/07/25		22602968	102689	P	12/05/25	10131010 620105	COMPUTER SUPPLIES	199.90
	INVOICE: 14TD-Q636-T33J									
	217904	11/07/25		22602968	102689	P	12/05/25	50195160 620105	COMPUTER SUPPLIES	199.90
	INVOICE: 14TD-Q636-T33J									
	217904	11/07/25		22602968	102689	P	12/05/25	50295280 620105	COMPUTER SUPPLIES	199.91
	INVOICE: 14TD-Q636-T33J									
	217905	11/07/25		22602968	102689	P	12/05/25	10131010 620101	OFFICE SUPPLIES	11.89
	INVOICE: 14TD-Q636-RDCW									
	217905	11/07/25		22602968	102689	P	12/05/25	50195160 620101	OFFICE SUPPLIES	11.91
	INVOICE: 14TD-Q636-RDCW									
	217905	11/07/25		22602968	102689	P	12/05/25	50295280 620101	OFFICE SUPPLIES	11.89
	INVOICE: 14TD-Q636-RDCW									
	217906	11/15/25		22602968	102689	P	12/05/25	10131010 620101	OFFICE SUPPLIES	5.63
	INVOICE: 11PL-JKQW-XJNQ									
	217906	11/15/25		22602968	102689	P	12/05/25	50195160 620101	OFFICE SUPPLIES	5.63
	INVOICE: 11PL-JKQW-XJNQ									
	217906	11/15/25		22602968	102689	P	12/05/25	50295280 620101	OFFICE SUPPLIES	5.65
	INVOICE: 11PL-JKQW-XJNQ									
	217907	11/06/25		22602968	102689	P	12/05/25	10131010 620101	OFFICE SUPPLIES	6.00
	INVOICE: 1P7F-VPXY-7VXH									
	217907	11/06/25		22602968	102689	P	12/05/25	50195160 620101	OFFICE SUPPLIES	6.00

CITY OF EL CENTRO

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	INVOICE: 1P7F-VPXY-7VXH									
	217907	11/06/25		22602968	102689	P	12/05/25	50295280 620101	OFFICE SUPPLIES	6.00
	INVOICE: 1P7F-VPXY-7VXH									
	VENDOR TOTALS		15,879.49 YTD INVOICED					5,405.81 YTD PAID		3,620.70
7928	AMERICA'S FINEST FIRE PROTECTION									
	218111	10/08/25		22603132	102690	P	12/05/25	10153010 630101	BUILDING MAINT.	578.41
	INVOICE: 18M 935041									
	218112	10/08/25		22603131	102690	P	12/05/25	10153010 630101	BUILDING MAINT.	359.80
	INVOICE: 18M 935042									
	VENDOR TOTALS		.00 YTD INVOICED					5,645.95 YTD PAID		938.21
7	AMERICAN LINEN									
	217908	11/05/25		22603029	102691	P	12/05/25	10123010 620129	LAUNDRY SERVICE & SUPPLY	78.80
	INVOICE: LYUM1920015									
	217909	10/28/25		22602821	102691	P	12/05/25	10121010 630101	BUILDING MAINT.	204.94
	INVOICE: LYUM1918197									
	VENDOR TOTALS		1,370.31 YTD INVOICED					1,809.30 YTD PAID		283.74
6266	AT&T MOBILITY									
	217910	11/03/25		22603032	102692	P	12/05/25	10123010 610103	TELEPHONE	1,107.22
	INVOICE: 287312326813X111125									
	VENDOR TOTALS		8,979.74 YTD INVOICED					8,736.27 YTD PAID		1,107.22
4170	AUTOZONE, INC.									
	217912	11/14/25		22602982	102693	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	67.71
	INVOICE: 2803994396									
	217913	11/06/25		22602970	102693	P	12/05/25	60496400 630113	TIRES & BATTERIES	72.35
	INVOICE: 2803984100									
	217914	11/12/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	43.83
	INVOICE: 2803991639									
	217915	11/12/25		22602970	102693	P	12/05/25	60496400 630113	TIRES & BATTERIES	192.51
	INVOICE: 2803991552									
	217916	11/12/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	167.75
	INVOICE: 2803992273									
	217917	11/12/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	10.48
	INVOICE: 2803991586									
	217918	11/12/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	212.50
	INVOICE: 2803991585									
	217919	11/12/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	112.62
	INVOICE: 2803991996									
	217920	11/12/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	528.94
	INVOICE: 2803992098									
	217921	11/12/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	175.01
	INVOICE: 3362402690									
	217922	11/13/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	278.36
	INVOICE: 2803993589									

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WARRANT: 120525 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
217923	11/14/25		22602970	102693	P	12/05/25	60496400 630114	PARTS	47.35
INVOICE: 2803995026									
217924	11/04/25			102693	P	12/05/25	60496400 630114	PARTS	-24.52
INVOICE: 2803981876									
217925	11/14/25			102693	P	12/05/25	60496400 630114	PARTS	-43.47
INVOICE: 2803995005									
217926	11/14/25			102693	P	12/05/25	60496400 630114	PARTS	-43.83
INVOICE: 2803995006									
217927	11/14/25			102693	P	12/05/25	60496400 630114	PARTS	-86.95
INVOICE: 2803995007									
218176	10/27/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	76.13
INVOICE: 2803971702									
218177	10/27/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	66.43
INVOICE: 2803971857									
218178	10/27/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	265.17
INVOICE: 2803971559									
218179	10/28/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	82.51
INVOICE: 2803972780									
218180	10/30/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	23.96
INVOICE: 3362393122									
218181	10/31/25		22602810	102693	P	12/05/25	60496400 630113	TIRES & BATTERIES	385.02
INVOICE: 2803976490									
218182	11/03/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	21.49
INVOICE: 2803980219									
218183	11/03/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	335.55
INVOICE: 2803980534									
218184	11/03/25		22602810	102693	P	12/05/25	60496400 630114	PARTS	2.44
INVOICE: 2803980647									
218185	10/28/25			102693	P	12/05/25	60496400 630114	PARTS	-66.43
INVOICE: 2803972795									
218186	10/27/25			102693	P	12/05/25	60496400 630113	TIRES & BATTERIES	-158.95
INVOICE: 2803971307									
218187	09/22/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	385.80
INVOICE: 2803925254									
218189	09/23/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	65.55
INVOICE: 2803927008									
218190	09/23/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	90.37
INVOICE: 2803926897									
218191	09/29/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	355.55
INVOICE: 2803934204									
218192	09/29/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	187.61
INVOICE: 2803934372									
218193	10/01/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	26.19
INVOICE: 2803936921									
218194	10/01/25		22602291	102693	P	12/05/25	60496400 630113	TIRES & BATTERIES	379.61
INVOICE: 2803936886									
218195	10/01/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	20.06
INVOICE: 2803936914									
218196	10/01/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	145.35
INVOICE: 2803936923									
218197	10/01/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	36.42

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	INVOICE: 2803936928									
	218198	10/01/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	109.90
	INVOICE: 2803936979									
	218199	10/02/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	136.48
	INVOICE: 2803938673									
	218200	10/02/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	182.13
	INVOICE: 2803938241									
	218201	10/03/25		22602291	102693	P	12/05/25	60496400 630114	PARTS	94.79
	INVOICE: 2803939680									
	218202	10/02/25			102693	P	12/05/25	60496400 630114	PARTS	-10.13
	INVOICE: 2803938420									
	218203	09/23/25			102693	P	12/05/25	60496400 630114	PARTS	-9.30
	INVOICE: 2803927159									
	218204	09/23/25			102693	P	12/05/25	60496400 630114	PARTS	-65.55
	INVOICE: 2803927100									
	VENDOR TOTALS		2,724.51 YTD INVOICED					6,058.60 YTD PAID		4,874.79
10631	BADGE FRAME, INC.									
	217928	11/04/25		22602482	102694	P	12/05/25	22121010 640124	CONTRIBUTIONS	2,066.11
	INVOICE: 43486									
	VENDOR TOTALS		.00 YTD INVOICED					8,686.47 YTD PAID		2,066.11
5875	BEJARANO'S PORTABLE WELDING									
	217929	09/12/25		22602945	102695	P	12/05/25	50195110 750023	HURRICANE BLOWERS	3,800.00
	INVOICE: 067									
	VENDOR TOTALS		.00 YTD INVOICED					3,800.00 YTD PAID		3,800.00
9930	BEST VERSION MEDIA, LLC									
	217930	11/10/25		22602831	102696	P	12/05/25	10152020 610113	PROFESSIONAL FEES (O)	197.40
	INVOICE: 322574-202601									
	217930	11/10/25		22602831	102696	P	12/05/25	10152040 610113	PROFESSIONAL FEES (O)	197.40
	INVOICE: 322574-202601									
	217930	11/10/25		22602831	102696	P	12/05/25	10152060 610106	ADVERTISING	197.40
	INVOICE: 322574-202601									
	217931	10/10/25		22602746	102696	P	12/05/25	10152020 610113	PROFESSIONAL FEES (O)	197.40
	INVOICE: 322574-202512									
	217931	10/10/25		22602746	102696	P	12/05/25	10152040 610113	PROFESSIONAL FEES (O)	197.40
	INVOICE: 322574-202512									
	217931	10/10/25		22602746	102696	P	12/05/25	10152060 610106	ADVERTISING	197.40
	INVOICE: 322574-202512									
	VENDOR TOTALS		592.20 YTD INVOICED					1,184.40 YTD PAID		1,184.40
9851	BLU BULK DELIVERY									
	217932	10/15/25		22602778	102697	P	12/05/25	10151010 610113	PROFESSIONAL FEES (O)	37.15
	INVOICE: 2686473									
	217933	10/31/25		22602778	102697	P	12/05/25	10151010 610113	PROFESSIONAL FEES (O)	5.00
	INVOICE: 2688499									

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	VENDOR TOTALS		187.20 YTD INVOICED						121.25 YTD PAID		42.15
10520	BLUE TRITON BRANDS INC										
	217934	11/04/25		22602753	102698	P	12/05/25	10152020	610129	OTHER EXPENSE	247.73
	INVOICE: 05J8730033352										
	217934	11/04/25		22602753	102698	P	12/05/25	10152110	610113	PROFESSIONAL FEES/OTHER	247.73
	INVOICE: 05J8730033352										
	217935	10/07/25		22602656	102699	P	12/05/25	50195110	620137	LAB TESTS & SUPPLIES	334.69
	INVOICE: 05J8730278003										
	VENDOR TOTALS		318.19 YTD INVOICED						1,117.93 YTD PAID		830.15
3183	BORDER TACTICAL										
	217936	11/07/25		22602814	102700	P	12/05/25	10121010	610141	EXPLORER PROGRAM	876.18
	INVOICE: A220876										
	VENDOR TOTALS		41.00 YTD INVOICED						876.18 YTD PAID		876.18
9931	BRAWLEY ANALYTICAL, INC.										
	217937	11/17/25		22602983	102701	P	12/05/25	50295210	620137	LAB TESTS & SUPPLIES	334.50
	INVOICE: 001588										
	218113	11/17/25		22603085	102701	P	12/05/25	50195110	620137	LAB TESTS & SUPPLIES	2,040.00
	INVOICE: 001580										
	VENDOR TOTALS		3,822.50 YTD INVOICED						4,722.50 YTD PAID		2,374.50
6276	C R & R										
	218114	11/01/25		22603047	102702	P	12/05/25	10118020	630101	BUILDING MAINT.	632.42
	INVOICE: 000463354										
	VENDOR TOTALS		195,805.83 YTD INVOICED						192,534.26 YTD PAID		632.42
5783	CALTEST ANALYTICAL LABORATORY										
	218116	11/19/25		22603119	102703	P	12/05/25	50295210	620137	LAB TESTS & SUPPLIES	82.00
	INVOICE: 735120										
	VENDOR TOTALS		443.00 YTD INVOICED						443.00 YTD PAID		82.00
10671	CAMPOS, MARTIN HUGO										
	217875	11/25/25			102704	P	12/05/25	501	104001	ACCOUNTS RECEIVABLE	25.08
	INVOICE: 217875										
	VENDOR TOTALS		.00 YTD INVOICED						25.08 YTD PAID		25.08
1846	CARLOS NEON SIGNS										
	217938	11/06/25		22602893	102705	P	12/05/25	10152010	610113	PROFESSIONAL FEES (O)	70.00
	INVOICE: 1320										
	217938	11/06/25		22602893	102705	P	12/05/25	29951010	610135	SPECIAL EVENTS	97.79
	INVOICE: 1320										

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	VENDOR TOTALS	265.21 YTD INVOICED						5,678.48 YTD PAID			167.79
1631	CATHOLIC CHARITIES										
	218117	11/14/25		22603106	102706	P	12/05/25	25261500	640124	CONTRIBUTIONS	17,652.90
	INVOICE:	13-OCTOBER 2025									
	VENDOR TOTALS	17,885.78 YTD INVOICED						17,652.90 YTD PAID			17,652.90
10390	JONATHAN CAZARES										
	218118	08/02/25		22603064	102707	P	12/05/25	29951010	610135	SPECIAL EVENTS	250.00
	INVOICE:	00I5448									
	VENDOR TOTALS	.00 YTD INVOICED						1,180.00 YTD PAID			250.00
4323	CDW GOVERNMENT, INC.										
	217939	11/20/25		22602989	102708	P	12/05/25	10113040	610121	DUES & SUBSCRIPTIONS	4,260.12
	INVOICE:	AG9ZT4N									
	217939	11/20/25		22602989	102708	P	12/05/25	50195160	610121	DUES & SUBSCRIPTIONS	4,260.12
	INVOICE:	AG9ZT4N									
	217939	11/20/25		22602989	102708	P	12/05/25	50295280	610121	DUES & SUBSCRIPTIONS	4,260.12
	INVOICE:	AG9ZT4N									
	217940	11/22/25		22602988	102708	P	12/05/25	10113040	610121	DUES & SUBSCRIPTIONS	4,210.00
	INVOICE:	AG98P2F									
	217940	11/22/25		22602988	102708	P	12/05/25	50195160	610121	DUES & SUBSCRIPTIONS	4,210.00
	INVOICE:	AG98P2F									
	217940	11/22/25		22602988	102708	P	12/05/25	50295280	610121	DUES & SUBSCRIPTIONS	4,210.00
	INVOICE:	AG98P2F									
	217941	09/23/25		22601369	102708	P	12/05/25	26152140	720109	COMPUTERS	839.39
	INVOICE:	AG16D8G									
	218246	11/18/25		22602708	102708	P	12/05/25	10115010	720109	COMPUTERS	871.38
	INVOICE:	AG9NB9F									
	218247	11/20/25		22602708	102708	P	12/05/25	10115010	720109	COMPUTERS	32.91
	INVOICE:	AG97T2T									
	VENDOR TOTALS	11,352.98 YTD INVOICED						30,684.92 YTD PAID			27,154.04
10669	CERVANTES, ENRIQUE										
	217873	11/25/25			102709	P	12/05/25	504	104001	ACCOUNTS RECEIVABLE	1.27
	INVOICE:	217873									
	VENDOR TOTALS	.00 YTD INVOICED						132.44 YTD PAID			1.27
6050	CHARTER COMMUNICATIONS										
	217942	10/14/25		22602718	102710	P	12/05/25	10152050	610113	PROFESSIONAL FEES (O)	129.51
	INVOICE:	189471901101425									
	217943	10/14/25		22602891	102710	P	12/05/25	10121010	610113	PROFESSIONAL FEES (O)	187.34
	INVOICE:	189473501101425									
	218119	11/14/25		22603136	102710	P	12/05/25	20434060	610113	PROFESSIONAL FEES/OTHER	139.99
	INVOICE:	189473901111425									

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	VENDOR TOTALS	2,708.71 YTD INVOICED						705.35 YTD PAID			456.84
6403	ADRIAN CHILPA										
	217944	09/23/25		22601744	102711	P	12/05/25	10121050	610123	TRAINING	307.50
	INVOICE: 217944										
	VENDOR TOTALS	307.50 YTD INVOICED						615.00 YTD PAID			307.50
10670	CHRISTADOSS, SANDEEP										
	217874	11/25/25			102712	P	12/05/25	504	104001	ACCOUNTS RECEIVABLE	62.44
	INVOICE: 217874										
	VENDOR TOTALS	.00 YTD INVOICED						62.44 YTD PAID			62.44
54	CITY OF EL CENTRO-WATER DEPT.										
	218206	10/25/25		22602854	102713	P	12/05/25	10118020	610104	WATER	588.25
	INVOICE: 1892088										
	VENDOR TOTALS	1,532.41 YTD INVOICED						2,412.03 YTD PAID			588.25
650	CLINICAL LAB OF SAN BERNARDINO, INC.										
	217945	11/10/25		22602931	102714	P	12/05/25	50195110	620137	LAB TESTS & SUPPLIES	610.00
	INVOICE: 25J1935-ELC01										
	VENDOR TOTALS	800.00 YTD INVOICED						680.00 YTD PAID			610.00
1371	CONSOLIDATED ELEC DISTRIBUTORS, INC.										
	217947	09/17/25		22602948	102715	P	12/05/25	50195110	630120	WATER PUMPS MAINTENANCE	294.37
	INVOICE: 1964-1018312										
	VENDOR TOTALS	.00 YTD INVOICED						294.37 YTD PAID			294.37
5483	CONTROL SYSTEM ENGINEERING INC										
	217948	10/25/25		22602947	102716	P	12/05/25	50195110	630111	OTHER FACILITY MAINT.	5,833.34
	INVOICE: 2025-1025										
	VENDOR TOTALS	.00 YTD INVOICED						5,833.34 YTD PAID			5,833.34
6113	CORE & MAIN LP										
	217949	10/14/25		22602937	102717	P	12/05/25	50195110	630117	METER MAINTENANCE	2,516.64
	INVOICE: X921787										
	217950	06/25/25		22602952	102717	P	12/05/25	50195100	620139	PIPE FITTINGS	1,208.37
	INVOICE: X229775										
	VENDOR TOTALS	6,841.74 YTD INVOICED						3,725.01 YTD PAID			3,725.01
4676	COUNTY BURNER & MACHINERY CORP										
	217951	10/23/25		22602965	102718	P	12/05/25	50295210	630108	FIELD/SHOP EQUIP. MAINT.	4,010.98
	INVOICE: 00112951										

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	VENDOR TOTALS			.00 YTD INVOICED				4,010.98 YTD PAID		4,010.98
2470	COUNTY OF SAN DIEGO, RCS									
	217952	11/01/25		22602829	102719	P	12/05/25	10151010 630107	COMMUNICATION EQUIPMENT M	213.50
	INVOICE: 26ELCNCSN04									
	217952	11/01/25		22602829	102719	P	12/05/25	10152010 630107	COMUNICATION EQUIP PMAINT	152.50
	INVOICE: 26ELCNCSN04									
	217952	11/01/25		22602829	102719	P	12/05/25	10152060 630107	COMUNICATION EQUIP PMAINT	30.50
	INVOICE: 26ELCNCSN04									
	VENDOR TOTALS			4,071.00 YTD INVOICED				8,066.74 YTD PAID		396.50
8103	DAMMARELL INDUSTRIES									
	217953	10/16/25		22602949	102720	P	12/05/25	50195110 730102	TRUCKS	3,788.75
	INVOICE: 3171									
	VENDOR TOTALS			.00 YTD INVOICED				3,788.75 YTD PAID		3,788.75
1871	DANIELS TIRE SERVICE, INC.									
	218207	09/15/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	427.84
	INVOICE: 227072455									
	218208	09/29/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	420.55
	INVOICE: 227072919									
	218209	10/17/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	185.17
	INVOICE: 227073332									
	218210	10/22/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	323.80
	INVOICE: 227073397									
	218211	10/24/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	352.07
	INVOICE: 227073302									
	218212	10/21/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	101.79
	INVOICE: 227073375									
	218213	10/30/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	599.79
	INVOICE: 227073556									
	218214	10/31/25		22602953	102721	P	12/05/25	60496400 630113	TIRES & BATTERIES	654.68
	INVOICE: 227073481									
	VENDOR TOTALS			3,627.10 YTD INVOICED				5,111.88 YTD PAID		3,065.69
852	DEPARTMENT OF MOTOR VEHICLES									
	217958	11/17/25		22602876	102724	P	12/05/25	10121010 610114	PROFESSIONAL FEES (D)	32.00
	INVOICE: 4ZJSL1412B1001895									
	217959	11/17/25		22602876	102725	P	12/05/25	10121010 610114	PROFESSIONAL FEES (D)	32.00
	INVOICE: 1R9BR1013JJ482239									
	217960	11/17/25		22602876	102726	P	12/05/25	10121010 610114	PROFESSIONAL FEES (D)	32.00
	INVOICE: 1R9BR101XHJ482118									
	217961	11/17/25		22602876	102727	P	12/05/25	10121010 610114	PROFESSIONAL FEES (D)	32.00
	INVOICE: 1R9BR1018HJ482117									
	217963	11/17/25		22602806	102728	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: 2N9SL10073A045242									
	218120	11/17/25		22602809	102729	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00

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	INVOICE: JK204442/FY2026									
	218121	11/17/25		22602808	102730	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: 35540867/FY2026									
	218122	11/17/25		22602799	102731	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: CAT0420FKHWC00165/1									
	218123	11/17/25		22602800	102732	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: CAT00432TH7E00373/1									
	218124	11/17/25		22602801	102733	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: 1T0310GAEPGX0418/1									
	218125	11/17/25		22602802	102734	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: CAT00415TH8A00479/1									
	218126	11/17/25		22602803	102722	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: 2NKHHM7X0LM400832/1									
	218127	11/17/25		22602804	102723	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: 1FDCF7DC3RDF08062/1									
	218128	11/17/25		22602805	102735	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: CAT0420FCSKR02624/1									
	218129	11/17/25		22602807	102736	P	12/05/25	60496400 610113	PROFESSIONAL FEES (O)	32.00
	INVOICE: AGCMC580KMC000706/1									
	VENDOR TOTALS		.00	YTD INVOICED				480.00	YTD PAID	480.00
9160	DESERT VALLEY POWER SYSTEMS LLC									
	217956	11/17/25		22603041	102737	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	1,764.44
	INVOICE: 3454									
	217957	11/17/25		22603037	102737	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	660.00
	INVOICE: 3457									
	VENDOR TOTALS		1,558.22	YTD INVOICED				2,424.44	YTD PAID	2,424.44
9514	DISABILITY ACCESS CONSULTANTS, LLC									
	217973	10/31/25		22603066	102738	P	12/05/25	29941010 750010	ADA IMPROVEMENTS	8,200.00
	INVOICE: 25-312									
	VENDOR TOTALS		.00	YTD INVOICED				8,200.00	YTD PAID	8,200.00
9621	DXP ENTERPRISES, INC.									
	217974	09/29/25		22603084	102739	P	12/05/25	50195110 630120	WATER PUMPS MAINTENANCE	20,974.83
	INVOICE: 55395291									
	VENDOR TOTALS		11,080.68	YTD INVOICED				22,824.83	YTD PAID	20,974.83
5078	EBSCO SUBSCRIPTION SERVICES									
	217975	11/17/25		22602995	102740	P	12/05/25	10153010 610121	DUES & SUBSCRIPTIONS	5,780.00
	INVOICE: 91011035249									
	VENDOR TOTALS		.00	YTD INVOICED				5,780.00	YTD PAID	5,780.00
10627	EQUITY FITNESS									
	217976	11/20/25		22602247	102741	P	12/05/25	29923010 720102	FURNITURE & FIXTURES	7,925.89
	INVOICE: 120224A1									

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	217977	11/20/25		22602247	102741	P	12/05/25	29923010 720102	FURNITURE & FIXTURES	7,925.89
	INVOICE: 120224A2									
	217978	11/20/25		22602247	102741	P	12/05/25	29923010 720102	FURNITURE & FIXTURES	7,925.89
	INVOICE: 120224A3									
	VENDOR TOTALS			.00 YTD INVOICED				23,777.67 YTD PAID		23,777.67
10084	EVOQUA WATER TECHNOLOGIES									
	218130	11/19/25		22603118	102742	P	12/05/25	50295210 620136	TREATMENT CHEMICALS	15,635.86
	INVOICE: 907310735									
	VENDOR TOTALS			.00 YTD INVOICED				15,635.86 YTD PAID		15,635.86
247	FEDEX									
	217979	11/14/25		22602944	102743	P	12/05/25	50195110 620137	LAB TESTS & SUPPLIES	7.35
	INVOICE: 9-707-31304									
	217980	10/24/25		22602874	102743	P	12/05/25	10121010 620102	POSTAGE	78.94
	INVOICE: 9-041-93679									
	217981	09/12/25		22602874	102743	P	12/05/25	10121010 620102	POSTAGE	5.56
	INVOICE: 9-702-85217									
	217982	06/20/25		22602874	102743	P	12/05/25	10121010 620102	POSTAGE	5.42
	INVOICE: 9-697-66315									
	VENDOR TOTALS			1,532.34 YTD INVOICED				1,117.46 YTD PAID		97.27
4462	FERGUSON ENTERPRISES, INC.									
	217983	10/01/25		22602787	102744	P	12/05/25	50195110 620130	MAINTENANCE SUPPLIES	19.96
	INVOICE: 5789223									
	218131	10/07/25		22603081	102744	P	12/05/25	50195100 620139	PIPE FITTINGS	249.45
	INVOICE: 5619180-1									
	218132	10/24/25		22603081	102744	P	12/05/25	50195100 620139	PIPE FITTINGS	7,692.62
	INVOICE: 5842787									
	218133	10/24/25		22603081	102744	P	12/05/25	50195100 620139	PIPE FITTINGS	4,458.33
	INVOICE: 5829858									
	VENDOR TOTALS			35,119.99 YTD INVOICED				12,497.40 YTD PAID		12,420.36
1459	FIRE ETC									
	217984	11/17/25		22603038	102745	P	12/05/25	10123010 620112	PROTECTIVE CLOTHING	487.13
	INVOICE: 202634									
	VENDOR TOTALS			.00 YTD INVOICED				487.13 YTD PAID		487.13
4317	FRUTH GROUP INC.									
	217985	10/27/25		22602976	102746	P	12/05/25	10143010 620103	PRINTING	236.23
	INVOICE: 766825/ENG									
	217986	10/27/25		22602782	102746	P	12/05/25	50195110 630106	OFFICE MACHINES MAINT.	200.92
	INVOICE: 766824									
	217987	10/21/25		22602873	102746	P	12/05/25	10121010 630106	OFFICE MACHINES MAINT.	38.30
	INVOICE: 765867									
	217988	10/21/25		22602873	102746	P	12/05/25	10121010 630106	OFFICE MACHINES MAINT.	126.06

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: 765866									
	VENDOR TOTALS		2,466.80 YTD INVOICED				1,840.47 YTD PAID			601.51
125	HAAKER EQUIPMENT CO									
	217989	05/06/25		22602972	102747	P	12/05/25	60496400 630114	PARTS	805.64
	INVOICE: C3A4B2									
	217990	10/16/25		22602972	102747	P	12/05/25	60496400 630114	PARTS	115.12
	INVOICE: INV19526									
	218134	10/10/25		22603080	102747	P	12/05/25	50295200 630108	FIELD/SHOP EQUIP. MAINT.	307.05
	INVOICE: INV18968									
	218135	10/30/25		22603080	102747	P	12/05/25	50295200 630108	FIELD/SHOP EQUIP. MAINT.	4,278.04
	INVOICE: INV20862									
	218136	09/04/25			102747	P	12/05/25	50295200 630108	FIELD/SHOP EQUIP. MAINT.	-4,278.04
	INVOICE: CM61229									
	VENDOR TOTALS		12,462.65 YTD INVOICED				1,227.81 YTD PAID			1,227.81
457	HACH COMPANY									
	217991	11/06/25		22602936	102748	P	12/05/25	50295210 620137	LAB TESTS & SUPPLIES	441.30
	INVOICE: 14747081									
	217992	11/10/25		22602936	102748	P	12/05/25	50295210 620137	LAB TESTS & SUPPLIES	297.18
	INVOICE: 14749208									
	VENDOR TOTALS		1,525.62 YTD INVOICED				4,505.97 YTD PAID			738.48
2170	HELIX LABORATORIES, INC.									
	217993	07/31/25		22602954	102749	P	12/05/25	50295210 620136	TREATMENT CHEMICALS	15,717.90
	INVOICE: 91601									
	217994	11/05/25		22602955	102749	P	12/05/25	50295210 620136	TREATMENT CHEMICALS	794.80
	INVOICE: 91675									
	217995	06/04/25		22602955	102749	P	12/05/25	50295210 620136	TREATMENT CHEMICALS	794.80
	INVOICE: 91544									
	VENDOR TOTALS		.00 YTD INVOICED				17,307.50 YTD PAID			17,307.50
159	ALFREDO HERNANDEZ									
	217996	08/25/25		22602822	102750	P	12/05/25	10121010 610129	OTHER EXPENSE	520.00
	INVOICE: 217996									
	VENDOR TOTALS		.00 YTD INVOICED				520.00 YTD PAID			520.00
5617	IMPERIAL COUNTY PUBLIC HEALTH DEPT.									
	217999	11/03/25		22602715	102751	P	12/05/25	10152020 610113	PROFESSIONAL FEES (O)	128.00
	INVOICE: IN0045420									
	218000	11/03/25		22602714	102751	P	12/05/25	10152020 610113	PROFESSIONAL FEES (O)	666.00
	INVOICE: IN0044723									
	VENDOR TOTALS		.00 YTD INVOICED				794.00 YTD PAID			794.00
4966	IMPERIAL LANDFILL									

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	218001	10/15/25		22602826	102752	P	12/05/25	10121010 610129	OTHER EXPENSE	71.76
	INVOICE:	4136-000022749								
	VENDOR TOTALS		71.46 YTD INVOICED					71.76 YTD PAID		71.76
982	IMPERIAL VALLEY FIRE CHIEFS ASSOC.									
	218002	11/24/25		22603036	102753	P	12/05/25	10123010 610121	DUES & SUBSCRIPTIONS	200.00
	INVOICE:	218002								
	218003	11/24/25		22603036	102753	P	12/05/25	10123010 610121	DUES & SUBSCRIPTIONS	200.00
	INVOICE:	218003								
	218004	11/24/25		22603036	102753	P	12/05/25	10123010 610121	DUES & SUBSCRIPTIONS	200.00
	INVOICE:	218004								
	218005	11/24/25		22603036	102753	P	12/05/25	10123010 610121	DUES & SUBSCRIPTIONS	200.00
	INVOICE:	218005								
	VENDOR TOTALS		.00 YTD INVOICED					800.00 YTD PAID		800.00
607	IMPERIAL VALLEY PRESS									
	218006	11/21/25		22603056	102754	P	12/05/25	10144010 610106	ADVERTISING	324.03
	INVOICE:	534435								
	VENDOR TOTALS		1,558.10 YTD INVOICED					2,242.57 YTD PAID		324.03
141	IMPERIAL VALLEY TERMITE									
	218007	11/03/25		22603028	102755	P	12/05/25	10123010 630101	BUILDING MAINT.	60.00
	INVOICE:	0357733								
	218008	11/17/25		22603028	102755	P	12/05/25	10123010 630101	BUILDING MAINT.	95.00
	INVOICE:	0357735								
	VENDOR TOTALS		409.00 YTD INVOICED					1,098.00 YTD PAID		155.00
4854	IVECA									
	217997	11/06/25		22602981	102756	P	12/05/25	10119010 610129	OTHER EXPENSE	197,415.59
	INVOICE:	07-165								
	217997	11/06/25		22602981	102756	P	12/05/25	50195160 610129	OTHER EXPENSE	10,967.53
	INVOICE:	07-165								
	217997	11/06/25		22602981	102756	P	12/05/25	50295280 610129	OTHER EXPENSE	10,967.53
	INVOICE:	07-165								
	VENDOR TOTALS		.00 YTD INVOICED					219,350.65 YTD PAID		219,350.65
4727	IVROP									
	217998	10/28/25		22602875	102757	P	12/05/25	10121010 610113	PROFESSIONAL FEES (O)	140.00
	INVOICE:	217998								
	VENDOR TOTALS		1,456.00 YTD INVOICED					364.00 YTD PAID		140.00
3760	JADE SECURITY SYSTEMS INC.									
	218137	11/19/25		22603133	102758	P	12/05/25	10153010 630101	BUILDING MAINT.	58.00
	INVOICE:	0229480								

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	VENDOR TOTALS	2,372.54 YTD INVOICED						4,873.73 YTD PAID		58.00
821	JCI JONES CHEMICALS, INC.									
	218009	11/10/25		22602932	102759	P	12/05/25	50195110 620136	TREATMENT CHEMICALS	10,629.08
	INVOICE: 983247									
	VENDOR TOTALS	40,230.64 YTD INVOICED						21,379.33 YTD PAID		10,629.08
899	JUNIOR'S CAFE									
	218138	12/01/25		22603159	102760	P	12/05/25	10112010 610135	SPECIAL EVENTS	3,238.54
	INVOICE: 13-19057									
	218242	12/04/25		22603209	102760	P	12/05/25	10113010 610143	WELLNESS PROGRAM	452.13
	INVOICE: 13-19198									
	VENDOR TOTALS	209.33 YTD INVOICED						3,690.67 YTD PAID		3,690.67
6291	K-C WELDING & RENTALS INC.									
	218010	10/25/25		22602930	102761	P	12/05/25	10132010 620120	STREET CONSTRUCTION	6,688.54
	INVOICE: 219835									
	VENDOR TOTALS	15,596.31 YTD INVOICED						7,806.83 YTD PAID		6,688.54
7550	LABOR COMPLIANCE CONSULTANTS OF SO. CAL.									
	218139	11/06/25		22603138	102762	P	12/05/25	50295210 750029	UV DESINFECTING SYSTEM	1,000.00
	INVOICE: 3057									
	218140	09/09/25		22603137	102762	P	12/05/25	50295210 750029	UV DESINFECTING SYSTEM	1,000.00
	INVOICE: 3011									
	VENDOR TOTALS	1,170.00 YTD INVOICED						3,127.50 YTD PAID		2,000.00
4406	LABRUCHERIE IRRIGATION SUPPLY									
	218012	11/12/25		22602940	102763	P	12/05/25	50195110 620139	PIPE FITTINGS	153.09
	INVOICE: 314446C									
	218013	11/12/25		22602940	102763	P	12/05/25	50195110 620139	PIPE FITTINGS	137.83
	INVOICE: 314385C									
	218014	11/06/25		22602940	102763	P	12/05/25	50195110 620139	PIPE FITTINGS	363.14
	INVOICE: 313924C									
	218015	11/05/25		22602781	102763	P	12/05/25	50195110 630111	OTHER FACILITY MAINT.	1,606.43
	INVOICE: 313811C									
	218016	11/05/25		22602781	102763	P	12/05/25	50195110 620139	PIPE FITTINGS	162.07
	INVOICE: 313824C									
	218017	11/04/25		22602781	102763	P	12/05/25	50195110 620139	PIPE FITTINGS	110.44
	INVOICE: 313724C									
	218018	11/05/25		22602957	102763	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	963.25
	INVOICE: 313819C									
	218019	11/05/25		22602957	102763	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	37.83
	INVOICE: 313840C									
	218020	11/06/25		22602957	102763	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	81.67
	INVOICE: 313962C									
	218021	11/05/25		22602958	102763	P	12/05/25	50295210 630103	GROUND/LANDSCAPING MAINT	366.88

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	INVOICE: 313866C									
	218022	11/12/25		22602958	102763	P	12/05/25	50295210 630103	GROUND/LANDSCAPING MAINT	106.14
	INVOICE: 314483									
	218023	11/12/25		22602958	102763	P	12/05/25	50295210 630103	GROUND/LANDSCAPING MAINT	479.46
	INVOICE: 314427C									
	218141	11/19/25		22603126	102763	P	12/05/25	50295210 630103	GROUND/LANDSCAPING MAINT	455.31
	INVOICE: 314998/C									
	218215	07/30/25		22602187	102763	P	12/05/25	10151010 620123	IRRIGATION & SPRINKLERS	58.62
	INVOICE: 307719C									
	218216	08/13/25		22602187	102763	P	12/05/25	10151010 620123	IRRIGATION & SPRINKLERS	2,033.54
	INVOICE: 308606C									
	218217	09/29/25		22602187	102763	P	12/05/25	10151010 620123	IRRIGATION & SPRINKLERS	138.95
	INVOICE: 311183C									
	218218	09/25/25		22602187	102763	P	12/05/25	10151010 620123	IRRIGATION & SPRINKLERS	65.95
	INVOICE: 310958C									
	218219	10/01/25		22602187	102763	P	12/05/25	10151010 620123	IRRIGATION & SPRINKLERS	58.09
	INVOICE: 311310C									
	218219	10/01/25		22602187	102763	P	12/05/25	10151010 620140	SMALL TOOLS	38.20
	INVOICE: 311310C									
	218220	10/09/25		22602187	102763	P	12/05/25	10151010 620123	IRRIGATION & SPRINKLERS	45.84
	INVOICE: 311885C									
	218221	10/09/25		22602187	102763	P	12/05/25	10151010 620123	IRRIGATION & SPRINKLERS	571.60
	INVOICE: 311826C									
	VENDOR TOTALS		10,125.00 YTD INVOICED					18,710.24 YTD PAID		8,034.33
10676	ROBERT M. LAMADRID									
	218142	12/01/25		22603194	102764	P	12/05/25	29951010 610135	SPECIAL EVENTS	3,900.00
	INVOICE: 218142									
	VENDOR TOTALS		.00 YTD INVOICED					3,900.00 YTD PAID		3,900.00
2471	ALEJANDRO S. LEE									
	218143	11/20/25		22603072	102765	P	12/05/25	29952050 610113	PROFESSIONAL FEES/OTHER	700.00
	INVOICE: 218143									
	VENDOR TOTALS		850.00 YTD INVOICED					700.00 YTD PAID		700.00
4003	LIFE ASSIST INC.									
	218024	11/10/25		22603031	102766	P	12/05/25	10123040 620111	PARAMEDIC SUPPLIES	440.98
	INVOICE: 2013887									
	218025	11/10/25		22603031	102766	P	12/05/25	10123040 620111	PARAMEDIC SUPPLIES	942.64
	INVOICE: 2013920									
	218026	11/04/25		22603039	102766	P	12/05/25	10123040 620111	PARAMEDIC SUPPLIES	125.25
	INVOICE: 2010529									
	218027	11/13/25		22603039	102766	P	12/05/25	10123040 620111	PARAMEDIC SUPPLIES	187.25
	INVOICE: 2015360									
	218029	11/14/25		22600082	102766	P	12/05/25	10123040 620111	PARAMEDIC SUPPLIES	153.55
	INVOICE: 2017101									

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	VENDOR TOTALS		1,599.64 YTD INVOICED				2,065.67 YTD PAID			1,849.67
8104	MELISSA I. LIMON									
	218030	10/25/25		22602577	102767	P	12/05/25	10153010 610109	MEETING AND TRAVEL	40.35
	INVOICE: 094223									
	VENDOR TOTALS		.00 YTD INVOICED				40.35 YTD PAID			40.35
7850	GASPAR LOPEZ									
	218031	08/29/25		22602786	102768	P	12/05/25	50195110 610129	OTHER EXPENSE	105.00
	INVOICE: 218031									
	VENDOR TOTALS		693.50 YTD INVOICED				105.00 YTD PAID			105.00
9718	JAQUELINE MACIAS									
	218144	11/20/25		22603074	102769	P	12/05/25	29952050 610113	PROFESSIONAL FEES/OTHER	350.00
	INVOICE: 218144									
	VENDOR TOTALS		350.00 YTD INVOICED				350.00 YTD PAID			350.00
5744	MARIO ROACHO/XTREME PRO AUDIO									
	218145	11/25/25		22603173	102770	P	12/05/25	29951010 610135	SPECIAL EVENTS	1,850.00
	INVOICE: 218145									
	VENDOR TOTALS		.00 YTD INVOICED				1,850.00 YTD PAID			1,850.00
9975	CARLA MASON									
	218032	10/16/25		22602369	102771	P	12/05/25	10153010 610123	TRAINING	24.53
	INVOICE: 218032									
	VENDOR TOTALS		403.26 YTD INVOICED				24.53 YTD PAID			24.53
276	MCNEECE BROS. OIL CO. INC.									
	218033	10/31/25		22602688	102772	P	12/05/25	10151010 630112	GASOLINE & OIL	3,326.11
	INVOICE: 920523									
	218033	10/31/25		22602688	102772	P	12/05/25	10152020 630112	GASOLINE & OIL	971.55
	INVOICE: 920523									
	218033	10/31/25		22602688	102772	P	12/05/25	10152040 630112	GASOLINE & OIL	188.75
	INVOICE: 920523									
	218034	11/07/25		22603030	102772	P	12/05/25	10123010 630112	GASOLINE & OIL	569.23
	INVOICE: 624377									
	218035	11/07/25		22603030	102772	P	12/05/25	10123010 630112	GASOLINE & OIL	901.56
	INVOICE: 624378									
	218036	10/31/25		22602819	102772	P	12/05/25	10121010 630112	GASOLINE & OIL	199.16
	INVOICE: 1161/10-31-25									
	218037	10/31/25		22602818	102772	P	12/05/25	10121010 630112	GASOLINE & OIL	13,015.31
	INVOICE: 920552									
	218037	10/31/25		22602818	102772	P	12/05/25	10121030 630112	GASOLINE & OIL	488.79
	INVOICE: 920552									

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	VENDOR TOTALS	13,684.08 YTD INVOICED						47,556.67 YTD PAID		19,660.46
10675	CHRISTOPHER MEANS									
	218146	11/26/25		22603193	102773	P	12/05/25	29951010 610135	SPECIAL EVENTS	8,000.00
	INVOICE: INV-20250925									
	VENDOR TOTALS	.00 YTD INVOICED						8,000.00 YTD PAID		8,000.00
10445	MES SERVICE CO., LLC									
	218038	10/31/25		22603040	102774	P	12/05/25	10123010 630110	BREATHING APPARATUS	724.64
	INVOICE: IN2372168									
	VENDOR TOTALS	8,245.13 YTD INVOICED						13,262.70 YTD PAID		724.64
7569	JUAN C. MIRANDA									
	218040	10/05/25		22602725	102775	P	12/05/25	10152110 610113	PROFESSIONAL FEES/OTHER	35.00
	INVOICE: 1193405									
	VENDOR TOTALS	.00 YTD INVOICED						35.00 YTD PAID		35.00
9626	MOTION INDUSTRIES, INC.									
	218041	11/14/25		22602941	102776	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	243.59
	INVOICE: CA05-01149083									
	VENDOR TOTALS	.00 YTD INVOICED						1,355.40 YTD PAID		243.59
2619	MOTOROLA SOLUTIONS, INC.									
	218042	06/04/25		22602791	102777	P	12/05/25	10121010 630109	COMPUTER EQUIP. MAINT.	3,195.43
	INVOICE: 8282144051									
	218043	12/18/24		22602892	102777	P	12/05/25	10121010 610113	PROFESSIONAL FEES (O)	3,100.00
	INVOICE: 1411150942									
	VENDOR TOTALS	.00 YTD INVOICED						6,295.43 YTD PAID		6,295.43
9598	ANA DANIELA MUNOZ									
	218148	11/20/25		22603071	102778	P	12/05/25	29952050 610113	PROFESSIONAL FEES/OTHER	350.00
	INVOICE: 218148									
	VENDOR TOTALS	792.00 YTD INVOICED						428.00 YTD PAID		350.00
3200	NAPA MOTOR PARTS									
	218149	11/19/25		22603125	102779	P	12/05/25	50295210 630112	GASOLINE & OIL	65.17
	INVOICE: 780253									
	VENDOR TOTALS	2,335.94 YTD INVOICED						603.68 YTD PAID		65.17
9143	NEWCASTLE FARMS, LLC									
	218150	11/19/25		22603065	102780	P	12/05/25	50195110 630120	WATER PUMPS MAINTENANCE	8,605.58
	INVOICE: 14989									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS			.00 YTD INVOICED					8,605.58 YTD PAID		8,605.58
9816	NUSO, LLC										
	218151	11/01/25		22603130	102781	P	12/05/25	10153010	610103	TELEPHONE	228.16
	INVOICE: 131095146										
	VENDOR TOTALS			464.05 YTD INVOICED					228.16 YTD PAID		228.16
3700	ONE SOURCE DISTRIBUTORS INC										
	218044	10/23/25		22602960	102782	P	12/05/25	50295210	630108	FIELD/SHOP EQUIP. MAINT.	203.23
	INVOICE: S008096219.001										
	VENDOR TOTALS			561.29 YTD INVOICED					413.64 YTD PAID		203.23
8013	PADRE USA										
	218045	10/28/25		22602731	102783	P	12/05/25	10152040	620128	JANITORIAL SUPPLIES	92.66
	INVOICE: 16033227										
	218046	10/01/25		22602730	102783	P	12/05/25	10152020	620128	JANITORIAL SUPPLIES	52.07
	INVOICE: 16033037										
	218047	10/28/25		22602730	102783	P	12/05/25	10152020	620128	JANITORIAL SUPPLIES	284.21
	INVOICE: 16033249										
	VENDOR TOTALS			3,521.76 YTD INVOICED					2,141.34 YTD PAID		428.94
9761	GABRIELA RAMIREZ PEDROZA										
	218152	11/20/25		22603073	102784	P	12/05/25	29952050	610113	PROFESSIONAL FEES/OTHER	700.00
	INVOICE: 218152										
	VENDOR TOTALS			700.00 YTD INVOICED					700.00 YTD PAID		700.00
10567	PINE VALLEY DANCE & PLAY										
	218153	11/18/25		22603000	102785	P	12/05/25	10110006	460129	CONTRACT INSTRUCTORS	468.00
	INVOICE: 218153										
	VENDOR TOTALS			.00 YTD INVOICED					3,588.00 YTD PAID		468.00
4380	PITNEY BOWES PURCHASE POWER										
	218048	10/19/25		22602824	102786	P	12/05/25	10121010	620102	POSTAGE	453.55
	INVOICE: 00898159/OCT2025										
	VENDOR TOTALS			1,409.86 YTD INVOICED					453.55 YTD PAID		453.55
3940	POLYDYNE, INC.										
	218154	11/19/25		22603086	102787	P	12/05/25	50195110	620136	TREATMENT CHEMICALS	8,926.66
	INVOICE: 1979546										
	VENDOR TOTALS			39,660.25 YTD INVOICED					8,926.66 YTD PAID		8,926.66
9729	PRECISION CONCRETE CUTTING										
	218049	11/17/25		22601483	102788	P	12/05/25	29943010	750012	SIDEWALKS / ADA RAMPS	14,999.62

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	INVOICE: 25-0341										
	VENDOR TOTALS			.00 YTD INVOICED				14,999.62 YTD PAID			14,999.62
9678	PRIMO'S PARTY RENTALS										
	218155	11/15/25		22602745	102789	P	12/05/25	10152140	610113	PROFESSIONAL FEES/OTHER	800.00
	INVOICE: 11577										
	VENDOR TOTALS			.00 YTD INVOICED				800.00 YTD PAID			800.00
3121	PRO RECORD STORAGE & SHRED INC										
	218050	11/01/25		22602977	102790	P	12/05/25	10143010	610129	OTHER EXPENSE	131.30
	INVOICE: 0032802										
	VENDOR TOTALS			881.65 YTD INVOICED				859.76 YTD PAID			131.30
293	QUILL CORPORATION										
	218052	10/23/25		22602690	102791	P	12/05/25	10152050	620101	OFFICE SUPPLIES	67.53
	INVOICE: 46291853										
	218053	10/27/25		22602690	102791	P	12/05/25	10152020	620101	OFFICE SUPPLIES	49.17
	INVOICE: 46344587										
	218053	10/27/25		22602690	102791	P	12/05/25	10152050	620101	OFFICE SUPPLIES	8.00
	INVOICE: 46344587										
	218054	10/21/25		22602690	102791	P	12/05/25	10152020	620101	OFFICE SUPPLIES	86.53
	INVOICE: 46267614										
	218054	10/21/25		22602690	102791	P	12/05/25	10152050	620101	OFFICE SUPPLIES	30.00
	INVOICE: 46267614										
	218055	10/21/25		22602690	102791	P	12/05/25	10152050	620101	OFFICE SUPPLIES	13.98
	INVOICE: 46266980										
	218056	10/22/25		22602690	102791	P	12/05/25	10152050	620101	OFFICE SUPPLIES	18.09
	INVOICE: 46272774										
	218057	11/05/25		22602690	102791	P	12/05/25	10152020	620101	OFFICE SUPPLIES	58.61
	INVOICE: 46464823										
	218057	11/05/25		22602690	102791	P	12/05/25	10152050	620101	OFFICE SUPPLIES	58.60
	INVOICE: 46464823										
	VENDOR TOTALS			986.53 YTD INVOICED				593.03 YTD PAID			390.51
4955	RICHARD RAMOS										
	218058	09/22/25		22601741	102792	P	12/05/25	10121050	610123	TRAINING	307.50
	INVOICE: 218058										
	VENDOR TOTALS			.00 YTD INVOICED				307.50 YTD PAID			307.50
8634	REXEL USA, INC.										
	218059	11/05/25		22602939	102793	P	12/05/25	50195110	630120	WATER PUMPS MAINTENANCE	371.20
	INVOICE: S143838039.002										
	218060	11/04/25		22602939	102793	P	12/05/25	50195110	630120	WATER PUMPS MAINTENANCE	34.30
	INVOICE: S143838039.001										
	218061	11/06/25		22602956	102793	P	12/05/25	50295210	630108	FIELD/SHOP EQUIP. MAINT.	46.71
	INVOICE: S143863006.001										

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS		256.65 YTD INVOICED					986.26 YTD PAID		452.21
584	RICK'S GROUP DIESEL, INC.									
	218062	10/15/25		22603035	102794	P	12/05/25	10123010 630115	OUTSIDE MAINTENANCE	1,869.63
	INVOICE: 32146									
	218063	11/01/25		22603034	102794	P	12/05/25	10123010 630115	OUTSIDE MAINTENANCE	1,242.96
	INVOICE: 32180									
	VENDOR TOTALS		1,313.66 YTD INVOICED					3,397.59 YTD PAID		3,112.59
8791	RICK'S ROADRUNNER LOCK & SAFE									
	218065	11/07/25		22602942	102795	P	12/05/25	50195110 620135	OTHER SUPPLIES	22.73
	INVOICE: 23766									
	218157	11/18/25		22603076	102795	P	12/05/25	10118020 630101	BUILDING MAINT.	10.82
	INVOICE: 23769									
	VENDOR TOTALS		265.98 YTD INVOICED					112.56 YTD PAID		33.55
4235	ROMAN'S WATER INC.									
	218066	11/07/25		22602815	102796	P	12/05/25	10121010 610113	PROFESSIONAL FEES (O)	129.50
	INVOICE: 98130									
	VENDOR TOTALS		276.50 YTD INVOICED					259.00 YTD PAID		129.50
10653	ROSS SHIPLEY									
	218067	10/31/25		22603082	102797	P	12/05/25	29951010 750021	FRAZIER PARK IMPRO (PARKS	75,468.95
	INVOICE: 1.00									
	VENDOR TOTALS		.00 YTD INVOICED					75,468.95 YTD PAID		75,468.95
10219	EDWARD SOLORZANO									
	218158	10/29/25		22603075	102798	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	129.30
	INVOICE: 0003561									
	218159	10/27/25		22603075	102798	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	290.92
	INVOICE: 0003637									
	218160	10/23/25		22603075	102798	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	2,747.62
	INVOICE: 0003606									
	218161	10/02/25		22603009	102798	P	12/05/25	10151010 630115	OUTSIDE MAINTENANCE	215.50
	INVOICE: 0006915									
	VENDOR TOTALS		.00 YTD INVOICED					3,383.34 YTD PAID		3,383.34
213	SOUTHERN CALIFORNIA GAS CO									
	218068	10/17/25		22602686	102799	P	12/05/25	10152050 610102	NATURAL GAS	21.50
	INVOICE: 13132656284/OCT2025									
	218069	10/17/25		22602686	102799	P	12/05/25	10152020 610102	NATURAL GAS	105.68
	INVOICE: 18592554002/OCT2025									
	218070	10/20/25		22602685	102799	P	12/05/25	10152030 610102	NATURAL GAS	15.01
	INVOICE: 04322688005/OCT2025									
	218071	07/22/24		22602935	102799	P	12/05/25	50295210 610102	NATURAL GAS	20.76

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	INVOICE: 04986508523/JULY2024										
	218072	10/20/25		22603044	102799	P	12/05/25	60496400	610102	NATURAL GAS	19.73
	INVOICE: 05162691009/OCT2025										
	218223	10/24/25		22602847	102799	P	12/05/25	50295210	610102	NATURAL GAS	15.81
	INVOICE: 05835330282/OCT2025										
	218230	11/21/25		22602894	102800	P	12/05/25	50295210	750030	SOUTHERN PUMP STATION	58,359.78
	INVOICE: 218230										
	VENDOR TOTALS		4,956.03	YTD INVOICED				67,507.62	YTD PAID		58,558.27
9644	SPIRIT HALLOWEEN SUPERSTORES, LLC										
	217876	11/25/25			102801	P	12/05/25	501	104001	ACCOUNTS RECEIVABLE	53.97
	INVOICE: 217876										
	VENDOR TOTALS		.00	YTD INVOICED				53.97	YTD PAID		53.97
1856	STANLEY ACCESS TECH INC.										
	218076	10/17/25		22602703	102802	P	12/05/25	10152020	630101	BUILDING MAINT.	422.50
	INVOICE: 90077867										
	VENDOR TOTALS		.00	YTD INVOICED				422.50	YTD PAID		422.50
392	STATE OF CA. DEPT. OF JUSTICE										
	218073	11/04/25		22602926	102803	P	12/05/25	10113010	610122	RECRUITING	96.00
	INVOICE: 002796										
	218074	11/04/25		22602934	102803	P	12/05/25	10113010	610122	RECRUITING	290.00
	INVOICE: 001151										
	218075	09/05/25		22602951	102803	P	12/05/25	10113010	610122	RECRUITING	64.00
	INVOICE: 841195										
	VENDOR TOTALS		224.00	YTD INVOICED				676.00	YTD PAID		450.00
1460	BJORN STRUEBING										
	218077	11/17/25		22602911	102804	P	12/05/25	10113040	610113	PROFESSIONAL FEES (O)	4,000.00
	INVOICE: 0001252										
	VENDOR TOTALS		14,000.00	YTD INVOICED				11,200.00	YTD PAID		4,000.00
979	SWRCB										
	218078	11/05/25		22602966	102805	P	12/05/25	50295250	610131	FILING FEES	18,196.00
	INVOICE: SW-0323207										
	VENDOR TOTALS		.00	YTD INVOICED				98,265.00	YTD PAID		18,196.00
4062	TERMINIX OF IMPERIAL VALLEY										
	218079	10/09/25		22602707	102806	P	12/05/25	10152050	610113	PROFESSIONAL FEES (O)	44.00
	INVOICE: 1160942										
	218080	10/09/25		22602707	102806	P	12/05/25	10152020	610113	PROFESSIONAL FEES (O)	45.36
	INVOICE: 1160892										
	218081	11/05/25		22602962	102806	P	12/05/25	10118010	630101	BUILDING MAINT.	45.36
	INVOICE: 1164463										

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	218082	11/05/25		22602962	102806	P	12/05/25	10118010 630101	BUILDING MAINT.	21.60
	INVOICE: 1163835									
	218162	11/04/25		22603129	102806	P	12/05/25	10153010 610113	PROFESSIONAL FEES/OTHER	48.60
	INVOICE: 1164066									
	218163	11/05/25		22603095	102806	P	12/05/25	10118020 630101	BUILDING MAINT.	44.00
	INVOICE: 1164003									
	218164	10/06/25		22603095	102806	P	12/05/25	10118020 630101	BUILDING MAINT.	44.00
	INVOICE: 1160857									
	218165	11/06/25		22603096	102806	P	12/05/25	10118020 630101	BUILDING MAINT.	45.36
	INVOICE: 1163885									
	218224	07/15/25		22602200	102806	P	12/05/25	10152050 610113	PROFESSIONAL FEES (O)	44.00
	INVOICE: 1151946									
	218225	08/29/25		22602200	102806	P	12/05/25	10152050 610113	PROFESSIONAL FEES (O)	44.00
	INVOICE: 1154960									
	218226	07/15/25		22602200	102806	P	12/05/25	10152020 610113	PROFESSIONAL FEES (O)	45.36
	INVOICE: 1151896									
	218227	08/29/25		22602200	102806	P	12/05/25	10152020 610113	PROFESSIONAL FEES (O)	45.36
	INVOICE: 1154914									
	VENDOR TOTALS		417.12 YTD INVOICED					723.00 YTD PAID		517.00
5974	THATCHER COMPANY OF CALIFORNIA									
	218083	11/05/25		22602933	102807	P	12/05/25	50195110 620136	TREATMENT CHEMICALS	20,025.00
	INVOICE: 2025100116867									
	VENDOR TOTALS		40,293.00 YTD INVOICED					59,825.80 YTD PAID		20,025.00
8034	TIZNADO PALLETS & STORAGE CONTAINERS CO									
	218228	10/30/25		22602392	102808	P	12/05/25	29962030 750017	VALLEY POINT DEMOL	3,597.50
	INVOICE: 23977									
	VENDOR TOTALS		.00 YTD INVOICED					3,597.50 YTD PAID		3,597.50
10441	TRIAD SECURITY INCORP.									
	218167	11/15/25		22602751	102809	P	12/05/25	10152140 610113	PROFESSIONAL FEES/OTHER	457.50
	INVOICE: 218167									
	VENDOR TOTALS		305.00 YTD INVOICED					457.50 YTD PAID		457.50
214	TURBO DATA SYSTEMS INC.									
	218084	10/31/25		22602816	102810	P	12/05/25	10121010 610114	PROFESSIONAL FEES (D)	465.55
	INVOICE: 47048									
	VENDOR TOTALS		.00 YTD INVOICED					919.55 YTD PAID		465.55
9554	TYPSA, INC.									
	218168	11/12/25		22603140	102811	P	12/05/25	20532130 710102	ARCH/ENGINEERING	1,186.86
	INVOICE: 18060226									
	218169	11/12/25		22603139	102811	P	12/05/25	20532040 610113	PROFESSIONAL FEES/OTHER	2,290.00
	INVOICE: 18060316									

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	VENDOR TOTALS		.00 YTD INVOICED				3,476.86 YTD PAID			3,476.86
6289	U.S. BANK									
	218231	10/22/25		22603127	102812	P	12/05/25	10131010 610109	MEETING AND TRAVEL	208.34
	INVOICE: 65370833/10-22-25									
	218231	10/22/25		22603127	102812	P	12/05/25	10131010 610121	DUES & SUBSCRIPTIONS	58.33
	INVOICE: 65370833/10-22-25									
	218231	10/22/25		22603127	102812	P	12/05/25	50195160 610109	MEETING & TRAVEL	208.34
	INVOICE: 65370833/10-22-25									
	218231	10/22/25		22603127	102812	P	12/05/25	50195160 610121	DUES & SUBSCRIPTIONS	58.33
	INVOICE: 65370833/10-22-25									
	218231	10/22/25		22603127	102812	P	12/05/25	50295280 610109	MEETING & TRAVEL	208.33
	INVOICE: 65370833/10-22-25									
	218231	10/22/25		22603127	102812	P	12/05/25	50295280 610121	DUES & SUBSCRIPTIONS	58.33
	INVOICE: 65370833/10-22-25									
	218232	10/22/25		22603115	102812	P	12/05/25	50295210 610104	WATER	54.34
	INVOICE: 65370841/10-22-25									
	218232	10/22/25		22603115	102812	P	12/05/25	50295210 610107	BOOKS & PERIODICALS	174.24
	INVOICE: 65370841/10-22-25									
	218232	10/22/25		22603115	102812	P	12/05/25	50295210 610109	MEETING & TRAVEL	237.60
	INVOICE: 65370841/10-22-25									
	218232	10/22/25		22603115	102812	P	12/05/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	54.10
	INVOICE: 65370841/10-22-25									
	218233	10/22/25		22602842	102812	P	12/05/25	10121010 620144	K-9 SUPPLIES	60.00
	INVOICE: 00890878/10-22-25									
	218233	10/22/25		22602842	102812	P	12/05/25	10121010 620146	RESERVE VOLUNTEER PROGRAM	134.28
	INVOICE: 00890878/10-22-25									
	218234	10/22/25		22602850	102812	P	12/05/25	10121010 610113	PROFESSIONAL FEES (O)	25.00
	INVOICE: 78384714/10-22-25									
	218234	10/22/25		22602850	102812	P	12/05/25	10121010 620144	K-9 SUPPLIES	260.96
	INVOICE: 78384714/10-22-25									
	218235	10/22/25		22602849	102812	P	12/05/25	10121050 610123	TRAINING	840.04
	INVOICE: 78384714/10-22-25(1)									
	218237	10/22/25		22602846	102812	P	12/05/25	10121010 620144	K-9 SUPPLIES	161.18
	INVOICE: 52400957/10-22-25									
	218238	09/22/25		22603046	102812	P	12/05/25	60496400 610121	DUES & SUBSCRIPTIONS	96.34
	INVOICE: 65370833/9-22-25(1)									
	218239	10/22/25		22602668	102812	P	12/05/25	50295250 620101	OFFICE SUPPLIES	89.90
	INVOICE: 53140099/10-22-25									
	218240	10/22/25		22602472	102812	P	12/05/25	10121030 610129	OTHER EXPENSE	1,302.55
	INVOICE: 69502431/10-22-25									
	218243	10/22/25		22603024	102812	P	12/05/25	10153010 610107	BOOKS & PERIODICALS	1,958.26
	INVOICE: 66414846/10-22-25(3)									
	VENDOR TOTALS		71,041.30 YTD INVOICED				69,187.90 YTD PAID			6,248.79
9871	USA BLUE BOOK									
	218085	10/27/25		22602783	102813	P	12/05/25	50195110 630117	METER MAINTENANCE	80.82
	INVOICE: INV00868572									

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	VENDOR TOTALS	6,509.05 YTD INVOICED							484.89 YTD PAID		80.82
7955	VALLEY TRAILER SALES & SERVICE LLC										
	218236	12/02/25		22600882	102814	P	12/05/25	60496400	750001	CAPITAL OUTLAY MISCELLANE	22,205.00
	INVOICE: 2755										
	VENDOR TOTALS	.00 YTD INVOICED							22,205.00 YTD PAID		22,205.00
1002	PATRICIA VERDUGO										
	218170	11/20/25		22603070	102815	P	12/05/25	29952050	610113	PROFESSIONAL FEES/OTHER	700.00
	INVOICE: 218170										
	VENDOR TOTALS	743.25 YTD INVOICED							700.00 YTD PAID		700.00
4647	VERIZON WIRELESS										
	218086	10/23/25		22602827	102816	P	12/05/25	10121010	610103	TELEPHONE	3,236.60
	INVOICE: 6126761802										
	218087	09/26/25		22602767	102816	P	12/05/25	10121010	610103	TELEPHONE	676.91
	INVOICE: 6124559009										
	VENDOR TOTALS	605.20 YTD INVOICED							4,590.50 YTD PAID		3,913.51
7951	VESTIS SERVICES, LLC										
	218088	10/24/25		22603043	102817	P	12/05/25	50295210	610125	UNIFORM RENTAL	201.19
	INVOICE: 5220592447										
	218089	10/24/25		22603043	102817	P	12/05/25	50295210	620128	JANITORIAL SUPPLIES	155.97
	INVOICE: 5220592448										
	218090	10/10/25		22603042	102817	P	12/05/25	50295210	610125	UNIFORM RENTAL	76.59
	INVOICE: 5220586510										
	218091	10/10/25		22603042	102817	P	12/05/25	50295210	620128	JANITORIAL SUPPLIES	155.97
	INVOICE: 5220586511										
	218092	10/10/25		22602727	102817	P	12/05/25	10152040	610113	PROFESSIONAL FEES (O)	32.95
	INVOICE: 5220586507										
	218092	10/10/25		22602727	102817	P	12/05/25	10152040	620128	JANITORIAL SUPPLIES	22.35
	INVOICE: 5220586507										
	218093	10/10/25		22602727	102817	P	12/05/25	10152110	610125	UNIFORM RENTAL	6.84
	INVOICE: 5220586517										
	218094	11/14/25		22602969	102817	P	12/05/25	10118010	610125	UNIFORM RENTAL	83.69
	INVOICE: 5220601434										
	218095	11/14/25		22602969	102817	P	12/05/25	10118010	620128	JANITORIAL SUPPLIES	54.70
	INVOICE: 5220601435										
	218096	11/07/25		22602950	102817	P	12/05/25	50195110	620128	JANITORIAL SUPPLIES	99.67
	INVOICE: 5220598423										
	218097	11/14/25		22602950	102817	P	12/05/25	50195110	620128	JANITORIAL SUPPLIES	99.67
	INVOICE: 5220601432										
	218098	11/07/25		22602950	102817	P	12/05/25	50195110	610125	UNIFORM RENTAL	159.91
	INVOICE: 5220598424										
	218099	11/14/25		22602950	102817	P	12/05/25	50195110	610125	UNIFORM RENTAL	73.31
	INVOICE: 5220601433										

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 120525 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS		6,106.91 YTD INVOICED						4,146.04 YTD PAID		1,222.81
10668	VU, TAM THI										
	217872	11/25/25			102818	P	12/05/25	504	104001	ACCOUNTS RECEIVABLE	117.44
	INVOICE: 217872										
	VENDOR TOTALS		.00 YTD INVOICED						117.44 YTD PAID		117.44
528	WAXIE SANITARY SUPPLY										
	218100	10/28/25		22602943	102819	P	12/05/25	50195110	620128	JANITORIAL SUPPLIES	73.25
	INVOICE: 83602011										
	218101	10/09/25		22602961	102819	P	12/05/25	50295210	620128	JANITORIAL SUPPLIES	463.91
	INVOICE: 83561979										
	218171	11/03/25		22603134	102819	P	12/05/25	10131010	620128	JANITORIAL SUPPLIES	54.14
	INVOICE: 83613013										
	218171	11/03/25		22603134	102819	P	12/05/25	50195160	620128	JANITORIAL SUPPLIES	54.14
	INVOICE: 83613013										
	218171	11/03/25		22603134	102819	P	12/05/25	50295280	620128	JANITORIAL SUPPLIES	54.16
	INVOICE: 83613013										
	218172	11/19/25		22603134	102819	P	12/05/25	10131010	620128	JANITORIAL SUPPLIES	57.68
	INVOICE: 83649354										
	218172	11/19/25		22603134	102819	P	12/05/25	50195160	620128	JANITORIAL SUPPLIES	57.68
	INVOICE: 83649354										
	218172	11/19/25		22603134	102819	P	12/05/25	50295280	620128	JANITORIAL SUPPLIES	57.69
	INVOICE: 83649354										
	VENDOR TOTALS		5,783.77 YTD INVOICED						3,163.57 YTD PAID		872.65
530	WEST 80 ELECTRIC										
	218173	10/27/25		22603128	102820	P	12/05/25	50295210	630103	GROUND/LANDSCAPING MAINT	622.47
	INVOICE: 23707										
	VENDOR TOTALS		622.34 YTD INVOICED						622.47 YTD PAID		622.47
380	WYMORE, INC.										
	218102	11/12/25		22602963	102821	P	12/05/25	50295210	630108	FIELD/SHOP EQUIP. MAINT.	16.24
	INVOICE: 1242761										
	218103	10/23/25		22602691	102821	P	12/05/25	10151010	620123	IRRIGATION & SPRINKLERS	156.91
	INVOICE: 1242487										
	VENDOR TOTALS		922.90 YTD INVOICED						173.15 YTD PAID		173.15
500	WILLIAM YU										
	218104	09/23/25		22601736	102822	P	12/05/25	10121050	610123	TRAINING	307.50
	INVOICE: 218104										
	VENDOR TOTALS		.00 YTD INVOICED						307.50 YTD PAID		307.50
532	ZEP MANUFACTURING COMPANY										
	218105	10/10/25		22602858	102823	P	12/05/25	60496400	610129	OTHER EXPENSE	1,005.66

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PAID INVOICES REPORT

WARRANT: 120525 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
INVOICE: 9011899946									
218106	10/15/25		22602858	102823	P	12/05/25	60496400 610129	OTHER EXPENSE	134.04
INVOICE: 9011920085									
VENDOR TOTALS			.00 YTD INVOICED				1,253.59 YTD PAID		1,139.70
720 ZUMAR INDUSTRIES, INC.									
218174	10/31/25		22603078	102824	P	12/05/25	10132010 620121	TRAFFIC SIGN - HDW	2,762.59
INVOICE: 11229									
VENDOR TOTALS			.00 YTD INVOICED				2,762.59 YTD PAID		2,762.59
								REPORT TOTALS	774,628.65

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	141	774,628.65

PAID INVOICES REPORT

WARRANT: 121225 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
7897 360 BUSINESS PRODUCTS									
218249	11/20/25		22602986	102825	P	12/12/25	50195120 620101	OFFICE SUPPLIES	110.10
INVOICE: WO-48988-1									
218249	11/20/25		22602986	102825	P	12/12/25	50295220 620101	OFFICE SUPPLIES	47.19
INVOICE: WO-48988-1									
218250	11/21/25		22602986	102825	P	12/12/25	50195120 620101	OFFICE SUPPLIES	29.70
INVOICE: WO-48988-2									
218250	11/21/25		22602986	102825	P	12/12/25	50295220 620101	OFFICE SUPPLIES	12.73
INVOICE: WO-48988-2									
218251	11/17/25		22603229	102825	P	12/12/25	10115010 620101	OFFICE SUPPLIES	208.72
INVOICE: WO-48949-1									
218252	10/31/25		22602907	102825	P	12/12/25	26453010 760003	ADULT LITERACY	631.31
INVOICE: OE-69135-1									
218452	11/21/25		22603240	102825	P	12/12/25	10118010 620101	OFFICE SUPPLIES	11.82
INVOICE: OE-69254-1									
218453	11/24/25		22603240	102825	P	12/12/25	10118010 620101	OFFICE SUPPLIES	10.54
INVOICE: OE-69254-2									
218538	11/20/25		22602984	102825	P	12/12/25	50195120 620105	COMPUTER SUPPLIES	665.11
INVOICE: WO-48987-1									
218538	11/20/25		22602984	102825	P	12/12/25	50295220 620105	COMPUTER SUPPLIES	285.04
INVOICE: WO-48987-1									
VENDOR TOTALS		5,766.41 YTD INVOICED					3,911.56 YTD PAID		2,012.26
6206 ACCUSOURCE INC.									
218253	11/30/25		22603210	102826	P	12/12/25	10113010 610122	RECRUITING	140.22
INVOICE: 122941									
VENDOR TOTALS		127.65 YTD INVOICED					140.22 YTD PAID		140.22
9324 ACE HARDWARE CORPORATION									
218255	11/08/25		22603089	102827	P	12/12/25	10123010 630101	BUILDING MAINT.	178.82
INVOICE: J25434									
218256	11/09/25		22603089	102827	P	12/12/25	10123010 630101	BUILDING MAINT.	64.90
INVOICE: J25537									
218257	11/20/25		22603089	102827	P	12/12/25	10123010 630101	BUILDING MAINT.	30.29
INVOICE: J29608									
218258	11/20/25			102827	P	12/12/25	10123010 630101	BUILDING MAINT.	-61.63
INVOICE: J29605									
218259	11/14/25		22603055	102827	P	12/12/25	10152060 620130	MAINTENANCE SUPPLIES	15.14
INVOICE: J27515									
218260	11/17/25		22603055	102827	P	12/12/25	10152060 620130	MAINTENANCE SUPPLIES	24.40
INVOICE: J28300									
218261	11/23/25		22603188	102827	P	12/12/25	10123010 620140	SMALL TOOLS	425.67
INVOICE: J30905									
218264	11/12/25		22603060	102827	P	12/12/25	10152110 620130	MAINTENANCE SUPPLIES	18.60
INVOICE: J26691									
218454	11/07/25		22603124	102827	P	12/12/25	50195110 620130	MAINTENANCE SUPPLIES	123.35
INVOICE: J24909									
218455	10/14/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	43.70
INVOICE: J15449									

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 121225 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
218456	10/27/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	49.34
INVOICE:	J20312								
218457	10/28/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	52.98
INVOICE:	J20739								
218458	10/28/25		22603017	102827	P	12/12/25	10151010 620131	PAINTING SUPPLIES	213.35
INVOICE:	J20704								
218459	10/30/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	40.03
INVOICE:	J21716								
218460	10/30/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	79.02
INVOICE:	J21498								
218461	10/31/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	16.21
INVOICE:	J22053								
218462	10/31/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	42.21
INVOICE:	J21980								
218463	11/01/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	16.21
INVOICE:	J22735								
218464	11/04/25		22603017	102827	P	12/12/25	10151010 620131	PAINTING SUPPLIES	104.73
INVOICE:	J23746								
218465	11/04/25		22603017	102827	P	12/12/25	10151010 620140	SMALL TOOLS	64.89
INVOICE:	J23592								
218466	11/05/25		22603017	102827	P	12/12/25	10151010 620131	PAINTING SUPPLIES	27.90
INVOICE:	J24013								
218467	11/06/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	64.90
INVOICE:	J24355								
218468	11/06/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	17.31
INVOICE:	J24328								
218469	11/07/25		22603017	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	23.12
INVOICE:	J24817								
218470	11/10/25		22603017	102827	P	12/12/25	10151010 620131	PAINTING SUPPLIES	127.81
INVOICE:	424020								
218471	11/06/25			102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	-16.21
INVOICE:	J24327								
218472	12/03/25		22603290	102827	P	12/12/25	10123010 630114	PARTS	31.24
INVOICE:	J34633								
218473	12/02/25		22603290	102827	P	12/12/25	10123010 630114	PARTS	134.29
INVOICE:	J34087								
218539	10/01/25		22603201	102827	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	17.43
INVOICE:	J10577								
218540	11/13/25		22603201	102827	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	121.72
INVOICE:	J26905								
218541	11/14/25		22603201	102827	P	12/12/25	10151010 620131	PAINTING SUPPLIES	48.17
INVOICE:	J27391								
218542	11/14/25		22603201	102827	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	23.79
INVOICE:	J27417								
218543	11/17/25		22603201	102827	P	12/12/25	10151010 620131	PAINTING SUPPLIES	200.38
INVOICE:	J28510								
218544	11/17/25		22603201	102827	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	45.47
INVOICE:	J28324								
218544	11/17/25		22603201	102827	P	12/12/25	10151010 620140	SMALL TOOLS	9.26
INVOICE:	J28324								
218545	11/18/25		22603201	102827	P	12/12/25	10151010 630108	FIELD/SHOP EQUIP. MAINT.	53.02

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 121225 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	INVOICE: J28853										
	VENDOR TOTALS		5,660.99 YTD INVOICED						3,559.64 YTD PAID		2,471.81
8497	ADVANCED COMMUNICATION SYSTEMS, INC.										
	218254	11/25/25		22601506	102828	P	12/12/25	29923010	720111	COMMUNICATION EQUIPMENT	7,769.75
	INVOICE: 20542										
	VENDOR TOTALS		.00 YTD INVOICED						7,769.75 YTD PAID		7,769.75
9296	HEALTH & HUMAN RESOURCE CENTER, INC.										
	218481	12/04/25		22603319	102829	P	12/12/25	60396300	640106	EAP EXPENSE	510.51
	INVOICE: 218481										
	VENDOR TOTALS		587.73 YTD INVOICED						510.51 YTD PAID		510.51
6047	ALLIANT INSURANCE SERVICES, INC.										
	218265	11/26/25		22603175	102830	P	12/12/25	29951010	610135	SPECIAL EVENTS	4,518.00
	INVOICE: 3331690										
	VENDOR TOTALS		16,684.31 YTD INVOICED						4,518.00 YTD PAID		4,518.00
2053	ALLSTAR FIRE EQUIPMENT INC.										
	218474	11/17/25		22603295	102831	P	12/12/25	10123010	620112	PROTECTIVE CLOTHING	405.94
	INVOICE: 268666										
	VENDOR TOTALS		.00 YTD INVOICED						405.94 YTD PAID		405.94
10007	AMAZON CAPITAL SERVICES, INC.										
	218266	11/06/25		22603101	102832	P	12/12/25	10152060	610106	ADVERTISING	209.40
	INVOICE: 1JGD-NLR4-93C4										
	218267	11/15/25		22603102	102832	P	12/12/25	10152060	610129	OTHER EXPENSE	250.52
	INVOICE: 13NM-P9P1-YDF9										
	218268	11/18/25		22603102	102832	P	12/12/25	10152060	610129	OTHER EXPENSE	97.65
	INVOICE: 1K7N-WN1F-C9FH										
	218269	11/18/25		22603062	102832	P	12/12/25	29951010	610135	SPECIAL EVENTS	47.60
	INVOICE: 1JQ4-R6WX-97QM										
	218270	11/13/25		22603062	102832	P	12/12/25	29951010	610135	SPECIAL EVENTS	98.26
	INVOICE: 1FP3-MWYJ-DDDD										
	218271	11/14/25		22603062	102832	P	12/12/25	29951010	610135	SPECIAL EVENTS	378.21
	INVOICE: 1HJR-RXXH-NKFQ										
	218272	11/05/25		22603062	102832	P	12/12/25	10152010	620115	ATHLETIC FIELD SUPP	212.83
	INVOICE: 1YJY-946M-9V6F										
	218273	11/06/25		22603062	102832	P	12/12/25	10152010	620115	ATHLETIC FIELD SUPP	140.34
	INVOICE: 16RF-JWKW-FCHL										
	VENDOR TOTALS		15,879.49 YTD INVOICED						5,405.81 YTD PAID		1,434.81
7928	AMERICA'S FINEST FIRE PROTECTION										
	218274	10/09/25		22603097	102833	P	12/12/25	10152060	610113	PROFESSIONAL FEES/OTHER	369.19
	INVOICE: 18M 935037										

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 121225 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	218275	10/08/25		22603093	102833	P	12/12/25	10162010 630101	BUILDING MAINT.	357.78
	INVOICE:	16M 935036								
	218276	10/09/25		22603093	102833	P	12/12/25	10118020 630101	BUILDING MAINT.	391.28
	INVOICE:	18M 935030								
	218277	10/09/25		22603057	102833	P	12/12/25	10152040 610113	PROFESSIONAL FEES (O)	451.83
	INVOICE:	18M 935038								
	218278	10/09/25		22603057	102833	P	12/12/25	10152110 610113	PROFESSIONAL FEES/OTHER	319.24
	INVOICE:	18M 935039								
	218475	10/08/25		22603236	102833	P	12/12/25	10118010 630101	BUILDING MAINT.	332.42
	INVOICE:	18M 935035								
	218476	10/08/25		22603236	102833	P	12/12/25	10118010 630101	BUILDING MAINT.	383.65
	INVOICE:	18M 935034								
	218477	10/08/25		22603236	102833	P	12/12/25	10118010 630101	BUILDING MAINT.	297.30
	INVOICE:	18M 935043								
	VENDOR TOTALS			.00 YTD INVOICED				5,645.95 YTD PAID		2,902.69
196	AMERICAN FAMILY LIFE INS.									
	218482	11/01/25		22603308	102834	P	12/12/25	101 201211	ACCIDENTAL DEATH	1,702.84
	INVOICE:	976096								
	218482	11/01/25		22603308	102834	P	12/12/25	101 201212	ICU	120.88
	INVOICE:	976096								
	218482	11/01/25		22603308	102834	P	12/12/25	101 201214	CANCER INSURANCE	2,363.60
	INVOICE:	976096								
	218482	11/01/25		22603308	102834	P	12/12/25	101 201216	DISABILITY INSURANCE	1,444.80
	INVOICE:	976096								
	218482	11/01/25		22603308	102834	P	12/12/25	101 201217	OTHER PAYROLL DEDUCTIONS	595.26
	INVOICE:	976096								
	VENDOR TOTALS			6,777.76 YTD INVOICED				6,227.38 YTD PAID		6,227.38
7	AMERICAN LINEN									
	218279	11/27/25		22603147	102835	P	12/12/25	10123010 620129	LAUNDRY SERVICE & SUPPLY	230.14
	INVOICE:	LYUM1924716								
	218280	11/10/25		22603149	102835	P	12/12/25	10123010 620129	LAUNDRY SERVICE & SUPPLY	88.04
	INVOICE:	LYUM1920811								
	218478	11/19/25		22603148	102835	P	12/12/25	10123010 620129	LAUNDRY SERVICE & SUPPLY	81.80
	INVOICE:	LYUM1922947								
	218479	11/24/25		22603148	102835	P	12/12/25	10123010 620129	LAUNDRY SERVICE & SUPPLY	88.04
	INVOICE:	LYUM1923767								
	VENDOR TOTALS			1,370.31 YTD INVOICED				1,809.30 YTD PAID		488.02
6266	AT&T MOBILITY									
	218535	09/03/25		22602770	102836	P	12/12/25	10121010 610103	TELEPHONE	3,312.73
	INVOICE:	287306731535X091125								
	VENDOR TOTALS			8,979.74 YTD INVOICED				8,736.27 YTD PAID		3,312.73
4170	AUTOZONE, INC.									
	218281	09/01/25		22603166	102837	P	12/12/25	10123010 630114	PARTS	5.02

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: 2803898154									
	218282	11/19/25		22603166	102837	P	12/12/25	10123010 630112	GASOLINE & OIL	90.87
	INVOICE: 2803001042									
	218480	10/29/25		22603003	102837	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	20.06
	INVOICE: 2803974350									
	VENDOR TOTALS		2,724.51 YTD INVOICED					6,058.60 YTD PAID		115.95
9647	BENEFIT COORDINATORS CORP.									
	218483	12/04/25		22603321	102838	P	12/12/25	60396300 640104	MEDICAL CLAIMS	8,269.04
	INVOICE: B0L795									
	218484	12/04/25		22603322	102838	P	12/12/25	60396300 640105	VISION CLAIMS	5,248.79
	INVOICE: B0L79Y									
	218485	12/01/25		22603320	102838	P	12/12/25	60396300 640104	MEDICAL CLAIMS	362,283.00
	INVOICE: B0KXQS									
	218485	12/01/25		22603320	102838	P	12/12/25	60396300 640105	VISION CLAIMS	183.95
	INVOICE: B0KXQS									
	VENDOR TOTALS		368,153.91 YTD INVOICED					375,984.78 YTD PAID		375,984.78
9931	BRAWLEY ANALYTICAL, INC.									
	218283	11/10/25		22602964	102839	P	12/12/25	50295210 620137	LAB TESTS & SUPPLIES	1,679.00
	INVOICE: 001566									
	VENDOR TOTALS		3,822.50 YTD INVOICED					4,722.50 YTD PAID		1,679.00
6340	BRINKS INCORPORATED									
	218486	11/30/25		22603287	102840	P	12/12/25	10152020 610113	PROFESSIONAL FEES (O)	700.21
	INVOICE: 8161589									
	218486	11/30/25		22603287	102840	P	12/12/25	10152040 610113	PROFESSIONAL FEES (O)	360.77
	INVOICE: 8161589									
	218486	11/30/25		22603287	102840	P	12/12/25	10152060 610113	PROFESSIONAL FEES/OTHER	1,250.58
	INVOICE: 8161589									
	218486	11/30/25		22603287	102840	P	12/12/25	10153010 610113	PROFESSIONAL FEES/OTHER	744.57
	INVOICE: 8161589									
	218486	11/30/25		22603287	102840	P	12/12/25	50195120 610113	PROFESSIONAL FEES (O)	802.47
	INVOICE: 8161589									
	218486	11/30/25		22603287	102840	P	12/12/25	50295220 610113	PROFESSIONAL FEES (O)	802.47
	INVOICE: 8161589									
	VENDOR TOTALS		4,623.27 YTD INVOICED					4,661.07 YTD PAID		4,661.07
10416	BRYCE BROWN									
	218284	12/01/25		22603192	102841	P	12/12/25	10123010 610113	PROFESSIONAL FEES (O)	1,500.00
	INVOICE: 20251201-ECFD									
	VENDOR TOTALS		1,500.00 YTD INVOICED					1,500.00 YTD PAID		1,500.00
6276	C R & R									
	218285	12/03/25		22603195	102842	P	12/12/25	50495400 610117	SOLID WASTE COLLECTIONS	191,269.42
	INVOICE: 218285									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS	195,805.83 YTD INVOICED					192,534.26 YTD PAID			191,269.42
1167	MANUELA CARRILLO									
	218556	12/12/25	1635		102843	P	12/12/25	201217	OTHER PAYROLL DEDUCTIONS	222.50
	INVOICE: 218556									
	VENDOR TOTALS	445.00 YTD INVOICED					445.00 YTD PAID			222.50
4301	CARROT-TOP INDUSTRIES INC.									
	218286	10/31/25		22603068	102844	P	12/12/25	10152010 610129	OTHER EXPENSE	166.73
	INVOICE: INV145237									
	VENDOR TOTALS	.00 YTD INVOICED					166.73 YTD PAID			166.73
10390	JONATHAN CAZARES									
	218287	11/13/25		22603063	102845	P	12/12/25	10152140 610113	PROFESSIONAL FEES/OTHER	320.00
	INVOICE: 00I5489									
	218288	11/13/25		22603063	102845	P	12/12/25	29951010 610135	SPECIAL EVENTS	610.00
	INVOICE: 00I5490									
	VENDOR TOTALS	.00 YTD INVOICED					1,180.00 YTD PAID			930.00
4323	CDW GOVERNMENT, INC.									
	218289	11/17/25		22602764	102846	P	12/12/25	29923010 750009	FIRE STATION ALERTING	3,412.11
	INVOICE: AG9G48J									
	218290	11/18/25		22602764	102846	P	12/12/25	29923010 750009	FIRE STATION ALERTING	118.77
	INVOICE: AG9LN9G									
	VENDOR TOTALS	11,352.98 YTD INVOICED					30,684.92 YTD PAID			3,530.88
54	CITY OF EL CENTRO-WATER DEPT.									
	218563	11/25/25		22603372	102847	P	12/12/25	20434060 610104	WATER	497.01
	INVOICE: 1904879									
	218564	11/25/25		22603372	102847	P	12/12/25	20434060 610104	WATER	26.06
	INVOICE: 1904880									
	VENDOR TOTALS	1,532.41 YTD INVOICED					2,412.03 YTD PAID			523.07
10479	ERIC CORREA									
	218291	11/03/25		22603105	102848	P	12/12/25	10123050 610123	TRAINING	77.00
	INVOICE: 83547177									
	VENDOR TOTALS	.00 YTD INVOICED					77.00 YTD PAID			77.00
10411	COYNE COMPANIES LLC									
	218292	12/03/25		22603191	102849	P	12/12/25	10152010 750020	GOLF CART (PARKS)	2,400.00
	INVOICE: 4024147									
	218292	12/03/25		22603191	102849	P	12/12/25	29951010 750020	GOLF CART (PARKS)	7,600.00
	INVOICE: 4024147									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS			.00 YTD INVOICED				10,000.00 YTD PAID		10,000.00
1871	DANIELS TIRE SERVICE, INC.									
	218487	08/12/25		22603296	102850	P	12/12/25	10123010 630113	TIRES & BATTERIES	151.79
	INVOICE: 227071959									
	218488	12/03/25		22603294	102850	P	12/12/25	10123010 630113	TIRES & BATTERIES	1,894.40
	INVOICE: 227074196									
	VENDOR TOTALS			3,627.10 YTD INVOICED				5,111.88 YTD PAID		2,046.19
1964	DESERT DOC SHREDDERS & RECORDS STORAGE LLC									
	218489	12/04/25		22603329	102851	P	12/12/25	10115010 610129	OTHER EXPENSE	571.00
	INVOICE: 55852									
	VENDOR TOTALS			.00 YTD INVOICED				571.00 YTD PAID		571.00
10609	EL CENTRO GENERAL EMPLOYEES ASSOC.									
	218560	12/12/25	1639		102852	P	12/12/25	101 201206	EMPLOYEES ASSOCIATION	2,025.00
	INVOICE: 218560									
	VENDOR TOTALS			.00 YTD INVOICED				4,050.00 YTD PAID		2,025.00
103	EL CENTRO POSTMASTER									
	218490	12/09/25		22603334	102853	P	12/12/25	10115010 620102	POSTAGE	382.00
	INVOICE: 2069/FY2026									
	VENDOR TOTALS			.00 YTD INVOICED				382.00 YTD PAID		382.00
247	FEDEX									
	218520	11/28/25		22603270	102854	P	12/12/25	10143010 620102	POSTAGE	101.48
	INVOICE: 9-085-01544									
	VENDOR TOTALS			1,532.34 YTD INVOICED				1,117.46 YTD PAID		101.48
4462	FERGUSON ENTERPRISES, INC.									
	218491	10/31/25		22603002	102855	P	12/12/25	10151010 630101	BUILDING MAINT.	39.28
	INVOICE: 5868384									
	VENDOR TOTALS			35,119.99 YTD INVOICED				12,497.40 YTD PAID		39.28
202	FIRST IMPERIAL CREDIT UNION									
	218554	12/12/25	1633		102856	P	12/12/25	101 201207	POLICE OFFICERS ASSN	3,120.00
	INVOICE: 218554									
	VENDOR TOTALS			6,000.00 YTD INVOICED				6,240.00 YTD PAID		3,120.00
10677	FOCUS PSYCHOLOGICAL SERVICE, INC.									
	218492	10/13/25		22603260	102857	P	12/12/25	10123010 610113	PROFESSIONAL FEES (O)	200.00
	INVOICE: INV106798									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS		.00 YTD INVOICED						200.00 YTD PAID		200.00
9862	FOSTER & FOSTER, INC.										
	218493	12/08/25		22603328	102858	P	12/12/25	60296200	610113	PROFESSIONAL FEES/OTHER	1,700.00
	INVOICE: 39301										
	VENDOR TOTALS		.00 YTD INVOICED						1,700.00 YTD PAID		1,700.00
3767	FRANCHISE TAX BOARD										
	218557	12/12/25	1636		102859	P	12/12/25	101 201217		OTHER PAYROLL DEDUCTIONS	664.76
	INVOICE: 218557										
	VENDOR TOTALS		.00 YTD INVOICED						1,329.52 YTD PAID		664.76
4317	FRUTH GROUP INC.										
	218293	10/21/25		22602992	102860	P	12/12/25	10152040	620103	PRINTING	106.93
	INVOICE: 765865										
	218294	11/11/25		22603099	102860	P	12/12/25	10152060	620103	PRINTING	118.86
	INVOICE: 770018										
	218494	11/14/25		22603286	102860	P	12/12/25	10114010	620103	PRINTING	89.53
	INVOICE: 770631										
	VENDOR TOTALS		2,466.80 YTD INVOICED						1,840.47 YTD PAID		315.32
121	GIO'S MOBILE HOME ESTATES										
	218495	11/10/25		22603332	102861	P	12/12/25	50295210	610101	ELECTRICITY	35.22
	INVOICE: 98700300/NOV2025										
	VENDOR TOTALS		47.43 YTD INVOICED						35.22 YTD PAID		35.22
10172	ANDREW HEATH										
	218562	12/09/25		22603376	102862	P	12/12/25	10115010	610113	PROFESSIONAL FEES (O)	6,650.00
	INVOICE: 25-23										
	VENDOR TOTALS		12,337.50 YTD INVOICED						6,650.00 YTD PAID		6,650.00
4982	HOME DEPOT										
	218296	11/19/25		22603088	102863	P	12/12/25	10123010	630101	BUILDING MAINT.	14.19
	INVOICE: 8903322										
	218297	11/25/25		22603170	102863	P	12/12/25	10123010	620108	FLARES-BATTERIES-FILM	873.58
	INVOICE: 2904349										
	218298	11/17/25		22603203	102863	P	12/12/25	10151010	620130	MAINTENANCE SUPPLIES	108.10
	INVOICE: 902887										
	218299	11/18/25		22603203	102863	P	12/12/25	10151010	620140	SMALL TOOLS	132.03
	INVOICE: 9903153										
	218300	11/19/25		22603079	102863	P	12/12/25	10118020	630101	BUILDING MAINT.	50.97
	INVOICE: 8903422										
	218301	10/20/25		22603077	102863	P	12/12/25	20532040	610113	PROFESSIONAL FEES/OTHER	449.81
	INVOICE: 8904687										
	218302	11/04/25		22602713	102863	P	12/12/25	10118020	630101	BUILDING MAINT.	25.57

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: 3901090									
	218304	10/29/25		22602774	102863	P	12/12/25	50195100 620132	CONSTRUCTION MATERIAL	255.09
	INVOICE: 9900179									
	218305	10/27/25		22602853	102863	P	12/12/25	60496400 630101	BUILDING MAINT.	67.35
	INVOICE: 1905710									
	218306	11/07/25		22602841	102863	P	12/12/25	10162020 620131	PAINTING SUPPLIES	25.35
	INVOICE: 901624									
	218307	11/03/25		22602928	102863	P	12/12/25	10118010 620130	MAINTENANCE SUPPLIES	45.18
	INVOICE: 4900790									
	218308	11/04/25		22602928	102863	P	12/12/25	10118010 620140	SMALL TOOLS	10.70
	INVOICE: 3901089									
	218309	11/05/25		22602928	102863	P	12/12/25	10118010 620140	SMALL TOOLS	27.03
	INVOICE: 2901224									
	218310	10/28/25		22602711	102863	P	12/12/25	10152050 630101	BUILDING MAINT.	13.27
	INVOICE: 900030									
	218313	09/24/25		22602711	102863	P	12/12/25	29951010 610135	SPECIAL EVENTS	103.93
	INVOICE: 5905263									
	218315	09/24/25		22602711	102863	P	12/12/25	29951010 610135	SPECIAL EVENTS	57.12
	INVOICE: 4901309									
	218316	09/30/25		22602711	102863	P	12/12/25	10152020 620130	MAINTENANCE SUPPLIES	331.60
	INVOICE: 8902111									
	218317	10/31/25		22602711	102863	P	12/12/25	10152020 620130	MAINTENANCE SUPPLIES	88.42
	INVOICE: 7900526									
	218318	10/21/25		22602711	102863	P	12/12/25	10152020 620130	MAINTENANCE SUPPLIES	103.52
	INVOICE: 7904961									
	218319	10/16/25		22602711	102863	P	12/12/25	10152050 620130	MAINTENANCE SUPPLIES	14.05
	INVOICE: 2904273									
	218320	09/22/25		22602711	102863	P	12/12/25	10152050 620130	MAINTENANCE SUPPLIES	6.46
	INVOICE: 6901037									
	218321	11/05/25		22602711	102863	P	12/12/25	10152050 620130	MAINTENANCE SUPPLIES	86.21
	INVOICE: 2901259									
	218323	10/13/25		22602784	102863	P	12/12/25	50195110 630117	METER MAINTENANCE	547.86
	INVOICE: 5903742									
	218324	10/16/25		22602784	102863	P	12/12/25	50195110 620130	MAINTENANCE SUPPLIES	28.48
	INVOICE: 2904287									
	218325	11/07/25		22602959	102863	P	12/12/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	1,345.01
	INVOICE: 901600									
	218326	11/04/25		22602959	102863	P	12/12/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	182.30
	INVOICE: 3901062									
	218327	11/07/25		22602959	102863	P	12/12/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	424.82
	INVOICE: 901534									
	218328	10/21/25		22602971	102863	P	12/12/25	60496400 610129	OTHER EXPENSE	101.52
	INVOICE: 7904970									
	VENDOR TOTALS		12,043.86 YTD INVOICED					6,995.95 YTD PAID		5,519.52
5691	I.C. WORK TRAINING CENTER, INC.									
	218329	10/31/25		22603172	102864	P	12/12/25	10152020 610113	PROFESSIONAL FEES (O)	1,372.00
	INVOICE: 3488									
	218329	10/31/25		22603172	102864	P	12/12/25	10152030 610113	PROFESSIONAL FEES/OTHER	1,176.00
	INVOICE: 3488									

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	218329	10/31/25		22603172	102864	P	12/12/25	10152050	610113	PROFESSIONAL FEES (O)	980.00
	INVOICE: 3488										
	218330	10/31/25		22602905	102864	P	12/12/25	10153010	610113	PROFESSIONAL FEES/OTHER	6,381.71
	INVOICE: 3487										
	218331	09/30/25		22602904	102864	P	12/12/25	10153010	610113	PROFESSIONAL FEES/OTHER	6,381.71
	INVOICE: 3471										
	VENDOR TOTALS		3,528.00	YTD INVOICED				16,291.42	YTD PAID		16,291.42
205	IMPERIAL CO SHERIFF'S DEPT.										
	218555	12/12/25	1634		102865	P	12/12/25	101	201217	OTHER PAYROLL DEDUCTIONS	50.00
	INVOICE: 218555										
	VENDOR TOTALS		100.00	YTD INVOICED				100.00	YTD PAID		50.00
145	IMPERIAL IRRIGATION DIST										
	218332	11/05/25		22603111	102866	P	12/12/25	50195110	620138	PURCHASED WATER	14,104.00
	INVOICE: 3034482/NOV2025										
	VENDOR TOTALS		284,851.23	YTD INVOICED				14,104.00	YTD PAID		14,104.00
146	IMPERIAL PRINTERS										
	218333	10/25/25		22603153	102867	P	12/12/25	10111010	610110	MAYOR'S EXPENSE	78.48
	INVOICE: 25-3336										
	VENDOR TOTALS		2,697.60	YTD INVOICED				892.61	YTD PAID		78.48
9601	IMPERIAL VALLEY COLLEGE FOUNDATION										
	218496	12/02/25		22603284	102868	P	12/12/25	10112010	610139	COMMUNITY SPONSORSHIP	500.00
	INVOICE: 2025-383										
	VENDOR TOTALS		.00	YTD INVOICED				500.00	YTD PAID		500.00
8378	IMPERIAL VALLEY OCCUPATIONAL MEDICINE										
	218497	12/05/25		22603324	102869	P	12/12/25	10113010	610122	RECRUITING	320.00
	INVOICE: 5132										
	VENDOR TOTALS		1,993.44	YTD INVOICED				320.00	YTD PAID		320.00
607	IMPERIAL VALLEY PRESS										
	218334	11/29/25		22603158	102870	P	12/12/25	10144010	610106	ADVERTISING	291.99
	INVOICE: 537443										
	218335	11/22/25		22603199	102870	P	12/12/25	10111020	610106	ADVERTISING	208.67
	INVOICE: 535190										
	218336	11/21/25		22603198	102870	P	12/12/25	10111020	610106	ADVERTISING	548.34
	INVOICE: 535096										
	VENDOR TOTALS		1,558.10	YTD INVOICED				2,242.57	YTD PAID		1,049.00
141	IMPERIAL VALLEY TERMITE										
	218339	11/03/25		22603152	102871	P	12/12/25	10123010	630101	BUILDING MAINT.	60.00

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	INVOICE: 0357734									
	218546	10/16/25		22602771	102871	P	12/12/25	20434060 610113	PROFESSIONAL FEES/OTHER	60.00
	INVOICE: 0356664									
	VENDOR TOTALS		409.00 YTD INVOICED					1,098.00 YTD PAID		120.00
6144	INLAND FAIR HOUSING AND MEDIATION BOARD									
	218519	10/31/25		22603208	102872	P	12/12/25	24393190 610113	PROFESSIONAL FEES/OTHER	1,788.15
	INVOICE: 16077									
	VENDOR TOTALS		2,739.06 YTD INVOICED					1,788.15 YTD PAID		1,788.15
3760	JADE SECURITY SYSTEMS INC.									
	218499	11/24/25		22603261	102873	P	12/12/25	10123010 630101	BUILDING MAINT.	95.00
	INVOICE: 0229493									
	VENDOR TOTALS		2,372.54 YTD INVOICED					4,873.73 YTD PAID		95.00
6291	K-C WELDING & RENTALS INC.									
	218341	11/05/25		22603012	102874	P	12/12/25	10151010 630108	FIELD/SHOP EQUIP. MAINT.	383.50
	INVOICE: 220324									
	218342	11/14/25		22603204	102874	P	12/12/25	10151010 630108	FIELD/SHOP EQUIP. MAINT.	120.15
	INVOICE: 220739									
	218500	12/02/25		22603292	102874	P	12/12/25	10123010 630114	PARTS	302.34
	INVOICE: 221373									
	VENDOR TOTALS		15,596.31 YTD INVOICED					7,806.83 YTD PAID		805.99
610	KNORR SYSTEMS, INC.									
	218343	11/20/25		22603092	102875	P	12/12/25	10152060 610113	PROFESSIONAL FEES/OTHER	3,862.12
	INVOICE: 290244									
	VENDOR TOTALS		3,795.82 YTD INVOICED					3,862.12 YTD PAID		3,862.12
7550	LABOR COMPLIANCE CONSULTANTS OF SO. CAL.									
	218344	07/07/25		22603143	102876	P	12/12/25	50295210 750029	UV DESINFECTING SYSTEM	1,000.00
	INVOICE: 2961									
	218345	11/06/25		22603014	102876	P	12/12/25	10151010 610113	PROFESSIONAL FEES (O)	127.50
	INVOICE: 3055									
	VENDOR TOTALS		1,170.00 YTD INVOICED					3,127.50 YTD PAID		1,127.50
4406	LABRUCHERIE IRRIGATION SUPPLY									
	218346	11/13/25		22603202	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	317.87
	INVOICE: 314519									
	218347	11/13/25		22603202	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	87.51
	INVOICE: 314520									
	218348	11/13/25		22603202	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	108.94
	INVOICE: 314507									
	218349	11/14/25		22603202	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	9.15
	INVOICE: 314659									

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218350	11/14/25		22603202	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	190.35
INVOICE: 314626									
218351	11/17/25		22603202	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	822.56
INVOICE: 314780									
218352	11/17/25		22603202	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	463.06
INVOICE: 314766									
218353	11/18/25		22603113	102877	P	12/12/25	50195110 630117	METER MAINTENANCE	313.99
INVOICE: 314945									
218354	11/06/25		22603113	102877	P	12/12/25	50195110 620139	PIPE FITTINGS	115.46
INVOICE: 313979C									
218355	11/18/25		22603123	102877	P	12/12/25	50195110 630117	METER MAINTENANCE	2,265.89
INVOICE: 314939									
218356	10/22/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	46.92
INVOICE: 312791C									
218357	10/27/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	61.70
INVOICE: 313100C									
218358	10/27/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	340.21
INVOICE: 313089C									
218359	10/28/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	525.28
INVOICE: 313199C									
218360	10/30/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	402.54
INVOICE: 313435C									
218361	10/30/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	72.80
INVOICE: 313384C									
218362	10/31/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	338.18
INVOICE: 313487C									
218363	11/03/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	23.09
INVOICE: 313622C									
218364	11/03/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	109.51
INVOICE: 313666C									
218365	11/03/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	85.00
INVOICE: 313671C									
218366	11/04/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	334.35
INVOICE: 313695C									
218367	11/05/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	248.94
INVOICE: 313825C									
218368	11/05/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	42.22
INVOICE: 313843C									
218369	11/05/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	262.92
INVOICE: 313872C									
218369	11/05/25		22603018	102877	P	12/12/25	10151010 630108	FIELD/SHOP EQUIP. MAINT.	23.01
INVOICE: 313872C									
218370	11/05/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	405.92
INVOICE: 313812C									
218370	11/05/25		22603018	102877	P	12/12/25	10151010 630108	FIELD/SHOP EQUIP. MAINT.	23.01
INVOICE: 313812C									
218371	11/06/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	358.46
INVOICE: 313919C									
218372	11/07/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	213.27
INVOICE: 314019C									
218373	11/07/25		22603018	102877	P	12/12/25	10151010 620123	IRRIGATION & SPRINKLERS	58.69

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	INVOICE: 314040C									
	218374	11/07/25		22603018	102877	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	45.67
	INVOICE: 314046C									
	218375	11/10/25		22603018	102877	P	12/12/25	10151010 620132	CONSTRUCTION MATERIALS	14.53
	INVOICE: 314219C									
	218376	11/12/25		22603018	102877	P	12/12/25	10151010 630108	FIELD/SHOP EQUIP. MAINT.	95.98
	INVOICE: 314418									
	218377	11/12/25		22603018	102877	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	487.29
	INVOICE: 314409									
	218378	11/12/25			102877	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	-456.17
	INVOICE: 314411									
	VENDOR TOTALS		10,125.00 YTD INVOICED					18,710.24 YTD PAID		8,858.10
8754	LESLIE'S SWIMMING POOL SUPPLIES									
	218379	11/20/25		22603094	102878	P	12/12/25	10152060 620133	SWIMMING POOL SUPPLIES	115.20
	INVOICE: 00652-02-067699									
	218380	11/12/25		22603053	102878	P	12/12/25	10152060 620133	SWIMMING POOL SUPPLIES	115.20
	INVOICE: 00652-01-066300									
	VENDOR TOTALS		326.26 YTD INVOICED					345.60 YTD PAID		230.40
4003	LIFE ASSIST INC.									
	218381	11/18/25		22603103	102879	P	12/12/25	10123040 620111	PARAMEDIC SUPPLIES	216.00
	INVOICE: 2014743									
	VENDOR TOTALS		1,599.64 YTD INVOICED					2,065.67 YTD PAID		216.00
276	MCNEECE BROS. OIL CO. INC.									
	218382	11/18/25		22603104	102880	P	12/12/25	10123010 630112	GASOLINE & OIL	858.09
	INVOICE: 624586									
	218501	11/25/25		22603275	102880	P	12/12/25	10123010 630112	GASOLINE & OIL	613.01
	INVOICE: 624999									
	218502	11/25/25		22603275	102880	P	12/12/25	10123010 630112	GASOLINE & OIL	155.44
	INVOICE: 624587									
	218503	11/30/25		22603274	102880	P	12/12/25	10123010 630112	GASOLINE & OIL	1,166.31
	INVOICE: 921162									
	218505	11/30/25		22603285	102880	P	12/12/25	10112010 630112	GASOLINE & OIL	83.62
	INVOICE: 921153									
	VENDOR TOTALS		13,684.08 YTD INVOICED					47,556.67 YTD PAID		2,876.47
9095	MECHANICS BANK									
	218559	12/12/25 1638			102881	P	12/12/25	101 201208	FIREFIGHTERS ASSOCIATION	1,420.00
	INVOICE: 218559									
	218559	12/12/25 1638			102881	P	12/12/25	101 201216	DISABILITY INSURANCE	200.13
	INVOICE: 218559									
	VENDOR TOTALS		3,100.14 YTD INVOICED					3,240.26 YTD PAID		1,620.13
6025	MED-TECH RESOURCE, INC.									

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	218383	10/23/25		22603174	102882	P	12/12/25	10123040 620111	PARAMEDIC SUPPLIES	629.23
	INVOICE: 155933									
	218506	11/24/25		22603293	102882	P	12/12/25	10123040 620111	PARAMEDIC SUPPLIES	273.75
	INVOICE: 156387									
	218507	12/02/25		22603293	102882	P	12/12/25	10123040 620111	PARAMEDIC SUPPLIES	523.55
	INVOICE: 156485									
	VENDOR TOTALS		.00	YTD INVOICED				1,426.53	YTD PAID	1,426.53
10654	FAVIOLA MEJORADO									
	218384	10/14/25		22603067	102883	P	12/12/25	10110006 460116	RECREATION FEES	172.00
	INVOICE: 2753518									
	VENDOR TOTALS		.00	YTD INVOICED				172.00	YTD PAID	172.00
8892	NHA ADVISORS, LLC									
	218386	11/21/25		22603231	102884	P	12/12/25	10119010 610113	PROFESSIONAL FEES (O)	962.50
	INVOICE: 01900									
	218387	11/21/25		22603216	102884	P	12/12/25	10119010 610113	PROFESSIONAL FEES (O)	3,631.25
	INVOICE: 01896									
	218388	07/11/25		22603233	102884	P	12/12/25	10119010 610113	PROFESSIONAL FEES (O)	6,987.50
	INVOICE: 01789									
	218389	07/11/25		22603232	102884	P	12/12/25	10119010 610113	PROFESSIONAL FEES (O)	5,256.25
	INVOICE: 01738									
	VENDOR TOTALS		18,500.00	YTD INVOICED				16,837.50	YTD PAID	16,837.50
9305	NUCo2									
	218390	11/05/25		22603052	102885	P	12/12/25	10152060 620136	TREATMENT CHEMICALS	612.14
	INVOICE: 81820674									
	218391	11/17/25		22603052	102885	P	12/12/25	10152060 620136	TREATMENT CHEMICALS	412.80
	INVOICE: 81960308									
	VENDOR TOTALS		2,023.39	YTD INVOICED				1,024.94	YTD PAID	1,024.94
8013	PADRE USA									
	218392	10/31/25		22603005	102886	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	37.45
	INVOICE: 16033278									
	218547	11/10/25		22603059	102886	P	12/12/25	10152040 620128	JANITORIAL SUPPLIES	265.21
	INVOICE: 16033385									
	218548	11/10/25		22603059	102886	P	12/12/25	10152040 620128	JANITORIAL SUPPLIES	8.98
	INVOICE: 16033397									
	VENDOR TOTALS		3,521.76	YTD INVOICED				2,141.34	YTD PAID	311.64
9651	PREMIER ELECTRICAL SOLUTIONS INC.									
	218393	11/18/25		22603011	102887	P	12/12/25	10151010 610113	PROFESSIONAL FEES (O)	7,658.27
	INVOICE: 683									
	VENDOR TOTALS		767.55	YTD INVOICED				7,658.27	YTD PAID	7,658.27

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3121	PRO RECORD STORAGE & SHRED INC									
	218394	12/01/25		22603165	102888	P	12/12/25	10144010 610129	OTHER EXPENSE	48.21
	INVOICE: 0032976									
	218395	12/01/25		22603164	102888	P	12/12/25	10141010 610129	OTHER EXPENSE	249.46
	INVOICE: 0032904									
	218396	12/01/25		22603211	102888	P	12/12/25	10113010 610113	PROFESSIONAL FEES (O)	97.72
	INVOICE: 0032952									
	218508	12/01/25		22603333	102888	P	12/12/25	10115010 610129	OTHER EXPENSE	142.34
	INVOICE: 0032970									
	VENDOR TOTALS		881.65 YTD INVOICED					859.76 YTD PAID		537.73
293	QUILL CORPORATION									
	218549	10/15/25		22602825	102889	P	12/12/25	10121010 620128	JANITORIAL SUPPLIES	202.52
	INVOICE: 46194600									
	VENDOR TOTALS		986.53 YTD INVOICED					593.03 YTD PAID		202.52
2840	RESERVE ACCOUNT-PITNEY BOWES									
	218397	12/01/25		22603230	102890	P	12/12/25	10119010 620102	POSTAGE	250.00
	INVOICE: 218397									
	218398	11/26/25		22603230	102890	P	12/12/25	10119010 620102	POSTAGE	250.00
	INVOICE: 218398									
	218509	12/02/25		22603331	102890	P	12/12/25	10119010 620102	POSTAGE	250.00
	INVOICE: 218509									
	218510	12/04/25		22603331	102890	P	12/12/25	10119010 620102	POSTAGE	250.00
	INVOICE: 218510									
	218511	12/05/25		22603331	102890	P	12/12/25	10119010 620102	POSTAGE	250.00
	INVOICE: 218511									
	VENDOR TOTALS		1,000.00 YTD INVOICED					1,500.00 YTD PAID		1,250.00
8634	REXEL USA, INC.									
	218399	10/16/25		22603015	102891	P	12/12/25	10151010 620132	CONSTRUCTION MATERIALS	231.09
	INVOICE: S143693296.001									
	VENDOR TOTALS		256.65 YTD INVOICED					986.26 YTD PAID		231.09
584	RICK'S GROUP DIESEL, INC.									
	218512	11/25/25		22603262	102892	P	12/12/25	10123010 630115	OUTSIDE MAINTENANCE	285.00
	INVOICE: 32268									
	VENDOR TOTALS		1,313.66 YTD INVOICED					3,397.59 YTD PAID		285.00
8791	RICK'S ROADRUNNER LOCK & SAFE									
	218401	11/03/25		22603010	102893	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	41.13
	INVOICE: 23763									
	VENDOR TOTALS		265.98 YTD INVOICED					112.56 YTD PAID		41.13
1830	DENISE J. RYAN									

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	218402	12/02/25		22603228	102894	P	12/12/25	10119010 610129	OTHER EXPENSE	150.00
	INVOICE:	0534102								
	VENDOR TOTALS		200.00 YTD INVOICED					250.00 YTD PAID		150.00
1656	SECURITAS SEC. SERV. USA, INC.									
	218403	10/31/25		22602702	102896	P	12/12/25	29951010 610113	PROFESSIONAL FEES/OTHER	211.84
	INVOICE:	12351221								
	218404	10/31/25		22602702	102896	P	12/12/25	29951010 610113	PROFESSIONAL FEES/OTHER	3,262.87
	INVOICE:	12351222								
	218405	11/30/25		22603288	102895	P	12/12/25	50195120 610113	PROFESSIONAL FEES (O)	337.62
	INVOICE:	12386184								
	218405	11/30/25		22603288	102895	P	12/12/25	50295220 610113	PROFESSIONAL FEES (O)	337.62
	INVOICE:	12386184								
	VENDOR TOTALS		13,438.60 YTD INVOICED					7,963.07 YTD PAID		4,149.95
213	SOUTHERN CALIFORNIA GAS CO									
	218406	10/20/25		22602994	102897	P	12/12/25	10152110 610102	NATURAL GAS	15.01
	INVOICE:	17977410368/OCT2025								
	218407	10/23/25		22602901	102897	P	12/12/25	10153010 610102	NATURAL GAS	25.00
	INVOICE:	02884022845/OCT2025								
	218513	11/19/25		22603273	102897	P	12/12/25	10123010 610102	NATURAL GAS	222.83
	INVOICE:	02222688000/NOV2025								
	218514	11/18/25		22603273	102897	P	12/12/25	10123010 610102	NATURAL GAS	115.76
	INVOICE:	09772541000/NOV2025								
	VENDOR TOTALS		4,956.03 YTD INVOICED					67,507.62 YTD PAID		378.60
5990	STATE DISBURSEMENT UNIT									
	218558	12/12/25 1637			102898	P	12/12/25	101 201217	OTHER PAYROLL DEDUCTIONS	2,966.14
	INVOICE:	218558								
	VENDOR TOTALS		5,245.76 YTD INVOICED					5,932.28 YTD PAID		2,966.14
6129	SUNBELT RENTALS INC.									
	218408	10/29/25		22603206	102899	P	12/12/25	10151010 610111	EQUIPMENT RENTAL	353.03
	INVOICE:	176105175-0001								
	218409	10/30/25		22603008	102899	P	12/12/25	10151010 610111	EQUIPMENT RENTAL	119.42
	INVOICE:	176052103-0002								
	VENDOR TOTALS		604.98 YTD INVOICED					1,091.24 YTD PAID		472.45
979	SWRCB									
	218410	11/19/25		22603142	102900	P	12/12/25	50295210 610131	FILING FEES	54,974.00
	INVOICE:	WD-0310210								
	VENDOR TOTALS		.00 YTD INVOICED					98,265.00 YTD PAID		54,974.00
4062	TERMINIX OF IMPERIAL VALLEY									
	218411	11/06/25		22603061	102901	P	12/12/25	10152110 610113	PROFESSIONAL FEES/OTHER	51.84

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	INVOICE: 1164009									
	218412	11/06/25		22603061	102901	P	12/12/25	10152040 610113	PROFESSIONAL FEES (O)	44.00
	INVOICE: 1164255									
	218413	11/05/25		22603100	102901	P	12/12/25	10152060 610113	PROFESSIONAL FEES/OTHER	64.80
	INVOICE: 1164771									
	VENDOR TOTALS		417.12 YTD INVOICED					723.00 YTD PAID		160.64
5974	THATCHER COMPANY OF CALIFORNIA									
	218414	11/14/25		22603120	102902	P	12/12/25	50195110 620136	TREATMENT CHEMICALS	19,793.60
	INVOICE: 2025100117638									
	VENDOR TOTALS		40,293.00 YTD INVOICED					59,825.80 YTD PAID		19,793.60
521	TYLER TECHNOLOGIES, INC.									
	218415	12/01/25		22603157	102903	P	12/12/25	10141010 610113	PROFESSIONAL FEES (O)	2,432.50
	INVOICE: 025-535005/PLN									
	VENDOR TOTALS		2,432.50 YTD INVOICED					4,579.00 YTD PAID		2,432.50
6289	U.S. BANK									
	218521	10/22/25		22603022	102904	P	12/12/25	10153010 610109	MEETING AND TRAVEL	315.20
	INVOICE: 66414846/10/22-25									
	218521	10/22/25		22603022	102904	P	12/12/25	10153010 610121	DUES & SUBSCRIPTIONS	27.22
	INVOICE: 66414846/10/22-25									
	218521	10/22/25		22603022	102904	P	12/12/25	10153010 610129	OTHER EXPENSE	2,119.33
	INVOICE: 66414846/10/22-25									
	218521	10/22/25		22603022	102904	P	12/12/25	10153010 620101	OFFICE SUPPLIES	200.35
	INVOICE: 66414846/10/22-25									
	218521	10/22/25		22603022	102904	P	12/12/25	10153010 620128	JANITORIAL SUPPLIES	119.39
	INVOICE: 66414846/10/22-25									
	218524	10/22/25		22603048	102904	P	12/12/25	10152060 610121	DUES & SUBSCRIPTIONS	174.02
	INVOICE: 02068424/10-22-25									
	218524	10/22/25		22603048	102904	P	12/12/25	10152060 610129	OTHER EXPENSE	32.48
	INVOICE: 02068424/10-22-25									
	218524	10/22/25		22603048	102904	P	12/12/25	10152060 620128	JANITORIAL SUPPLIES	449.49
	INVOICE: 02068424/10-22-25									
	218524	10/22/25		22603048	102904	P	12/12/25	10152060 620133	SWIMMING POOL SUPPLIES	530.85
	INVOICE: 02068424/10-22-25									
	218524	10/22/25		22603048	102904	P	12/12/25	29951010 610135	SPECIAL EVENTS	602.09
	INVOICE: 02068424/10-22-25									
	218525	10/22/25		22603050	102904	P	12/12/25	10152060 620133	SWIMMING POOL SUPPLIES	702.42
	INVOICE: 02068424/10-22-25(1)									
	218526	10/22/25		22603049	102904	P	12/12/25	29951010 610135	SPECIAL EVENTS	600.00
	INVOICE: 02068424/10-22-25(2)									
	218527	10/22/25		22603051	102904	P	12/12/25	10110006 460115	SWIMMING POOL FEES	27.90
	INVOICE: 02016654/10-22-25									
	218527	10/22/25		22603051	102904	P	12/12/25	10152010 610109	MEETING AND TRAVEL	170.28
	INVOICE: 02016654/10-22-25									
	218527	10/22/25		22603051	102904	P	12/12/25	10152060 610109	MEETING AND TRAVEL	10.70
	INVOICE: 02016654/10-22-25									

CITY OF EL CENTRO

PAID INVOICES REPORT

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VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
218527	10/22/25		22603051	102904	P	12/12/25	10152060 620101	OFFICE SUPPLIES	108.20
INVOICE:	02016654/10-22-25								
218527	10/22/25		22603051	102904	P	12/12/25	29951010 610135	SPECIAL EVENTS	943.41
INVOICE:	02016654/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	10151010 610121	DUES & SUBSCRIPTIONS	135.00
INVOICE:	53207468/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	10152010 610121	DUES & SUBSCRIPTIONS	489.52
INVOICE:	53207468/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	10152010 630112	GASOLINE & OIL	48.18
INVOICE:	53207468/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	10152020 610121	DUES & SUBSCRIPTIONS	13.99
INVOICE:	53207468/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	10152020 620130	MAINTENANCE SUPPLIES	30.27
INVOICE:	53207468/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	10152050 610121	DUES & SUBSCRIPTIONS	8.99
INVOICE:	53207468/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	10152050 610129	OTHER EXPENSE	107.71
INVOICE:	53207468/10-22-25								
218528	10/22/25		22603020	102904	P	12/12/25	29951010 610135	SPECIAL EVENTS	2,277.57
INVOICE:	53207468/10-22-25								
218529	10/22/25		22602724	102904	P	12/12/25	10162010 610109	MEETING & TRAVEL	268.96
INVOICE:	00758976/10-22-25								
218529	10/22/25		22602724	102904	P	12/12/25	10162010 610129	OTHER EXPENSE	54.13
INVOICE:	00758976/10-22-25								
218529	10/22/25		22602724	102904	P	12/12/25	10162010 630112	GASOLINE & OIL	37.45
INVOICE:	00758976/10-22-25								
218530	10/22/25		22603021	102904	P	12/12/25	29951010 610135	SPECIAL EVENTS	515.86
INVOICE:	53207468/10-22-25(1)								
218531	10/22/25		22603058	102904	P	12/12/25	10152010 620115	ATHLETIC FIELD SUPP	130.37
INVOICE:	00900230/10-22-25								
218531	10/22/25		22603058	102904	P	12/12/25	10152040 610106	ADVERTISING	28.94
INVOICE:	00900230/10-22-25								
218531	10/22/25		22603058	102904	P	12/12/25	10152040 610121	DUES & SUBSCRIPTIONS	19.99
INVOICE:	00900230/10-22-25								
218531	10/22/25		22603058	102904	P	12/12/25	10152040 620115	ATHLETIC FIELD SUPP	125.52
INVOICE:	00900230/10-22-25								
218531	10/22/25		22603058	102904	P	12/12/25	10152110 620115	ATHLETIC FIELD SUPPLIES	356.10
INVOICE:	00900230/10-22-25								
218531	10/22/25		22603058	102904	P	12/12/25	10152140 620115	ATHLETIC FIELD SUPPLIES	189.12
INVOICE:	00900230/10-22-25								
218531	10/22/25		22603058	102904	P	12/12/25	29951010 610135	SPECIAL EVENTS	1,091.06
INVOICE:	00900230/10-22-25								
218532	10/22/25		22603214	102904	P	12/12/25	10162010 610109	MEETING & TRAVEL	439.81
INVOICE:	51230504/10-22-25								
218533	10/22/25			102904	P	12/12/25	10162010 610109	MEETING & TRAVEL	-660.11
INVOICE:	51230504/CR10-22-25								
218534	10/22/25		22603016	102904	P	12/12/25	10151010 610129	OTHER EXPENSE	454.44
INVOICE:	01951943/10-22-25								
218534	10/22/25		22603016	102904	P	12/12/25	10151010 620130	MAINTENANCE SUPPLIES	207.28
INVOICE:	01951943/10-22-25								
218537	10/22/25		22602669	102904	P	12/12/25	10131010 610109	MEETING AND TRAVEL	22.36

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	10131010 610121	DUES & SUBSCRIPTIONS	33.33
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	10131010 620101	OFFICE SUPPLIES	1.92
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	50195160 610109	MEETING & TRAVEL	22.36
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	50195160 610121	DUES & SUBSCRIPTIONS	33.33
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	50195160 620101	OFFICE SUPPLIES	1.92
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	50295280 610109	MEETING & TRAVEL	22.37
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	50295280 610121	DUES & SUBSCRIPTIONS	33.34
	INVOICE: 65370833/10-22-25(1)									
	218537	10/22/25		22602669	102904	P	12/12/25	50295280 620101	OFFICE SUPPLIES	1.93
	INVOICE: 65370833/10-22-25(1)									
	VENDOR TOTALS		71,041.30 YTD INVOICED					69,187.90 YTD PAID		13,676.34
9871	USA BLUE BOOK									
	218416	11/05/25		22603121	102905	P	12/12/25	50195110 630117	METER MAINTENANCE	404.07
	INVOICE: INV00876590									
	VENDOR TOTALS		6,509.05 YTD INVOICED					484.89 YTD PAID		404.07
8341	VAN DERMYDEN MAKUS LAW CORP.									
	218561	10/20/25		22603370	102906	P	12/12/25	10119010 610113	PROFESSIONAL FEES (O)	35,410.25
	INVOICE: 35690									
	VENDOR TOTALS		1,421.00 YTD INVOICED					35,410.25 YTD PAID		35,410.25
7951	VESTIS SERVICES, LLC									
	218417	11/07/25		22603098	102907	P	12/12/25	10152060 610125	UNIFORM RENTAL	29.60
	INVOICE: 5220598418									
	218418	11/14/25		22603098	102907	P	12/12/25	10152060 610125	UNIFORM RENTAL	29.60
	INVOICE: 5220601427									
	218419	10/03/25		22603069	102907	P	12/12/25	10152010 610125	UNIFORM RENTAL	21.42
	INVOICE: 5220583526									
	218420	10/10/25		22603069	102907	P	12/12/25	10152010 610125	UNIFORM RENTAL	21.42
	INVOICE: 5220586521									
	218421	10/17/25		22603069	102907	P	12/12/25	10152010 610125	UNIFORM RENTAL	21.42
	INVOICE: 5220589498									
	218422	10/24/25		22603069	102907	P	12/12/25	10152010 610125	UNIFORM RENTAL	21.42
	INVOICE: 5220592458									
	218423	10/31/25		22603069	102907	P	12/12/25	10152010 610125	UNIFORM RENTAL	21.42
	INVOICE: 5220595429									
	218424	10/03/25		22603069	102907	P	12/12/25	10152010 620128	JANITORIAL SUPPLIES	73.61
	INVOICE: 5220583525									
	218425	10/10/25		22603069	102907	P	12/12/25	10152010 620128	JANITORIAL SUPPLIES	73.61
	INVOICE: 5220586520									

CITY OF EL CENTRO

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VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
218426	10/17/25		22603069	102907	P	12/12/25	10152010 620128	JANITORIAL SUPPLIES	73.61
INVOICE:	5220589497								
218427	10/24/25		22603069	102907	P	12/12/25	10152010 620128	JANITORIAL SUPPLIES	73.61
INVOICE:	5220592457								
218428	10/31/25		22603069	102907	P	12/12/25	10152010 620128	JANITORIAL SUPPLIES	73.61
INVOICE:	5220595428								
218429	10/03/25		22603069	102907	P	12/12/25	10152050 620128	JANITORIAL SUPPLIES	46.66
INVOICE:	5220583524								
218430	10/10/25		22603069	102907	P	12/12/25	10152050 620128	JANITORIAL SUPPLIES	46.66
INVOICE:	5220586519								
218431	10/17/25		22603069	102907	P	12/12/25	10152050 620128	JANITORIAL SUPPLIES	46.66
INVOICE:	5220589496								
218432	10/24/25		22603069	102907	P	12/12/25	10152050 620128	JANITORIAL SUPPLIES	46.66
INVOICE:	5220592456								
218433	10/31/25		22603069	102907	P	12/12/25	10152050 620128	JANITORIAL SUPPLIES	46.66
INVOICE:	5220595427								
218434	10/31/25		22602993	102907	P	12/12/25	10152040 610113	PROFESSIONAL FEES (O)	32.95
INVOICE:	5220595415								
218434	10/31/25		22602993	102907	P	12/12/25	10152040 620128	JANITORIAL SUPPLIES	22.35
INVOICE:	5220595415								
218435	10/31/25		22602993	102907	P	12/12/25	10152110 610125	UNIFORM RENTAL	6.84
INVOICE:	5220595425								
218436	10/24/25		22602991	102907	P	12/12/25	10152040 610113	PROFESSIONAL FEES (O)	32.95
INVOICE:	5220592444								
218436	10/24/25		22602991	102907	P	12/12/25	10152040 620128	JANITORIAL SUPPLIES	22.35
INVOICE:	5220592444								
218437	10/24/25		22602991	102907	P	12/12/25	10152110 610125	UNIFORM RENTAL	6.84
INVOICE:	5220592454								
218441	10/03/25		22602998	102907	P	12/12/25	10151010 610125	UNIFORM RENTAL	137.18
INVOICE:	5220583517								
218441	10/03/25		22602998	102907	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	40.50
INVOICE:	5220583517								
218442	10/10/25		22602998	102907	P	12/12/25	10151010 610125	UNIFORM RENTAL	65.32
INVOICE:	5220586512								
218442	10/10/25		22602998	102907	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	32.85
INVOICE:	5220586512								
218443	10/17/25		22602998	102907	P	12/12/25	10151010 610125	UNIFORM RENTAL	35.40
INVOICE:	5220589489								
218443	10/17/25		22602998	102907	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	39.62
INVOICE:	5220589489								
218444	10/24/25		22602998	102907	P	12/12/25	10151010 610125	UNIFORM RENTAL	35.40
INVOICE:	5220592449								
218444	10/24/25		22602998	102907	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	34.50
INVOICE:	5220592449								
218445	10/31/25		22602998	102907	P	12/12/25	10151010 610125	UNIFORM RENTAL	48.77
INVOICE:	5220595420								
218445	10/31/25		22602998	102907	P	12/12/25	10151010 620128	JANITORIAL SUPPLIES	26.25
INVOICE:	5220595420								
VENDOR TOTALS		6,106.91 YTD INVOICED					4,146.04 YTD PAID		1,387.72

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
528	WAXIE SANITARY SUPPLY									
	218446	10/23/25		22602902	102908	P	12/12/25	10153010 620128	JANITORIAL SUPPLIES	369.60
	INVOICE:	83591407								
	218449	10/16/25		22603054	102908	P	12/12/25	10152060 620128	JANITORIAL SUPPLIES	576.78
	INVOICE:	83578035								
	218515	11/05/25		22603238	102908	P	12/12/25	10118010 620128	JANITORIAL SUPPLIES	40.78
	INVOICE:	83618474								
	218516	11/05/25		22603238	102908	P	12/12/25	10118010 620128	JANITORIAL SUPPLIES	41.50
	INVOICE:	83618473								
	218517	10/20/25		22603238	102908	P	12/12/25	10118010 620128	JANITORIAL SUPPLIES	58.99
	INVOICE:	83584187								
	218518	12/20/23			102908	P	12/12/25	10118010 620128	JANITORIAL SUPPLIES	-24.58
	INVOICE:	82167425CR								
	VENDOR TOTALS		5,783.77 YTD INVOICED					3,163.57 YTD PAID		1,063.07
1120	ZOLL MEDICAL CORP.									
	218450	11/19/25		22603160	102909	P	12/12/25	10123040 620111	PARAMEDIC SUPPLIES	463.74
	INVOICE:	4373616								
	VENDOR TOTALS		9,312.24 YTD INVOICED					463.74 YTD PAID		463.74
									REPORT TOTALS	868,078.47

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	85	868,078.47

CITY OF EL CENTRO

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
7897	360 BUSINESS PRODUCTS									
	218712	12/11/25		22603315	102910	P	12/19/25	50195120 620105	COMPUTER SUPPLIES	128.49
	INVOICE:	WO-49179-1								
	218712	12/11/25		22603315	102910	P	12/19/25	50295220 620105	COMPUTER SUPPLIES	55.06
	INVOICE:	WO-49179-1								
	218713	12/10/25		22603337	102910	P	12/19/25	50195120 620101	OFFICE SUPPLIES	14.46
	INVOICE:	WO-49181-1								
	218713	12/10/25		22603337	102910	P	12/19/25	50195120 620105	COMPUTER SUPPLIES	301.83
	INVOICE:	WO-49181-1								
	218713	12/10/25		22603337	102910	P	12/19/25	50295220 620101	OFFICE SUPPLIES	6.20
	INVOICE:	WO-49181-1								
	218713	12/10/25		22603337	102910	P	12/19/25	50295220 620105	COMPUTER SUPPLIES	129.36
	INVOICE:	WO-49181-1								
	218714	12/11/25		22603337	102910	P	12/19/25	50195120 620101	OFFICE SUPPLIES	4.81
	INVOICE:	WO-49181-2								
	218714	12/11/25		22603337	102910	P	12/19/25	50195120 620105	COMPUTER SUPPLIES	100.25
	INVOICE:	WO-49181-2								
	218714	12/11/25		22603337	102910	P	12/19/25	50295220 620101	OFFICE SUPPLIES	2.06
	INVOICE:	WO-49181-2								
	218714	12/11/25		22603337	102910	P	12/19/25	50295220 620105	COMPUTER SUPPLIES	42.96
	INVOICE:	WO-49181-2								
	VENDOR TOTALS		5,766.41 YTD INVOICED					3,911.56 YTD PAID		785.48
1	A-MODERN SANITATION									
	218568	10/24/25		22603221	102911	P	12/19/25	29951010 610135	SPECIAL EVENTS	411.35
	INVOICE:	037303								
	VENDOR TOTALS		.00 YTD INVOICED					411.35 YTD PAID		411.35
9324	ACE HARDWARE CORPORATION									
	218569	12/04/25		22603377	102912	P	12/19/25	10162020 610129	OTHER EXPENSE	34.63
	INVOICE:	J34924								
	218570	11/24/25		22603187	102912	P	12/19/25	10121020 610129	OTHER EXPENSE	23.80
	INVOICE:	J31056								
	218715	12/12/25		22600764	102912	P	12/19/25	10123010 630101	BUILDING MAINT.	2.81
	INVOICE:	J38504								
	218716	12/12/25		22600764	102912	P	12/19/25	10123010 630101	BUILDING MAINT.	15.61
	INVOICE:	J38301								
	VENDOR TOTALS		5,660.99 YTD INVOICED					3,559.64 YTD PAID		76.85
8882	AMALGAMATED RECYCLING, INC.									
	218571	10/30/25		22603239	102913	P	12/19/25	10132010 620120	STREET CONSTRUCTION	554.55
	INVOICE:	1880								
	VENDOR TOTALS		.00 YTD INVOICED					554.55 YTD PAID		554.55
10007	AMAZON CAPITAL SERVICES, INC.									
	218572	11/19/25		22603218	102914	P	12/19/25	10152040 620101	OFFICE SUPPLIES	112.27
	INVOICE:	1YFW-9K9L-N741								

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	218573	11/21/25		22603218	102914	P	12/19/25	29951010 610135	SPECIAL EVENTS	20.54
	INVOICE: 1WVG-YQKK-XLGP									
	218574	11/21/25		22603218	102914	P	12/19/25	29951010 610135	SPECIAL EVENTS	28.12
	INVOICE: 1MKY-M97C-XCYF									
	218575	11/21/25		22603218	102914	P	12/19/25	29951010 610135	SPECIAL EVENTS	20.54
	INVOICE: 1K76-QX67-TR3T									
	218576	11/22/25		22603218	102914	P	12/19/25	10152040 620101	OFFICE SUPPLIES	34.87
	INVOICE: 14XF-XP7Y-DNVY									
	218576	11/22/25		22603218	102914	P	12/19/25	10152040 620128	JANITORIAL SUPPLIES	18.19
	INVOICE: 14XF-XP7Y-DNVY									
	218576	11/22/25		22603218	102914	P	12/19/25	29951010 610135	SPECIAL EVENTS	115.77
	INVOICE: 14XF-XP7Y-DNVY									
	VENDOR TOTALS		15,879.49 YTD INVOICED					5,405.81 YTD PAID		350.30
10066	AMBERLY'S PLACE, INC.									
	218577	10/27/25		22603190	102915	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	700.00
	INVOICE: 103277									
	VENDOR TOTALS		700.00 YTD INVOICED					1,400.00 YTD PAID		700.00
7928	AMERICA'S FINEST FIRE PROTECTION									
	218578	10/09/25		22603219	102916	P	12/19/25	10152020 610113	PROFESSIONAL FEES (O)	387.27
	INVOICE: 18M 935033									
	218579	10/09/25		22603219	102916	P	12/19/25	10152030 610113	PROFESSIONAL FEES/OTHER	751.00
	INVOICE: 18M 935040									
	218580	10/09/25		22603219	102916	P	12/19/25	10152030 610113	PROFESSIONAL FEES/OTHER	242.04
	INVOICE: 18M 935031									
	VENDOR TOTALS		.00 YTD INVOICED					5,645.95 YTD PAID		1,380.31
10514	AMERICAN BUSINESS BANK									
	218717	11/14/25		22603451	102917	P	12/19/25	50295210 750029	UV DESINFECTING SYSTEM	5,023.66
	INVOICE: 4									
	VENDOR TOTALS		1,814.95 YTD INVOICED					5,023.66 YTD PAID		5,023.66
7	AMERICAN LINEN									
	218582	11/04/25		22603146	102918	P	12/19/25	10121010 630101	BUILDING MAINT.	155.38
	INVOICE: LYUM1919698									
	218583	11/18/25		22603146	102918	P	12/19/25	10121010 630101	BUILDING MAINT.	155.38
	INVOICE: LYUM1922598									
	VENDOR TOTALS		1,370.31 YTD INVOICED					1,809.30 YTD PAID		310.76
6266	AT&T MOBILITY									
	218566	11/03/25		22603177	102919	P	12/19/25	10121010 610103	TELEPHONE	3,178.70
	INVOICE: 287306731535X111125									
	VENDOR TOTALS		8,979.74 YTD INVOICED					8,736.27 YTD PAID		3,178.70

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
9525	AUTO SHOP									
	018734	12/02/25		22603303	102920	P	12/19/25	10141010 610129	OTHER EXPENSE	45.00
	INVOICE: 018734									
	018734	12/02/25		22603303	102920	P	12/19/25	10144010 610129	OTHER EXPENSE	35.00
	INVOICE: 018734									
	218585	12/03/25		22603342	102920	P	12/19/25	10141010 610129	OTHER EXPENSE	70.00
	INVOICE: 018735									
	VENDOR TOTALS		.00 YTD INVOICED					150.00 YTD PAID		150.00
4170	AUTOZONE, INC.									
	218584	12/08/25		22603330	102921	P	12/19/25	10123010 630114	PARTS	36.77
	INVOICE: 2803026067									
	VENDOR TOTALS		2,724.51 YTD INVOICED					6,058.60 YTD PAID		36.77
10631	BADGE FRAME, INC.									
	218736	11/25/25		22603109	102922	P	12/19/25	22121010 640124	CONTRIBUTIONS	6,620.36
	INVOICE: 43691									
	VENDOR TOTALS		.00 YTD INVOICED					8,686.47 YTD PAID		6,620.36
10008	BALFOUR BEATTY CONSTRUCTION LLC									
	218589	11/30/25		22603291	102923	P	12/19/25	41221010 750004	POLICE STATION (PD)	49,998.00
	INVOICE: 028									
	VENDOR TOTALS		57,007.00 YTD INVOICED					49,998.00 YTD PAID		49,998.00
9566	BARNHART-REESE CONSTRUCTION, INC.									
	218590	09/30/25		22603297	102924	P	12/19/25	41221010 750004	POLICE STATION (PD)	1,382,881.75
	INVOICE: 20/PD									
	VENDOR TOTALS		2,419,507.50 YTD INVOICED					1,382,881.75 YTD PAID		1,382,881.75
10652	MARIA BLANCO									
	218591	12/02/25		22603264	102925	P	12/19/25	10110006 460115	SWIMMING POOL FEES	75.00
	INVOICE: 2677029									
	VENDOR TOTALS		.00 YTD INVOICED					75.00 YTD PAID		75.00
9851	BLU BULK DELIVERY									
	218592	09/17/25		22603355	102926	P	12/19/25	10151010 610113	PROFESSIONAL FEES (O)	32.60
	INVOICE: 2682559									
	218593	09/30/25		22603355	102926	P	12/19/25	10151010 610113	PROFESSIONAL FEES (O)	5.00
	INVOICE: 2684171									
	218595	11/12/25		22603355	102926	P	12/19/25	10151010 610113	PROFESSIONAL FEES (O)	36.50
	INVOICE: 2690315									
	218596	11/30/25		22603355	102926	P	12/19/25	10151010 610113	PROFESSIONAL FEES (O)	5.00
	INVOICE: 2692791									

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VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
VENDOR TOTALS	187.20 YTD INVOICED					121.25 YTD PAID			79.10
9931 BRAWLEY ANALYTICAL, INC.									
218588	11/25/25		22603254	102927	P	12/19/25	50295210 620137	LAB TESTS & SUPPLIES	334.50
INVOICE: 001602									
VENDOR TOTALS	3,822.50 YTD INVOICED					4,722.50 YTD PAID			334.50
5975 BRENNTAG PACIFIC, INC.									
218597	12/01/25		22603268	102928	P	12/19/25	10152060 620136	TREATMENT CHEMICALS	1,705.88
INVOICE: BPI566110									
VENDOR TOTALS	14,145.97 YTD INVOICED					1,705.88 YTD PAID			1,705.88
9304 BRIDGECOM LLC									
218718	11/28/25		22603462	102929	P	12/19/25	50195120 610113	PROFESSIONAL FEES (O)	6.65
INVOICE: INV/2025/13038									
218718	11/28/25		22603462	102929	P	12/19/25	50295200 610113	PROFESSIONAL FEES (O)	2.85
INVOICE: INV/2025/13038									
218719	11/28/25		22603461	102929	P	12/19/25	50195120 610113	PROFESSIONAL FEES (O)	128.30
INVOICE: INV/2025/13033									
218719	11/28/25		22603461	102929	P	12/19/25	50295220 610113	PROFESSIONAL FEES (O)	54.99
INVOICE: INV/2025/13033									
218720	11/28/25		22603460	102929	P	12/19/25	50195120 610113	PROFESSIONAL FEES (O)	1,273.61
INVOICE: INV/2025/13034									
218720	11/28/25		22603460	102929	P	12/19/25	50295220 610113	PROFESSIONAL FEES (O)	545.83
INVOICE: INV/2025/13034									
218721	11/28/25		22603459	102929	P	12/19/25	50195120 610113	PROFESSIONAL FEES (O)	5.03
INVOICE: INV/2025/13037									
218721	11/28/25		22603459	102929	P	12/19/25	50295220 610113	PROFESSIONAL FEES (O)	2.15
INVOICE: INV/2025/13037									
218722	11/28/25		22603458	102929	P	12/19/25	50195120 610113	PROFESSIONAL FEES (O)	224.47
INVOICE: INV/2025/13036									
218722	11/28/25		22603458	102929	P	12/19/25	50295200 610113	PROFESSIONAL FEES (O)	96.20
INVOICE: INV/2025/13036									
218723	11/28/25		22603457	102929	P	12/19/25	50195120 610113	PROFESSIONAL FEES (O)	35.17
INVOICE: INV/2025/13035									
218723	11/28/25		22603457	102929	P	12/19/25	50295220 610113	PROFESSIONAL FEES (O)	15.07
INVOICE: INV/2025/13035									
VENDOR TOTALS	10,826.56 YTD INVOICED					2,390.32 YTD PAID			2,390.32
5783 CALTEST ANALYTICAL LABORATORY									
218724	11/25/25		22603253	102930	P	12/19/25	50295210 620137	LAB TESTS & SUPPLIES	361.00
INVOICE: 735360									
VENDOR TOTALS	443.00 YTD INVOICED					443.00 YTD PAID			361.00
1846 CARLOS NEON SIGNS									
218599	12/03/25		22603360	102931	P	12/19/25	10151010 610113	PROFESSIONAL FEES (O)	4,654.75

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	INVOICE: 1434										
	VENDOR TOTALS			265.21 YTD INVOICED					5,678.48 YTD PAID		4,654.75
10669	CERVANTES, ENRIQUE										
	218565	12/11/25			102932	P	12/19/25	504	104001	ACCOUNTS RECEIVABLE	131.17
	INVOICE: 218565										
	VENDOR TOTALS			.00 YTD INVOICED					132.44 YTD PAID		131.17
6050	CHARTER COMMUNICATIONS										
	218600	11/14/25		22603176	102933	P	12/19/25	10162010	610129	OTHER EXPENSE	119.00
	INVOICE: 189462501111425										
	218601	11/14/25		22603224	102933	P	12/19/25	10152050	610113	PROFESSIONAL FEES (O)	129.51
	INVOICE: 189471901111425										
	VENDOR TOTALS			2,708.71 YTD INVOICED					705.35 YTD PAID		248.51
6403	ADRIAN CHILPA										
	218725	09/23/25		22601745	102934	P	12/19/25	10121050	610123	TRAINING	307.50
	INVOICE: 218725										
	VENDOR TOTALS			307.50 YTD INVOICED					615.00 YTD PAID		307.50
54	CITY OF EL CENTRO-WATER DEPT.										
	218803	11/25/25		22603380	102935	P	12/19/25	10118020	610104	WATER	1,300.71
	INVOICE: 1902457										
	VENDOR TOTALS			1,532.41 YTD INVOICED					2,412.03 YTD PAID		1,300.71
10381	CLOUDBURST CONSULTING GROUP, INC.										
	218603	10/31/25		22603313	102936	P	12/19/25	24393140	610129	OTHER EXPENSE	400.00
	INVOICE: 18849										
	VENDOR TOTALS			.00 YTD INVOICED					400.00 YTD PAID		400.00
2470	COUNTY OF SAN DIEGO, RCS										
	218604	12/01/25		22603272	102937	P	12/19/25	10118010	630107	COMMUNICATION EQUIPMENT M	305.00
	INVOICE: 26ELCNPWN05										
	218604	12/01/25		22603272	102937	P	12/19/25	10131010	630107	COMMUNICATION EQUIPMENT M	10.16
	INVOICE: 26ELCNPWN05										
	218604	12/01/25		22603272	102937	P	12/19/25	10132010	630107	COMMUNICATION EQUIPMENT M	396.50
	INVOICE: 26ELCNPWN05										
	218604	12/01/25		22603272	102937	P	12/19/25	10143010	630107	COMMUNICATION EQUIPMENT M	122.00
	INVOICE: 26ELCNPWN05										
	218604	12/01/25		22603272	102937	P	12/19/25	50195100	630107	COMUNICATION EQUIP PMAINT	183.00
	INVOICE: 26ELCNPWN05										
	218604	12/01/25		22603272	102937	P	12/19/25	50195110	630107	COMMUNICATION EQUIPMENT M	122.00
	INVOICE: 26ELCNPWN05										
	218604	12/01/25		22603272	102937	P	12/19/25	50195160	630107	COMMUNICATION EQUIPMENT M	10.16
	INVOICE: 26ELCNPWN05										

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	218604	12/01/25		22603272	102937	P	12/19/25	50295200 630107	COMMUNICATION EQUIPMENT M	183.02
	INVOICE:	26ELCNPWN05								
	218604	12/01/25		22603272	102937	P	12/19/25	50295210 630107	COMMUNICATION EQUIPMENT M	396.50
	INVOICE:	26ELCNPWN05								
	218604	12/01/25		22603272	102937	P	12/19/25	50295280 630107	COMMUNICATION EQUIPMENT M	10.16
	INVOICE:	26ELCNPWN05								
	218604	12/01/25		22603272	102937	P	12/19/25	60496400 630107	COMMUNICATION EQUIPMENT M	91.50
	INVOICE:	26ELCNPWN05								
	218605	12/01/25		22603317	102937	P	12/19/25	10123010 630107	COMMUNICATION EQUIPMENT M	1,738.50
	INVOICE:	26ELCNFDN05								
	218606	11/01/25		22603162	102937	P	12/19/25	10121020 610113	PROFESSIONAL FEES/OTHER	4,040.74
	INVOICE:	26ELCNPDN04								
	218607	12/01/25		22603350	102937	P	12/19/25	10112010 630107	COMUNICATION EQUIP PMAINT	61.00
	INVOICE:	26ELCNCMN05								
	VENDOR TOTALS		4,071.00 YTD INVOICED					8,066.74 YTD PAID		7,670.24
9404	CR ASSOCIATES									
	218598	12/02/25		22603301	102938	P	12/19/25	20532080 710102 L13	ARCH/ENGINEERING	2,052.90
	INVOICE:	0012585								
	VENDOR TOTALS		.00 YTD INVOICED					2,052.90 YTD PAID		2,052.90
9781	D FENCE CO INC.									
	218608	11/26/25		22603325	102939	P	12/19/25	10123010 630101	BUILDING MAINT.	4,785.00
	INVOICE:	8989								
	VENDOR TOTALS		.00 YTD INVOICED					4,785.00 YTD PAID		4,785.00
3211	DELL MARKETING L.P.									
	218726	12/09/25		22603271	102940	P	12/19/25	41221010 750004	POLICE STATION (PD)	367.89
	INVOICE:	10852302781								
	218727	12/04/25		22603271	102940	P	12/19/25	41221010 750004	POLICE STATION (PD)	481.98
	INVOICE:	10851439611								
	218728	12/09/25		22603271	102940	P	12/19/25	41221010 750004	POLICE STATION (PD)	8,995.09
	INVOICE:	10852350129								
	218729	12/11/25		22603271	102940	P	12/19/25	41221010 750004	POLICE STATION (PD)	4,388.89
	INVOICE:	10852704653								
	VENDOR TOTALS		55,817.52 YTD INVOICED					19,371.65 YTD PAID		14,233.85
2418	DIVISION OF THE STATE ARCHITECT									
	218609	12/02/25		22603161	102941	P	12/19/25	10121010 620110	AMMUNITION & RANGE SUPPLI	400.00
	INVOICE:	218609								
	VENDOR TOTALS		.00 YTD INVOICED					400.00 YTD PAID		400.00
6284	DUDEK									
	218610	11/12/25		22603249	102942	P	12/19/25	21461230 610113	PROFESSIONAL FEES/OTHER	89,766.64
	INVOICE:	202509340								
	218610	11/12/25		22603249	102942	P	12/19/25	50195110 610113	PROFESSIONAL FEES (O)	18,112.30

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	INVOICE: 202509340									
	218610	11/12/25		22603249	102942	P	12/19/25	50295210 610113	PROFESSIONAL FEES (O)	18,112.31
	INVOICE: 202509340									
	VENDOR TOTALS		49,630.40 YTD INVOICED					125,991.25 YTD PAID		125,991.25
9496	EL JUMPING BEAN									
	218611	12/03/25		22603312	102943	P	12/19/25	29952050 610113	PROFESSIONAL FEES/OTHER	1,623.75
	INVOICE: 048									
	VENDOR TOTALS		.00 YTD INVOICED					1,623.75 YTD PAID		1,623.75
2989	EXECUTIVE LANDSCAPE, INC.									
	218612	12/01/25		22603226	102944	P	12/19/25	10151010 610113	PROFESSIONAL FEES (O)	11,957.00
	INVOICE: 75076									
	218612	12/01/25		22603226	102944	P	12/19/25	10152140 610113	PROFESSIONAL FEES/OTHER	870.84
	INVOICE: 75076									
	218612	12/01/25		22603226	102944	P	12/19/25	29934060 610113	PROFESSIONAL FEES/OTHER	354.17
	INVOICE: 75076									
	218613	12/01/25		22603226	102944	P	12/19/25	27299010 630103	GROUND/LANDSCAPING MAINT	2,618.06
	INVOICE: 75090									
	218613	12/01/25		22603226	102944	P	12/19/25	27499020 630103	GROUND/LANDSCAPING MAINT	1,847.22
	INVOICE: 75090									
	218613	12/01/25		22603226	102944	P	12/19/25	29099030 630103	GROUND/LANDSCAPING MAINT	1,220.89
	INVOICE: 75090									
	218614	12/01/25		22603226	102944	P	12/19/25	28099040 630103	GROUND/LANDSCAPING MAINT	385.00
	INVOICE: 75089									
	218615	12/03/25		22603353	102944	P	12/19/25	10151010 610113	PROFESSIONAL FEES (O)	1,167.25
	INVOICE: 25425DECX									
	VENDOR TOTALS		31,726.85 YTD INVOICED					20,420.43 YTD PAID		20,420.43
5564	FAIL SAFE TESTING, LLC									
	218616	11/24/25		22603323	102945	P	12/19/25	10123010 630115	OUTSIDE MAINTENANCE	2,837.28
	INVOICE: 14573									
	VENDOR TOTALS		.00 YTD INVOICED					2,837.28 YTD PAID		2,837.28
247	FEDEX									
	218619	10/31/25		22603155	102946	P	12/19/25	10121010 620102	POSTAGE	183.02
	INVOICE: 9-050-21596									
	218620	09/19/25		22603155	102946	P	12/19/25	10121010 620102	POSTAGE	103.97
	INVOICE: 8-998-12784									
	218621	11/28/25		22603302	102946	P	12/19/25	10141010 620102	POSTAGE	29.50
	INVOICE: 9-085-01544/PLN									
	218802	11/07/25		22603156	102946	P	12/19/25	10121010 620102	POSTAGE	156.24
	INVOICE: 9-058-74738									
	VENDOR TOTALS		1,532.34 YTD INVOICED					1,117.46 YTD PAID		472.73
4317	FRUTH GROUP INC.									

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	218622	11/19/25		22603310	102947	P	12/19/25	10152050 620103	PRINTING	96.85
	INVOICE: 771428									
	218623	11/19/25		22603310	102947	P	12/19/25	10152010 620103	PRINTING	156.93
	INVOICE: 771427									
	VENDOR TOTALS		2,466.80 YTD INVOICED					1,840.47 YTD PAID		253.78
120	GFOA									
	218730	12/02/25		22603444	102948	P	12/19/25	10115010 610121	DUES & SUBSCRIPTIONS	500.00
	INVOICE: 54253001-2026									
	VENDOR TOTALS		.00 YTD INVOICED					500.00 YTD PAID		500.00
9447	GREAT WESTERN INSTALLATIONS, INC.									
	218624	11/20/25		22603197	102949	P	12/19/25	10151010 620116	PLAYGROUND SUPPLIES	996.20
	INVOICE: 2510052									
	VENDOR TOTALS		.00 YTD INVOICED					996.20 YTD PAID		996.20
3581	HAVENS AND SONS TRUCKING									
	218625	11/12/25		22603352	102950	P	12/19/25	10151010 630115	OUTSIDE MAINTENANCE	379.99
	INVOICE: 202511-62									
	218626	11/20/25		22603352	102950	P	12/19/25	10151010 630115	OUTSIDE MAINTENANCE	298.34
	INVOICE: 202511-125									
	218627	11/14/25		22603352	102950	P	12/19/25	10151010 630115	OUTSIDE MAINTENANCE	165.04
	INVOICE: 202511-1102									
	VENDOR TOTALS		554.24 YTD INVOICED					3,971.85 YTD PAID		843.37
4982	HOME DEPOT									
	218749	11/17/25		22603112	102951	P	12/19/25	50195110 620130	MAINTENANCE SUPPLIES	371.62
	INVOICE: 902907									
	218750	10/29/25		22603004	102951	P	12/19/25	10151010 630101	BUILDING MAINT.	16.10
	INVOICE: 9900258									
	218751	10/30/25		22603004	102951	P	12/19/25	10151010 620116	PLAYGROUND SUPPLIES	16.21
	INVOICE: 8900376									
	218752	11/17/25		22603237	102951	P	12/19/25	10118010 620140	SMALL TOOLS	29.16
	INVOICE: 902915									
	218753	11/14/25		22603237	102951	P	12/19/25	10118010 620130	MAINTENANCE SUPPLIES	118.53
	INVOICE: 3902671									
	218754	11/25/25		22603246	102951	P	12/19/25	10132010 620120	STREET CONSTRUCTION	124.97
	INVOICE: 2904261									
	218754	11/25/25		22603246	102951	P	12/19/25	50195100 620132	CONSTRUCTION MATERIAL	124.96
	INVOICE: 2904261									
	218755	10/24/25		22603246	102951	P	12/19/25	10131010 610106	ADVERTISING	66.69
	INVOICE: 4905520									
	218755	10/24/25		22603246	102951	P	12/19/25	50195160 610106	ADVERTISING	66.69
	INVOICE: 4905520									
	218755	10/24/25		22603246	102951	P	12/19/25	50295280 610106	ADVERTISING	66.69
	INVOICE: 4905520									
	218756	11/14/25		22603246	102951	P	12/19/25	10132010 620140	SMALL TOOLS	67.06

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	INVOICE: 3902591									
	218757	12/02/25		22603379	102951	P	12/19/25	10162020 610129	OTHER EXPENSE	108.98
	INVOICE: 5905474									
	218758	11/26/25		22603255	102951	P	12/19/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	298.77
	INVOICE: 1904439									
	VENDOR TOTALS		12,043.86 YTD INVOICED					6,995.95 YTD PAID		1,476.43
10664	RODOLFO HUERTA JR.									
	218759	12/03/25		22603200	102952	P	12/19/25	10151010 620112	PROTECTIVE CLOTHING	300.00
	INVOICE: 218759									
	VENDOR TOTALS		.00 YTD INVOICED					300.00 YTD PAID		300.00
9056	IMPERIAL CHEVRON									
	218629	11/05/25		22603186	102953	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	855.52
	INVOICE: 076									
	VENDOR TOTALS		389.87 YTD INVOICED					855.52 YTD PAID		855.52
607	IMPERIAL VALLEY PRESS									
	218630	12/06/25		22603343	102954	P	12/19/25	10144010 610106	ADVERTISING	298.39
	INVOICE: 540147									
	218732	12/11/25		22603488	102954	P	12/19/25	10111020 610106	ADVERTISING	311.21
	INVOICE: 541742									
	VENDOR TOTALS		1,558.10 YTD INVOICED					2,242.57 YTD PAID		609.60
141	IMPERIAL VALLEY TERMITE									
	218631	07/08/25		22603019	102955	P	12/19/25	20434060 610113	PROFESSIONAL FEES/OTHER	60.00
	INVOICE: 0353188									
	218632	11/05/25		22603019	102955	P	12/19/25	20434060 610113	PROFESSIONAL FEES/OTHER	60.00
	INVOICE: 0357732									
	218633	11/05/25		22603151	102955	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	110.00
	INVOICE: 0357637									
	218634	11/03/25		22603150	102955	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	34.00
	INVOICE: 0357635									
	218635	11/03/25		22603150	102955	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	65.00
	INVOICE: 0357636									
	218734	12/08/25		22603454	102955	P	12/19/25	50195160 610113	PROFESSIONAL FEES (O)	25.00
	INVOICE: 0358792									
	218734	12/08/25		22603454	102955	P	12/19/25	50295280 610113	PROFESSIONAL FEES (O)	25.00
	INVOICE: 0358792									
	218735	12/08/25		22603454	102955	P	12/19/25	50195160 610113	PROFESSIONAL FEES (O)	70.00
	INVOICE: 0358793									
	218735	12/08/25		22603454	102955	P	12/19/25	50295280 610113	PROFESSIONAL FEES (O)	70.00
	INVOICE: 0358793									
	VENDOR TOTALS		409.00 YTD INVOICED					1,098.00 YTD PAID		519.00
894	UNITED STATES TREASURY									

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	218698	11/24/25		22603375	102956	P	12/19/25	10119010 610129	OTHER EXPENSE	2,631.57
	INVOICE: 218698									
	VENDOR TOTALS		.00 YTD INVOICED					2,631.57 YTD PAID		2,631.57
9727	JL GROUP, LLC									
	218737	10/06/25		22603463	102957	P	12/19/25	10113010 610113	PROFESSIONAL FEES (O)	22,009.90
	INVOICE: 25055PO.1									
	VENDOR TOTALS		.00 YTD INVOICED					22,009.90 YTD PAID		22,009.90
9996	JOE A. GONSALVES & SON									
	218636	11/24/25		22603345	102958	P	12/19/25	10112020 610115	PROFESSIONAL FEES (L)	1,833.33
	INVOICE: 163926									
	218636	11/24/25		22603345	102958	P	12/19/25	50195130 610115	PROFESSIONAL FEES - LOBBY	1,833.33
	INVOICE: 163926									
	218636	11/24/25		22603345	102958	P	12/19/25	50295230 610115	PROFESSIONAL FEES - LOBBY	1,833.34
	INVOICE: 163926									
	VENDOR TOTALS		5,500.00 YTD INVOICED					5,500.00 YTD PAID		5,500.00
6291	K-C WELDING & RENTALS INC.									
	218638	11/19/25		22603362	102959	P	12/19/25	10151010 630108	FIELD/SHOP EQUIP. MAINT.	186.17
	INVOICE: 220938									
	218639	11/20/25		22603362	102959	P	12/19/25	10151010 620130	MAINTENANCE SUPPLIES	106.67
	INVOICE: 221024									
	218640	11/25/25		22603362	102959	P	12/19/25	10151010 620130	MAINTENANCE SUPPLIES	19.46
	INVOICE: 221180									
	VENDOR TOTALS		15,596.31 YTD INVOICED					7,806.83 YTD PAID		312.30
4406	LABRUCHERIE IRRIGATION SUPPLY									
	218641	11/19/25		22603363	102960	P	12/19/25	10151010 620123	IRRIGATION & SPRINKLERS	35.10
	INVOICE: 314969									
	218642	11/19/25		22603363	102960	P	12/19/25	10151010 620123	IRRIGATION & SPRINKLERS	211.22
	INVOICE: 314963									
	218643	11/19/25		22603363	102960	P	12/19/25	10151010 620123	IRRIGATION & SPRINKLERS	13.66
	INVOICE: 315043									
	218644	11/19/25		22603363	102960	P	12/19/25	10151010 620123	IRRIGATION & SPRINKLERS	216.32
	INVOICE: 314977									
	218645	11/20/25		22603363	102960	P	12/19/25	10151010 620123	IRRIGATION & SPRINKLERS	43.25
	INVOICE: 315112									
	218646	11/20/25		22603363	102960	P	12/19/25	10151010 620123	IRRIGATION & SPRINKLERS	162.44
	INVOICE: 315079									
	218647	11/20/25		22603363	102960	P	12/19/25	10151010 620123	IRRIGATION & SPRINKLERS	29.58
	INVOICE: 315083									
	218648	11/20/25		22603363	102960	P	12/19/25	10151010 620112	PROTECTIVE CLOTHING	36.39
	INVOICE: 315070									
	218649	11/28/25		22603363	102960	P	12/19/25	10151010 630115	OUTSIDE MAINTENANCE	1,069.85
	INVOICE: 315583									

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	VENDOR TOTALS	10,125.00 YTD INVOICED					18,710.24 YTD PAID			1,817.81
2790	LANDMARK CONSULTANTS, INC.									
	218650	11/24/25		22603259	102961	P	12/19/25	41221010 750004	POLICE STATION (PD)	3,400.00
	INVOICE: LE1225-51									
	VENDOR TOTALS	7,200.00 YTD INVOICED					3,400.00 YTD PAID			3,400.00
8754	LESLIE'S SWIMMING POOL SUPPLIES									
	218651	11/25/25		22603267	102962	P	12/19/25	10152060 620133	SWIMMING POOL SUPPLIES	115.20
	INVOICE: 00652-02-067764									
	VENDOR TOTALS	326.26 YTD INVOICED					345.60 YTD PAID			115.20
8026	MAN-K9 INC.									
	218652	11/12/25		22603183	102963	P	12/19/25	10121010 620144	K-9 SUPPLIES	2,320.00
	INVOICE: MTN-NOV2025-3									
	VENDOR TOTALS	.00 YTD INVOICED					2,320.00 YTD PAID			2,320.00
276	MCNEECE BROS. OIL CO. INC.									
	218653	11/30/25		22603265	102964	P	12/19/25	10152060 630112	GASOLINE & OIL	67.81
	INVOICE: 921147									
	218654	11/30/25		22603252	102964	P	12/19/25	10118010 630112	GASOLINE & OIL	776.59
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	10132010 630112	GASOLINE & OIL	1,728.59
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	10143010 630112	GASOLINE & OIL	138.23
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	50195100 630112	GASOLINE & OIL	1,175.88
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	50195110 630112	GASOLINE & OIL	2,005.82
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	50295200 630112	GASOLINE & OIL	1,175.88
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	50295210 630112	GASOLINE & OIL	899.22
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	50295250 630112	GASOLINE & OIL	129.33
	INVOICE: 921145									
	218654	11/30/25		22603252	102964	P	12/19/25	60496400 630112	GASOLINE & OIL	189.69
	INVOICE: 921145									
	218738	10/13/25		22603453	102964	P	12/19/25	50195110 630112	GASOLINE & OIL	86.70
	INVOICE: 623441									
	VENDOR TOTALS	13,684.08 YTD INVOICED					47,556.67 YTD PAID			8,373.74
10445	MES SERVICE CO., LLC									
	218739	11/25/25		22602276	102965	P	12/19/25	10123010 620112	PROTECTIVE CLOTHING	12,538.06
	INVOICE: IN2388257									

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	VENDOR TOTALS	8,245.13 YTD INVOICED						13,262.70 YTD PAID		12,538.06
9626	MOTION INDUSTRIES, INC.									
	218740	11/19/25		22603141	102966	P	12/19/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	1,111.81
	INVOICE: CA05-01149230									
	VENDOR TOTALS	.00 YTD INVOICED						1,355.40 YTD PAID		1,111.81
9598	ANA DANIELA MUNOZ									
	218655	12/02/25		22603223	102967	P	12/19/25	10110006 460116	RECREATION FEES	78.00
	INVOICE: 218655									
	VENDOR TOTALS	792.00 YTD INVOICED						428.00 YTD PAID		78.00
3200	NAPA MOTOR PARTS									
	218656	12/08/25		22603336	102968	P	12/19/25	10123010 630114	PARTS	20.00
	INVOICE: 780597									
	218657	12/08/25		22603336	102968	P	12/19/25	10123010 630114	PARTS	518.51
	INVOICE: 780598									
	VENDOR TOTALS	2,335.94 YTD INVOICED						603.68 YTD PAID		538.51
8852	OVERHEAD DOOR COMPANY OF THE DESERT									
	218658	11/24/25		22603326	102969	P	12/19/25	10123010 630101	BUILDING MAINT.	1,461.07
	INVOICE: WO-17752									
	218659	11/24/25		22603327	102969	P	12/19/25	10123010 630101	BUILDING MAINT.	950.00
	INVOICE: WO-17748									
	VENDOR TOTALS	.00 YTD INVOICED						2,411.07 YTD PAID		2,411.07
3496	PACIFIC HYDROTECH CORP.									
	218742	11/14/25		22603450	102970	P	12/19/25	50295210 750029	UV DESINFECTING SYSTEM	95,449.53
	INVOICE: 4									
	VENDOR TOTALS	34,484.05 YTD INVOICED						95,449.53 YTD PAID		95,449.53
8013	PADRE USA									
	218660	11/21/25		22603358	102971	P	12/19/25	10151010 620128	JANITORIAL SUPPLIES	1,400.76
	INVOICE: 16033503									
	VENDOR TOTALS	3,521.76 YTD INVOICED						2,141.34 YTD PAID		1,400.76
9633	PEGASUS TELECOMMUNICATIONS CONSULTING GROUP									
	218661	11/30/25		22603299	102972	P	12/19/25	41221010 750004	POLICE STATION (PD)	4,625.00
	INVOICE: 218661									
	VENDOR TOTALS	3,375.00 YTD INVOICED						4,625.00 YTD PAID		4,625.00
10567	PINE VALLEY DANCE & PLAY									
	218662	11/26/25		22603217	102973	P	12/19/25	10110006 460129	CONTRACT INSTRUCTORS	3,120.00

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	INVOICE: 218662									
	VENDOR TOTALS		.00 YTD INVOICED		3,588.00 YTD PAID					3,120.00
3121	PRO RECORD STORAGE & SHRED INC									
	218663	12/01/25		22603279	102974	P	12/19/25	10143010 610129	OTHER EXPENSE	131.30
	INVOICE: 0032931									
	218664	11/01/25		22603244	102974	P	12/19/25	10132010 610113	PROFESSIONAL FEES (O)	13.60
	INVOICE: 0032731									
	218665	12/01/25		22603263	102974	P	12/19/25	10131010 610113	PROFESSIONAL FEES (O)	15.28
	INVOICE: 0032935									
	218665	12/01/25		22603263	102974	P	12/19/25	50195160 610113	PROFESSIONAL FEES (O)	15.28
	INVOICE: 0032935									
	218665	12/01/25		22603263	102974	P	12/19/25	50295280 610113	PROFESSIONAL FEES (O)	15.27
	INVOICE: 0032935									
	VENDOR TOTALS		881.65 YTD INVOICED		859.76 YTD PAID					190.73
9465	PSC INVESTIGATIONS LLC									
	218666	11/12/25		22603189	102975	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	4,213.65
	INVOICE: 25-231									
	VENDOR TOTALS		216.80 YTD INVOICED		4,213.65 YTD PAID					4,213.65
5865	PSOMAS									
	218667	12/03/25		22603300	102976	P	12/19/25	50295210 750030	SOUTHERN PUMP STATION	180.00
	INVOICE: 228996									
	VENDOR TOTALS		705.00 YTD INVOICED		180.00 YTD PAID					180.00
8634	REXEL USA, INC.									
	218668	11/17/25		22603359	102977	P	12/19/25	10151010 620132	CONSTRUCTION MATERIALS	91.03
	INVOICE: S143938768.001									
	VENDOR TOTALS		256.65 YTD INVOICED		986.26 YTD PAID					91.03
10006	MARGARITA FIGUEROA REYES									
	218669	12/18/25		22602908	102978	P	12/19/25	10153010 610129	OTHER EXPENSE	450.00
	INVOICE: 117									
	VENDOR TOTALS		.00 YTD INVOICED		850.00 YTD PAID					450.00
8791	RICK'S ROADRUNNER LOCK & SAFE									
	218670	12/08/25		22603378	102979	P	12/19/25	10162020 610129	OTHER EXPENSE	15.15
	INVOICE: 23778									
	VENDOR TOTALS		265.98 YTD INVOICED		112.56 YTD PAID					15.15
4235	ROMAN'S WATER INC.									
	218671	11/24/25		22603167	102980	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	129.50
	INVOICE: 98425									

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	VENDOR TOTALS		276.50 YTD INVOICED				259.00 YTD PAID			129.50
9017	ROVE ENGINEERING									
	218672	11/26/25		22603277	102981	P	12/19/25	20532130 710106	OTHER REAL PROPERTY	462,340.30
	INVOICE: 7373									
	VENDOR TOTALS		1,525,057.99 YTD INVOICED				462,340.30 YTD PAID			462,340.30
1656	SECURITAS SEC. SERV. USA, INC.									
	218674	11/30/25		22603298	102982	P	12/19/25	29934060 610113	PROFESSIONAL FEES/OTHER	3,813.12
	INVOICE: 12386165									
	VENDOR TOTALS		13,438.60 YTD INVOICED				7,963.07 YTD PAID			3,813.12
213	SOUTHERN CALIFORNIA GAS CO									
	218675	11/19/25		22603266	102983	P	12/19/25	10152060 610102	NATURAL GAS	5,576.95
	INVOICE: 07892745899/NOV2025									
	218678	11/17/25		22603247	102983	P	12/19/25	50295210 610102	NATURAL GAS	2,540.55
	INVOICE: 19422742791/NOV2025									
	218679	11/17/25		22603251	102983	P	12/19/25	50295210 610102	NATURAL GAS	37.98
	INVOICE: 16488264959/NOV2025									
	218680	11/17/25		22603251	102983	P	12/19/25	50295210 610102	NATURAL GAS	48.68
	INVOICE: 11025635076/NOV2025									
	218681	10/22/25		22603154	102983	P	12/19/25	10121010 610102	NATURAL GAS	92.85
	INVOICE: 06022765009/OCT2025									
	218800	11/18/25		22603225	102983	P	12/19/25	10152020 610102	NATURAL GAS	8.82
	INVOICE: 18592554002/NOV2025									
	218801	11/18/25		22603225	102983	P	12/19/25	10152050 610102	NATURAL GAS	23.84
	INVOICE: 13132656284/NOV2025									
	VENDOR TOTALS		4,956.03 YTD INVOICED				67,507.62 YTD PAID			8,329.67
4920	SPARKLETTS									
	218689	11/25/25		22603371	102984	P	12/19/25	10162010 610129	OTHER EXPENSE	130.90
	INVOICE: 05K8730257267									
	VENDOR TOTALS		63.94 YTD INVOICED				130.90 YTD PAID			130.90
3564	STAPLES									
	218682	10/31/25		22603220	102985	P	12/19/25	10152050 620101	OFFICE SUPPLIES	510.21
	INVOICE: 6046742902									
	218683	10/31/25		22603220	102985	P	12/19/25	10152010 620101	OFFICE SUPPLIES	62.16
	INVOICE: 6046742901									
	218684	10/31/25		22603220	102985	P	12/19/25	10152010 620101	OFFICE SUPPLIES	143.70
	INVOICE: 6046742899									
	218685	10/31/25		22603220	102985	P	12/19/25	10152010 620101	OFFICE SUPPLIES	22.83
	INVOICE: 6046742898									
	218686	10/31/25		22603220	102985	P	12/19/25	10152010 620101	OFFICE SUPPLIES	34.03
	INVOICE: 6046742903									
	218687	10/31/25		22603220	102985	P	12/19/25	10152010 620101	OFFICE SUPPLIES	758.95

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WARRANT: 121925 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: 6046742900									
	218688	11/30/25			102985	P	12/19/25	10152010 620101	OFFICE SUPPLIES	-282.06
	INVOICE: 6049331570									
	VENDOR TOTALS			.00 YTD INVOICED				1,249.82 YTD PAID		1,249.82
405	STATE BOARD OF EQUALIZATION									
	218690	12/11/25		22603373	102987	P	12/19/25	10119010 610129	OTHER EXPENSE	80.27
	INVOICE: 218690									
	218691	12/03/25		22603374	102986	P	12/19/25	10119010 610129	OTHER EXPENSE	23.83
	INVOICE: L0033725273									
	VENDOR TOTALS			13,522.04 YTD INVOICED				104.10 YTD PAID		104.10
392	STATE OF CA. DEPT. OF JUSTICE									
	218692	12/04/25		22603464	102988	P	12/19/25	10113010 610122	RECRUITING	226.00
	INVOICE: 008415									
	VENDOR TOTALS			224.00 YTD INVOICED				676.00 YTD PAID		226.00
6129	SUNBELT RENTALS INC.									
	218743	11/14/25		22603309	102989	P	12/19/25	29951010 610135	SPECIAL EVENTS	618.79
	INVOICE: 176955091-0001									
	VENDOR TOTALS			604.98 YTD INVOICED				1,091.24 YTD PAID		618.79
979	SWRCB									
	218744	11/19/25		22603248	102990	P	12/19/25	50295250 610131	FILING FEES	3,945.00
	INVOICE: WD-0309917									
	VENDOR TOTALS			.00 YTD INVOICED				98,265.00 YTD PAID		3,945.00
4062	TERMINIX OF IMPERIAL VALLEY									
	218693	09/16/25		22603311	102991	P	12/19/25	10152020 610113	PROFESSIONAL FEES (O)	45.36
	INVOICE: 1157978									
	VENDOR TOTALS			417.12 YTD INVOICED				723.00 YTD PAID		45.36
8836	THE COUNSELING TEAM INTERNATIONAL									
	218694	11/13/25		22603184	102992	P	12/19/25	10121010 610113	PROFESSIONAL FEES (O)	1,673.75
	INVOICE: INV107245									
	VENDOR TOTALS			.00 YTD INVOICED				1,673.75 YTD PAID		1,673.75
9852	THIND, JEEVAN K.									
	218733	12/16/25			102993	P	12/19/25	501 104001	ACCOUNTS RECEIVABLE	824.06
	INVOICE: 218733									
	218733	12/16/25			102993	P	12/19/25	504 104001	ACCOUNTS RECEIVABLE	200.00
	INVOICE: 218733									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS			.00 YTD INVOICED				1,024.06 YTD PAID		1,024.06
521	TYLER TECHNOLOGIES, INC.									
	218695	12/01/25		22603250	102994	P	12/19/25	50195160 610113	PROFESSIONAL FEES (O)	1,073.25
	INVOICE: 025-535005									
	218695	12/01/25		22603250	102994	P	12/19/25	50295280 610113	PROFESSIONAL FEES (O)	1,073.25
	INVOICE: 025-535005									
	VENDOR TOTALS			2,432.50 YTD INVOICED				4,579.00 YTD PAID		2,146.50
6289	U.S. BANK									
	218760	11/24/25		22603307	102995	P	12/19/25	10111020 620101	OFFICE SUPPLIES	42.98
	INVOICE: 63957516/11-24-25									
	218761	11/24/25		22603306	102995	P	12/19/25	10111010 610109	MEETING AND TRAVEL	1,019.22
	INVOICE: 63957516/NOV2025									
	218762	11/24/25		22603305	102995	P	12/19/25	10111010 610109	MEETING AND TRAVEL	571.57
	INVOICE: 63957516/11-24-25(1)									
	218764	11/24/25		22603381	102995	P	12/19/25	10111010 610109	MEETING AND TRAVEL	30.20
	INVOICE: 78403274/11-24-25									
	218765	10/22/25		22602513	102995	P	12/19/25	10111010 610109	MEETING AND TRAVEL	68.02
	INVOICE: 78403274/10-22-25									
	218766	09/22/25		22601957	102995	P	12/19/25	10153010 610107	BOOKS & PERIODICALS	966.24
	INVOICE: 66414846/9-22-25(3)									
	218766	09/22/25		22601957	102995	P	12/19/25	10153010 610121	DUES & SUBSCRIPTIONS	16.23
	INVOICE: 66414846/9-22-25(3)									
	218767	10/22/25		22603276	102995	P	12/19/25	10123030 610129	OTHER EXPENSE	554.93
	INVOICE: 53217525/10-22-25									
	218768	10/22/25		22603280	102995	P	12/19/25	10123010 610129	OTHER EXPENSE	1,775.01
	INVOICE: 53217525/10-22-25(1)									
	218769	10/22/25		22603281	102995	P	12/19/25	10123050 610123	TRAINING	804.76
	INVOICE: 53217525/10-22-25(2)									
	218770	10/22/25		22603282	102995	P	12/19/25	10123050 610123	TRAINING	857.73
	INVOICE: 53217525/10-22-25(3)									
	218771	11/24/25		22603364	102995	P	12/19/25	10112010 610109	MEETING AND TRAVEL	775.00
	INVOICE: 66427087/11-24-25									
	218772	11/24/25			102995	P	12/19/25	10112010 610109	MEETING AND TRAVEL	-775.00
	INVOICE: 66427087/CR11-24-25									
	218773	11/24/25		22603365	102995	P	12/19/25	10112010 610135	SPECIAL EVENTS	595.72
	INVOICE: 66427087/11-24-25(1)									
	218774	10/22/25		22603351	102995	P	12/19/25	10112010 610121	DUES & SUBSCRIPTIONS	.99
	INVOICE: 72511502/10-22-25									
	218774	10/22/25		22603351	102995	P	12/19/25	10112010 630115	OUTSIDE MAINTENANCE	27.00
	INVOICE: 72511502/10-22-25									
	218774	10/22/25		22603351	102995	P	12/19/25	10112010 720106	FIELD EQUIPMENT	137.91
	INVOICE: 72511502/10-22-25									
	218774	10/22/25		22603351	102995	P	12/19/25	10112020 610103	TELEPHONE	133.00
	INVOICE: 72511502/10-22-25									
	218774	10/22/25		22603351	102995	P	12/19/25	50195130 610103	TELEPHONE	133.00
	INVOICE: 72511502/10-22-25									
	218774	10/22/25		22603351	102995	P	12/19/25	50295230 610103	TELEPHONE	133.00

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE:	72511502/10-22-25								
218775		11/24/25		22603356	102995	P	12/19/25	10112010 610121	DUES & SUBSCRIPTIONS	25.99
	INVOICE:	72511502/11-24-25								
218775		11/24/25		22603356	102995	P	12/19/25	10112010 610129	OTHER EXPENSE	48.11
	INVOICE:	72511502/11-24-25								
218775		11/24/25		22603356	102995	P	12/19/25	10112010 620101	OFFICE SUPPLIES	21.51
	INVOICE:	72511502/11-24-25								
218775		11/24/25		22603356	102995	P	12/19/25	10112020 610113	PROFESSIONAL FEES (O)	112.71
	INVOICE:	72511502/11-24-25								
218775		11/24/25		22603356	102995	P	12/19/25	50195130 610113	PROFESSIONAL FEES (O)	112.71
	INVOICE:	72511502/11-24-25								
218775		11/24/25		22603356	102995	P	12/19/25	50295230 610113	PROFESSIONAL FEES (O)	112.73
	INVOICE:	72511502/11-24-25								
218777		10/22/25		22602871	102995	P	12/19/25	10121050 610123	TRAINING	1,365.29
	INVOICE:	74188200/10-22-25								
218778		10/22/25		22602870	102995	P	12/19/25	10121050 610123	TRAINING	1,046.00
	INVOICE:	74188200/10-22-25(1)								
218779		10/22/25		22602869	102995	P	12/19/25	10121050 610123	TRAINING	840.04
	INVOICE:	74188200/10-22-25(2)								
218780		10/22/25		22602868	102995	P	12/19/25	10121050 610123	TRAINING	528.81
	INVOICE:	74188200/10-22-25(3)								
218781		09/22/25		22603178	102995	P	12/19/25	10113040 630109	COMPUTER EQUIP. MAINT.	125.23
	INVOICE:	60335930/9-22-25								
218782		09/22/25		22603180	102995	P	12/19/25	10113040 610123	TRAINING	299.97
	INVOICE:	60335930/9-22-25(1)								
218783		09/22/25		22603179	102995	P	12/19/25	10113040 610123	TRAINING	299.97
	INVOICE:	60335930/9-22-25(2)								
218784		09/22/25		22603181	102995	P	12/19/25	10113040 630109	COMPUTER EQUIP. MAINT.	389.64
	INVOICE:	60335930/9-22-25(3)								
218785		11/24/25		22603369	102995	P	12/19/25	10141010 610109	MEETING AND TRAVEL	84.58
	INVOICE:	02057419/11-24-25								
218785		11/24/25		22603369	102995	P	12/19/25	10141010 610123	TRAINING	350.00
	INVOICE:	02057419/11-24-25								
218785		11/24/25		22603369	102995	P	12/19/25	10141010 620101	OFFICE SUPPLIES	265.65
	INVOICE:	02057419/11-24-25								
218786		11/24/25		22603347	102995	P	12/19/25	10141010 610109	MEETING AND TRAVEL	360.00
	INVOICE:	58077932/11-24-25								
218786		11/24/25		22603347	102995	P	12/19/25	10141010 620101	OFFICE SUPPLIES	50.36
	INVOICE:	58077932/11-24-25								
218787		11/24/25		22603349	102995	P	12/19/25	10141010 610109	MEETING AND TRAVEL	906.78
	INVOICE:	58077932/11-24-25(1)								
218788		11/24/25		22603368	102995	P	12/19/25	10141010 610121	DUES & SUBSCRIPTIONS	540.00
	INVOICE:	02057419/11-24-25(1)								
218789		11/24/25		22603348	102995	P	12/19/25	10141010 610109	MEETING AND TRAVEL	906.78
	INVOICE:	58077932/11-24-25(2)								
218790		10/22/25		22603304	102995	P	12/19/25	10110006 460120	DAY CAMP FEES	760.00
	INVOICE:	65370866/10-22-25								
218791		11/24/25		22603234	102995	P	12/19/25	10162010 610109	MEETING & TRAVEL	194.85
	INVOICE:	73165803/11-24-25								
218791		11/24/25		22603234	102995	P	12/19/25	10162010 620101	OFFICE SUPPLIES	119.60
	INVOICE:	73165803/11-24-25								

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VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
218792	11/24/25			102995	P	12/19/25	10162010 620101	OFFICE SUPPLIES	-59.80
INVOICE: 73165803/CR11-24-25									
218793	11/24/25		22603235	102995	P	12/19/25	10162010 610121	DUES & SUBSCRIPTIONS	2,095.00
INVOICE: 73165803/11-24-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10151010 610121	DUES & SUBSCRIPTIONS	145.00
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152010 610121	DUES & SUBSCRIPTIONS	4.99
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152010 610129	OTHER EXPENSE	28.10
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152010 760002	FIRST 5 - GRANT	165.69
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152020 610121	DUES & SUBSCRIPTIONS	15.99
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152020 610129	OTHER EXPENSE	42.69
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152020 620101	OFFICE SUPPLIES	10.83
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152030 610129	OTHER EXPENSE	330.48
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152050 610129	OTHER EXPENSE	952.17
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152050 620115	ATHLETIC FIELD SUPP	518.15
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	10152070 610129	OTHER EXPENSE	526.45
INVOICE: 65370866/10-22-25(1)									
218794	10/22/25		22602999	102995	P	12/19/25	29951010 610135	SPECIAL EVENTS	497.47
INVOICE: 65370866/10-22-25(1)									
218795	11/24/25		22603448	102995	P	12/19/25	10131010 610109	MEETING AND TRAVEL	30.47
INVOICE: 22399768/11-24-25									
218795	11/24/25		22603448	102995	P	12/19/25	50195160 610109	MEETING & TRAVEL	30.47
INVOICE: 22399768/11-24-25									
218795	11/24/25		22603448	102995	P	12/19/25	50295280 610109	MEETING & TRAVEL	30.47
INVOICE: 22399768/11-24-25									
218796	11/24/25		22603456	102995	P	12/19/25	10141010 610109	MEETING AND TRAVEL	1,511.95
INVOICE: 73212654/11-24-25									
218797	11/24/25		22603455	102995	P	12/19/25	10141010 610109	MEETING AND TRAVEL	1,511.95
INVOICE: 73212654/11-24-25(1)									
218798	10/22/25		22603412	102995	P	12/19/25	10141010 610121	DUES & SUBSCRIPTIONS	210.00
INVOICE: 02057419/10-22-25									
218799	11/24/25		22603478	102995	P	12/19/25	10141010 610109	MEETING AND TRAVEL	314.97
INVOICE: 73212654/11-24-25(2)									
218799	11/24/25		22603478	102995	P	12/19/25	10141010 620114	OTHER SAFETY SUPPLIES	91.44
INVOICE: 73212654/11-24-25(2)									
218799	11/24/25		22603478	102995	P	12/19/25	10141010 620140	SMALL TOOLS	22.69
INVOICE: 73212654/11-24-25(2)									
VENDOR TOTALS	71,041.30 YTD INVOICED						69,187.90 YTD PAID		26,762.44
355 UNDERGROUND SERV ALERT									
218696	11/01/25		22603245	102996	P	12/19/25	10132010 610113	PROFESSIONAL FEES (O)	13.63

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: 25-261317									
	218696	11/01/25		22603245	102996	P	12/19/25	50195100 610113	PROFESSIONAL FEES (O)	13.63
	INVOICE: 25-261317									
	218696	11/01/25		22603245	102996	P	12/19/25	50295200 610113	PROFESSIONAL FEES (O)	13.64
	INVOICE: 25-261317									
	218697	11/01/25		22603245	102996	P	12/19/25	10132010 610113	PROFESSIONAL FEES (O)	51.33
	INVOICE: 1020250260									
	218697	11/01/25		22603245	102996	P	12/19/25	50195100 610113	PROFESSIONAL FEES (O)	51.33
	INVOICE: 1020250260									
	218697	11/01/25		22603245	102996	P	12/19/25	50295200 610113	PROFESSIONAL FEES (O)	51.34
	INVOICE: 1020250260									
	VENDOR TOTALS		403.73 YTD INVOICED					194.90 YTD PAID		194.90
4647	VERIZON WIRELESS									
	218699	10/26/25		22603168	102997	P	12/19/25	10121010 610103	TELEPHONE	676.99
	INVOICE: 6127045282									
	VENDOR TOTALS		605.20 YTD INVOICED					4,590.50 YTD PAID		676.99
7951	VESTIS SERVICES, LLC									
	218700	11/07/25		22603269	102998	P	12/19/25	10152060 610125	UNIFORM RENTAL	13.58
	INVOICE: 5220598428									
	218701	11/14/25		22603269	102998	P	12/19/25	10152060 610125	UNIFORM RENTAL	13.58
	INVOICE: 5220601437									
	218702	10/31/25		22602780	102998	P	12/19/25	50195110 620128	JANITORIAL SUPPLIES	99.67
	INVOICE: 5220595421									
	218703	10/17/25		22602780	102998	P	12/19/25	50195110 620128	JANITORIAL SUPPLIES	99.67
	INVOICE: 5220589490									
	218704	10/24/25		22602780	102998	P	12/19/25	50195110 620128	JANITORIAL SUPPLIES	99.67
	INVOICE: 5220592450									
	218705	10/31/25		22602780	102998	P	12/19/25	50195110 610125	UNIFORM RENTAL	73.31
	INVOICE: 5220595422									
	218706	10/17/25		22602780	102998	P	12/19/25	50195110 610125	UNIFORM RENTAL	73.31
	INVOICE: 5220589491									
	218707	10/24/25		22602780	102998	P	12/19/25	50195110 610125	UNIFORM RENTAL	73.31
	INVOICE: 5220592451									
	VENDOR TOTALS		6,106.91 YTD INVOICED					4,146.04 YTD PAID		546.10
528	WAXIE SANITARY SUPPLY									
	218708	12/04/25		22603318	102999	P	12/19/25	10123010 620128	JANITORIAL SUPPLIES	199.66
	INVOICE: 83671755									
	VENDOR TOTALS		5,783.77 YTD INVOICED					3,163.57 YTD PAID		199.66
718	WE-DO EQUIP REPAIR &SUPPLY INC									
	218710	10/29/25		22603243	103000	P	12/19/25	10132010 620120	STREET CONSTRUCTION	266.27
	INVOICE: W313421									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS		.00	YTD INVOICED				266.27	YTD PAID		266.27
2395	WESTAIR GASES & EQUIPMENT INC.										
	218709	11/30/25		22603354	103001	P	12/19/25	10123040	610111	EQUIPMENT RENTAL	300.13
	INVOICE: 0080707759										
	VENDOR TOTALS		300.13	YTD INVOICED				300.13	YTD PAID		300.13
10666	WESTNET, LLC										
	218745	11/28/25		22603087	103002	P	12/19/25	29923010	750009	FIRE STATION ALERTING	36,466.58
	INVOICE: 29681										
	218746	11/28/25		22603087	103002	P	12/19/25	29923010	750009	FIRE STATION ALERTING	22,596.83
	INVOICE: 29682										
	218747	11/28/25		22603087	103002	P	12/19/25	29923010	750009	FIRE STATION ALERTING	21,502.28
	INVOICE: 29683										
	218748	11/28/25		22603087	103002	P	12/19/25	29923010	750009	FIRE STATION ALERTING	41,962.94
	INVOICE: 29684										
	VENDOR TOTALS		.00	YTD INVOICED				122,528.63	YTD PAID		122,528.63
10221	BERTHA WHITE										
	218711	12/02/25		22603222	103003	P	12/19/25	10110006	460116	RECREATION FEES	65.00
	INVOICE: 218711										
	VENDOR TOTALS		197.50	YTD INVOICED				65.00	YTD PAID		65.00
										REPORT TOTALS	2,461,499.42

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	94	2,461,499.42

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
7897	360 BUSINESS PRODUCTS									
	218804	12/10/25		22603316	103004	P	12/26/25	50195120 620101	OFFICE SUPPLIES	269.16
	INVOICE: WO-49180-1									
	218804	12/10/25		22603316	103004	P	12/26/25	50295220 620101	OFFICE SUPPLIES	115.35
	INVOICE: WO-49180-1									
	218805	12/11/25		22603316	103004	P	12/26/25	50195120 620101	OFFICE SUPPLIES	.66
	INVOICE: WO-49180-2									
	218805	12/11/25		22603316	103004	P	12/26/25	50295220 620101	OFFICE SUPPLIES	.29
	INVOICE: WO-49180-2									
	218806	12/11/25		22603316	103004	P	12/26/25	50195120 620101	OFFICE SUPPLIES	24.76
	INVOICE: OE-69332-1									
	218806	12/11/25		22603316	103004	P	12/26/25	50295220 620101	OFFICE SUPPLIES	10.61
	INVOICE: OE-69332-1									
	218807	11/19/25		22603110	103005	P	12/26/25	50195110 620101	OFFICE SUPPLIES	313.57
	INVOICE: OE-69244-1									
	218808	11/13/25		22603383	103005	P	12/26/25	50295210 620101	OFFICE SUPPLIES	175.81
	INVOICE: WO-48895-1									
	VENDOR TOTALS		5,766.41 YTD INVOICED					3,911.56 YTD PAID		910.21
9324	ACE HARDWARE CORPORATION									
	218809	11/20/25		22603393	103006	P	12/26/25	60496400 630114	PARTS	81.78
	INVOICE: J29744									
	218810	12/09/25		22603435	103006	P	12/26/25	10123010 630114	PARTS	100.65
	INVOICE: J36995									
	218811	12/07/25		22603434	103006	P	12/26/25	10123010 630101	BUILDING MAINT.	23.80
	INVOICE: J36187									
	218812	12/08/25		22603434	103006	P	12/26/25	10123010 630101	BUILDING MAINT.	32.44
	INVOICE: J36545									
	218813	12/09/25		22603434	103006	P	12/26/25	10123010 630101	BUILDING MAINT.	24.43
	INVOICE: J37107									
	218814	12/10/25		22603438	103006	P	12/26/25	10123010 630108	FIELD/SHOP EQUIP. MAINT.	179.21
	INVOICE: I27016									
	218815	12/10/25		22603437	103006	P	12/26/25	10123010 630114	PARTS	108.89
	INVOICE: J37424									
	VENDOR TOTALS		5,660.99 YTD INVOICED					3,559.64 YTD PAID		551.20
3933	ACME SAFETY & SUPPLY CO.									
	218816	09/04/25		22603433	103007	P	12/26/25	10132010 620119	TRAFFIC PAINT	137.91
	INVOICE: 170780-00									
	VENDOR TOTALS		.00 YTD INVOICED					925.32 YTD PAID		137.91
10066	AMBERLY'S PLACE, INC.									
	218818	11/12/25		22603474	103008	P	12/26/25	10121010 610113	PROFESSIONAL FEES (O)	700.00
	INVOICE: 103287									
	VENDOR TOTALS		700.00 YTD INVOICED					1,400.00 YTD PAID		700.00
7928	AMERICA'S FINEST FIRE PROTECTION									

CITY OF EL CENTRO

PAID INVOICES REPORT

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	218819	10/23/25		22603470	103009	P	12/26/25	10121010	610114	PROFESSIONAL FEES (D)	424.74
	INVOICE:	18M 936950									
	VENDOR TOTALS		.00	YTD INVOICED				5,645.95	YTD PAID		424.74
7	AMERICAN LINEN										
	218820	12/09/25		22603477	103010	P	12/26/25	10121010	630101	BUILDING MAINT.	158.56
	INVOICE:	LYUM1927125									
	218821	12/02/25		22603477	103010	P	12/26/25	10121010	630101	BUILDING MAINT.	155.38
	INVOICE:	LYUM1925652									
	218822	11/25/25		22603145	103010	P	12/26/25	10121010	630101	BUILDING MAINT.	182.70
	INVOICE:	LYUM1924098									
	218937	12/11/25		22603513	103010	P	12/26/25	10123010	620129	LAUNDRY SERVICE & SUPPLY	230.14
	INVOICE:	LYUM1927727									
	VENDOR TOTALS		1,370.31	YTD INVOICED				1,809.30	YTD PAID		726.78
8105	ARAG LLC										
	219004	12/26/25	1645		103011	P	12/26/25	101	201217	OTHER PAYROLL DEDUCTIONS	661.78
	INVOICE:	219004									
	VENDOR TOTALS		623.64	YTD INVOICED				661.78	YTD PAID		661.78
6266	AT&T MOBILITY										
	218938	12/03/25		22603510	103012	P	12/26/25	10123010	610103	TELEPHONE	1,137.62
	INVOICE:	287312326813X121125									
	VENDOR TOTALS		8,979.74	YTD INVOICED				8,736.27	YTD PAID		1,137.62
2483	ATCO INTERNATIONAL										
	218996	11/17/25		22603396	103013	P	12/26/25	60496400	620127	OTHER SUPPLIES	175.09
	INVOICE:	I0651590									
	VENDOR TOTALS		.00	YTD INVOICED				175.09	YTD PAID		175.09
4170	AUTOZONE, INC.										
	218823	11/14/25		22603401	103014	P	12/26/25	60496400	630114	PARTS	44.21
	INVOICE:	2803995012									
	218824	11/17/25		22603401	103014	P	12/26/25	60496400	630114	PARTS	156.08
	INVOICE:	2803998466									
	218825	11/17/25		22603401	103014	P	12/26/25	60496400	630114	PARTS	86.58
	INVOICE:	2803998259									
	218826	11/18/25		22603401	103014	P	12/26/25	60496400	630114	PARTS	53.44
	INVOICE:	3362407239									
	218827	11/19/25		22603401	103014	P	12/26/25	60496400	630113	TIRES & BATTERIES	554.80
	INVOICE:	2803000786									
	218828	11/20/25		22603401	103014	P	12/26/25	60496400	630114	PARTS	115.69
	INVOICE:	2803002235									
	218829	11/20/25		22603401	103014	P	12/26/25	60496400	630114	PARTS	20.29
	INVOICE:	2803002237									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS		2,724.51 YTD INVOICED						6,058.60 YTD PAID		1,031.09
10520	BLUE TRITON BRANDS INC										
	218830	12/02/25		22603344	103015	P	12/26/25	10152020	610129	OTHER EXPENSE	143.89
	INVOICE: 05K8730033352										
	218830	12/02/25		22603344	103015	P	12/26/25	10152110	610113	PROFESSIONAL FEES/OTHER	143.89
	INVOICE: 05K8730033352										
	VENDOR TOTALS		318.19 YTD INVOICED						1,117.93 YTD PAID		287.78
9931	BRAWLEY ANALYTICAL, INC.										
	218831	12/02/25		22603413	103016	P	12/26/25	50295210	620137	LAB TESTS & SUPPLIES	334.50
	INVOICE: 001622										
	VENDOR TOTALS		3,822.50 YTD INVOICED						4,722.50 YTD PAID		334.50
6276	C R & R										
	218832	12/01/25		22603493	103017	P	12/26/25	10118020	630101	BUILDING MAINT.	632.42
	INVOICE: 000465707										
	VENDOR TOTALS		195,805.83 YTD INVOICED						192,534.26 YTD PAID		632.42
1846	CARLOS NEON SIGNS										
	218939	12/03/25		22603500	103018	P	12/26/25	26051100	610113	PROFESSIONAL FEES/OTHER	855.94
	INVOICE: 1433										
	VENDOR TOTALS		265.21 YTD INVOICED						5,678.48 YTD PAID		855.94
1167	MANUELA CARRILLO										
	219001	12/26/25 1642			103019	P	12/26/25	101	201217	OTHER PAYROLL DEDUCTIONS	222.50
	INVOICE: 219001										
	VENDOR TOTALS		445.00 YTD INVOICED						445.00 YTD PAID		222.50
650	CLINICAL LAB OF SAN BERNARDINO, INC.										
	218834	12/01/25		22603402	103020	P	12/26/25	50195110	620137	LAB TESTS & SUPPLIES	70.00
	INVOICE: 25K1416-ELC01										
	VENDOR TOTALS		800.00 YTD INVOICED						680.00 YTD PAID		70.00
10617	COMPRESSED AIR SPECIALISTS, INC.										
	218940	12/17/25		22602059	103021	P	12/26/25	29923010	720106	FIELD EQUIPMENT	107,218.04
	INVOICE: 00045509										
	VENDOR TOTALS		.00 YTD INVOICED						107,218.04 YTD PAID		107,218.04
69	CONTROL PARTS & ELECTRICAL SUPPLIES, INC.										
	218836	11/20/25		22603432	103022	P	12/26/25	50195110	620140	SMALL TOOLS	395.11
	INVOICE: 202508980										

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	VENDOR TOTALS		11,746.75 YTD INVOICED						395.11 YTD PAID		395.11
3211	DELL MARKETING L.P.										
	218842	11/10/25		22601370	103023	P	12/26/25	26152140	720109	COMPUTERS	74.28
	INVOICE: 10838324375										
	218843	11/09/25		22601370	103023	P	12/26/25	26152140	720109	COMPUTERS	674.63
	INVOICE: 10838128064										
	218844	11/14/25		22601370	103023	P	12/26/25	26152140	720109	COMPUTERS	4,388.89
	INVOICE: 10838894627										
	VENDOR TOTALS		55,817.52 YTD INVOICED						19,371.65 YTD PAID		5,137.80
9621	DXP ENTERPRISES, INC.										
	218845	12/15/25		22603416	103024	P	12/26/25	50295210	630108	FIELD/SHOP EQUIP. MAINT.	1,850.00
	INVOICE: 55519510										
	VENDOR TOTALS		11,080.68 YTD INVOICED						22,824.83 YTD PAID		1,850.00
3638	E.S. BABCOCK & SONS, INC.										
	218846	10/29/25		22603415	103025	P	12/26/25	50295210	620137	LAB TESTS & SUPPLIES	265.06
	INVOICE: LJ50059-2683										
	VENDOR TOTALS		.00 YTD INVOICED						265.06 YTD PAID		265.06
10609	EL CENTRO GENERAL EMPLOYEES ASSOC.										
	219006	12/26/25 1647			103026	P	12/26/25	101	201206	EMPLOYEES ASSOCIATION	2,025.00
	INVOICE: 219006										
	VENDOR TOTALS		.00 YTD INVOICED						4,050.00 YTD PAID		2,025.00
105	EL OASIS WATER										
	218941	11/19/25		22603506	103027	P	12/26/25	10123010	630101	BUILDING MAINT.	270.87
	INVOICE: 815570										
	218942	11/07/25		22603506	103027	P	12/26/25	10123010	630101	BUILDING MAINT.	321.60
	INVOICE: 816563										
	VENDOR TOTALS		631.90 YTD INVOICED						592.47 YTD PAID		592.47
245	EMPIRE SOUTHWEST										
	218847	11/05/25		22603397	103028	P	12/26/25	60496400	630115	OUTSIDE MAINTENANCE	5,972.33
	INVOICE: EMWK4134949										
	VENDOR TOTALS		1,545.30 YTD INVOICED						5,972.33 YTD PAID		5,972.33
247	FEDEX										
	218848	11/21/25		22603386	103029	P	12/26/25	50195110	620137	LAB TESTS & SUPPLIES	150.68
	INVOICE: 9-076-51465										
	218849	12/05/25		22603430	103029	P	12/26/25	50195110	620137	LAB TESTS & SUPPLIES	121.74
	INVOICE: 9-092-22447										
	218850	11/28/25		22603405	103029	P	12/26/25	50195110	620137	LAB TESTS & SUPPLIES	19.53

CITY OF EL CENTRO

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: 9-708-26026									
	218851	11/21/25		22603514	103029	P	12/26/25	10112010 620102	POSTAGE	38.89
	INVOICE: 9-076-29751									
	218852	11/28/25		22603475	103029	P	12/26/25	10121010 620102	POSTAGE	6.80
	INVOICE: 9-708-26820									
	218853	11/21/25		22603473	103029	P	12/26/25	10121010 620102	POSTAGE	108.34
	INVOICE: 9-075-50047									
	VENDOR TOTALS		1,532.34 YTD INVOICED					1,117.46 YTD PAID		445.98
4462	FERGUSON ENTERPRISES, INC.									
	218943	11/12/25		22603508	103030	P	12/26/25	10123010 630101	BUILDING MAINT.	37.76
	INVOICE: 5903702									
	VENDOR TOTALS		35,119.99 YTD INVOICED					12,497.40 YTD PAID		37.76
8069	FERNANDO RUIZ, INC.									
	218854	12/01/25		22603406	103031	P	12/26/25	50195110 610113	PROFESSIONAL FEES (O)	660.00
	INVOICE: 172030									
	VENDOR TOTALS		1,320.00 YTD INVOICED					660.00 YTD PAID		660.00
10636	FIRESTATIONFURNITURE.COM									
	218997	11/21/25		22602439	103032	P	12/26/25	10123010 750001	CAPITAL OUTLAY MISCELLANE	9,960.79
	INVOICE: 9390									
	VENDOR TOTALS		.00 YTD INVOICED					9,960.79 YTD PAID		9,960.79
202	FIRST IMPERIAL CREDIT UNION									
	218999	12/26/25 1640			103033	P	12/26/25	101 201207	POLICE OFFICERS ASSN	3,120.00
	INVOICE: 218999									
	VENDOR TOTALS		6,000.00 YTD INVOICED					6,240.00 YTD PAID		3,120.00
3767	FRANCHISE TAX BOARD									
	219002	12/26/25 1643			103034	P	12/26/25	101 201217	OTHER PAYROLL DEDUCTIONS	664.76
	INVOICE: 219002									
	VENDOR TOTALS		.00 YTD INVOICED					1,329.52 YTD PAID		664.76
4317	FRUTH GROUP INC.									
	218855	12/02/25		22603544	103035	P	12/26/25	10115010 620103	PRINTING	230.65
	INVOICE: 773780									
	218856	06/23/25		22603403	103035	P	12/26/25	50195110 630106	OFFICE MACHINES MAINT.	439.21
	INVOICE: 744365									
	VENDOR TOTALS		2,466.80 YTD INVOICED					1,840.47 YTD PAID		669.86
457	HACH COMPANY									
	218857	11/13/25		22603417	103036	P	12/26/25	50295210 620137	LAB TESTS & SUPPLIES	2,702.38
	INVOICE: 14755230									

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	218858	11/13/25		22603417	103036	P	12/26/25	50295210	620137	LAB TESTS & SUPPLIES	1,065.11
	INVOICE: 14756684										
	VENDOR TOTALS		1,525.62 YTD INVOICED					4,505.97 YTD PAID			3,767.49
3581	HAVENS AND SONS TRUCKING										
	218859	11/14/25		22603387	103037	P	12/26/25	20532040	610113	PROFESSIONAL FEES/OTHER	3,128.48
	INVOICE: 202511-91										
	VENDOR TOTALS		554.24 YTD INVOICED					3,971.85 YTD PAID			3,128.48
205	IMPERIAL CO SHERIFF'S DEPT.										
	219000	12/26/25 1641			103038	P	12/26/25	101	201217	OTHER PAYROLL DEDUCTIONS	50.00
	INVOICE: 219000										
	VENDOR TOTALS		100.00 YTD INVOICED					100.00 YTD PAID			50.00
9759	IMPERIAL COUNTY CEO										
	218862	12/03/25		22603540	103039	P	12/26/25	10121020	610113	PROFESSIONAL FEES/OTHER	6,500.00
	INVOICE: 2526-001										
	VENDOR TOTALS		.00 YTD INVOICED					6,500.00 YTD PAID			6,500.00
838	IMPERIAL COUNTY APCD										
	218944	12/17/25		22603505	103040	P	12/26/25	10123010	610113	PROFESSIONAL FEES (O)	233.00
	INVOICE: 3226 PTO/FY2026										
	218945	12/17/25		22603505	103040	P	12/26/25	10123010	610113	PROFESSIONAL FEES (O)	233.00
	INVOICE: 3227 PTO/FY2026										
	218946	12/17/25		22603505	103040	P	12/26/25	10123010	610113	PROFESSIONAL FEES (O)	233.00
	INVOICE: 4206 PTO/FY2026										
	218947	12/17/25		22603505	103040	P	12/26/25	10123010	610113	PROFESSIONAL FEES (O)	593.00
	INVOICE: 4205 PTO/FY2026										
	VENDOR TOTALS		.00 YTD INVOICED					1,292.00 YTD PAID			1,292.00
146	IMPERIAL PRINTERS										
	218863	11/11/25		22603543	103041	P	12/26/25	10115010	620103	PRINTING	574.89
	INVOICE: 25-3398										
	218948	11/13/25		22603541	103041	P	12/26/25	29951010	750021	FRAZIER PARK IMPRO (PARKS	77.94
	INVOICE: 25-3608										
	218950	11/11/25		22603515	103041	P	12/26/25	10112010	620103	PRINTING	97.43
	INVOICE: 25-3402										
	218951	11/13/25		22603515	103041	P	12/26/25	10111010	610129	OTHER EXPENSE	63.87
	INVOICE: 25-3625										
	VENDOR TOTALS		2,697.60 YTD INVOICED					892.61 YTD PAID			814.13
9814	IMPERIAL VALLEY CHEVROLET BUICK GMC CADILLAC										
	218864	11/24/25		22603400	103042	P	12/26/25	60496400	630114	PARTS	298.21
	INVOICE: 721431GM										
	218865	11/24/25		22603400	103042	P	12/26/25	60496400	630114	PARTS	94.13

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT		GL ACCOUNT DESCRIPTION	
	INVOICE: 721430GM										
	218866	12/01/25		22603400	103042	P	12/26/25	60496400	630114	PARTS	311.26
	INVOICE: 721565GM										
	VENDOR TOTALS		1,433.34 YTD INVOICED						703.60 YTD PAID		703.60
607	IMPERIAL VALLEY PRESS										
	218867	12/11/25		22603489	103043	P	12/26/25	10111020	610106	ADVERTISING	259.94
	INVOICE: 541746										
	VENDOR TOTALS		1,558.10 YTD INVOICED						2,242.57 YTD PAID		259.94
141	IMPERIAL VALLEY TERMITE										
	218868	12/01/25		22603471	103044	P	12/26/25	10121010	610113	PROFESSIONAL FEES (O)	65.00
	INVOICE: 0358700										
	218869	12/01/25		22603471	103044	P	12/26/25	10121010	610113	PROFESSIONAL FEES (O)	110.00
	INVOICE: 0358701										
	218870	12/01/25		22603471	103044	P	12/26/25	10121010	610113	PROFESSIONAL FEES (O)	34.00
	INVOICE: 0358699										
	218952	12/15/25		22603511	103044	P	12/26/25	10123010	630101	BUILDING MAINT.	95.00
	INVOICE: 0358797										
	VENDOR TOTALS		409.00 YTD INVOICED						1,098.00 YTD PAID		304.00
4727	IVROP										
	218871	11/06/25		22603169	103045	P	12/26/25	10121010	610113	PROFESSIONAL FEES (O)	224.00
	INVOICE: 218871										
	VENDOR TOTALS		1,456.00 YTD INVOICED						364.00 YTD PAID		224.00
3760	JADE SECURITY SYSTEMS INC.										
	218872	12/10/25		22603439	103046	P	12/26/25	10123010	610113	PROFESSIONAL FEES (O)	223.96
	INVOICE: 4654/JAN2026										
	218956	12/10/25		22603571	103046	P	12/26/25	10153010	610113	PROFESSIONAL FEES/OTHER	586.41
	INVOICE: 586.41										
	218957	12/17/25		22601489	103046	P	12/26/25	50195100	710105	BUILDINGS	1,955.18
	INVOICE: 4761										
	218957	12/17/25		22601489	103046	P	12/26/25	50295200	710105	BUILDINGS	1,955.18
	INVOICE: 4761										
	VENDOR TOTALS		2,372.54 YTD INVOICED						4,873.73 YTD PAID		4,720.73
821	JCI JONES CHEMICALS, INC.										
	218873	11/26/25		22603407	103047	P	12/26/25	50195110	620136	TREATMENT CHEMICALS	10,750.25
	INVOICE: 984354										
	VENDOR TOTALS		40,230.64 YTD INVOICED						21,379.33 YTD PAID		10,750.25
2493	MALLORY SAFETY & SUPPLY LLC										
	218874	11/24/25		22603419	103048	P	12/26/25	50295210	620112	PROTECTIVE CLOTHING	28.20
	INVOICE: 6302711										

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218875 INVOICE: 6293428	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	338.39
218876 INVOICE: 6293434	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	21.31
218877 INVOICE: 6293431	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	9.14
218878 INVOICE: 6293438	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	58.65
218879 INVOICE: 6293440	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	49.51
218880 INVOICE: 6293405	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	37.16
218881 INVOICE: 6293415	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	37.34
218882 INVOICE: 6293417	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	58.65
218883 INVOICE: 6293453	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	58.65
218884 INVOICE: 6293447	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	9.14
218885 INVOICE: 6293445	11/10/25		22603419	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	9.14
218886 INVOICE: 6293442	11/10/25		22603420	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	28.20
218887 INVOICE: 6302701	11/24/25		22603420	103048	P	12/26/25	50295210 630112	GASOLINE & OIL	43.20
218888 INVOICE: 6302698	11/24/25		22603420	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	43.20
218889 INVOICE: 6302686	11/24/25		22603420	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	43.20
218890 INVOICE: 6302688	11/24/25		22603420	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	43.00
218891 INVOICE: 6302695	11/24/25		22603420	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	43.20
218892 INVOICE: 4602703	11/24/25		22603420	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	43.20
218893 INVOICE: 6302707	11/24/25		22603420	103048	P	12/26/25	50295210 620112	PROTECTIVE CLOTHING	3.59
VENDOR TOTALS			116.58 YTD INVOICED				1,006.07 YTD PAID		1,006.07
276 MCNEECE BROS. OIL CO. INC.									
218894 INVOICE: 921174	11/30/25		22603472	103049	P	12/26/25	10121010 630112	GASOLINE & OIL	10,916.52
218894 INVOICE: 921174	11/30/25		22603472	103049	P	12/26/25	10121030 630112	GASOLINE & OIL	302.58
218895 INVOICE: 624780	11/19/25		22603388	103049	P	12/26/25	50295210 630112	GASOLINE & OIL	350.73
218960 INVOICE: 921144	11/30/25		22603559	103049	P	12/26/25	10151010 630112	GASOLINE & OIL	2,606.86
218960	11/30/25		22603559	103049	P	12/26/25	10152010 630112	GASOLINE & OIL	861.78

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	INVOICE: 921144										
	218960	11/30/25		22603559	103049	P	12/26/25	10152040	630112	GASOLINE & OIL	43.71
	INVOICE: 921144										
	218993	12/10/25		22603548	103049	P	12/26/25	10123010	630112	GASOLINE & OIL	1,291.75
	INVOICE: 625276										
	218994	12/10/25		22603548	103049	P	12/26/25	10123010	630112	GASOLINE & OIL	272.07
	INVOICE: 625277										
	VENDOR TOTALS		13,684.08	YTD INVOICED				47,556.67	YTD PAID		16,646.00
9095	MECHANICS BANK										
	219005	12/26/25	1646		103050	P	12/26/25	101	201208	FIREFIGHTERS ASSOCIATION	1,420.00
	INVOICE: 219005										
	219005	12/26/25	1646		103050	P	12/26/25	101	201216	DISABILITY INSURANCE	200.13
	INVOICE: 219005										
	VENDOR TOTALS		3,100.14	YTD INVOICED				3,240.26	YTD PAID		1,620.13
6250	MOSS, LEVY & HARTZHEIM LLP										
	218897	11/30/25		22603545	103051	P	12/26/25	10115010	610128	AUDITING	8,333.34
	INVOICE: 18185										
	218897	11/30/25		22603545	103051	P	12/26/25	50195160	610113	PROFESSIONAL FEES (O)	8,333.33
	INVOICE: 18185										
	218897	11/30/25		22603545	103051	P	12/26/25	50295280	610113	PROFESSIONAL FEES (O)	8,333.33
	INVOICE: 18185										
	VENDOR TOTALS		27,000.00	YTD INVOICED				25,000.00	YTD PAID		25,000.00
8294	MULHERIN MONUMENTAL, INC.										
	218898	10/17/25		22603565	103052	P	12/26/25	23833080	750039	FIRST RESPONDERS WALLS	23,273.75
	INVOICE: 2402035										
	VENDOR TOTALS		.00	YTD INVOICED				23,273.75	YTD PAID		23,273.75
3700	ONE SOURCE DISTRIBUTORS INC										
	218899	11/07/25		22603425	103053	P	12/26/25	50295210	630108	FIELD/SHOP EQUIP. MAINT.	44.88
	INVOICE: S008115065.001										
	218900	11/18/25		22603425	103053	P	12/26/25	50295210	630108	FIELD/SHOP EQUIP. MAINT.	165.53
	INVOICE: S008124837.001										
	VENDOR TOTALS		561.29	YTD INVOICED				413.64	YTD PAID		210.41
10649	FRANCISCO HECTOR OROZCO										
	218901	10/30/25		22603465	103054	P	12/26/25	50195110	610113	PROFESSIONAL FEES (O)	180.00
	INVOICE: 1785										
	VENDOR TOTALS		.00	YTD INVOICED				180.00	YTD PAID		180.00
10412	PARADISE CHEVROLET & CADILLAC										
	218902	12/16/25		22602110	103055	P	12/26/25	20132040	730102	TRUCKS	59,370.73
	INVOICE: 1GC4ALE76TF184657										

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	VENDOR TOTALS			.00 YTD INVOICED				59,370.73 YTD PAID		59,370.73
6116	PITNEY BOWES GLOBAL FIN SVC LLC									
	218903	11/21/25		22603479	103056	P	12/26/25	10121010 620102	POSTAGE	169.98
	INVOICE: 3107503966									
	VENDOR TOTALS			.00 YTD INVOICED				169.98 YTD PAID		169.98
294	RAIN FOR REST, INC.									
	218906	11/25/25		22603409	103057	P	12/26/25	50195110 610111	EQUIPMENT RENTAL	1,697.17
	INVOICE: 2215032									
	VENDOR TOTALS			.00 YTD INVOICED				1,697.17 YTD PAID		1,697.17
631	REFRIGERATION SUPPLIES DIST.									
	218907	10/01/25		22602538	103058	P	12/26/25	10121030 630101	BUILDING MAINT.	5.32
	INVOICE: 3348495-00									
	VENDOR TOTALS			3,905.42 YTD INVOICED				5.32 YTD PAID		5.32
2840	RESERVE ACCOUNT-PITNEY BOWES									
	218908	12/12/25		22603566	103059	P	12/26/25	10119010 620102	POSTAGE	250.00
	INVOICE: 218908									
	VENDOR TOTALS			1,000.00 YTD INVOICED				1,500.00 YTD PAID		250.00
8634	REXEL USA, INC.									
	218909	11/18/25		22603408	103060	P	12/26/25	50195110 620130	MAINTENANCE SUPPLIES	205.16
	INVOICE: S143900839.002									
	218910	11/12/25		22603408	103060	P	12/26/25	50195110 620130	MAINTENANCE SUPPLIES	6.77
	INVOICE: S143900839.001									
	VENDOR TOTALS			256.65 YTD INVOICED				986.26 YTD PAID		211.93
10006	MARGARITA FIGUEROA REYES									
	218911	12/12/25		22603552	103061	P	12/26/25	10153010 610129	OTHER EXPENSE	400.00
	INVOICE: 116									
	VENDOR TOTALS			.00 YTD INVOICED				850.00 YTD PAID		400.00
8791	RICK'S ROADRUNNER LOCK & SAFE									
	218912	11/07/25		22603411	103062	P	12/26/25	50195110 620135	OTHER SUPPLIES	22.73
	INVOICE: 23768									
	VENDOR TOTALS			265.98 YTD INVOICED				112.56 YTD PAID		22.73
10679	RIO BRAVO ROCKLIN									
	218913	12/19/25		22603485	103063	P	12/26/25	10131010 760005	AB 939 / SB 1383	25,000.00
	INVOICE: INV29387									

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	VENDOR TOTALS		.00 YTD INVOICED					25,000.00 YTD PAID		25,000.00
1830	DENISE J. RYAN									
	218959	12/03/25		22603523	103064	P	12/26/25	10152060 610106	ADVERTISING	100.00
	INVOICE: 0534104									
	VENDOR TOTALS		200.00 YTD INVOICED					250.00 YTD PAID		100.00
2640	SANDERS INC ARCHITECTURE/ENGINEERING									
	218914	11/20/23		22603469	103065	P	12/26/25	29943010 750011	PW ADA RESTROOM	13,100.00
	INVOICE: 1123-16									
	VENDOR TOTALS		.00 YTD INVOICED					13,100.00 YTD PAID		13,100.00
10673	SES NORTH AMERICA, INC.									
	218915	12/05/25		22603427	103066	P	12/26/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	4,700.00
	INVOICE: 12571									
	VENDOR TOTALS		.00 YTD INVOICED					4,700.00 YTD PAID		4,700.00
10465	SHEPPARD MULLIN RICHTER & HAMPTON LLP									
	218916	12/12/25		22603564	103067	P	12/26/25	10119010 610113	PROFESSIONAL FEES (O)	32,388.98
	INVOICE: 380126430									
	VENDOR TOTALS		75,696.30 YTD INVOICED					32,388.98 YTD PAID		32,388.98
213	SOUTHERN CALIFORNIA GAS CO									
	218917	11/19/25		22603366	103068	P	12/26/25	10152110 610102	NATURAL GAS	15.89
	INVOICE: 17977410368/NOV2025									
	218918	11/21/25		22603482	103068	P	12/26/25	10121010 610102	NATURAL GAS	96.56
	INVOICE: 06022765009/NOV2025									
	218919	11/24/25		22603507	103068	P	12/26/25	10123010 610102	NATURAL GAS	128.63
	INVOICE: 12964862366/NOV2025									
	VENDOR TOTALS		4,956.03 YTD INVOICED					67,507.62 YTD PAID		241.08
5990	STATE DISBURSEMENT UNIT									
	219003	12/26/25 1644			103069	P	12/26/25	101 201217	OTHER PAYROLL DEDUCTIONS	2,966.14
	INVOICE: 219003									
	VENDOR TOTALS		5,245.76 YTD INVOICED					5,932.28 YTD PAID		2,966.14
1460	BJORN STRUEBING									
	218958	10/24/25		22603610	103070	P	12/26/25	27191050 750008	CAD / RMS SYSTEM	7,200.00
	INVOICE: 0001251									
	VENDOR TOTALS		14,000.00 YTD INVOICED					11,200.00 YTD PAID		7,200.00
979	SWRCB									
	218920	11/19/25		22603418	103071	P	12/26/25	50295210 610131	FILING FEES	21,150.00

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VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	INVOICE: WD-0309938									
	VENDOR TOTALS		.00 YTD INVOICED				98,265.00 YTD PAID			21,150.00
5974	THATCHER COMPANY OF CALIFORNIA									
	218921	12/09/25		22603466	103072	P	12/26/25	50195110 620136	TREATMENT CHEMICALS	20,007.20
	INVOICE: 2025100118482									
	VENDOR TOTALS		40,293.00 YTD INVOICED				59,825.80 YTD PAID			20,007.20
8392	TOM PONTON INDUSTRIES, INC.									
	218922	10/07/25		22603424	103073	P	12/26/25	50295210 630108	FIELD/SHOP EQUIP. MAINT.	2,976.88
	INVOICE: 32428									
	VENDOR TOTALS		.00 YTD INVOICED				2,976.88 YTD PAID			2,976.88
214	TURBO DATA SYSTEMS INC.									
	218923	11/30/25		22603483	103074	P	12/26/25	10121010 610114	PROFESSIONAL FEES (D)	454.00
	INVOICE: 47294									
	VENDOR TOTALS		.00 YTD INVOICED				919.55 YTD PAID			454.00
6289	U.S. BANK									
	218961	10/22/25		22603283	103075	P	12/26/25	10123010 620101	OFFICE SUPPLIES	10.81
	INVOICE: 53217525/10-22-25(4)									
	218961	10/22/25		22603283	103075	P	12/26/25	10123010 630108	FIELD/SHOP EQUIP. MAINT.	270.52
	INVOICE: 53217525/10-22-25(4)									
	218961	10/22/25		22603283	103075	P	12/26/25	10123030 610121	DUES & SUBSCRIPTIONS	20.00
	INVOICE: 53217525/10-22-25(4)									
	218961	10/22/25		22603283	103075	P	12/26/25	10123030 610123	TRAINING	495.00
	INVOICE: 53217525/10-22-25(4)									
	218961	10/22/25		22603283	103075	P	12/26/25	10123030 610129	OTHER EXPENSE	588.05
	INVOICE: 53217525/10-22-25(4)									
	218961	10/22/25		22603283	103075	P	12/26/25	10123050 610123	TRAINING	101.95
	INVOICE: 53217525/10-22-25(4)									
	218962	11/24/25		22603227	103075	P	12/26/25	10151010 610129	OTHER EXPENSE	51.92
	INVOICE: 01951943/11-24-25									
	218962	11/24/25		22603227	103075	P	12/26/25	10151010 620130	MAINTENANCE SUPPLIES	298.96
	INVOICE: 01951943/11-24-25									
	218964	11/24/25		22603339	103075	P	12/26/25	10152040 610106	ADVERTISING	21.18
	INVOICE: 00900230/11-24-25									
	218964	11/24/25		22603339	103075	P	12/26/25	10152040 610121	DUES & SUBSCRIPTIONS	19.99
	INVOICE: 00900230/11-24-25									
	218964	11/24/25		22603339	103075	P	12/26/25	10152040 620101	OFFICE SUPPLIES	116.19
	INVOICE: 00900230/11-24-25									
	218964	11/24/25		22603339	103075	P	12/26/25	10152040 620105	COMPUTER SUPPLIES	74.52
	INVOICE: 00900230/11-24-25									
	218964	11/24/25		22603339	103075	P	12/26/25	10152110 610129	OTHER EXPENSE	356.22
	INVOICE: 00900230/11-24-25									
	218964	11/24/25		22603339	103075	P	12/26/25	10152110 620101	OFFICE SUPPLIES	8.87
	INVOICE: 00900230/11-24-25									

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218964	11/24/25		22603339	103075	P	12/26/25	29951010 610135	SPECIAL EVENTS	1,909.35
INVOICE: 00900230/11-24-25									
218965	11/24/25		22603338	103075	P	12/26/25	29951010 610135	SPECIAL EVENTS	530.20
INVOICE: 00900230/11-24-25(1)									
218966	11/24/25		22603340	103075	P	12/26/25	10152140 620115	ATHLETIC FIELD SUPPLIES	1,000.00
INVOICE: 00900230/11-24-25(2)									
218967	11/24/25		22603440	103075	P	12/26/25	10123010 620101	OFFICE SUPPLIES	327.15
INVOICE: 02104609/11-24-25									
218967	11/24/25		22603440	103075	P	12/26/25	10123010 620103	PRINTING	178.95
INVOICE: 02104609/11-24-25									
218967	11/24/25		22603440	103075	P	12/26/25	10123010 620135	OTHER SUPPLIES	41.12
INVOICE: 02104609/11-24-25									
218967	11/24/25		22603440	103075	P	12/26/25	10123030 610129	OTHER EXPENSE	85.93
INVOICE: 02104609/11-24-25									
218968	08/22/25		22601708	103075	P	12/26/25	10121010 610129	OTHER EXPENSE	54.00
INVOICE: 22619421/8-22-25(1)									
218968	08/22/25		22601708	103075	P	12/26/25	10121050 610123	TRAINING	653.28
INVOICE: 22619421/8-22-25(1)									
218969	08/22/25			103075	P	12/26/25	10121050 610123	TRAINING	-350.00
INVOICE: 22619421/CR8-22-25									
218970	11/24/25		22603212	103075	P	12/26/25	10111020 610109	MEETING AND TRAVEL	553.80
INVOICE: 01391591/11-24-25									
218971	11/24/25		22603213	103075	P	12/26/25	10111020 610109	MEETING AND TRAVEL	476.80
INVOICE: 01391591/11-24-25(1)									
218971	11/24/25		22603213	103075	P	12/26/25	10111020 610121	DUES & SUBSCRIPTIONS	235.00
INVOICE: 01391591/11-24-25(1)									
218971	11/24/25		22603213	103075	P	12/26/25	10111020 620101	OFFICE SUPPLIES	92.76
INVOICE: 01391591/11-24-25(1)									
218972	11/24/25			103075	P	12/26/25	10111020 620101	OFFICE SUPPLIES	-92.76
INVOICE: 01391591/CR11-24-25									
218973	10/22/25		22602586	103075	P	12/26/25	10111010 610109	MEETING AND TRAVEL	745.60
INVOICE: 01391591/10-22-25									
218973	10/22/25		22602586	103075	P	12/26/25	10111020 620101	OFFICE SUPPLIES	10.00
INVOICE: 01391591/10-22-25									
218974	09/22/25		22601969	103075	P	12/26/25	10121010 610114	PROFESSIONAL FEES (D)	351.33
INVOICE: 76841137/9-22-25									
218974	09/22/25		22601969	103075	P	12/26/25	10121010 610129	OTHER EXPENSE	271.82
INVOICE: 76841137/9-22-25									
218974	09/22/25		22601969	103075	P	12/26/25	10121010 620101	OFFICE SUPPLIES	216.21
INVOICE: 76841137/9-22-25									
218975	08/22/25		22601781	103075	P	12/26/25	10121010 610129	OTHER EXPENSE	854.34
INVOICE: 76841137/8-22-25									
218975	08/22/25		22601781	103075	P	12/26/25	10121010 620102	POSTAGE	6.93
INVOICE: 76841137/8-22-25									
218976	11/24/25		22603547	103075	P	12/26/25	10119010 610129	OTHER EXPENSE	357.44
INVOICE: 66427087/11-24-25(2)									
218977	10/22/25		22603494	103075	P	12/26/25	24393130 610121	DUES & SUBSCRIPTIONS	200.00
INVOICE: 73212654/10-22-25									
218977	10/22/25		22603494	103075	P	12/26/25	24393130 610123	TRAINING	60.00
INVOICE: 73212654/10-22-25									
218978	10/22/25		22603422	103075	P	12/26/25	26453010 760003	ADULT LITERACY	1,542.70

PAID INVOICES REPORT

WARRANT: 122625 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
INVOICE: 75926475/10-22-25									
218979	10/22/25		22603421	103075	P	12/26/25	26453010 760003	ADULT LITERACY	863.47
INVOICE: 75926475/10-22-25(1)									
218980	10/22/25		22603423	103075	P	12/26/25	10153010 610109	MEETING AND TRAVEL	79.91
INVOICE: 75926475/10-22-25(2)									
218980	10/22/25		22603423	103075	P	12/26/25	10153010 620101	OFFICE SUPPLIES	95.22
INVOICE: 75926475/10-22-25(2)									
218981	10/22/25		22603443	103075	P	12/26/25	10153010 610129	OTHER EXPENSE	75.00
INVOICE: 66414846/10-22-25(4)									
218982	10/22/25			103075	P	12/26/25	10153010 610129	OTHER EXPENSE	-75.00
INVOICE: 66414846/CR10-22-25									
218983	11/24/25		22603484	103075	P	12/26/25	10131010 610109	MEETING AND TRAVEL	266.66
INVOICE: 51150405/11-24-25									
218983	11/24/25		22603484	103075	P	12/26/25	50195160 610109	MEETING & TRAVEL	266.66
INVOICE: 51150405/11-24-25									
218983	11/24/25		22603484	103075	P	12/26/25	50295280 610109	MEETING & TRAVEL	266.68
INVOICE: 51150405/11-24-25									
218984	11/24/25			103075	P	12/26/25	10131010 610109	MEETING AND TRAVEL	-41.67
INVOICE: 51150405/CR11-24-25									
218984	11/24/25			103075	P	12/26/25	50195160 610109	MEETING & TRAVEL	-41.67
INVOICE: 51150405/CR11-24-25									
218984	11/24/25			103075	P	12/26/25	50295280 610109	MEETING & TRAVEL	-41.66
INVOICE: 51150405/CR11-24-25									
218985	11/24/25		22603486	103075	P	12/26/25	10131010 610123	TRAINING	266.66
INVOICE: 51150405/11-24-25(1)									
218985	11/24/25		22603486	103075	P	12/26/25	50195160 610123	TRAINING	266.66
INVOICE: 51150405/11-24-25(1)									
218985	11/24/25		22603486	103075	P	12/26/25	50295280 610123	TRAINING	266.68
INVOICE: 51150405/11-24-25(1)									
218986	11/24/25			103075	P	12/26/25	10131010 610123	TRAINING	-41.67
INVOICE: 51150405/CR11-24-25.									
218986	11/24/25			103075	P	12/26/25	50195160 610123	TRAINING	-41.67
INVOICE: 51150405/CR11-24-25.									
218986	11/24/25			103075	P	12/26/25	50295280 610123	TRAINING	-41.66
INVOICE: 51150405/CR11-24-25.									
218987	11/24/25		22603481	103075	P	12/26/25	50195160 610123	TRAINING	400.00
INVOICE: 51150405/11-24-25(2)									
218987	11/24/25		22603481	103075	P	12/26/25	50295280 610123	TRAINING	400.00
INVOICE: 51150405/11-24-25(2)									
218988	11/24/25			103075	P	12/26/25	50195160 610123	TRAINING	-62.50
INVOICE: 51150405/CR11-24-25*									
218988	11/24/25			103075	P	12/26/25	50295280 610123	TRAINING	-62.50
INVOICE: 51150405/CR11-24-25*									
218989	11/24/25		22603476	103075	P	12/26/25	10131010 610109	MEETING AND TRAVEL	123.28
INVOICE: 51150405/11-24-25(3)									
218989	11/24/25		22603476	103075	P	12/26/25	50195160 610109	MEETING & TRAVEL	211.99
INVOICE: 51150405/11-24-25(3)									
218989	11/24/25		22603476	103075	P	12/26/25	50295280 610109	MEETING & TRAVEL	211.99
INVOICE: 51150405/11-24-25(3)									
218990	11/24/25		22603467	103075	P	12/26/25	10131010 610109	MEETING AND TRAVEL	31.66
INVOICE: 65370833/11-24-25									

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 122625 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
	218990	11/24/25		22603467	103075	P	12/26/25	10131010 610121	DUES & SUBSCRIPTIONS	33.33
	INVOICE: 65370833/11-24-25									
	218990	11/24/25		22603467	103075	P	12/26/25	50195160 610109	MEETING & TRAVEL	49.16
	INVOICE: 65370833/11-24-25									
	218990	11/24/25		22603467	103075	P	12/26/25	50195160 610121	DUES & SUBSCRIPTIONS	33.33
	INVOICE: 65370833/11-24-25									
	218990	11/24/25		22603467	103075	P	12/26/25	50295250 610109	MEETING AND TRAVEL	25.00
	INVOICE: 65370833/11-24-25									
	218990	11/24/25		22603467	103075	P	12/26/25	50295280 610109	MEETING & TRAVEL	49.18
	INVOICE: 65370833/11-24-25									
	218990	11/24/25		22603467	103075	P	12/26/25	50295280 610121	DUES & SUBSCRIPTIONS	33.34
	INVOICE: 65370833/11-24-25									
	218991	10/22/25		22603612	103075	P	12/26/25	50195100 620112	PROTECTIVE CLOTHING	184.01
	INVOICE: 01871943/10-22-25									
	218992	11/24/25		22603578	103075	P	12/26/25	10131010 720102	FURNITURE & FIXTURE	1,079.72
	INVOICE: 65370833/11-24-25(1)									
	218992	11/24/25		22603578	103075	P	12/26/25	50195160 720102	FURNITURE & FIXTURES	1,000.00
	INVOICE: 65370833/11-24-25(1)									
	218992	11/24/25		22603578	103075	P	12/26/25	50295280 720102	FURNITURE & FIXTURES	1,000.00
	INVOICE: 65370833/11-24-25(1)									
	218995	11/24/25		22603361	103075	P	12/26/25	10111010 610129	OTHER EXPENSE	555.72
	INVOICE: 66427087/11-24-25(3)									
	218995	11/24/25		22603361	103075	P	12/26/25	10112010 610109	MEETING AND TRAVEL	24.99
	INVOICE: 66427087/11-24-25(3)									
	218995	11/24/25		22603361	103075	P	12/26/25	10112010 610121	DUES & SUBSCRIPTIONS	228.00
	INVOICE: 66427087/11-24-25(3)									
	218995	11/24/25		22603361	103075	P	12/26/25	10112010 610129	OTHER EXPENSE	600.82
	INVOICE: 66427087/11-24-25(3)									
	218995	11/24/25		22603361	103075	P	12/26/25	10112010 610135	SPECIAL EVENTS	679.34
	INVOICE: 66427087/11-24-25(3)									
	218995	11/24/25		22603361	103075	P	12/26/25	10112010 620101	OFFICE SUPPLIES	448.28
	INVOICE: 66427087/11-24-25(3)									
	218998	10/22/25		22602756	103075	P	12/26/25	10141010 610109	MEETING AND TRAVEL	30.77
	INVOICE: 73212654/10-22-25(1)									
	219007	11/24/25		22603651	103075	P	12/26/25	26453010 760003	ADULT LITERACY	56.69
	INVOICE: 75926475/11-24-25									
	VENDOR TOTALS	71,041.30 YTD INVOICED						69,187.90 YTD PAID		22,500.33
3856	ULINE									
	218924	11/18/25		22603357	103076	P	12/26/25	10151010 620128	JANITORIAL SUPPLIES	800.51
	INVOICE: 200726155									
	VENDOR TOTALS	760.16 YTD INVOICED						800.51 YTD PAID		800.51
576	SANTOS VAZQUEZ JR.									
	218926	12/02/25		22603341	103077	P	12/26/25	10144010 610129	OTHER EXPENSE	71.45
	INVOICE: 8685									
	VENDOR TOTALS	.00 YTD INVOICED						71.45 YTD PAID		71.45

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 122625 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME / DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION	
7951	VESTIS SERVICES, LLC									
	218927	11/07/25		22603367	103078	P	12/26/25	10152040 610113	PROFESSIONAL FEES (O)	32.95
	INVOICE: 5220598417									
	218927	11/07/25		22603367	103078	P	12/26/25	10152040 620128	JANITORIAL SUPPLIES	22.35
	INVOICE: 5220598417									
	218928	11/07/25		22603367	103078	P	12/26/25	10152110 610125	UNIFORM RENTAL	6.84
	INVOICE: 5220598427									
	218929	11/14/25		22603367	103078	P	12/26/25	10152040 610113	PROFESSIONAL FEES (O)	32.95
	INVOICE: 5220601426									
	218929	11/14/25		22603367	103078	P	12/26/25	10152040 620128	JANITORIAL SUPPLIES	22.35
	INVOICE: 5220601426									
	218930	11/14/25		22603367	103078	P	12/26/25	10152110 610125	UNIFORM RENTAL	6.84
	INVOICE: 5220601436									
	218931	11/21/25		22603385	103078	P	12/26/25	50195110 620128	JANITORIAL SUPPLIES	99.67
	INVOICE: 5220604431									
	218932	11/21/25		22603385	103078	P	12/26/25	50195110 610125	UNIFORM RENTAL	73.31
	INVOICE: 5220604432									
	218933	05/16/25		22603385	103078	P	12/26/25	50195110 610125	UNIFORM RENTAL	692.15
	INVOICE: 27245421									
	VENDOR TOTALS		6,106.91 YTD INVOICED					4,146.04 YTD PAID		989.41
9097	VIRTUAL PROJECT MANAGER LLC									
	218934	12/01/25		22603487	103079	P	12/26/25	20532040 610113	PROFESSIONAL FEES/OTHER	600.00
	INVOICE: 12-4750									
	218934	12/01/25		22603487	103079	P	12/26/25	50195110 610113	PROFESSIONAL FEES (O)	200.00
	INVOICE: 12-4750									
	218934	12/01/25		22603487	103079	P	12/26/25	50295210 610113	PROFESSIONAL FEES (O)	200.00
	INVOICE: 12-4750									
	VENDOR TOTALS		.00 YTD INVOICED					1,000.00 YTD PAID		1,000.00
528	WAXIE SANITARY SUPPLY									
	218935	12/11/25		22603512	103080	P	12/26/25	10123010 620128	JANITORIAL SUPPLIES	1,028.19
	INVOICE: 83684786									
	VENDOR TOTALS		5,783.77 YTD INVOICED					3,163.57 YTD PAID		1,028.19
532	ZEP MANUFACTURING COMPANY									
	218936	10/24/25		22603399	103081	P	12/26/25	60496400 610129	OTHER EXPENSE	113.89
	INVOICE: 9011923321									
	VENDOR TOTALS		.00 YTD INVOICED					1,253.59 YTD PAID		113.89
									REPORT TOTALS	467,241.42

	COUNT	AMOUNT
TOTAL PRINTED CHECKS	78	467,241.42

CITY OF EL CENTRO

PAID INVOICES REPORT

WARRANT: 122625 TO FISCAL 2026/01 12/05/2025 TO 12/26/2025

VENDOR	NAME	DOCUMENT	INV DATE	VOUCHER	PO	CHECK NO	T	CHK DATE	GL ACCOUNT	GL ACCOUNT DESCRIPTION

** END OF REPORT - Generated by Esmeralda Nunez **

WARRANT: DECEMBER 2025

Elizabeth Fuchen
FINANCE DIRECTOR

City Council of the City of El Centro
1275 W. Main Street
El Centro, CA 92243
SUBMITTED
ACTION ITEM (ID # 2026-13)

Item: 2.
Meeting: 1/20/2026 3:30 PM
Department: Finance
Category: Action Item
Prepared by: Cristhian Zambrano, Payroll Specialist
Department Head: Elizabeth Fuchen
DOC ID: 2026-13

Approve Payroll Registers for the month of December 2025.

CITY MANAGER'S RECOMMENDATION:
Approve Payroll Registers for the Month of December 2025.

FISCAL IMPACT:

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

BACKGROUND:

DISCUSSION:

CONCLUSION:

ATTACHMENTS:
1. PAYROLL REGISTERS DECEMBER 2025

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: 121225 PAYROLL TYPE: BI WEEKLY CHECK DATE: 12/12/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
100 REG	16,667.25	529,703.85	0.00	0.00
150 HRLY	1,267.00	23,865.90	0.00	0.00
180 AWP	280.00	9,848.73	0.00	0.00
200 OT1.0	55.50	2,077.07	0.00	0.00
201 OT1.5	2,057.00	105,663.29	0.00	0.00
202 OT2.0	84.50	3,714.56	0.00	0.00
205 HOL 1.	24.00	866.22	0.00	0.00
206 HP 1.5	124.00	6,387.16	0.00	0.00
210 FLSA	71.50	2,237.87	0.00	0.00
215 OCP1.0	162.00	4,500.64	0.00	0.00
216 OCP1.5	52.00	3,737.59	0.00	0.00
217 CBP1.5	331.00	14,498.25	0.00	0.00
218 STBY	52.00	1,972.75	0.00	0.00
226 CTPS	142.00	6,641.25	0.00	0.00
300 VAC	1,107.41	34,224.09	0.00	0.00
310 SICK	604.18	15,470.00	0.00	0.00
320 ADMN	43.00	2,102.14	0.00	0.00
330 ANNUAL	628.50	25,928.83	0.00	0.00
340 PN	107.00	3,302.06	0.00	0.00
345 VP	73.00	1,724.20	0.00	0.00
348 ALP	80.00	3,631.79	0.00	0.00
350 CMP1.5	84.25	0.00	0.00	0.00
351 CMPUSD	129.00	4,386.10	0.00	0.00
352 CMP1.0	32.00	0.00	0.00	0.00
354 HOL AC	352.00	0.00	0.00	0.00
355 HOLI	2,723.50	85,306.22	0.00	0.00
356 BDAY	46.00	1,453.70	0.00	0.00
360 BERE	38.00	757.58	0.00	0.00
400 CAR	2,000.00	1,661.54	0.00	0.00
410 BLNG	9,694.91	4,892.01	0.00	0.00
411 BLNG	0.00	100.00	0.00	0.00
415 PREM	800.00	1,000.00	0.00	0.00
420 EDI	5,548.50	7,095.70	0.00	0.00
440 CERT %	3,677.00	8,714.00	0.00	0.00
445 CERT	3,440.00	3,666.04	0.00	0.00
481 ACT	316.50	1,274.94	0.00	0.00
482 ACT-NP	160.00	267.92	0.00	0.00
483 ACT-NP	589.00	1,864.05	0.00	0.00
485 ACT %	0.00	472.60	0.00	0.00
510 EXPERT	1,600.00	2,077.00	0.00	0.00
515 FTO	35.00	1,225.00	0.00	0.00
520 HAZARD	1,440.00	1,976.21	0.00	0.00
523 SP ASS	1,011.00	1,002.49	0.00	0.00
530 SHIFT	1,280.00	1,600.00	0.00	0.00
600 LONG	240.00	150.00	0.00	0.00
737 SM	416.00	230.77	0.00	0.00
800 4850	204.00	8,692.29	0.00	0.00
801 DI	50.07	1,251.05	0.00	0.00
900 AWOP	196.09	0.00	0.00	0.00

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: 121225 PAYROLL TYPE: BI WEEKLY CHECK DATE: 12/12/2025

990 LFE>50	0.00	804.54	0.00	0.00
Total:	60,115.66	944,019.99	0.00	0.00
Total Employees: 318				

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: 121225 PAYROLL TYPE: BI WEEKLY CHECK DATE: 12/12/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1000	FICA 6.2%	1,212.32	1,212.32	2,424.64	19,553.51 X 12.40% =	2,424.64
1100	MEDI 1.45%	13,222.67	12,978.35	26,201.02	895,053.54 X 2.90% =	25,956.55
1100	MEDI 1. ADDL				27,147.01 X .90% =	244.32
2000	ADD FAMILY	128.93	0.00	128.93	101,019.91	
2001	ADD IND	99.30	0.00	99.30	82,835.22	
2004	BASIC AD&D F	0.00	14.85	14.85	141,621.76	
2005	BASIC LIFE	0.00	874.35	874.35	902,626.08	
2006	DEP LIFE	0.00	131.50	131.50	902,568.46	
2007	BASIC AD&D	0.00	41.40	41.40	771,358.46	
2010	TERM LIFE	1,490.40	0.00	1,490.40	379,928.24	
2050	ADDL LFE SPO	289.60	0.00	289.60	198,942.76	
2051	ADDL SPS CHI	39.00	0.00	39.00	174,125.23	
2055	SUP LIFE	0.00	226.50	226.50	345,517.09	
2300	MED INS	29,687.94	128,367.31	158,055.25	835,468.78	
2320	EAP	0.00	238.61	238.61	932,022.75	
2325	VISION	0.00	992.34	992.34	575,064.80	
2330	ADMN	0.00	102.60	102.60	36,917.44	
2334	LTD	0.00	200.13	200.13	98,113.85	
2335	LTD	0.00	1,237.46	1,237.46	613,038.68	
2336	STD	0.00	1,592.80	1,592.80	613,038.68	
2345	WORKERS COMP	0.00	70,570.36	70,570.36	785,908.37	
2400	ACCIDENT	833.46	0.00	833.46	175,098.82	
2405	CANCER	1,181.80	0.00	1,181.80	176,071.58	
2406	ICU	60.44	0.00	60.44	20,732.56	
2407	S125 MED	4,539.21	0.00	4,539.21	286,881.59	
2408	S125 DEP CAR	704.00	0.00	704.00	24,734.76	
2409	PERSONAL REC	297.63	0.00	297.63	39,612.99	
2450	STD	722.40	0.00	722.40	69,950.04	
2900	DEF - LINC	5,167.00	0.00	5,167.00	153,443.48	
2901	DEF NRS	815.00	0.00	815.00	36,806.25	
2902	DEF PERS	206.00	0.00	206.00	11,469.56	
3000	FIT	75,614.08	0.00	75,614.08	813,658.95	
4000	SIT	26,742.33	0.00	26,742.33	813,658.95	
6000	CHILD SUPP	3,188.64	0.00	3,188.64	35,826.22	
6501	GARN FTB	664.76	0.00	664.76	7,698.71	
6550	MISC	50.00	0.00	50.00	1,929.54	
6555	MISC	73.40	0.00	73.40	511.38	
7000	CALPERS ER	0.00	17,534.79	17,534.79	182,464.29	
7001	CALPERS EE	12,772.47	0.00	12,772.47	182,464.29	
7002	CALPERS EE	21,515.83	0.00	21,515.83	277,624.39	
7003	CALPERS PREP	0.00	26,679.68	26,679.68	277,624.39	
7010	CALPERS ER	0.00	43,432.37	43,432.37	164,828.72	
7011	CALPERS EE	19,779.43	0.00	19,779.43	164,828.72	
7012	CALPERS EE	21,304.35	0.00	21,304.35	146,926.54	
7013	CALPERS ER	0.00	21,980.20	21,980.20	146,926.54	
7015	SURVIVOR BEN	256.68	0.00	256.68	924,466.48	
8110	AT ACCIDENT	17.96	0.00	17.96	24,989.69	
8151	AT AD&D IND	0.30	0.00	0.30	2,144.95	

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: 121225 PAYROLL TYPE: BI WEEKLY CHECK DATE: 12/12/2025

8175	AT-ROTH LINC	325.00	0.00	325.00	15,820.05
8500	FFA DUES	1,420.00	0.00	1,420.00	171,017.66
8515	POA DUES	3,120.00	0.00	3,120.00	241,951.70
8535	ARAG LEGAL	330.89	0.00	330.89	97,667.13
8545	GEA DUES	2,025.00	0.00	2,025.00	188,674.27
9996	DIRECT DEP	950.00	0.00	950.00	11,805.14
9997	DIRECT DEP	520.00	0.00	520.00	5,892.90
9998	DIRECT DEP	15,073.63	0.00	15,073.63	112,197.21
9999	DIRECT DEP	630,360.64	0.00	630,360.64	894,112.61
Total:		896,802.49	328,407.92	1,225,210.41	

Total Employees: 318

** END OF REPORT - Generated by Cristhian Zambrano **

11/25/2025-12/08/2025
PAYDATE: 12/12/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M1203 PAYROLL TYPE: MISC CHECK DATE: 12/03/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
150 HRLY	24.00	396.00	0.00	0.00
Total:	24.00	396.00	0.00	0.00
Total Employees: 1				

Report generated: 12/03/2025 08:02
User: czambrano
Program ID: prpyddpf

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M1203 PAYROLL TYPE: MISC CHECK DATE: 12/03/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1000	FICA 6.2%	24.55	24.55	49.10	396.00 X 12.40% =	49.10
1100	MEDI 1.45%	5.75	5.75	11.50	396.00 X 2.90% =	11.48
2320	EAP	0.00	0.72	0.72	396.00	
2345	WORKERS COMP	0.00	35.64	35.64	396.00	
3000	FIT	0.00	0.00	0.00	396.00	
4000	SIT	0.00	0.00	0.00	396.00	
Total:		30.30	66.66	96.96		

Total Employees: 1

** END OF REPORT - Generated by Cristhian Zambrano **

MISCELLANEOUS CHECK
11/25/2025-12/08/2025
PAYDATE: 12/03/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M12031 PAYROLL TYPE: MISC CHECK DATE: 12/03/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
150 HRLY	8.00	132.00	0.00	0.00
Total:	8.00	132.00	0.00	0.00
Total Employees: 1				

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M12031 PAYROLL TYPE: MISC CHECK DATE: 12/03/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1000	FICA 6.2%	8.18	8.18	16.36	132.00 X 12.40% =	16.37
1100	MEDI 1.45%	1.91	1.91	3.82	132.00 X 2.90% =	3.83
2320	EAP	0.00	0.72	0.72	132.00	
2345	WORKERS COMP	0.00	11.88	11.88	132.00	
3000	FIT	0.00	0.00	0.00	132.00	
4000	SIT	0.00	0.00	0.00	132.00	
Total:		10.09	22.69	32.78		

Total Employees: 1

** END OF REPORT - Generated by Cristhian Zambrano **

MISCELLANEOUS CHECK
11/25/2025-12/08/2025
PAYDATE: 12/03/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: V1203 PAYROLL TYPE: VOID CHECK DATE: 12/03/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
150 HRLY	-32.00	-528.00	0.00	0.00
Total:	-32.00	-528.00	0.00	0.00
Total Employees: 1				

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: V1203 PAYROLL TYPE: VOID CHECK DATE: 12/03/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1000	FICA 6.2%	-32.73	-32.73	-65.46	-528.00 X 12.40% =	-65.47
1100	MEDI 1.45%	-7.66	-7.66	-15.32	-528.00 X 2.90% =	-15.31
2320	EAP	0.00	-1.44	-1.44	-528.00	
2345	WORKERS COMP	0.00	-47.52	-47.52	-528.00	
3000	FIT	0.00	0.00	0.00	-528.00	
4000	SIT	0.00	0.00	0.00	-528.00	
Total:		-40.39	-89.35	-129.74		
Total Employees: 1						

** END OF REPORT - Generated by Cristhian Zambrano **

VOID CHECK
Reason: VOID Check
11/25/2025-12/08/2025
PAYDATE: 12/03/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M1204 PAYROLL TYPE: MISC CHECK DATE: 12/04/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
150 HRLY	32.00	528.00	0.00	0.00
Total:	32.00	528.00	0.00	0.00
Total Employees: 1				

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M1204 PAYROLL TYPE: MISC CHECK DATE: 12/04/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1000	FICA 6.2%	32.73	32.73	65.46	528.00 X 12.40% =	65.47
1100	MEDI 1.45%	7.66	7.66	15.32	528.00 X 2.90% =	15.31
2320	EAP	0.00	0.72	0.72	528.00	
2345	WORKERS COMP	0.00	47.52	47.52	528.00	
3000	FIT	0.00	0.00	0.00	528.00	
4000	SIT	0.00	0.00	0.00	528.00	
Total:		40.39	88.63	129.02		
Total Employees: 1						

** END OF REPORT - Generated by Cristhian Zambrano **

MISCELLANEOUS CHECK
11/25/2025-12/08/2025
PAYDATE: 12/04/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: HP1205 PAYROLL TYPE: HP1 CHECK DATE: 12/05/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
860 HP1	2,040.90	57,513.09	0.00	0.00
Total:	2,040.90	57,513.09	0.00	0.00
Total Employees: 33				

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: HP1205 PAYROLL TYPE: HP1 CHECK DATE: 12/05/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS		FICA/MED CALC
1100	MEDI 1.45%	833.92	833.92	1,667.84	57,513.09 X	2.90% =	1,667.88
3000	FIT	8,954.08	0.00	8,954.08	50,002.75		
4000	SIT	2,796.89	0.00	2,796.89	50,002.75		
7010	CALPERS ER	0.00	8,738.37	8,738.37	33,162.75		
7011	CALPERS EE	3,979.56	0.00	3,979.56	33,162.75		
7012	CALPERS EE	3,530.78	0.00	3,530.78	24,350.34		
7013	CALPERS ER	0.00	3,642.83	3,642.83	24,350.34		
Total:		20,095.23	13,215.12	33,310.35			

Total Employees: 33

** END OF REPORT - Generated by Cristhian Zambrano **

HOLIDAY PAY
11/25/2025-12/08/2025
PAYDATE: 12/05/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M1205 PAYROLL TYPE: MISC CHECK DATE: 12/05/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
100 REG	72.00	3,026.49	0.00	0.00
206 HP 1.5	16.00	1,104.54	0.00	0.00
216 OCP1.5	3.00	207.10	0.00	0.00
218 STBY	13.00	598.29	0.00	0.00
225 CTP	240.00	11,045.38	0.00	0.00
344 PNP	16.00	736.36	0.00	0.00
348 ALP	582.13	26,791.02	0.00	0.00
420 EDI	72.00	45.00	0.00	0.00
440 CERT %	72.00	242.12	0.00	0.00
900 AWOP	8.00	0.00	0.00	0.00
Total:	1,094.13	43,796.30	0.00	0.00
Total Employees: 1				

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M1205 PAYROLL TYPE: MISC CHECK DATE: 12/05/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS		FICA/MED CALC
1100	MEDI 1.45%	631.73	631.73	1,263.46	43,567.70 X	2.90% =	1,263.46
2005	BASIC LIFE	0.00	3.35	3.35	43,796.30		
2006	DEP LIFE	0.00	0.50	0.50	43,796.30		
2007	BASIC AD&D	0.00	0.18	0.18	43,796.30		
2300	MED INS	228.60	1,295.44	1,524.04	10,447.08		
2320	EAP	0.00	0.72	0.72	5,223.54		
2325	VISION	0.00	6.66	6.66	5,223.54		
2335	LTD	0.00	6.17	6.17	3,026.49		
2336	STD	0.00	6.97	6.97	3,026.49		
2345	WORKERS COMP	0.00	298.22	298.22	3,313.61		
3000	FIT	0.00	0.00	0.00	43,258.43		
4000	SIT	0.00	0.00	0.00	43,258.43		
7000	CALPERS ER	0.00	424.58	424.58	4,418.15		
7001	CALPERS EE	309.27	0.00	309.27	4,418.15		
7015	SURVIVOR BEN	0.93	0.00	0.93	43,796.30		
Total:		1,170.53	2,674.52	3,845.05			

Total Employees: 1

** END OF REPORT - Generated by Cristhian Zambrano **

MISCELLANEOUS CHECK
11/25/2025-12/08/2025
PAYDATE: 12/05/2025



Miguel Felix
INTERIM FINANCE MANAGER

Report generated: 12/04/2025 17:01
User: czambrano
Program ID: prpyddpf

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M12081 PAYROLL TYPE: MISC CHECK DATE: 12/08/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
100 REG	28.43	621.63	0.00	0.00
215 OCP1.0	10.00	218.65	0.00	0.00
310 SICK	7.57	165.52	0.00	0.00
345 VP	98.47	2,153.09	0.00	0.00
354 HOL AC	8.00	0.00	0.00	0.00
355 HOLI	9.00	196.79	0.00	0.00
900 AWOP	35.00	0.00	0.00	0.00
Total:	196.47	3,355.68	0.00	0.00

Total Employees: 1

TOTALS PROOF

Pay Period 11/25/25 To 12/08/25

WARRANT: M12081 PAYROLL TYPE: MISC CHECK DATE: 12/08/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1100	MEDI 1.45%	43.89	43.89	87.78	3,027.08 X 2.90% =	87.79
2005	BASIC LIFE	0.00	3.35	3.35	3,355.68	
2006	DEP LIFE	0.00	0.50	0.50	3,355.68	
2007	BASIC AD&D	0.00	0.18	0.18	3,355.68	
2300	MED INS	328.60	1,295.44	1,624.04	2,405.18	
2320	EAP	0.00	0.72	0.72	1,202.59	
2325	VISION	0.00	6.66	6.66	1,202.59	
2335	LTD	0.00	2.01	2.01	983.94	
2336	STD	0.00	4.35	4.35	983.94	
2345	WORKERS COMP	0.00	88.55	88.55	983.94	
3000	FIT	448.05	0.00	448.05	2,950.82	
4000	SIT	124.96	0.00	124.96	2,950.82	
7002	CALPERS EE	76.26	0.00	76.26	983.94	
7003	CALPERS PREP	0.00	94.56	94.56	983.94	
7015	SURVIVOR BEN	0.93	0.00	0.93	3,355.68	
Total:		1,022.69	1,540.21	2,562.90		
Total Employees: 1						

** END OF REPORT - Generated by Cristhian Zambrano **

MISCELLANEOUS CHECK
11/25/2025-12/08/2025
PAYDATE: 12/08/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 12/09/25 To 12/22/25

WARRANT: 122625 PAYROLL TYPE: BI WEEKLY CHECK DATE: 12/26/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
100 REG	20,051.75	641,699.50	0.00	0.00
150 HRLY	1,338.00	25,270.33	0.00	0.00
180 AWP	344.00	12,118.47	0.00	0.00
200 OT1.0	27.50	878.37	0.00	0.00
201 OT1.5	1,832.50	95,543.26	0.00	0.00
202 OT2.0	14.50	538.76	0.00	0.00
210 FLSA	72.50	2,311.43	0.00	0.00
215 OCP1.0	142.00	4,146.60	0.00	0.00
216 OCP1.5	30.00	1,718.14	0.00	0.00
217 CBP1.5	177.00	8,390.87	0.00	0.00
218 STBY	52.00	2,217.22	0.00	0.00
226 CTPS	30.00	1,578.64	0.00	0.00
300 VAC	836.65	24,254.99	0.00	0.00
310 SICK	431.68	11,455.86	0.00	0.00
320 ADMN	8.00	570.05	0.00	0.00
330 ANNUAL	515.92	20,981.61	0.00	0.00
340 PN	40.75	1,036.56	0.00	0.00
350 CMP1.5	94.50	0.00	0.00	0.00
351 CMPUSD	74.50	2,201.93	0.00	0.00
352 CMP1.0	26.00	0.00	0.00	0.00
356 BDAY	60.00	1,837.38	0.00	0.00
360 BERE	51.00	2,043.40	0.00	0.00
400 CAR	1,920.00	1,615.39	0.00	0.00
410 BLNG	9,659.43	4,875.39	0.00	0.00
415 PREM	800.00	1,000.00	0.00	0.00
420 EDI	5,584.00	7,133.66	0.00	0.00
440 CERT %	3,668.00	8,792.48	0.00	0.00
445 CERT	3,428.00	3,658.48	0.00	0.00
481 ACT	337.00	1,325.89	0.00	0.00
482 ACT-NP	160.00	267.92	0.00	0.00
483 ACT-NP	583.00	1,856.48	0.00	0.00
485 ACT %	0.00	267.42	0.00	0.00
510 EXPERT	1,600.00	2,077.00	0.00	0.00
515 FTO	20.00	700.00	0.00	0.00
520 HAZARD	1,520.00	2,073.07	0.00	0.00
523 SP ASS	1,020.00	1,010.80	0.00	0.00
530 SHIFT	1,360.00	1,700.00	0.00	0.00
600 LONG	240.00	150.00	0.00	0.00
737 SM	416.00	230.77	0.00	0.00
800 4850	80.00	3,152.30	0.00	0.00
801 DI	69.68	1,877.65	0.00	0.00
900 AWOP	240.57	0.00	0.00	0.00
990 LFE>50	0.00	804.54	0.00	0.00
Total:	58,956.43	905,362.61	0.00	0.00
Total Employees: 314				

Report generated: 12/23/2025 14:44
User: czambrano
Program ID: prpyddpf

TOTALS PROOF

Pay Period 12/09/25 To 12/22/25

WARRANT: 122625 PAYROLL TYPE: BI WEEKLY CHECK DATE: 12/26/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1000	FICA 6.2%	1,223.71	1,223.71	2,447.42	19,736.93 X 12.40% =	2,447.38
1100	MEDI 1.45%	12,659.81	12,416.06	25,075.87	856,279.21 X 2.90% =	24,832.10
1100	MEDI 1. ADDL				27,083.01 X .90% =	243.75
2000	ADD FAMILY	128.93	0.00	128.93	91,871.15	
2001	ADD IND	99.30	0.00	99.30	80,281.80	
2004	BASIC AD&D F	0.00	14.85	14.85	142,101.33	
2005	BASIC LIFE	0.00	877.70	877.70	865,365.81	
2006	DEP LIFE	0.00	0.50	0.50	68,690.30	
2007	BASIC AD&D	0.00	41.58	41.58	732,394.26	
2010	TERM LIFE	1,490.40	0.00	1,490.40	358,439.84	
2050	ADDL LFE SPO	289.60	0.00	289.60	186,839.70	
2051	ADDL SPS CHI	39.00	0.00	39.00	160,272.19	
2055	SUP LIFE	0.00	226.50	226.50	347,796.34	
2300	MED INS	34,718.28	127,698.14	162,416.42	788,880.08	
2320	EAP	0.00	236.73	236.73	903,783.97	
2325	VISION	0.00	992.34	992.34	551,484.09	
2330	ADMN	0.00	102.60	102.60	36,325.74	
2334	LTD	0.00	200.13	200.13	98,113.86	
2335	LTD	0.00	1,242.51	1,242.51	615,515.49	
2336	STD	0.00	1,595.89	1,595.89	615,515.49	
2345	WORKERS COMP	0.00	70,731.63	70,731.63	787,700.05	
2400	ACCIDENT	833.46	0.00	833.46	167,711.59	
2405	CANCER	1,181.80	0.00	1,181.80	166,834.56	
2406	ICU	60.44	0.00	60.44	20,998.88	
2407	S125 MED	4,539.21	0.00	4,539.21	277,019.50	
2408	S125 DEP CAR	704.00	0.00	704.00	26,355.50	
2409	PERSONAL REC	297.63	0.00	297.63	36,249.85	
2450	STD	722.40	0.00	722.40	65,617.27	
2900	DEF - LINC	5,167.00	0.00	5,167.00	146,302.92	
2901	DEF NRS	815.00	0.00	815.00	31,593.04	
2902	DEF PERS	206.00	0.00	206.00	11,838.32	
3000	FIT	72,152.89	0.00	72,152.89	775,303.52	
4000	SIT	25,497.50	0.00	25,497.50	775,303.52	
6000	CHILD SUPP	3,188.64	0.00	3,188.64	32,983.23	
6501	GARN FTB	664.76	0.00	664.76	6,907.68	
6550	MISC	50.00	0.00	50.00	1,929.53	
6555	MISC	73.40	0.00	73.40	511.38	
7000	CALPERS ER	0.00	17,219.04	17,219.04	179,178.26	
7001	CALPERS EE	12,542.45	0.00	12,542.45	179,178.26	
7002	CALPERS EE	21,363.58	0.00	21,363.58	275,659.60	
7003	CALPERS PREP	0.00	26,490.85	26,490.85	275,659.60	
7010	CALPERS ER	0.00	43,542.73	43,542.73	165,247.54	
7011	CALPERS EE	19,829.70	0.00	19,829.70	165,247.54	
7012	CALPERS EE	21,217.45	0.00	21,217.45	146,327.24	
7013	CALPERS ER	0.00	21,890.55	21,890.55	146,327.24	
7015	SURVIVOR BEN	257.61	0.00	257.61	885,625.68	
8110	AT ACCIDENT	17.96	0.00	17.96	20,779.44	
8151	AT AD&D IND	0.30	0.00	0.30	1,715.96	

TOTALS PROOF

Pay Period 12/09/25 To 12/22/25

WARRANT: 122625 PAYROLL TYPE: BI WEEKLY CHECK DATE: 12/26/2025

8175	AT-ROTH LINC	325.00	0.00	325.00	16,141.01
8500	FFA DUES	1,420.00	0.00	1,420.00	167,007.32
8515	POA DUES	3,120.00	0.00	3,120.00	233,953.90
8535	ARAG LEGAL	330.89	0.00	330.89	96,219.46
8545	GEA DUES	2,025.00	0.00	2,025.00	173,151.42
9996	DIRECT DEP	1,050.00	0.00	1,050.00	14,802.50
9997	DIRECT DEP	520.00	0.00	520.00	5,961.12
9998	DIRECT DEP	15,073.63	0.00	15,073.63	99,295.25
9999	DIRECT DEP	600,676.83	0.00	600,676.83	855,313.22
Total:		866,573.56	326,744.04	1,193,317.60	

Total Employees: 314

** END OF REPORT - Generated by Cristhian Zambrano **

12/09/2025-12/22/2025
PAYDATE: 12/26/2025

Miguel Felix
INTERIM FINANCE MANAGER

Report generated: 12/23/2025 14:44
User: czambrano
Program ID: prpyddpf

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 12/09/25 To 12/22/25

WARRANT: V1226 PAYROLL TYPE: VOID CHECK DATE: 12/26/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
100 REG	-80.00	-1,999.85	0.00	0.00
530 SHIFT	-80.00	-100.00	0.00	0.00
Total:	-160.00	-2,099.85	0.00	0.00
Total Employees: 1				

Report generated: 12/26/2025 14:03
User: czambrano
Program ID: prpyddpf

TOTALS PROOF

Pay Period 12/09/25 To 12/22/25

WARRANT: V1226 PAYROLL TYPE: VOID CHECK DATE: 12/26/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS	FICA/MED CALC
1100	MEDI 1.45%	-30.45	-30.45	-60.90	-2,099.85 X 2.90% =	-60.90
2005	BASIC LIFE	0.00	-3.35	-3.35	-2,099.85	
2006	DEP LIFE	0.00	0.00	0.00	-2,099.85	
2007	BASIC AD&D	0.00	-0.18	-0.18	-2,099.85	
2320	EAP	0.00	-0.72	-0.72	-2,099.85	
2335	LTD	0.00	-4.08	-4.08	-1,999.85	
2336	STD	0.00	-6.97	-6.97	-1,999.85	
2345	WORKERS COMP	0.00	-188.99	-188.99	-2,099.85	
3000	FIT	-115.53	0.00	-115.53	-1,937.11	
4000	SIT	-17.83	0.00	-17.83	-1,937.11	
7002	CALPERS EE	-162.74	0.00	-162.74	-2,099.85	
7003	CALPERS PREP	0.00	-201.80	-201.80	-2,099.85	
7015	SURVIVOR BEN	-0.93	0.00	-0.93	-2,099.85	
9999	DIRECT DEP	-1,772.37	0.00	-1,772.37		
Total:		-2,099.85	-436.54	-2,536.39		

Total Employees: 1

** END OF REPORT - Generated by Cristhian Zambrano **

VOID CHECK
Reason: VOID Check
12/09/2025-12/22/2025
PAYDATE: 12/26/2025

Miguel Felix
INTERIM FINANCE MANAGER

Report generated: 12/26/2025 14:03
User: czambrano
Program ID: prpyddpf

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 12/09/25 To 12/22/25

WARRANT: M1226 PAYROLL TYPE: MISC CHECK DATE: 12/26/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
100 REG	80.00	1,999.85	0.00	0.00
530 SHIFT	80.00	100.00	0.00	0.00
Total:	160.00	2,099.85	0.00	0.00
Total Employees: 1				

Report generated: 12/26/2025 14:25
User: czambrano
Program ID: prpyddpf

TOTALS PROOF

Pay Period 12/09/25 To 12/22/25

WARRANT: M1226 PAYROLL TYPE: MISC CHECK DATE: 12/26/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS		FICA/MED CALC
1100	MEDI 1.45%	30.45	30.45	60.90	2,099.85 x	2.90% =	60.90
2005	BASIC LIFE	0.00	3.35	3.35	2,099.85		
2007	BASIC AD&D	0.00	0.18	0.18	2,099.85		
2320	EAP	0.00	0.72	0.72	2,099.85		
2335	LTD	0.00	4.08	4.08	1,999.85		
2336	STD	0.00	6.97	6.97	1,999.85		
2345	WORKERS COMP	0.00	188.99	188.99	2,099.85		
3000	FIT	115.53	0.00	115.53	1,937.11		
4000	SIT	17.83	0.00	17.83	1,937.11		
7002	CALPERS EE	162.74	0.00	162.74	2,099.85		
7003	CALPERS PREP	0.00	201.80	201.80	2,099.85		
7015	SURVIVOR BEN	0.93	0.00	0.93	2,099.85		
Total:		327.48	436.54	764.02			
Total Employees: 1							

** END OF REPORT - Generated by Cristhian Zambrano **

MISCELLANEOUS CHECK
12/09/2025-12/22/2025
PAYDATE: 12/26/2025

Miguel Felix
INTERIM FINANCE MANAGER

CITY OF EL CENTRO

TOTALS PROOF

Pay Period 12/23/25 To 01/05/26

WARRANT: M12304 PAYROLL TYPE: MISC CHECK DATE: 12/30/2025

EARNINGS SUMMARY

PAY TYPE	HOURS	AMOUNT	PAY EARNED	ESCROW AMOUNT
225 CTP	199.00	9,485.41	0.00	0.00
330 ANNUAL	20.50	904.76	0.00	0.00
348 ALP	107.37	5,117.83	0.00	0.00
355 HOLI	13.50	595.82	0.00	0.00
440 CERT %	34.00	120.05	0.00	0.00
900 AWOP	46.00	0.00	0.00	0.00
Total:	420.37	16,223.87	0.00	0.00
Total Employees: 1				

TOTALS PROOF

Pay Period 12/23/25 To 01/05/26

WARRANT: M12304 PAYROLL TYPE: MISC CHECK DATE: 12/30/2025

DEDUCTION SUMMARY

DED	TYPE	EMPLOYEE AMT	EMPLOYER AMT	TOTAL AMT	EMPLOYEE GROSS		FICA/MED CALC
1100	MEDI 1.45%	213.10	213.10	426.20	14,696.96 X	2.90% =	426.21
2300	MED INS	1,526.91	-669.17	857.74	1,620.63		
2335	LTD	0.00	3.06	3.06	1,500.58		
2336	STD	0.00	6.63	6.63	1,500.58		
2345	WORKERS COMP	0.00	145.86	145.86	1,620.63		
3000	FIT	0.00	0.00	0.00	14,583.52		
4000	SIT	0.00	0.00	0.00	14,583.52		
7000	CALPERS ER	0.00	155.74	155.74	1,620.63		
7001	CALPERS EE	113.44	0.00	113.44	1,620.63		
7015	SURVIVOR BEN	0.93	0.00	0.93	16,223.87		
Total:		1,854.38	-144.78	1,709.60			
Total Employees: 1							

** END OF REPORT - Generated by Cristhian Zambrano **

MISCELLANEOUS CHECK
12/23/2025-01/05/2026
PAYDATE: 12/30/2025

Miguel Felix
INTERIM FINANCE MANAGER

Approve the Treasurer's Report for the month of December 2025.

CITY MANAGER'S RECOMMENDATION:

FISCAL IMPACT:

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

BACKGROUND:

DISCUSSION:

CONCLUSION:

ATTACHMENTS:

1. Treasurer's Report of December 2025

CITY OF EL CENTRO
TREASURER'S REPORT
SCHEDULE OF INVESTMENTS
DECEMBER 2025

	Maturity Date	Par	Rate (Pcnt)	YTM	Cost	Market Value
GENERAL ACCOUNT						
U.S. Savings and CD's						
Bank Amer NA Charlotte 06051XE32	09/17/26	250,000.00	3.700	3.690	250,000.00	250,150.00
Haddon SVGS Haddon 40473OFV0	09/29/26	250,000.00	3.700	3.690	250,000.00	250,175.00
Merrick South Jordan Utah 59013LDQ4	04/12/27	250,000.00	3.600	3.600	250,000.00	249,957.50
Transportation Alliance Bk Inc 89388CKS6	04/15/27	250,000.00	3.600	3.600	250,000.00	249,930.00
Toyota Finl Svgs Bk 89235MTE1	09/20/27	250,000.00	3.600	3.600	250,000.00	249,785.00
Bank Sun Prairie Wis 065226AY8	09/24/27	250,000.00	3.550	3.550	250,000.00	249,475.00
University Ill Cmnty Cr 914359AQ7	09/24/27	250,000.00	3.650	3.650	250,000.00	249,900.00
Atlantic Cmnty Bankers 04846LAG8	09/29/27	250,000.00	3.700	3.700	250,000.00	249,705.00
Mutualone Bk Framingham Ma 62847HFG9	10/06/27	250,000.00	3.600	3.600	250,000.00	249,635.00
Kemba Finl Cr Un 48836LCT7	10/12/27	250,000.00	3.600	3.600	250,000.00	249,660.00
BMW Bk North Amer Salt Lake 05612LGE6	09/19/28	250,000.00	3.600	3.610	250,000.00	248,955.00
Goldman Sachs Bk USA New York 3815OV6S3	09/25/28	250,000.00	3.550	3.560	250,000.00	248,710.00
Civic Fed Cr Un Raleigh NC 1788O8AF8	09/26/28	250,000.00	3.650	3.660	250,000.00	249,265.00
Bankers Bk Okla City 06610QFLO	09/29/28	250,000.00	3.550	3.560	250,000.00	248,607.50
Dort Finl Cr Un Grand Blanc Mi 25844MCG1	10/10/28	250,000.00	3.700	3.700	250,000.00	249,642.50
Freedom Bk of Va Fairfax Va CTF 35633MFZ0	10/16/28	250,000.00	3.600	3.610	250,000.00	248,892.50
Amercian Eagle Bk South 02554NHG9	12/26/28	250,000.00	3.500	3.520	250,000.00	248,007.50
Gulf Atlantic Bk Key West 40216LCM9	03/29/29	250,000.00	3.500	3.530	250,000.00	247,747.50
Hardin Cnty Svgs Bk Eldora 412022EA9	09/19/29	250,000.00	3.500	3.530	250,000.00	247,240.00
Gbank Las Vegas Nev Ctf 3683OMBW0	09/26/29	250,000.00	3.500	3.530	250,000.00	247,217.50
Morgan Stanley Private Bk Ntl Assn 61776NZA4	10/08/30	250,000.00	3.750	3.770	250,000.00	248,655.00
Morgan Stanley Bk N A Salt Lake 61778GB1	10/08/30	250,000.00	3.750	3.770	250,000.00	248,655.00
Subtotal		**$ 5,500,000.00**			**$ 5,500,000.00**	**$ 5,479,967.50**
US Treasury Securities						
United States Treas Nts 91282CNU1	08/15/28	3,000,000	3.625	3.610	3,000,000.00	3,008,430.00
United States Treas Nts 91282CLN9	09/30/29	2,000,000	3.500	3.510	2,000,000.00	1,991,880.00
United States Treas Nts 91282CNX5	02/28/26	3,000,000	3.625	3.630	3,000,000.00	2,991,930.00
Subtotal		**$ 8,000,000.00**			**$ 8,000,000.00**	**$ 7,992,240.00**
U.S. Government Obligations						
Federal Home Loan Bks 3130AM2F8	04/29/26	$ 750,000	1.125	1.130	750,000.00	743,775.00
Federal Natl Mtg Assn Benchmark 3135GOK36	04/24/26	$ 2,000,000	2.130	2.130	2,000,000.00	1,990,800.00
Federal Farm Cr Bks Cons Sysyemwide 3133ETB22	09/30/27	$ 2,000,000	3.730	3.730	2,000,000.00	1,999,340.00
Federal Natl Mtg Assn Medium T 3136GASA8	09/01/28	$ 2,000,000	3.750	3.750	2,000,000.00	1,999,320.00
Federal Farm Cr Bks Cons Systemwide 3133ETYX9	09/24/29	$ 2,000,000	3.900	3.900	2,000,000.00	1,999,760.00
Federal Agric MTG Corp Medium T 31424WV33	09/17/30	$ 2,000,000	3.750	3.760	2,000,000.00	1,992,900.00
Federal Natl MTG Assn Medium T 3136GASX8	09/18/30	$ 1,500,000	3.750	3.760	1,500,000.00	1,495,650.00
Subtotal		**$ 12,250,000**			**$ 12,250,000.00**	**$ 12,221,545.00**
Subtotal		**25,750,000**			**25,750,000**	**25,693,753**
Other Investments						
Cash Equiv.		$ 5,965,014	0.010	0.010	5,965,014.30	5,965,014.30
Local Agency Investment Fund		$ 67,176,798	4.096	4.150	67,176,797.62	67,176,797.62
Subtotal		**73,141,812**			**73,141,811.92**	**73,141,811.92**
Subtotal		**98,891,812**			**98,891,811.92**	**98,835,564.42**
Bonds						
Series B - 2007 Redevelopment		$ 1,986,107	0.010	0.010	1,986,106.57	1,986,106.57
2021 Series A - Library Bond Project		$ 1,097,003	0.010	0.010	1,097,002.92	1,097,002.92
2023 Series A - Police Station Project		$ 25,073,305	0.010	0.010	25,073,304.61	25,073,304.61
		28,156,414			**28,156,414.10**	**28,156,414.10**
Total		**$ 127,048,226.02**			**$ 127,048,226.02**	**$ 126,991,978.52**

CITY OF EL CENTRO
TREASURER'S REPORT
SCHEDULE OF INVESTMENTS
DECEMBER 2025

	This Month	Fiscal YTD	Prior Fiscal Year YTD Same Period
Interest Received			
Other Investments	$ 9,587	$ 82,384	$ 233,807
LAIF		1,446,023	1,548,338
Total	$ 9,587	$ 1,528,407	$ 1,782,145

	Balance 11/30/25	Change	Balance 12/31/25
Monthly Activity			
General Accounts			
U.S. Savings and CD's	5,500,000	$ -	5,500,000
U.S. Treasury Securities	8,000,000	$ -	8,000,000
U.S. Government Obligations	12,250,000	$ -	12,250,000
Cash Equiv. & Other Investments	5,964,990	$ 25	5,965,014
LAIF	67,176,798	$ -	67,176,798
	$ 98,891,787	25	$ 98,891,812
Trustee Accounts			
Series B - 2007 Redevelopment	$ 1,979,957	$ 6,150	$ 1,986,107
Library 2021 Bond Project	1,097,003	-	1,097,003
El Centro Police 2023 Bond Project	24,987,692	85,613	25,073,305
	$ 28,064,652	91,763	$ 28,156,414
Total	**$ 126,956,439**		**$ 127,048,226**

I hereby certify that this report reflects the pooled investments of the City of El Centro and is in conformity with the Investment Policy of the City as adopted by the City Council on February 21, 2001. A copy of this Policy is available at the Office of the City Clerk. In the opinion of the undersigned, the City's expenditure requirements for the following six months, can be met from projected revenues and maturities of Investments listed herein.

Elizabeth Fuchen
Finance Director

Cityof El Centro
Treasurer's Report
Summary of Investments
as of 12/31/2025

		Cost/Par	Investment income to-date	Unrealized gain/loss (*) (**)	Net increase decrease	Market Value end of Period	percent of total
1	U.S. Savings and CD's	$ 5,500,000		$ (20,033)		$ 5,479,968	6%
2	U.S Treasury Securities	$ 8,000,000		$ (7,760)		$ 7,992,240	8%
3	U.S. Government Obligati	$ 12,250,000		$ (28,455)		$ 12,221,545	12%
4	Cash Equiv. & Other Inves	$ 5,965,014		$ -		$ 5,965,014	6%
5	LAIF	$ 67,176,798		$ -		$ 67,176,798	68%
	Total	$ 98,891,812	$ -	$ (56,248)	$ -	$ 98,835,564	100%

(*) Investments 1 through 5
Investments are held to maturity redemption is at cost rendering no loss.

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO TERMINATING RESOLUTION NO. 25-50 PROCLAIMING A LOCAL EMERGENCY FOR REPAIRS OF THE SEWER LIFT STATION AT 3RD STREET AND ROSS AVENUE IN THE CITY OF EL CENTRO.

CITY MANAGER'S RECOMMENDATION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO TERMINATING RESOLUTION NO. 25-50 PROCLAIMING A LOCAL EMERGENCY FOR REPAIRS OF THE SEWER LIFT STATION AT 3RD STREET AND ROSS AVENUE IN THE CITY OF EL CENTRO.

FISCAL IMPACT:

No impact to the General Fund. Project was funded by Wastewater Enterprise Funds. Below are the known costs to date. Final invoices are yet to be processed. However, they are expected to total less than the $150,000 that was approved by the Council on July 15, 2025.

Cholla Construction Invoices to date: $98,869.50

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

Environmental Sustainability & Infrastructure

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

NA

BACKGROUND:

During inspections that have occurred as part of the Sewer master plan project, the consultant advised that the 3rd and Ross sewer lift station was in a bad state of repair. The wet well was heavily weathered and deteriorated, which could had led to the collapse of the wet well and interruption of sewer service to the area located south of Ross Avenue, east of SR-86, west of the Railroad, and north of I-8. The work required a temporary bypass of the sewer from the lift station to allow repairs to the wet well. The repair included resurfacing the interior of the wet well and replacing the concrete top of the wet well. At the July 15, 2025, Council Meeting, resolution 25-50 was adopted and staff worked with the construction company to coordinate the project.

DISCUSSION:

The emergency repairs on the Ross Avenue & 3rd Street Lift Station have been completed. During repairs, an additional pipe that travels under the railroad required replacement. This was successfully accomplished. The lift station is fully functional and operating normally. The contractor is working in finalizing costs for this portion of work.

CONCLUSION:

Approve Resolution No. 26- RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO TERMINATING RESOLUTION NO. 25-50 PROCLAIMING A LOCAL EMERGENCY FOR REPAIRS OF THE SEWER LIFT STATION AT 3RD STREET AND ROSS AVENUE IN THE CITY OF EL CENTRO

ATTACHMENTS:

1. Resolution 26-

RESOLUTION NO. 26 -

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO TERMINATING RESOLUTION NO. 25-50 PROCLAIMING A LOCAL EMERGENCY FOR REPAIRS OF THE SEWER LIFT STATION AT 3RD STREET AND ROSS AVENUE IN THE CITY OF EL CENTRO

WHEREAS, the California Emergency Services Act, including, but not limited to, Government Code Sections 8630 et seq, and Chapter 8, Article 1 empowers the City to proclaim the existence or threatened existence of a local emergency in the City and to terminate such local emergency when the threat ends; and

WHEREAS, on July 15, 2025, pursuant to Resolution No. 25-50, the City Council of the City of El Centro proclaimed a local emergency as allowed by state law and as defined in City Municipal Code Section 8.2 due to needed emergency repairs for a sewer lift station wet well that was found to be heavily deteriorated to the point of failure as determined during an inspection at 3rd Street at Ross Avenue and; and

WHEREAS, pursuant to Resolution No. 25-50, the City contracted with Cholla Construction to perform such repairs, Cholla Construction and City staff collaborated to complete the work efficiently and minimized costs and the work now has been completed successfully; and

WHEREAS, as of January 1, 2026, the emergency conditions resulting from the impending failure of the sewer lift station wet well have been ended with the successful repair of the wet well pursuant to Resolution No. 25-50; and

WHEREAS, the City Council therefore finds that for these reasons, Resolution No. 25-50 should be terminated by the adoption of this Resolution.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, HEREBY PROCLAIMS AND ORDERS AS FOLLOWS:

1. That the Recitals set out above are true and correct and are incorporated herein as though set forth in full.

2. The City Council has reviewed the proclamation of local emergency and finds that such emergency no longer exists.

3. That the City Council by adoption of this Resolution terminates the local emergency proclaimed by Resolution No. 25-50 and terminates that Resolution.

4. That this Resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California held on day of , 2026.

CITY OF EL CENTRO

By _____
Michael Crankshaw, Mayor

ATTEST:

By _____
Norma Wyles, City Clerk

APPROVED AS TO FORM:
Office of the City Attorney

By_____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CITY OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By_____
Norma Wyles, City Clerk

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH THE HOLT GROUP, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

CITY MANAGER'S RECOMMENDATION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH THE HOLT GROUP, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

FISCAL IMPACT:

Contract is not to exceed one million dollars ($1,000,000.00) through out the term of the agreement. This will be through the approval of various task orders through out the life of the contract.

Award of the contract will not obligate the City to purchase any specific level of effort from any firm as task orders will be issued by the City Manager or Public Works Director to assign work on an as-needed, project-by-project basis. Funding for each project will be budgeted in the Citywide Capital Improvement Program (CIP) budget which is adopted through the annual budget process. If a non-budgeted project arises, staff will return to Council to request funding as needed. Funding sources may include the general fund, enterprise funds as well as other sources such as Measure D, Gas Tax, SB1 and other grants.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

Financial & Governance Stability & Sustainability

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

The consultant went through a request for proposals and an evaluation process. Any missing documentation, such as a business license, will be obtained before issuance of Notice to Proceed ("NTP").

BACKGROUND:

In late 2020, the City Council awarded a series of contracts to on-call consultants. These contracts in essence, pre-approve consultants for design work, construction management work, special studies, etc. This expedites the award of work and eliminates the need to do RFP's, interviews, etc., for contract which may be small in value, which may discourage firms from submitting due to the cost of preparing for a RFP and interview process.

Generally, these contracts are not utilized for certain grant funds, as grant funds have added language that may not be included in the on-call contracts and that does not apply for all projects. As such, grant funded projects generally go through contracts outside of

the on-call approved contract list.

On-call contracts have been used in the past to do design work funded by park impact fees, general fund, water enterprise, wastewater enterprise, Measure D and SB1 funds. Individual Task Orders are issued for projects that fit within the scope of the on-call contract.

Projects in the past have included the Imperial Avenue Extension design, studies and portions of the Southern Pump Station project, various construction management contracts for Measure D projects and some water and wastewater projects to name a few. Task Orders are funded from approved budget funds.

DISCUSSION:
The current list of On-Call contracts began to expire at the beginning of August 2025. To replace the contracts, Public Works' staff divided the on-call disciplines into two groups. One Request for Proposals (RFP) was prepared for Civil Engineering- General and Civil Engineering- Water and Wastewater Treatment, while another was prepared for the On-Call Architectural Design and Construction Management and Inspection Services.

On August 19, 2025, the City Council, during its regular meeting, approved the Request for Proposals(RFP) for four on-call disciplines. Each RFP was advertised and released as follows:

1. Request for Proposals (RFP) for On-Call Civil Engineering - General and On-Call Civil Engineering- Water and Wastewater Treatment was published in the Imperial Valley Press on August 22, 2025, with an initial deadline of September 19, 2025, and then revised via addendum to October 3, 2025.

2. Request for Proposals (RFP) for On-Call Architectural Design, and Construction Management and Inspection Services was published in the Imperial Valley Press on August 26, 2025, with an initial deadline of September 26, 2025, and then revised to October 10th, 2025.

These are the disciplines where we expect to have the need for these contracts. Each applicant was required to specify the discipline for which they were submitting a proposal.

Under this Council approval request, we are focusing on consultants who submitted for the On-Call Civil Engineering-General Services portion of the RFP. For this discipline, the City received six proposals. The proposals were evaluated by a panel of three city staff members. Based on the scores, six firms were selected and will be recommended for contract award, which includes the following in no particular order:

- Dynamic Consulting Engineers
- CR Associates
- Nicklaus Engineering, Inc.
- Psomas
- TYPSA, Inc.
- The Holt Group, Inc.

A separate Council agenda report, agreement and resolution is being prepared for each firm. Each agreement would be limited to $250,000 per fiscal year for each fiscal year the

agreement is active. However, as each agreement will be for on-call, as-needed services, there is no guarantee on any level of services from any firm. Each contract has an initial Two (2) year life with the option to provide for three (3) individual one (1) year extensions for a possible total five (5) year contract.

In this report, staff seeks approval of an on-call contract for Civil Engineering- General Services with The Holt Group.

CONCLUSION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH THE HOLT GROUP, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

ATTACHMENTS:

1. Design Professional Services Agreement- The Holt Group
2. Resolution 26-

DESIGN PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement"), is made and effective as of the last signature date in this agreement, between the City of El Centro ("City"), a municipal corporation, and The Holt Group, Inc. ("Consultant"), a stock corporation. In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

I. TERM

This Agreement shall commence upon the issuance of the Notice to Proceed ("NTP") and shall remain and continue in effect until the professional services described herein are completed, but in no event later than two (2) years from the date of approval and may be extended for up to three (3) one (1) year extensions by mutual agreement unless sooner terminated pursuant to the provisions of this Agreement. All days set out in this Agreement are calendar days unless otherwise provided.

II. SERVICES

Consultant shall perform the tasks described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full (the Tasks to be Performed or Tasks). Consultant shall complete the Tasks according to the schedule of performance which also is set forth in Exhibit A. To the extent that Exhibit A is a proposal from Consultant, such proposal is incorporated only for the description of the scope of services and no other terms and conditions from any such proposal shall apply to this Agreement unless specifically agreed to in writing. A sample Task Order is attached as Exhibit G.

III. PERFORMANCE BY CONSULTANT

A. Consultant shall at all times faithfully, competently, and to the best of their ability, experience, and talent, perform all Tasks. Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing similar services as are required of Consultant hereunder in meeting its obligations under this Agreement.

B. Consultant immediately shall notify the City Representative in writing of any delay in completion of the services. Such notice shall include the reason for such delay and a reasonable estimate of the length of the delay. If the delay materially effects performance of the Services, the City may terminate this Agreement under Section VI (Termination) or VII (Default).

C. Force Majeure. If delays in performance of the services are caused by the following unforeseen events or conditions beyond the reasonable control of City or Consultant, the time for performance may be extended by City only for the period of such events: war, changes in law or government regulation, labor disputes or strikes; fires, floods, adverse weather or other natural conditions preventing work; or inability to obtains materials, equipment or labor when the Consultant provides the City with timely evidence of its inability to obtain personnel.

D. Consultant may terminate this Agreement without cause upon providing at least 60 days prior written notice to the City of such termination. Within such time period, the Consultant shall complete any work necessary for the orderly termination of its consulting services

IV. CITY REPRESENTATIVE

City's Public Works Director shall represent City in all matters pertaining to the administration of this Agreement, review and approve all products submitted by Consultant, but not including the authority to change the compensation due to Consultant except as provided in this Agreement (the "City Representative")

V. PAYMENT

A. The City agrees to pay Consultant in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B, attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. This amount shall not exceed One million dollars ($1,000,000.00) for the total term of the Agreement unless additional payment is approved as provided in this Agreement.

B. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City. Consultant shall be compensated for any such authorized additional services in the amounts and in the manner as agreed to by the City and Consultant at the time City's written authorization is given to Consultant for the performance of such services and/or as set for in Exhibit B.

C. Consultant shall submit invoices monthly for actual services performed. Invoices shall be submitted on or about the first business day of each month, or as soon thereafter as practical, for services provided in the previous month. City shall use reasonable efforts to pay within forty-five (45) days of receipt of each invoice as to all non-disputed fees. If the City disputes any of Consultant's fees, it shall use its best efforts to give written notice to Consultant within forty-five (45) days of receipt of an invoice of any disputed fees set forth on the invoice.

D. It is understood and agreed that the City's obligation to proceed under this Agreement is conditioned upon the appropriation of funds. If anticipated funds for payment under this Agreement are not forthcoming or are insufficient, the City shall have the right to terminate this Agreement without penalty upon ten (10) days prior written notice to Consultant. Notwithstanding, the City also may determine a source of additional funds.

VI. CITY'S SUSPENSION OR TERMINATION OF AGREEMENT

A. Except as otherwise provided herein below, the City may suspend or terminate this Agreement, or any portion hereof, without cause and for convenience by serving written notice of termination upon the other party at least ten (10) calendar days prior to the date of termination. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City terminates a portion of this Agreement, such termination shall not make void or invalidate the remainder of this Agreement.

B. In the event this Agreement is terminated pursuant to this section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, less any disputed amounts. Upon termination of the Agreement pursuant to this section, the Consultant will submit an invoice to the City as provided above.

VII. DEFAULT

A. Either Party's failure to comply with the provisions of this Agreement shall constitute a default. In the event that either party is in default for cause under the terms of this Agreement, the affected party shall promptly notify the deficient party of such default and following such notice shall have no obligation or duty to continue compensating or providing any work after the date of default and terminate this Agreement immediately by written notice to the other party. If such failure hereunder arises out of causes beyond either party's control under Section III C above (force majeure), the provisions of that sub-section shall apply.

B. If the City Representative determines the Consultant is in default in the performance of any of the terms or conditions of this Agreement, City shall cause to be served upon the Consultant a written notice of the default. The Consultant shall have ten (10) days after service of default to cure the default as directed by the City in the notice of default. In the event the Consultant fails to cure its default within such period of time, the City shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

VIII. OWNERSHIP OF DOCUMENTS

A. Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the City at reasonable times to such books and records; shall give City the right to examine and audit said

books and records; shall permit City to make transcripts or copies therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

B. Upon completion of, or in the event of termination of this Agreement, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the City and may be used, reused, or otherwise disposed of by the City without the permission of the Consultant. With respect to computer files, Consultant shall make available to the City, at the Consultant's office and upon reasonable written request by the City, the necessary computer software and hardware for purposes of accessing, compiling, transferring, copying and/or printing computer files. Consultant hereby grants to City all right, title, and interest, including any copyright, in and to the documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared by Consultant in the course of providing the services under this Agreement.

IX. INDEMNIFICATION AND DEFENSE

To the fullest extent permitted by law, Consultant shall indemnify, defend, and hold harmless City and any and all of its officials, employees, agents, and volunteers ("Indemnified Parties") from and against any and all claims, losses, liabilities, damages, costs, and expenses, including attorney's fees and costs, to the extent they arise out of, pertain to or relate to the negligence, recklessness, or willful misconduct of the Consultant.

Consultant's duty to defend shall consist of reimbursement of defense costs incurred by Agency in direct proportion to the Consultant's proportionate percentage of fault.

Consultant's percentage of fault, for both indemnity and defense, shall be determined, as applicable, by a court of law, jury, or arbitrator. In the event any loss, liability, or damage is incurred by way of settlement or resolution without a court, jury or arbitrator having made a determination of the Consultant's percentage of fault, and the parties cannot mutually agree on Consultant's percentage of fault, the parties agree to mediation with a neutral third-party to determine the Consultant's proportionate percentage of fault for purposes of determining the amount of indemnity and defense cost reimbursement owed to the Agency.

X. INDEPENDENT CONTRACTOR

A. Consultant is and shall at all times remain as to the City a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, or agents shall have

control over the conduct of Consultant or any of Consultant's officers, employees, or agents, except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation, or liability whatever against City, or bind City in any manner.

B. No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

XI. INSURANCE

Consultant shall maintain prior to the beginning of and for the duration of this Agreement insurance coverage as specified in Exhibit C attached hereto and incorporated herein by this reference as though set forth in full.

XII. LEGAL RESPONSIBILITIES

A. The Consultant shall keep itself informed of local, state, and federal laws and regulations which in any manner affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. The Consultant shall at all times observe and comply with all such laws and regulations. The City, its officers, agents and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this section.

B. Licenses. At all times during the term of this Agreement, Consultant shall have in effect all licenses required for the performance of the services described in this Agreement.

C. City Business License: At all time during the term of this Agreement, Consultant shall have in effect a City business license.

D. Non-discrimination. Consultant shall not discriminate on the basis of any protected state or federal class or association with such class in its solicitation, selection, hiring or treatment of its employees, vendors or suppliers. Consultant understands that violation of this requirement shall be a material breach of this Agreement and may result in its termination, debarment or other sanctions. This requirement shall be placed in all agreements between the Consultant and its employees, vendors and suppliers.

E. Drug-free Workplace. Consultant agrees to insure a drug free workplace. The Consultant shall certify to the City that it will provide a drug-free workplace by submitting a Consultant Certification for a Drug-Free Workplace form as provided

by the City. The Consultant shall publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the workplace, and specifying the actions that will be taken against employees for violations of the prohibition. The Consultant also shall establish a drug-free awareness program to inform employees about all of the following: the dangers of drug abuse in the workplace; the policy of maintaining a drug free workplace; available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug abuse violations. In addition, the Consultant shall post the drug free policy in a prominent place.

F. No Use of City logo or Product Endorsement. The Consultant agrees that any advertisement or notification identifying or referring to the City as a client of the Consultant requires the prior written approval of the City. No City logo or other identifying mark may be used without the prior written approval of the City.

XIII. CONFLICTS OF INTEREST

A. Undue Influence. Consultant declares and warrants that no undue influence or pressure was used against or in concert with any officer or employee of the City in connection with the award, terms, or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of the City has or will receive compensation, directly or indirectly, from Consultant, or from any officer, employee, or agent of Consultant, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this section shall be a material breach of this Agreement entitling the City to any and all remedies at law or in equity.

B. No Benefit to City Employees. During their tenure and for one year thereafter, no officer or employee of City, or their designees or agents, and no public official who exercises authority over or responsibilities with respect to the services under this Agreement shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the services performed under this Agreement.

C. Consultant covenants that neither Consultant nor any officer or principal of their firm have any interest in, or shall acquire any interest, directly or indirectly, which will conflict in any manner or degree with the performance of their services hereunder. Consultant further covenants that in the performance of this Agreement, no person having such interest shall be employed by them as an officer, employee, agent, or subconsultant. To the extent applicable, Consultant further covenants that Consultant has not contracted with nor is performing any services, directly or indirectly, with any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area and further covenants and agrees that Consultant and/or its subconsultants shall provide no service or enter into any agreement or agreements with a/any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area prior to the completion of the work

under this Agreement.

D. Form 700. Consultant is subject to all applicable federal, state and local conflict of interest laws, regulations and policies applicable to its contract with the City and procurement practices related to such contract, including but not limited to the those under the Political Reform Act and its regulations or California Government Code Section 1090 et seq. Consultant may be required to complete Form 700's or similar forms as determined under Exhibit D, attached and incorporated.

E. Levine Act Compliance. The Consultant shall complete and comply with the provisions of Exhibit E, attached and incorporated, regarding compliance with the Levine Act.

XIV. RELEASE OF INFORMATION

A. All information gained by Consultant in the performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents, or subconsultants, shall not without prior written authorization from the City Attorney or designee, or unless requested by the City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena.

B. Consultant promptly shall notify City should Consultant, its officers, employees, agents, or subconsultants be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request ("Discovery"), court order, or subpoena from any person or party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the City, unless the City is a party to any lawsuit, arbitration, or administrative proceeding connected to such Discovery, or unless Consultant is prohibited by law from informing the City of such Discovery. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding as allowed by law. Unless City is a party to the lawsuit, arbitration, or administrative proceeding and is adverse to Consultant in such proceeding, Consultant agrees to cooperate fully with City and to provide the opportunity to review any response to Discovery requests provided by Consultant. However, City's right to review any such response does not imply or mean the right by City to control, direct, or rewrite said response.

XV. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by: (i) personal service; (ii) delivery by a reputable document delivery service (e.g., Federal Express), which provides a receipt showing date and time of delivery; or (iii) United States mail,

certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To CITY: City of El Centro
1275 Main St.
El Centro, CA 92243
Attention: City Clerk

TO CONSULTANT: The Holt Group, Inc.
1601 N. Imperial, Ave.
El Centro, CA 92243
Attention: James G. Holt, P.E., Principal Engineer

XVI. ASSIGNMENT

A. Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the City. Due to the personal nature of the services to be rendered pursuant to this Agreement, only Consultant shall perform the services described in this Agreement.

B. Before retaining or contracting with any subconsultant for any services under this Agreement, Consultant shall provide City with the identity of the proposed subconsultant, a copy of the proposed written contract between Consultant and such subconsultant which shall include an indemnity provision identical to the one provided herein identifying City as an indemnified party, or an incorporation of the indemnity provision provided herein, and proof that such proposed subconsultant carries insurance at least equal to that required by this Agreement or obtain a written waiver from City for such insurance.

C. The Holt Group, Inc. may use assistants, under their direct supervision, to perform some of the services under this Agreement. Consultant shall provide City fourteen (14) days' notice prior to the departure of James G. Holt, P.E. from Consultant's employ. Should James G. Holt, P.E. leave Consultant's employ, the City shall have the option to immediately terminate this Agreement. Upon termination of this Agreement, Consultant's sole compensation shall be payment for actual services performed up to, and including, the date of termination or as may be otherwise agreed to in writing between the Governing Board and the Consultant.

XVII. GOVERNING LAW

The City and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court with jurisdiction over the City.

XVIII. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, negotiations, understandings, representations, and statements, oral or written and pertaining to the subject of this Agreement or with respect to the terms and conditions of this Agreement, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

A. No waiver or failure of either Party to insist upon the strict performance by the other shall be a continuing waiver of any breach of this Agreement, nor shall such waiver affect or alter this Agreement, and each provision hereof shall continue in full force and effect. No change to any term or condition of this Agreement, nor any verbal understanding of the Parties shall be valid unless in writing as set forth in this Agreement.

B. Nothing contained this Agreement shall be considered a limit upon the charter city powers of the City.

C. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in its drafting.

D. In any conflict between the body of this Agreement and the Exhibits, the body of this Agreement shall control. If a conflict exists between any applicable law, rule, or regulation, that law, rule or regulation shall control. The most stringent requirements shall control. Each Party shall notify the other immediately upon identification of any apparently conflict or inconsistency.

XIX. SEVERABILITY

Any part, provision, or representation of this Agreement or any of its exhibits, including, which is held to be invalid, void or unenforceable by a court of competent jurisdiction, shall be limited to that part, provision or representation and all other parts, provisions, or representations herein shall remain in full force and effect.

XX. CONTENTS OF REQUEST FOR PROPOSAL AND PROPOSAL

Consultant is bound by the contents of the proposal submitted by the Consultant, attached and incorporated as Exhibit A In the event of conflict, the requirements of City's Request for Proposal and this Agreement shall take precedence over those contained in the Consultant's proposal. The incorporation of the Consultant's proposal shall be for the scope of services to be provided only, and any other terms and conditions included in such proposal shall have no force and effect on this Agreement or the relationship between Consultant and/or City, unless expressly agreed to in writing.

XXI. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant warrants and represents that they have the authority to execute this Agreement on behalf of the Consultant and have the authority to bind Consultant to the performance of its obligations hereunder.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

The Holt Group, Inc. By:
(Signature)

_____

(Typed Name) JAMES G. HOLT

SECRETARY/CFO
(Title)

City of El Centro
A Municipal Corporation

_____
Robert Sawyer, City Manager

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:
City Attorney

By: _____

Attachments:	Exhibit A	Consultant's Proposal
	Exhibit B	Fee Schedule
	Exhibit C	Insurance Requirements
	Exhibit D	Conflict Financial Disclosure
	Exhibit E	Levine Act Certification
	Exhibit F	City RFP
	Exhibit G	Sample Task Order

EXHIBIT A

CONSULTANT'S PROPOSAL

CITY OF EL CENTRO

REQUEST FOR PROPOSALS FOR ON-CALL

GENERAL CIVIL ENGINEERING SERVICES

October 3, 2025

Submitted by:

The Holt Group

Requested By:

City of El Centro
Department of Public Works
307 W. Brighton Avenue
El Centro, CA 92243
Phone: (760) 336-3152
Abraham Campos, P.E.
Director of Public Works/City Engineer

The Holt Group, Inc.

James G. Holt, P.E.

Robert K. Holt, P.E.

Engineering ■ Planning ■ Surveying

October 3, 2025

Mr. Abraham Campos, P.E.
Director of Public Works/City Engineer
City of El Centro
Department of Public Works
307 W. Brighton Avenue
El Centro, California 92243

RE: CITY OF EL CENTRO REQUEST FOR PROPOSAL FOR ON-CALL GENERAL CIVIL ENGINEERING SERVICES - THG PROPOSAL NO. 2025-066

Dear Mr. Campos,

The Holt Group is pleased to present this Proposal for On-Call General Civil Engineering Services to the City of El Centro. The Holt Group has over forty-one years of experience in providing General Civil Engineering Services to municipalities, districts, governmental agencies and private entities. We are confident that with our well-qualified staff and local experience, that we possess the ability to provide superior general civil engineering for projects within the City of El Centro. Our experienced staff is readily available from our El Centro office to ensure our projects run smoothly and our clients are satisfied. We look forward to the opportunity to discuss how we can best serve the City of El Centro with general civil engineering services as requested within the contents of the Request for Proposal (RFP). Thank you for the opportunity to submit this proposal. Contact me if questions arise.

The Primary Contact for this Proposal is:

Mr. James G. "Jack" Holt, P.E.
Principal Engineer and Secretary/CFO
The Holt Group, Inc.
1601 N. Imperial Avenue
El Centro, CA 92243
Phone: (760)337-3883
Fax: (760)337-5997
Email: jack@theholtgroup.net

Sincerely,

James G. "Jack" Holt, P.E.
Secretary/CFO – Principal Engineer
The Holt Group, Inc.

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1. EXECUTIVE SUMMARY

Founded in 1984, The Holt Group, Inc. is a full service consulting firm offering Design Engineering, Construction Management and Inspection, Resident Engineering, Plan Checking, Surveying, Engineering Report and Study Services, Planning, Environmental Assessments, Grant Administration, Grant Writing, Engineering Administrative Support Services and related Professional Services to both Private and Public Sector Clients throughout Southern California and Western Arizona. Our main office is located in El Centro, California, with satellite office locations in Blythe, California and Palm Desert, California. If selected, all of the Services provided to the City of El Centro will be provided from **our principal office located at 1601 N. Imperial Avenue in El Centro, California**.

The Holt Group El Centro office is staffed with Professionals who specialize in providing contract Engineering and Planning Services to local Imperial and Riverside County Municipalities. We have maintained office locations in the County of Imperial, City of Blythe and Coachella Valley for the last forty-one years during which we have had the opportunity to perform services for the County of Imperial, Seeley County Water District, Niland County Sanitary District, Heber Public Utility District, Palo Verde Water District, Imperial Irrigation District, and the Cities of Blythe, Brawley, Calexico, Calipatria, El Centro, Imperial, Holtville and Westmorland. The Holt Group, Inc. currently serves as the consulting City/District Engineer for the Cities of Holtville, Calipatria, and the Heber Public Utility District and provide on-call, as needed Engineering, Planning, and Plan Checking Services to the County of Imperial and Cities of El Centro, Imperial and Calexico. We also serve as the consulting City Planning, Grant Writing and Administration, and Environmental Staff for the Cities of Holtville and Calipatria, and the Heber Public Utility District.

Due to our extensive amount of local participation and experience, we are intimately familiar with the local Engineering and Planning standards, regulations, and guidelines as well as local seismic, geotechnical, groundwater and extreme temperature conditions which significantly impact Engineering Projects in Imperial County. Over the years, The Holt Group has developed Engineering Standards, Details and Specifications and Long-Range Planning Documents for many of our Municipal Clients which address the conditions unique to Imperial County. Our firm also has extensive experience working with a variety of agencies including the California Department of Housing and Community Development (HCD), Community Development Block Grant (CDBG), Economic Development Agency (EDA), North American Development Bank (NADB), United States Department of Agriculture (USDA), Environmental Protection Agency (EPA) and Regional Water Quality Control Board (RWQCB).

We understand that the City of El Centro is seeking experienced Professional Engineering Firm(s) to provide As-Needed, On-Call General Civil Engineering Services for various City of El Centro projects. The selected firm(s) will be available on an “on-call” basis to assist the City with General Civil Engineering Services.

The Holt Group takes both professional and personal interest in the development of communities within Imperial County. Although many consulting firms possess the technical knowledge and ability to serve the City of El Centro, we believe that the commitment of local engineers and planners participating in local projects coupled with the knowledge of local conditions and local agency requirements results in superior engineering projects. Our El Centro office has a staff of 24 Engineering, Planning, Surveying, Construction Management and Administrative Specialists who can handle multiple projects for the City of El Centro simultaneously. All of our Staff members performing services for the City of El Centro will be staffed out of our El Centro office and therefore will be available 7 days a week, 24 hours a day to provide services if required on an emergency basis. We are highly sensitive to the needs of our Municipal Clients and consistently strive to complete projects on time and within budget. Thank you for the opportunity to submit this Proposal and we look forward to further discussing our capabilities in assisting the City of El Centro with General Civil Engineering Services.

2. APPROACH TO SATISFYING SCOPE OF WORK AND SCOPE OF SERVICES

The Holt Group is a full service Engineering and Planning firm completing a full spectrum of Civil Engineering and Planning Services including Water and Wastewater Treatment Plant Designs; Domestic Water, Sanitary Sewer and Storm Water Pump Station Designs; Street Designs; Surveying; Domestic Water, Sanitary Sewer and Stormwater Pipeline Designs, Park Designs and other general Civil Engineering Project Designs. The Holt Group does not complete Geotechnical Work, Electrical Engineering and Labor Compliance Monitoring and will use sub-consultants to complete these services, as required. The Holt Group Engineering services also include completing plan checks, environmental studies, structural calculations and survey work. The Engineering requirements for most infrastructure projects include a study phase, design phase, bidding phase and construction phase. Section 5 of this Proposal describes the engineering scope of work for all project phases including the Study, Design, Bidding and Construction phases.

A separate proposal is being submitted to the City of El Centro for Construction Management and Inspection Services. It was stated in the Request for Proposals that the City of El Centro will complete project bidding phase services with a limited amount of assistance from the Design Engineer. This proposal will therefore primarily address the study and design scope of work for projects; however, as previously stated, section 5 of this proposal includes a description and scope of work for the bidding and construction management phases of a project.

Most Infrastructure projects require a study be completed, as a first step, prior to initiating the project design phase. Regardless of whether the study is referred to as a Preliminary Design Report, Initial Assessment Report, Preliminary Engineering Report or simply a Study the reports need to clearly define the project scope of work, accurately identify the costs associated with the project and include a project schedule which accurately identifies the length of time for the design, bidding, construction and startup phases of a project. The schedule may also include a funding procurement phase.

Project Design is initiated after the study/report phase is complete and the scope of work, budget and schedule are clearly defined. During the preparation of the project design it is important to review the study/report phase scope of work, budget and schedule. Should an increase in the project scope of work occur during the project design which significantly increases project costs or lengthens the project schedule then these items need to be immediately brought to the attention of the City of El Centro.

The Holt Group standard Surveying, Reports/Studies and Design services are listed in Items 5.1, 5.2 and 5.3 of this proposal. Please refer to these overall services and scopes of work which will be applied to the specific projects the City of El Centro awards to the Holt Group, Inc.

The Holt Group proposes to perform engineering design services resulting in contract documents (plans, specifications and cost estimates) for various projects on an “on call” basis.

The City of El Centro will provide a detailed schedule of the assigned project upon the issuance of a Task Order of that particular project. The Holt Group shall also provide all field survey work required to complete the designs. In addition to scope of work items necessary to complete the design of approved CIP projects, the Holt Group will also provide specific Engineering Services. The services are listed below:

1.0 General Civil Engineering Services Scope of Work

- Research existing records of utility companies and agencies and coordinate the proposed improvements with existing field conditions.

- Prepare all documentation required to obtain permits from any and all agencies having jurisdiction of the project.

- Conduct an environmental assessment for each project and prepare all documentation required to comply with the California Environmental Quality Act (CEQA).

- Provide all field survey and topographic work necessary to complete the design effort. Design level survey and base mapping of the project site shall be prepared in US Customary English units by a California licensed Land Surveyor in accordance with the City guidelines and in AutoCAD Computer Aided Design and Drafting (CADD) format. The horizontal datum shall be NAD 83 and the vertical datum shall be NAVD 88. All survey field notes shall be on forms provided by the City, shall be neatly completed in pencil, and shall become property of the City upon completion of the project. Informal field investigations including marking of removal areas may be required for some of the sidewalk, curb and gutter, and pavement replacement projects.

- Complete the design of projects including plans, specifications, and engineer's construction cost estimate. The Holt Group shall contact manufacturers and/or contractors to verify the engineer's estimate prior to submitting to the City. Specifications shall be prepared in Microsoft Word and an electronic copy of the final version shall be furnished to the City. The City will provide the specification boiler plate to the Holt Group.

- All preliminary and bid sets of plans shall be plotted on bond or velum using the AutoCAD program. All drawings shall be completed per the City of El Centro CADD Standards.

- All original plan sheets, the title sheet of the specifications, calculations and reports shall be signed and stamped by the Holt Group licensed professional engineer in responsible-charge of the project. These signed originals will then become the property of the City.

- The Holt Group shall provide support services as needed during the bidding and construction phases of the project, including:

    - The Holt Group shall respond to bidder inquiries during the bidding process, including preparation of any addenda. Upon award of the construction contract, the Holt Group shall attend the pre-construction meeting.

    - The Holt Group shall review and approve all submittals and shop plan drawings required supporting the construction contract. The Holt Group shall complete shop drawings reviews within one (1) week of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.

    - The Holt Group shall respond to written Requests for Information (RFI) to provide clarification or resolve discrepancies in the contract documents. Responses shall be completed within three (3) workings days.

    - The Holt Group shall provide periodic field reviews and bring to the attention of the City of El Centro any defects or deficiencies in the work by the construction contractor which the Holt Group may observe. The Holt Group shall have no authority to issue instruction on behalf of the City of El Centro, or to deputize another to do so.

- Upon the completion of construction, as-builts shall be submitted to the City. The Holt Group shall incorporate all changes to the plans electronically with all necessary revision notations. Once plans have been updated, a signed set of as-built mylars shall be submitted to the City with an electronic copy (in AutoCAD and pdf formats) of the final as-built drawings via CD or e-mail.

- The Holt Group shall monitor the project progress, maintain project files, and control the quality of the work performed by in-house staff and/or sub-consultants. Incomplete (not meeting targeted completion) or poor quality work will not be accepted. The Holt Group will need to revise the documents within a revised schedule set by the City, which may require overtime. No additional regular or overtime hours shall be approved for the required revisions.

- Attend meetings with the City staff as required.

- Coordinate plan check, design topics, permits and any other issues with the City, other Agencies, and all utility companies as required. The Holt Group shall be the liaison with affected agencies.

- The Holt Group shall be responsible for to reviewing and approving addenda and clarifications to plans and specifications.

1.1 Preliminary Design

- Review available record plans, existing/proposed conditions and requirements.
- Attend the Field Report Meeting; prepare Field Review Report.
- Conduct a field survey in order to confirm the accuracy of any existing drawings, surveys, streets, and utility locations data obtained. The Holt Group is expected to conduct additional surveys based on the project requirements.
- The Holt Group shall prepare a preliminary Design Report (PDR) of alternatives, preliminary cost estimate and preferred alternative.

1.2 Development of Detail Plans, Specifications and Estimate (PS&E)

- All reports, plans, specifications and quantity calculations shall conform to criteria, policies, procedures and standards of Caltrans, APWA and the City, and shall be made available to the City at stages specified in the milestone schedule and upon request.
- Construction plans shall adhere to City of El Centro Standard Construction Drawing standards. The Holt Group shall produce, at the Holt Group's sole cost and expense, blank reproducible sample plan sheets and any needed standard drawings. Standard drawings and standard plans shall be incorporated into the Contract Plans where applicable.
- Each plan sheet shall bear the State of California Registered Professional Engineer registration seal within signatures, license number and registration certificate expiration date of the Engineer who is in responsible charge for developing the plan. Each plan sheet shall be signed by the engineer who performed the independent plan check.
- The Holt Group shall prepare complete contract specifications based on the Manuals/Standards section 2.4.
- A list of contract pay items with the descriptions, item codes and estimated quantities shall be included in the front of the special provisions.
- The Holt Group shall prepare quantity calculations for items that are applicable to this project, and prepare cost estimates.

- Quantities for all contract pay items shall be substantiated by calculations. Quantity calculations shall be neat and orderly and shall show all sketches, diagrams, and dimensions necessary to allow them to be independently used by field inspectors during construction.

- Electronic files for all structural details and calculations shall be submitted at the end of the contract or when requested by the City.

- All electronic software developed, databases generated, spreadsheets and intellectual properties developed during the life of the Agreement shall become the property of the City.

1.3 Environmental Documents and Permit Compliance

- Specific environmental documentation work as may be required by the funding agency and the City including, but not be limited to the following: prepare Preliminary Environmental Study (PES), CEQA compliance documentation, technical studies, NPDES permit, Regional Board Section 401 certification, any coordination as required completing the environmental NEPA and CEQA work, and any encroachment permits required for the project from agencies such as Caltrans, County of Imperial, the City and any other having jurisdiction.

1.4 Utility Research and Coordination

- Research and obtain file copy of utility maps within the project limits for existing and/or proposed facilities.

- Prepare preliminary plans with utility notices/questionnaires to be sent to utility companies.

- Plot existing and proposed utilities in plan (and profile when applicable)

- Monitor response of utility notices received by the City and then make recommendations for mitigating conflicts.

- Attend coordination meetings when required regarding adjustments and relocations.

- Pothole information, where required, shall be coordinated by the Holt Group.

1.5 Construction Bidding Phase

- Bidding procedures will be the responsibility of the City. While the PS&E construction package is being advertised for bids, all questions concerning the intent shall be referred to the City for resolution. In the event that any items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the Holt Group for decision by the City, or by a covering change order after the award of the construction contract.

1.6 Construction Support Phase (As Needed)

- All construction support work shall be coordinated with the City.

- The Holt Group shall furnish, at the Holt Group's sole cost and expense, all necessary drawings for corrections and change orders required by errors and omissions of the Holt Group. The original tracing(s) of the drawings and contract wording for the change orders shall be submitted to the city for duplication and distribution.

- The Holt Group will receive written notification of the award of a construction contract. Upon such notification, the Holt Group will proceed with the services required by the Agreement.

- The Holt Group is required to attend the pre-construction meeting with the successful construction contractor upon notification by the City.

- The Holt Group shall review and approve all submittals and shop plan drawings required supporting the construction contract. The Holt Group shall complete shop drawings reviews within two (2) weeks of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.

- The Holt Group shall be available as requested by the City to resolve discrepancies in the contract documents. The Holt Group shall bring to the attention of the City any defects or deficiencies in the work by the construction contractor which the Holt Group may observe. The Holt Group shall have no authority to issue instruction on behalf of the City, or to deputize another to do so.

- The Holt Group shall prepare and deliver to the City the final as-built plans incorporating field marked prints supplied by the City. Upon completion of construction, the City will submit field-marked prints to the Holt Group. The Holt Group shall incorporate all changes to the plans electronically with all necessary revision notations and submit to the City.

1.7 Description of Required Services

- All work shall be performed in conformance with the State of California and/or City of El Centro policies, procedures and standards.

- The Holt Group shall carry out the instructions received from the City and shall cooperate with the City and other involved agencies.

- The Holt Group has total responsibility for the accuracy and completeness of the plans and related designs, specifications and estimates prepared and shall check all such materials accordingly. The plans will be reviewed by the City for conformity with the requirements of the Agreement. Reviews by the city do NOT include detailed review or checking of design or the accuracy with which such designs are depicted on the plans. The responsibility for accuracy and completeness of such items remains solely that of the Holt Group.

- The Holt Group or its sub consultants shall not incorporate in the design any materials or equipment of single or sole source origin without written approval of the City.

- The plans, specifications, estimates, calculations, and other documents furnished under the Agreement shall be of a quality acceptable to the City and State. The criteria for acceptance shall be a product of neat appearance, well organized, technically and grammatically correct, checked, and dated and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that of similar types produced by the State and set forth in related Caltrans manuals. The Holt Group shall modify its work as necessary to meet the level of acceptability defined by the criteria above.

- The Holt Group shall have a quality control plan in effect during the entire time work is being performed under the Agreement. The Quality control plan shall establish a process whereby plans are independently checked, corrected and back checked, and all job related correspondence and memoranda dated and received by affected persons and then bound in appropriate job files.

2.0 Construction Plans

2.1 60% PS&E (Unchecked Details)

- Unchecked plan details shall consist of 60% design and detailed plans ready for the independent design check.

- Three sets (3) full size (24”x36”) of design plans. The following submittals may be submitted electronically: draft SSP, preliminary quantities and estimates, pay item list, and design calculations.

2.2 100% PS&E

- The Holt Group shall submit the following documents for review and approval: Four sets (4) full size (24”x36”) signed and sealed prints of checked design. Electronic copies of Special Provisions.

- Electronic copies of cost estimate and check quantity calculations.

- Electronic copies of design calculations.

- Electronic copies of design check calculations.

- Other reports as needed by the City of El Centro.

- The City will review and comment on the PS&E package as soon as possible. The turnaround goal is within four (4) weeks of receipt of the complete PS&E package. One (1) copy of those documents with comments will be returned to the Holt Group.

2.3 Final PS&E

- The Holt Group shall submit the following documents for review and approval:
    - Electronic sets of signed final design plans.
    - Electronic copies of signed final specifications.
    - Electronic copies of final cost estimate and final quantity calculations.
    - Electronic copies of final design calculations.
    - Electronic files in its original format and in PDF of all plans, specifications, and estimates.

2.4 Manuals/Standards

- Where applicable, engineering design of all PROJECT improvements shall be compatible and in accordance with the following as applicable:
    - Caltrans Highway Design Manual.
    - Caltrans Standard Plans.
    - Caltrans Standard Plans.
    - Imperial County Hydrology Manual.
    - American Public Works Association Standard Specifications for Public Works Construction.
    - American Public Works Association Standard Plans.
    - American Water Works Association.
    - City of El Centro Standard Plans.
    - San Diego Regional Standard Drawings.
- It will be the responsibility of the Holt Group to verify that it has received the latest version or update of these documents.

- Plans for the improvements on the State Highway shall be prepared in accordance with Caltrans recommended practice for detailing and scope of work. Caltrans Standard plans shall be utilized where applicable and may be called out on the plans as reference.

- Local street improvement plans shall adhere to City of El Centro Standard Plans and the Standard Specifications for Public Works Construction. Plans shall be computer drafted in AutoCAD compatible format and shall adhere to the current City of El Centro Public Works Department CAD standards.

- The Holt Group's work will be subject to inspections by representatives of the City, County, State and FHWA.

2.5 Coordination

- Coordination with the City, other consultants and other involved agencies will be required to achieve compatible designs, phasing of construction with existing or designed conditions, and timely delivery of the contract PS&E. Coordination may include, but not be limited to, coordination with Caltrans, FHWA, Regional Water Quality Control Board and other agencies.

- The City will decide the manner in which the coordination of individual matters is undertaken. At the City's option, coordination efforts may be performed by the Holt Group's direct contact, by the Holt Group acting through the City or by the City only. When coordination efforts require Agreement, such Agreement shall be coordinated through the City.

3. AVAILABILITY TO MEET EXPECTED WORK SCHEDULE

While timelines vary from project to project based on the project scope and complexity, the Holt Group will complete all as-needed general engineering services promptly to ensure the project schedule is maintained. Commencement of work will occur within three (3) working days from the notice to proceed issued by the City of El Centro except that emergency work will commence immediately after being requested by City of El Centro Staff.

4. CURRENT HOLT GROUP GENERAL CIVIL ENGINEERING SERVICES PROJECT WORKLOAD

Following is a list of projects The Holt Group, Inc. is currently providing General Civil Engineering Services:

CLIENT	PROJECT NAME
City of Calipatria	Design Engineering Services for the Bonita Place Pedestrian Safety Improvement Project Between South Brown Avenue and Southeast Avenue
City of Holtville	Plan Checking Services for the Public Safety Building
City of Holtville	Plan Checking Services for the Peri & Sons Labor Housing
City of Brawley	City Wide Street System Evaluation
City of Westmorland	Design Engineering Services for the 6th Street Sidewalk Improvement Between Center Street and B Street
Heber Public Utility District	Design Engineering Services Correll Park Improvement Project
County of Imperial	Design Engineering, Bidding Support and Construction Support Services for the Heber Townsite Phase II Improvement Project
Britt Dhalliwal	Preparation of a Parcel Map Waiver and Record of Survey
VC Renewables/Cedar II SES, LLC	Civil Design Engineering Services for the Vega 5 Solar Project

5. QUALIFICATIONS OF FIRM

The Holt Group, Inc. is an Engineering and Planning Firm offering a full range of services to public sector and private clients. The Holt Group completes a full range of Civil Engineering Services including, Surveying, Preliminary Engineering Services, Design Services, Bidding Services, Construction Management and Inspection Services, Plan and Map Checking Services and Miscellaneous Engineering Services. The Holt Group Planning Department often assists with Engineering related projects contributing Environmental Assessment. The Planning Staff also assists with preparing grant applications for large scale projects and assisting with complying with funding agency requirements during the project construction phase.

The Holt Group staff is capable of completing a large number of diverse and complex projects. A description of the Civil Engineering Services provided by the Holt Group follows.

5.1 SURVEYING

Obtaining surveying information and preparing base survey documents is required at the commencement of preliminary engineering and design projects. The completion of initial survey work is required prior to the commencement of construction activities. The Holt Group is capable of completing a full range of surveying services. The Holt Group is capable of providing the following list of surveying services:

- Right of Way research and acquisition.
- Easement research and acquisition.
- Preparation of Legal Descriptions and Plats for various projects.
- Boundary surveys and maps.
- Topographic Surveys including obtain all horizontal and vertical information for the preparation of improvement plans. Vertical information includes spot elevations and contours.
- Completing level loops and shots to obtain vertical information for preliminary engineering and design projects.
- Tentative Maps.
- Parcel Maps.
- Tract Maps.
- Records of Survey.
- Lot Line Adjustments.
- Parcel Mergers.
- Annexation Maps.
- ALTA Surveys.
- Construction Surveying and Staking

5.2 PRELIMINARY ENGINEERING, REPORTS AND STUDIES

Preliminary Engineering includes preparation of Reports, Conceptual Plans, Special Studies and preliminary cost estimates. Engineering Projects generally commence with a Study followed by a Design Phase, Bidding Phase and Construction Phase. The Holt Group has completed a wide variety of Preliminary Engineering Reports and Studies from a six page report for specific street section improvements to Comprehensive Grant Agency Required Wastewater and Water Treatment Plant Preliminary Engineering Reports. Engineering Reports prepared for infrastructure projects should clearly define the scope of work, costs and offer an accurate schedule for the completion of the project design, bidding and construction phases. The Holt Group has prepared numerous reports over the past 41 years. A listing of the different types of reports prepared by the Holt Group follows:

- Hydrology Studies
- Storm Water Pollution Prevention Plans (SWPPP's). The Holt Group possesses four (4) California Certified Qualified SWPPP Developers and Practitioners (QSP's and QSD's) to assist with the completion and implementation of SWPPP's.
- Initial Assessment Reports
- Water Distribution System Studies
- Sanitary Sewer Collection System Studies
- Master Plan of Water Reports
- Master Plan of Sewer Reports
- Comprehensive Municipal Street Reports
- Preliminary Engineering Report (PER) meeting USDA, SRF and NadBank requirements for Water Treatment Plant
- Preliminary Engineering Report (PER) meeting USDA, SRF and NadBank requirements for Sanitary Sewer Plant
- Response Plans
- Updated Operations Plans for Water Treatment Plants
- NPDES Permit Renewal for Wastewater Treatment Plants
- Preliminary Design Reports
- Sanitary Sewer Management Plans
- Conceptual Plans

The draft preliminary engineering studies and reports are reviewed and approved by the Clients prior to finalizing the studies and reports.

5.3 DESIGN SERVICES

Design services include the preparation of all, or a portion of the documents necessary for the construction of a project. Clients often request only a portion of the documents be provided such as the Plans, Special Conditions, Technical Conditions, Bid Forms and Cost Estimates with the Clients preparing the other sections of the project manual. Other Clients request the entire set of project design documents be prepared. The Holt Group is amendable to preparing all or a portion of the design documents as requested by the client. A full scope of design services follow:

- Review survey information and complete the first draft project site plans. Illustrate the project boundary on the draft site plan. For infrastructure to be constructed in streets or alleys illustrate the right of way lines or easements on the plans.
- Prepare a Sheet Count listing the plan sheets to comprise a project.
- Prepare a Title Sheet. The Title Sheet includes the list of drawing sheets comprising the plans, project description, vicinity map, abbreviation list, project title and can include General Notes, City Staff and City Council. The project benchmark may be listed on the Title Sheet.
- Prepare a Sheet Index Sheet for projects which contain multiple plan sheets over a wide area. Sheet Index Sheets are included for projects such as street or pipeline projects that include many street sections or pipelines which extend for long distances.
- Prepare an existing site plan sheet or existing site/demolition plan sheet, if applicable. Illustrate all existing above grade items on the plan sheet and “callout” all existing above grade items. Indicate which items are to remain and which items are subject to demolition. Illustrate all known below grade items on the plan sheet. Illustrate the site boundary and vertical information on the plan sheet such as spot elevations or contours.
- Research available records. Illustrate Easements on the plan sheets and call out the Easement Grantor and Grantee. Illustrate the easement dimensions and the purpose of the easement.
- Contact Utility Companies. Obtain Utility Maps. Conduct a site field review. Illustrate all known utilities on the improvement plans. Forward the plans to the utility companies and request the utility companies review the plans and offer any comments, especially with regard to utility conflicts.
- Research all recorded survey maps. Illustrate existing survey monuments on the plan sheets. If survey monuments will be destroyed during construction then require that the survey monuments be removed and replaced per current California Survey Laws.
- Prepare new improvement plans. Illustrate all critical elevations and slopes on the grading plans. Water, Sewer and Stormwater Plans will be prepared on plan and profile sheets. Improvement plans shall illustrate design grades and contours. Existing elevations shall be illustrated with brackets. Illustrate all new items proposed to be constructed and existing items to remain on the new improvement plan sheet(s). Illustrate the project benchmark information on the new improvement plans.

- Prepare detail sheets and section sheets as required. “Blowup” plans illustrating an enlarged portion of the new improvement plan sheets shall be located with the detail and section sheets.
- Include Erosion Control Plans, if applicable.
- Include Traffic Control Plans, if applicable.
- Forward the plans to the City of El Centro Public Works Department for plan check. The plans shall be modified according to the redlined plan check comments. Complete iterative plan check reviews and revisions until the plans are completed and accepted by the City of El Centro. It is anticipated there will be a 30 percent, 90 percent and 100 percent sets of plans prepared, reviewed and revised prior to plan finalization.
- Prepare an Engineers Opinion of Probable Quantity and Cost. Forward the documents to the City of El Centro for review. The Quantity and Cost Estimates will be used to prepare the Bid Form.
- Prepare the Specifications as required by the Client. A limited set of specifications would include the Special Conditions and Technical Conditions. It would also include the preparation of the bid form. A full service set of specifications would include the bid advertisement, instruction for bidders, proposal forms, contract documents, general conditions, special conditions and technical conditions. Grant Agencies may require Construction Specifications Institute (CSI) formatted Technical Specifications and Engineers Joint Contract Document Committee (EJCDC) Contract Documents. It should be noted EJCDC Contract Documents include everything but the Technical and Special Condition Sections of the Specifications. Funding Agencies for Water and Wastewater Projects generally require CSI and EJCDC specifications and contract documents. The Holt Group has prepared numerous projects using the CSI and EJCDC specifications and contract documents and will prepare the specifications and contract documents using these documents as required.
- Conduct design review meetings during the course of the design. The number of design review meetings will depend on the size and complexity of a given project.
- A geotechnical report will be required during the design phase of most projects. If the project involves deep excavations it is recommended piezometers are installed during the design to accurately determine the water table depth. The Holt Group will provide the Geotechnical Report, if required by the task order agreement; or the Client can provide the Geotechnical Report as determined by the Client.
- Construction Support Services can be offered in addition to the Design Fee or as a separate item to provide specific design related services during the construction period. Design Support Services are generally requested when another firm (other than the Holt Group) is completing the Construction Management and Inspection for a project that the Holt Group had completed the Design. Construction Support Services generally include attendance of the Pre-Construction Conference, Review of Submittals, Responding to RFI’s during the construction period, attending Construction Meetings and participating in the final project review at the conclusion of the project and preparing the as-built plans.

5.4 BIDDING SERVICES

The Holt Group offers bidding phase services to its clients. The client may elect to select all, none or a portion of the offered bidding services. Bidding phase services include the following items:

- Place a Legal Advertisement in a newspaper of wide circulation such as the Imperial Valley Press
- Large scale projects are forwarded to Client preferred plan rooms.
- Maintain a Plan Holder List throughout the Bid process. Periodically update the plan holder list. It is important an accurate and up to date plan holder list is maintained to ensure all plan holders receive project addendum(a).
- Actively contact local subcontractors, contractors and material suppliers to insure the local businesses are given an opportunity to submit quotations/proposals for projects.
- Actively contact specialty contractors outside of the Imperial Valley to insure there are competent subcontractors participating in the bidding process. For instance, traffic lighting subcontractors are contacted for given street improvement projects.
- Chair the Pre-Bid Conference. Contacts all plan holders in advance of the Pre-Bid Conference as a reminder. Effected Utility Agencies are also to be contacted and invited to the Pre-Bid Conference. The Holt Group prepares the Pre-Bid Conference Agenda and Pre-Bid Conference Attendance List. Prepare a Pre-Bid Conference Memorandum after the Pre-Bid Conference summarizing the items discussed at the Pre-Bid Conference. The Pre-Bid Conference Memorandum to be is distributed to all Plan Holders.
- Prepare project addendum(a) periodically throughout the bidding process as required. The project addendum(a) is issued to the plan holders and plan rooms. Follow-up phone calls or e-mail confirmation is to be conducted after the issuance of the Addendum(a) to ensure all Plan Holders are in receipt of the Addendum(a).
- Answers questions posed by contractors, subcontractors, suppliers, affected utility agencies and others during the bidding process using Request for Information Forms (RFI's). The RFI's are distributed to all plan holders by means of project addendum(a).
- Assist in the opening of proposals and prepare a word processor based bid tabulation form listing all bids received after the bid opening.
- Assist in reviewing the submitted bid proposals for compliance with the Invitation for Proposals and Instruction for Bidders. Assist in preparing the recommendation letter for the Award of Contract. Assist with the preparation of City Council or District Resolutions approving the Award of Contact.

5.5 CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES

Proper design and review efforts are only the first steps toward insuring proper completion of Engineering Improvement Projects. Construction Management and Inspection services are essential to ensure compliance with the approved plans and specifications. Construction Management and Inspection Services include the following items:

- The Holt Group, Inc. will assist in conducting the Pre-Construction Conference. A Pre-Construction Conference Agenda will be prepared prior to the commencement of the Pre-Construction Conference. A Pre-Construction Conference Attendance List will be circulated during the commencement of the Pre-Construction Conference. Effected Utility Agency Representatives are invited to the Pre-Construction Conference. Grant/loan agency representatives are invited to the Pre-Construction Conference and may review Grant/Loan agency requirements as applicable. The Holt Group, Inc. Labor Compliance Consultant attends the Pre-Construction Conference and reviews the Labor Compliance Requirements for the Project. The Geotechnical representatives are also invited to the Pre-Construction Conference.
- The Holt Group, Inc. reviews submittals forwarded by the Contractor. The Holt Group, Inc. approves, conditionally approves or rejects project submittals. The submittal process insures the materials, equipment and items used for a project comply with the specification requirements. An expeditious submittal review process is encouraged as submittals which are not processed in a timely manner often result in project delays.
- It is recommended that full time project inspection occur at the project site. Inspection work requirements include checking the subbase, subgrade and concrete formwork prior to allowing Class 2 Base, A.C. pavement or concrete placement, monitoring and insuring Geotechnical Testing occurs in conformance with the Contract Documents, keeping concrete and asphalt delivery slips, insuring traffic control measures are in place, responding to clients and contractor questions and similar items. At the conclusion of each day's inspection it is required that the Resident Engineer/Inspector complete a daily report which includes pictures of the day's work activities. The Daily Inspection Report is emailed to the Client, Contractor and other Client approved parties at the conclusion of the work day. The Daily Inspection Report is e-mailed to the Client and Contractor and is accessible at the beginning of the following work day. By daily issuance of the Daily Inspection Reports, problems which occur the previous day are known to all parties for immediate action.
- The Resident Engineer/Project Inspector maintains all level notes, cut sheets, correspondence, material delivery slips, daily activity lists, memorandums, contractor's payment request forms and all other items in 3-inch wide bound notebooks. Each item is labeled and maintained separately within the project notebook. This filing method allows for easy access to records during the construction process and for archive retrieval after the project is complete.
- The Resident Engineer/Inspector monitors the placement of materials at the project site. The Resident Engineer/Inspector obtains copies of material delivery slips and

maintains a daily spread sheet of the materials placed at a project site each day. This is of particular importance for unit price based contracts where the contractor is compensated on a unit price basis for the quantity of material placed.

- The Resident Engineer/Inspector interprets the Contract Documents and answers Contractor questions.
- The Resident Engineer/Inspector is to inspect the work completed to insure the project is constructed in conformance with the project documents. The Resident Engineer/Inspector is to maintain contact with effected Utility Purveyors and notify/coordinate utility improvements or connections required for the project.
- The Holt Group, Inc.'s policy is to conduct weekly project meetings with the Contractor, Subcontractors, Owner, effected utilities, effected Public Agencies with the Resident Engineer/Inspector present. The Resident Engineer/Inspector prepares an Agenda of items to discuss prior to the meeting. The work completed during the week, the work anticipated to be completed next week, work items to be completed by the Resident Engineer, Contractor, Subcontractors or Owner the next week, problems to be addressed and other specific items are discussed. The Resident Engineer/Inspector completes a memorandum of the Weekly Project Meeting summarizing the issues discussed. The Weekly Project Memorandum documents the work completed during the week, lists the project work items to be completed the next week, lists specific work tasks to be completed the next week and offers "look ahead" items. The Weekly Meeting Memorandum is distributed to all pertinent parties. The Weekly Meetings and Weekly Memorandums are extremely effective in maintaining a project schedule, defining important work tasks to be completed and facilitate an atmosphere of teamwork during the Construction Process.
- The Resident Engineer/Inspector is to assist with completing the Contractor's Monthly Payment Request for forwarding to the Client for processing.
- The Resident Engineer/Inspector is to respond to Request for Information (RFI's) forwarded by the Contractor. The Resident Engineer/Inspector is to review change orders submitted by the Contractor, review the change orders with the Client and respond to the change order request. If the change order is approved the Resident Engineer is to assist in processing the change order and insuring the change order is reflected in the Payment Request.
- The Resident Engineer/Inspector is to insure that all Grant/Loan Agency contract document requirements are completed as appropriate during the course of the project construction. Agency required monthly forms are to be completed as required.
- At the conclusion of the project a job walk is to be completed by the Client, Contractor, Resident Engineer/Inspector and Grant/Loan Agency representative as applicable. A comprehensive "punch list" of items necessary for completion prior to project acceptance is to be completed.
- The Resident Engineer/Inspector is to assist in the filing of the Notice of Completion (NOC) for the project. Certified copies of the NOC are to be obtained from the County Recorder's Office and distributed to the Client, Contractor and Grant/Loan Agency as required.

- The Resident Engineer/Inspector is to assist in coordinating the Survey Crew for completion of required staking at the project site.
- The Resident Engineer/Inspector shall require the Contractor submit all Equipment Manuals. The Resident Engineer/Inspector shall assemble the Project Operation and Maintenance Manuals after all the Equipment Manuals for a project are received.
- The Resident Engineer/Inspector is to coordinate and assist in the "start-up" of Mechanical Units, Traffic Lights, Treatment Plant Facility Units, Etc.
- The Resident Engineer/Inspector is to coordinate project tests, i.e.: hydrostatic pressure tests for watermains, disinfection tests for water mains, disinfection tests for Ground Storage Reservoirs, etc. The Resident Engineer/Inspector shall coordinate all specialty tests and start-up requirements during the project such as x-ray weld tests for steel reservoirs or calibrations of programmable controllers (PC's) at water and wastewater treatment plants.
- The Resident Engineer is to update Boards or City Councils with regard to the status of the projects if so directed by the City Manager or District General Manager.
- The Resident Engineer is to take a lead position along with the City Board Staff on Grant/Loan related projects to insure all Grant/Loan related requirements are being compiled with and that the Grant/Loan Agency is forwarded all required information to promptly process and distribute payment reimbursements to the City or District during the construction project.
- The Resident Engineer/Inspector shall coordinate the Geotechnical Testing at the Project Site and ensure the Geotechnical Testing is completed in conformance with the Quality Assurance Program (QAP), if applicable.
- The Resident Engineer is to assemble As-Built records maintained by the Contractor and Resident Engineer during the project construction. The redlined As-Built Drawings are to be forwarded to the Design Engineer for preparation. The finalized As-Built Drawings are to be forwarded to the Owner.

The above items are a few of the items to be completed by the Resident Engineer/Inspector for a project. There are many other duties and responsibilities to be completed and assumed by the Resident Engineer/Inspector for a given construction project.

5.6 MISCELLANEOUS ENGINEERING SERVICES

The Holt Group is available to complete miscellaneous engineering services for clients. Miscellaneous services may include the following:

- Prepare Council or Board Staff Reports or Resolutions.
- Attend Utility, Caltrans or other Agency Meetings on the behalf of the Client if requested.
- Attend Council Meetings or Planning Commission Meetings to address a specific item if requested.

6. RECENT OR PENDING LITIGATION

None.

7. QUALIFICATIONS AND RESUMES OF KEY INDIVIDUALS

Due to the Request for Proposal (RFP) 30-page maximum allowance, the Holt Group has not provided resumes and qualifications of all qualified staff members. Resumes and qualifications of the Holt Group's key staff members have been provided in this proposal response. Additional resumes and qualifications for qualified staff members can be provided at the City of El Centro's request.

James G. "Jack" Holt, P.E.

PRINCIPAL ENGINEER / QAQC

EDUCATION

B.S., Civil Engineering, 1977
University of Michigan
Ann Arbor, Michigan

REGISTRATIONS

Registered Civil Engineer R.C.E. # 31773, California - 1980

Registered Civil Engineer, R.C.E. # 25315, Arizona – 1992

California QSP & QSD SWPPP Certification # 20198

PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers

Water Pollution Control Federation

American Water Works Association

GENERAL QUALIFICATIONS

Mr. James G. "Jack" Holt offers over forty-eight years of engineering, surveying, project administration and construction management experience. Mr. Holt currently manages The Holt Group El Centro office. Mr. Holt's responsibilities include the daily administration of the offices and engineering projects in conjunction with senior principals of the staff. He has been responsible for the design, administration and construction management of various municipal civil engineering projects in California and Arizona since 1979 including water and wastewater treatment plant expansions, wastewater pump stations, domestic booster pump stations, water and wastewater pipeline projects and numerous street and roadway improvement projects for the Cities of Brawley, Blythe, Calipatria, Calexico, Westmorland, El Centro, Imperial, and Holtville, the Heber Public Utility District, the Niland Sanitary District, the Jacumba Community Services District, the Cibola Water District, the Palo Verde County Water District, the Town of Quartzsite and the County of Imperial.

RELEVANT EXPERIENCE

Mr. Holt has completed comprehensive street reports identifying the type of street improvements and associated costs for each street section comprising the roadway system for the Cities of Holtville, Calipatria, and Westmorland. Mr. Holt has completed design, bidding and construction management/resident engineering services for over sixty (60) street improvement projects during the last forty (40) years in the Imperial Valley. Mr. Holt is familiar with Street maintenance improvements (SAMI's, crack sealing, slurry seal coats), and street rehabilitation (cold recycling, A.C. pulverizing, glass grid, petromats, lime treated base, cement treated base, A.C. overlays and ARAM overlays). Mr. Holt has completed the design and construction management of numerous wastewater pump stations, stormwater pump stations, wastewater treatment plants and water treatment

American Concrete Institute

PROFESSIONAL PRACTICE

THE HOLT GROUP, INC.
El Centro, California
1984 - Present

MAINIERO, SMITH & ASSOCIATES
Palm Springs, California
1979 – 1983

PERLA STOUT ASSOCIATES, INC.
Traverse City, Michigan
1977 – 1979

JOHN C. LINTON & ASSOCIATES
Traverse City, Michigan
1974 – 1977

plants projects. Mr. Holt completed the design of the Niland and Seeley townsite street maintenance design in 2013, Winterhaven street maintenance design in 2014, Ocotillo street maintenance design in 2014, Desert Shores street maintenance Design in 2015, and the Bombay Beach Bombay Beach rehabilitation design in 2022. The street maintenance designs were completed for the County of Imperial and included between 5 to 8 miles of roadway improvements within the communities. Mr. Jack Holt also recently completed the design of the Niland Wastewater Treatment Plant and Collection System Improvement Project and the Gateway of the Americas Water Treatment Plant Improvements Project.

Jesus "Juny" Marmolejo, P.E.

PROJECT ENGINEER / PROJECT MANAGER – PRELIMINARY ENGINEERING DESIGN, CONSTRUCTION MANAGEMENT AND FIELD SERVICES

EDUCATION

B.S., Civil Engineering, June 2002
California State University at
Long Beach
Long Beach, California

CERTIFICATIONS

Registered Professional Engineer (P.E.)
California, Certificate No. C80410

PROFESSIONAL PRACTICE

THE HOLT GROUP, INC.
El Centro, California
August 2002 - Present

KPFF CONSULTING ENGINEERS
Long Beach, California
June 2001 – August 2002

GRANITE CONSTRUCTION
El Centro, California
June 1998 – August 1998

GENERAL QUALIFICATIONS

During Mr. Marmolejo's tenure at The Holt Group, he has prepared and managed multiple engineering studies, prepared improvement plans, prepared specifications and contract documents, and has provided construction management services for various types and magnitudes of civil infrastructure including water and wastewater treatment plants, pump stations, retention basins, water distribution, sewer and stormwater collections systems, and street infrastructure.

Mr. Marmolejo has extensive knowledge and command of various civil engineering activities which include Preliminary Engineering Reports, Improvements Plans, Contract Documents, Specifications, Storm Water Pollution Prevention Plans, Quantity Estimates and Cost Estimates, Environmental Reports, Engineering Calculations, Surveying, Construction Inspection and Observation, and Meeting and Coordination between Clients and Contractors.

Mr. Marmolejo has completed project coordination efforts with various public agencies including the County of Imperial, Imperial Irrigation District (water and power departments), AT&T, Time Warner Cable, The Gas Company, Caltrans, Regional Water Quality Control Board, SWRCB's Division of Drinking Water, and various City agencies.

Mr. Marmolejo is The Holt Group's Manager of Construction Activities and oversees construction related projects. Construction Management responsibilities managed by Mr. Marmolejo include the administration of pre-construction conferences and progress meetings, observation and inspection of construction activities, preparation of daily construction activity logs, materials and equipment inventory, submittal review of equipment and material, review and response to RFI's, review and processing of change orders, review and processing of contractor's payment requests, preparation of as-built drawings, building and agency permit coordination and environmental review, commissioning and start-up of facilities, close-out of project and project records filing and archiving, coordination of project survey requirements, structural review, labor compliance and monitoring services (as required).

FUMI HAMANAKA GALVAN, P.E., P.L.S.

PROJECT ENGINEER / PROJECT MANAGER – DESIGN

EDUCATION

B.S., Civil Engineering, 2000
Oregon Institute of Technology
Klamath Falls, Oregon

B.S., Civil Engineering, 2002
Muroran Institute of Technology
Hokkaido, Japan

CERTIFICATIONS

Registered Civil Engineer, R.C.E. # 68390, California

Professional Land Surveyor, P.L.S. # 8990, California

California QSP and QSD Certification # 20331

PROFESSIONAL PRACTICE

THE HOLT GROUP, INC.
El Centro, California
February 2000 - Present

GENERAL QUALIFICATIONS

Ms. Galvan has over twenty-five years of experience in the civil engineering field which includes providing field surveying, design, plan checking, record research, construction management and project management services. Since joining The Holt Group, Ms. Galvan has completed the preparation of hydrology and hydraulic analyses, stormwater pollution and prevention plans, traffic control plans, engineer's quantity and cost estimates, preparing and processing of bidding/contract documents of numerous residential and commercial subdivisions, roadway projects, and wastewater, water and stormwater facility improvement projects. Ms. Galvan has also completed a variety of work tasks including supervising the junior engineering staff, project management, preparing bidding documents and specifications, communicating with stakeholders for the project specific compliance requirements, obtaining permits, and reviewing the final plans and design documents for quality assurance.

RELEVANT EXPERIENCE

Client: City of Holtville
Project: City Wide Street Improvement Project – Phase I & II
Location: Holtville, California
Ms. Galvan has also completed engineering design services for the City of Holtville City Wide Street Improvement Project Phase I & II completed in 2019. Ms. Galvan was responsible for obtaining field work, preparing the project improvement plans including the development of the traffic control plan, specifications and contract documents, preparation of the engineer's quantity and cost estimate, coordinating with local utility purveyors and governmental agencies, coordination with the City Public Works Staff, participation throughout the bidding process including the processing of the contract documents and providing construction management and payment processing services. The project included infrastructure improvements for the improvement of the entire City of Holtville Street System.

Client: City of Calipatria
Project: Bond Financed Street Rehabilitation Project
Location: Calpatria, California
Ms. Galvan has also completed the design and bidding services for the City of Calipatria Bond Financed Street Improvement Project which was completed and submitted for bid in 2020. In conjunction the project identified nine (9) rehabilitation street sections within the Calipatria City Limits to be improved. Ms. Galvan and The Holt Group Principal Engineer jointly completed the coordination

of the design survey work, design of the improvement plans, the engineer's quantity and cost estimates, the specifications, and assisted with the project bidding phase.

Client: City of El Centro
Project: South Imperial Avenue Water Pipeline Improvements and Drainage Pipeline Installation Project
Location: El Centro, California
Ms. Galvan has completed design services for the South Imperial Avenue Water Pipeline Improvements and Drainage Pipeline Installation Project in which design services were completed in 2019**.** Ms. Galvan was responsible for the preparation of the Improvement Plans for the replacement of an 18-inch diameter water pipeline along South Imperial Avenue including the directional drilling of the 18-inch diameter water pipeline beneath Interstate 8. Ms. Galvan was responsible for the design and bidding phases of the project including the preparation of the plans, specifications, and bid forms. Ms. Galvan was responsible for interfacing with Caltrans regarding the water pipeline installation and directional drilling requirements within the Interstate 8 Right of Way, interfacing and coordinating the stormwater pipeline design with Caltrans and The Imperial Irrigation District, and completing the background investigatory work to secure the easements for the stormwater and water pipelines. Ms. Galvan also assisted the City of El Centro in providing the back-up information required by Caltrans for reimbursing the City with the design and construction costs of the project within Caltrans Right of Way.

Client: City of Holtville
Project: Dollar General Store Site Plan - Plan Checking Services
Location: Holtville, California
Ms. Galvan has completed multiple plan checks of the City of Holtville Dollar General Store Site Plan Review. Ms. Galvan reviewed the onsite and offsite improvement plans. Ms. Galvan conducted meetings with the Developer, Developers Engineer, and City Staff. The plans were reviewed for compliance with the project conditions of approval as approved by the City of Holtville Planning Commission and City of Holtville Standard Details and Specifications, and project geotechnical report. The review of the phase included a review of the offsite street improvements, offsite water services, on-site stormwater infiltration system, parking lot, utility review and similar items. It was also necessary to coordinate the offsite review improvements with Caltrans. A Caltrans Encroachment Permit was required for the developer to obtain for improvements along Highway 115.

Rolando Sanchez, P.E.

SENIOR DESIGN ENGINEER

EDUCATION

B.S., Mechanical Engineering, Dec 2004
CETYS University
Mexicali, Baja California, Mexico

CERTIFICATIONS

Registered Mechanical Engineer in Mexico
License No. 6642365

Registered Professional Civil Engineer (P.E.) in the State of California
License No. 90701

PROFESSIONAL PRACTICE

THE HOLT GROUP, INC.
El Centro, California
July 2005 – Present

SONY CORPORATION
Mexicali, Baja California, Mexico
June 2004 – July 2005

GENERAL QUALIFICATIONS

Mr. Rolando Sanchez obtained a Bachelor of Engineering degree in Mechanical Engineering from CETYS University in Mexico. Mr. Sanchez has over twenty years of experience in the civil engineering field. Mr. Sanchez has performed duties including surveying, design and construction management services for various infrastructure improvement projects. Mr. Sanchez has assisted with the preparation of various SWPPP documents, grading plans, civil engineering analyses, specifications and improvement plans. Mr. Sanchez has also completed various types of civil engineering calculations including earthwork calculations and survey calculations. Mr. Sanchez has assisted with the design of various civil infrastructure improvements such as roadways, water and wastewater treatment plants, water, stormwater and wastewater pipelines, pump stations, retention basins, grading plans and various other infrastructure improvements. Mr. Sanchez has also assisted with the design of various mapping documents, in addition to various solar energy and power transmission related projects. Mr. Sanchez is extremely knowledgeable with regards to drafting criteria and AutoCAD Civil 3D functions.

RELEVANT EXPERIENCE

Client: AECOM
Project: California State Department of Corrections – Ironwood State Prison – HVAC Chilled Water System Project
Location: 13 miles west of Blythe, California
The Holt Group was a sub-consultant to AECOM for the State of California Department of Corrections Ironwood State Prison, Heating, Ventilation and Air Conditioning System project. The project construction cost was 142 million dollars and involved replacing the prison's deteriorated evaporative cooling system with a Heating, Ventilation and closed loop chilled water Air Conditioning (HVAC) system at the Ironwood State Prison located approximately 13 miles west of Blythe, California. The new HVAC system was to be connected to and supported 20 large housing structures and the majority of the other prison institutional support structures. The main components of the HVAC consisted of a large chiller plant and a closed looped underground water pipeline system to deliver and return the chilled water to the chiller plant. The Holt Group's sub-consultant task was to complete the Civil grading design and plans for different HVAC support areas and to prepare the plan and profile chilled water pipeline plans for the HVAC system.

Mr. Sanchez assisted with the project design consisting of the preparation of the plan and profile pipeline drawings and Civil Grading plans. The identification and

accurate illustration of existing utilities on the plan and profile sheets was extremely important to avoid conflicts with the new chilled water pipeline. Mr. Sanchez was the lead CAD designer in the preparation of the demolition plans, pipeline plan and profile sheets, grading plans and detail sheets. Mr. Sanchez also assisted with the preparation of the Civil Section of the Specifications. Mr. Sanchez was the lead contact person in providing construction support services during the project construction period. Mr. Sanchez reviewed the Civil submittal documents, regularly participated in teleconference calls to discuss construction issues, responded to RFI's and conducted periodic site visits.

Client: County of Imperial - ICWED
Project: Niland Public Safety Facility
Location: Niland, California

Mr. Sanchez assisted in the completion of the preliminary design and was the lead Design Engineer for the preparation of the Civil grading and offsite street and utility design for the Niland Public Safety Facility project. The Holt Group completed the preliminary and final project design documents along with the Architectural subconsultant, Holt Architects. The Imperial County Community and Economic Development Department (ICCED) obtained a 5 million dollar CDBG Grant to construct the project. The project consisted of demolishing the existing Niland Fire Department Building at 8071 Luxor Avenue in Niland, California and constructing a new 7,500 square foot Fire/Police Substation/Cooling Center Facility at the same site.

The Holt Group designed the civil on-site and off-site improvement plans including roadway improvements along Luxor Avenue and Third Street, site fencing, a new masonry solids waste enclosure, new masonry wall along the south project boundary, an offsite alley improvement extending from the southerly property boundary to Fourth Street and parking lot areas. The improvement plans also included the sanitary sewer service pipeline design, domestic and fire water pipeline designs and utility coordination. The Holt Group completed the submission and coordination of the Imperial Irrigation District Electrical Customer Service Proposal (CSP) for the demolition and installation of electrical power service lines. The approved IID CSP was approved during the design period. The Holt also completed the initial coordination of the gas pipeline disconnection and new gas pipeline service with Southern California Gas Company. The Holt Group also completed offsite water improvement plans in conformance with Golden State Water Company Guidelines and assisted with the coordination of Golden State applications and fee payments. Mr. Sanchez completed the offsite water improvement plans in conformance with Golden State Water Company guidelines. Mr. Sanchez took the lead in completing the ADA design of sidewalks and ramps for the path of travel along the exterior of the Niland Public Safety Facility. Mr. Sanchez coordinated the ADA design with the Project Architect and County of Imperial Representatives. The Holt Group

completed the Bid Forms, Special Conditions and Civil Technical Conditions. Mr. Sanchez prepared the Civil Technical Conditions. Mr. Sanchez completed the Engineers Opinion of Probable Quantity and Cost for the Project. Mr. Sanchez also attended numerous meetings during the project design period with the County of Imperial and Project Architect to streamline the project design plans and specifications and maintain the project costs to a minimum.

8. CLIENT REFERENCES

Mr. Nick Wells City Manager City of Holtville 121 West Fifth Street Holtville, CA 92250 Tel: 760/356-2912	**Ms. Madeline Dessert** General Manager Heber Public Utility District 1078 Dogwood Road Heber, CA 92249 Tel: 760/482-2440
Ms. Laura Gutierrez City Manager City of Calipatria 125 North Park Avenue Calipatria, California 92233 Tel: 760/348-4141	**Mr. John Gay, P.E.** Public Works Director County of Imperial 155 S. State Street El Centro, California 92243 Tel: 760/482-4462
Ms. Laura Fischer City Manager City of Westmorland 355 S. Center Street Westmorland, California 92281 Tel: 760/344-3411	**Mr. Rom Medina** Director of Public Works and Operations City of Brawley 180 S. Western Avenue Brawley, California 92227 Tel: 760/344-5800

ATTACHMENT “A” – ACKNOWLEDGED ADDENDA

REQUEST FOR PROPOSALS FOR ON-CALL CIVIL ENGINEERING GENERAL, AND CIVIL ENGINEERING WATER AND WASTEWATER TREATMENT SERVICES

ADDENDUM NO. 1

Date: September 10, 2025
To: Prospective Bidders
From: Abraham Campos, PE – Public Works Director/City Engineer
City of El Centro
307 W. Brighton Ave., El Centro, CA 92243
Telephone: (760) 336-3152

This addendum forms a part of the contract documents and modifies the original request for proposal documents. Addenda shall be noted as received and acknowledged on Proposal when submitted as outlined in the RFP Package.

Failure to properly acknowledge all Addenda on the proposal may be cause for rejection of proposal.

***Summary*:**

1) Change to RFP Due Date
2) Change to Q&A Deadline
3) Revisions to RFP Section X. Selection Process
4) Q&A Response

Changes:

1. RFP due date is hereby extended to October 3, 2025. Submittals must be received no later than 4:30 PM at the same location as noted in the RFP.
2. The deadline for questions is hereby extended to Monday, September 22, 2025 at 5:00 P.M. Questions must be submitted through Planet Bids.
3. The following sentence shall be deleted from the RFP Section X. Selection Process: "All Consultants issued this RFP were previously asked to certify that they would execute a contract with the City of El Centro with no exceptions or additions shall be deleted."

Questions and Answers:

1. Are we able to use the City of El Centro as one of our three references/projects in our Statement of Qualifications?
   a. No.

2. On page 8: The submittal requirements specify "Responses must be limited to 30 pages maximum." Does the 30-page count include cover, cover letter, table of contents, resumes, and Exhibit D Levine Act Statement?

a. *Cover, cover letter, table of contents, and Exhibit D Levine Act Statement will be excluded from the 30 page count. Resumes will be counted towards the 30 page limit.*

3. In reviewing the Sample Agreement, we didn't see any language addressing rate escalation. If it's not currently included, may we incorporate a provision for annual rate adjustments in our Fee Proposal?
    a. *Yes, incorporate a provision for rate escalation and/or fee schedules for the 2 year term of the contract if awarded*

4. The Water and Wastewater Treatment discipline scope of services states that the consultant shall provide services for projects identified in the City's current water, wastewater, and stormwater master plans or as requested by the City, including updates to master plans. Though the discipline states water and wastewater 'treatment' specifically, will firms with master planning and collection/distribution system planning and design experience be considered for on-call services in the absence of treatment system design experience?.
    a. *No, you are welcomed to submit for the Civil Engineering General services discipline.*

5. Would the City consider excluding the cover, cover letter, and table of contents from the 30-page limit? And can the signed Levine Act statement be in an Appendix that is also excluded from the 30-page limit?
    a. *Refer to question No. 2*

6. Will you permit an 11x17 landscape page for a chart showing staffing availability and current workload?
    a. *Yes.*

7. We would like to confirm whether the Civil Engineering - General scope needs to include the review and preparation of improvement plans and studies for both domestic/raw water and sewer systems.
    a. *Yes*

8. Does the 30-page maximum include the front cover, back cover, and table of contents?
    a. *Refer to question No. 2*

9. Does 11" x 17" landscape pages count as one or two pages?
    a. *Counts as one page.*

10. Do staff resumes count toward the 30 page maximum?
    a. *Yes. Refer to question No. 2.*

11. On page 9 of the RFP, it states that "All Consultants issued this RFP were previously asked to certify that they would execute a contract with the City of El Centro with no exceptions or additions." Can you clarify when this occurred? Was this RFP issued only to select firms? We were under the impression that this was a publicly advertised RFP.
    a. *Please disregard this sentence. It will be removed from the RFP via an addendum. In conformance with the Table of Contents, changes to the attached sample agreement are not desired. Should very minor modifications be requested they need to be included as part of your proposal submittal. Refer to*

section X. Selection Process of the RFP

12. We were just made aware of this RFP. Would you please extend the due date by two weeks from Sept 19, 2025 to Oct 3, 2025?
    a. *Refer to Addendum No. 1, Item No. 1 Change to RFP Due Date listed above.*

END OF ADDENDUM NO. 1

REQUEST FOR PROPOSALS FOR ON-CALL CIVIL ENGINEERING GENERAL, AND CIVIL ENGINEERING WATER AND WASTEWATER TREATMENT SERVICES

ADDENDUM NO. 2

Date: September 25, 2025
To: Prospective Bidders
From: Abraham Campos, PE – Public Works Director/City Engineer
City of El Centro
307 W. Brighton Ave., El Centro, CA 92243
Telephone: (760) 336-3152

This addendum forms a part of the contract documents and modifies the original request for proposal documents. Addenda shall be noted as received and acknowledged on Proposal when submitted as outlined in the RFP Package.

Failure to properly acknowledge all Addenda on the proposal may be cause for rejection of proposal.

***Summary*:**

1) Q&A Response

Questions and Answers:

1. Can the City please confirm whether the separate fee schedule refers to our team's billing rates?
   a. *Yes, please refer to section IX. Delivery of Proposals of the RFP.*

2. Our firm has over 1,000 employees, making it impractical to provide a total count by title and discipline. Would it be acceptable to provide employee counts by discipline only?
   a. *Yes, however, refer to section XI. Submittal Requirements item No. 10.*

END OF ADDENDUM NO. 2

ATTACHMENT “B” – LEVINE ACT STATEMENT

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES __X__ NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES __X__ NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

10/3/2025
DATE

(SIGNATURE OF CONSULTANT)

EXHIBIT B
FEE SCHEDULE

The Holt Group, Inc.

Hourly Rate Schedule

2025

Municipal Rates

PLANNING	
Principal Planner (AICP)/ Project Manager	$150.00/Hour
Senior Planner	$140.00/Hour
Associate Planner	$135.00/Hour
Assistant Planner	$100.00/Hour
Planning Designer/AutoCAD Technician	$95.00/Hour
Planning Clerk	$70.00/Hour
Senior Labor Standards Compliance Monitor	$100.00/Hour
Assistant Labor Standards Compliance Monitor	$85.00/Hour
ENGINEERING	
Principal Engineer P.E./L.S.	$170.00/Hour
Project Engineer P.E./L.S.	$150.00/Hour
Associate Project Engineer	$140.00/Hour
Assistant Project Engineer	$130.00/Hour
Project Manager	$150.00/Hour
Civil Designer III	$105.00/Hour
Civil Designer II	$100.00/Hour
Civil Designer I	$90.00/Hour
Senior Plan Checker P.E./L.S.	$150.00/Hour
Junior Plan Checker	$120.00/Hour
Resident Engineer	$140.00/Hour
Assistant Resident Engineer	$120.00/Hour
Designer III	$90.00/Hour
Designer II	$80.00/Hour
Designer I	$75.00/Hour
SURVEYING	
Survey Project Manager	$150.00/Hour
2 Man Survey Crew with GPS (Overtime)	$340.00/Hour
2 Man Survey Crew with GPS	$270.00/Hour
1 Man Survey Crew with GPS	$160.00/Hour
Survey Travel Time	Crew Rate x 50%

NOTES:

1. The minimum time charged for survey project is 1/2 day (4 hours at the crew rates plus travel time).
2. Crew charges include standard surveying equipment.

Rental of any special equipment will be charged at cost plus 15%.

ADMINISTRATIVE SUPPORT SERVICES	
Senior Administrator	$90.00/Hour
Word Processor	$65.00/Hour
Office Technician/Courier	$60.00/Hour
REIMBURSABLE EXPENSES	
Photocopies (each)	$0.25
Plots (per square foot in color)	$1.70
Plots (per square foot in black & white)	$0.85
Computer Plotter	$19.00/Hour
Postage	Cost + 15%
Vehicle Mileage	$0.60
Reproduction, Special Photography, Printing, etc. performed by Subcontractor, Aerial Photogrammetry, Delivery Service, Hotel/Motel Per Diem Expenses	Cost + 15%

EXHIBIT C
INSURANCE REQUIREMENTS

Without limiting Consultant's indemnification of City, and prior to commencement of work and/or services under this Agreement, Consultant shall obtain, provide, and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and, in a form, satisfactory to City.

General liability insurance. Consultant shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office (Form CG 00 01), in an amount not less than $1,000,000 per occurrence, $2,000,000 general aggregate, for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. Consultant shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned, or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Professional liability (errors & omissions) insurance. Consultant shall maintain professional liability insurance that covers the Services to be performed in connection with this Agreement, in the minimum amount of $1,000,000 per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this agreement and Consultant agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this agreement.

Workers' compensation insurance. Consultant shall maintain Workers' Compensation Insurance (statutory limits) and Employer's Liability insurance (with limits of at least $1,000,000).

Consultant shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of City, its officers, agents, employees, and volunteers.

Umbrella or excess liability insurance. [If required to meet higher limits.]. Consultant shall obtain and maintain an umbrella liability insurance policy with limits that will provide bodily injury, personal injury, and property damage liability coverage, including commercial general liability, automobile liability, and employer's liability. Such policy or policies shall include the following terms and conditions:

- A drop-down feature requiring the policy to respond if any primary insurance that would otherwise have applied proves to be uncollectible in whole or in part for any reason, other than bankruptcy or insolvency of said primary insurer;
- "Pay on behalf of" wording as opposed to "reimbursement";
- Concurrency of effective dates with primary policies.

Should Consultant obtain and maintain an excess liability policy, such policy shall be

excess over commercial general liability, automobile liability, and employer's liability policies. Such policy or policies shall include wording that the excess liability policy follows the terms and conditions of the underlying policies.

Other provisions or requirements

Proof of insurance. Consultant shall provide certificates of insurance and required endorsements to City as evidence of the insurance coverage required herein. Insurance certificates and endorsements must be approved by City's Risk Manager prior to commencement of performance. Current certification of insurance shall be kept on file with City for the contract period and any additional length of time required thereafter. City reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Consultant shall procure and maintain for the contract period, and any additional length of time required thereafter, insurance against claims for injuries to persons or damages to property, or financial loss which may arise from or in connection with the performance of the Work hereunder by Consultant, their agents, representatives, employees, or subconsultants.

Primary/noncontributing. Coverage provided by Consultant shall be primary and any insurance or self-insurance procured or maintained by City shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City before the City's own insurance or self- insurance shall be called upon to protect it as a named insured.

City's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary, and any premium paid by City will be promptly reimbursed by Consultant or City will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, City may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the City's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against City, its elected or appointed officers, agents, officials, employees, and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against City and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non-estoppel). Consultant acknowledges and agrees that any actual or alleged failure on the part of the City to inform Consultant of non-compliance with any requirement imposes no additional obligations on the City nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Consultant maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Notice of cancellation. Consultant agrees to oblige its insurance agent or broker and insurers to provide the City with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage. If any of the Consultant's insurers are unwilling to provide such notice, then Consultant shall have the responsibility of notifying the City immediately in the event of Consultant's failure to renew any of the required insurance coverages, or insurer's cancellation or non-renewal.

Additional insured status. General liability, automobile liability, and umbrella/excess liability insurance policies shall provide or be endorsed to provide that City and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to City and approved of in writing.

Separation of insureds. A severability of interests provision must apply for all additional insureds ensuring that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass through clause. Consultant agrees to ensure that its subconsultants, subcontractors, and any other party who is brought onto or involved in the project/service by Consultant (hereinafter collectively "Subcontractor"), provide the same minimum insurance coverage and endorsements required of Consultant under this Agreement. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. However, in the event Consultant's Subcontractor cannot comply with this requirement, which proof must be submitted to the City, Consultant may still be able to utilize the Subcontractor provided Consultant shall be required to ensure that its Subcontractor provide and maintain insurance coverage and endorsements sufficient to the specific risk of exposure involved with Subcontractor's scope of work and services, with limits less than required of the Consultant, but in all

other terms consistent with the Consultant's requirements under this Agreement. This provision does not relieve the Consultant of its contractual obligations under the Agreement and/or limit its liability to the amount of insurance coverage provided by its subcontractors. This provision is intended solely to provide Consultant with the ability to utilize a Subcontractor who may be otherwise qualified to perform the work or services but may not carry the same insurance limits as required of the Consultant under this Agreement given the limited scope of work or services provided by the subcontractor. Consultant agrees that upon request, all agreements with Subcontractors, and others engaged in the project and/or services, will be submitted to City for review.

City's right to revise specifications. The City reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Consultant ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Consultant, the City and Consultant may renegotiate Consultant's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by City. City reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible, or require proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention through confirmation from the underwriter.

Timely notice of claims. Consultant shall give City prompt and timely notice of claims made or suits instituted that arise out of or result from Consultant's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

Claims made: The following provisions shall apply if any of the required policies are written on a claims-made basis:

a. The Retroactive Date of the policy must be shown and must be before the date of the Agreement or the beginning of the contracted work.

b. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement or the work.

c. If coverage is canceled or not renewed and it is not replaced with another claims-made policy form with a Retroactive Date that precedes the date of this Agreement, Consultant must provide extended reporting coverage for a minimum of five (5) years after completion of the Agreement or the work. The City shall have the right to exercise, at the Consultant's sole cost and expense, any extended reporting provisions of the policy, if the Consultant cancels or does not renew the coverage.

d. A copy of the claim reporting requirements must be submitted to the City prior to the commencement of any work under this Agreement.

EXHIBIT D
CONSULTANT'S FINANCIAL DISCLOSURE STATEMENT [1]

Consultant will comply with all conflict-of-interest laws and regulations including, without limitations, City's Conflict of Interest Code (on file in the City Clerk's Office) as required by Section 4.10 of this Agreement. It is incumbent upon the Consultant to notify the City pursuant to Sections 7.1 and 7.5 of any staff changes relating to this Agreement. The City Manager has made the following determination and Consultant, by his/her signature, acknowledges said determination. [2]

A. In accomplishing the scope of services of this Agreement, all officers, employees and/or agents of Consultant will be performing a very limited and closely supervised function, and, therefore, unlikely to have a conflict of interest arise. No disclosures are required of any officers, employees, and/or agents of Consultant. Consultant duties are as follows:

City Manager	SECRETARY/CFO Consultant Signature & Title JAMES G. HOLT

B. In accomplishing the scope of services of this Agreement, Consultant will be performing a specialized or general service for the City, and there is substantial likelihood that the Consultant may make or participate in making a governmental decision, which may have a foreseeable material effect on a financial interest. As a result, the Consultant shall be subject to the Disclosure Category "Consultant" of the City's Conflict of Interest Code.

City Manager	SECRETARY/CFO Consultant Signature & Title JAMES G. HOLT

1. Fair Political Practices Commission Section 18700.3 defines a consultant as follows:
(a) For purposes of Sections 82019 and 82048, "consultant" means an individual who, pursuant to a contract with a state or local government agency:
(1) Makes a governmental decision whether to:
(A) Approve a rate, rule, or regulation;
(B) Adopt or enforce a law;
(C) Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order, or similar authorization or entitlement;
(D) Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract that requires agency approval;
(E) Grant agency approval to a contract that requires agency approval and to which the agency is a party, or to the specifications for such a contract;
(F) Grant agency approval to a plan, design, report, study, or similar item;
(G) Adopt, or grant agency approval of, policies, standards, or guidelines for the agency, or for any subdivision thereof; or
(2) Serves in a staff capacity with the agency and in that capacity participates in making a governmental decision as defined in Regulation 18704(a) and (b) or performs the same or substantially all the same duties for the agency that would otherwise be performed by an individual holding a position specified in the agency's Conflict of Interest Code under Section 87302.
2. Disclosure by Consultants: Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the City's adopted Conflict of Interest Code, subject to the following limitations: The City Manager may determine in writing that a particular consultant, although a "designated position", is hired to perform a range of duties that is limited in scope and closely supervised, and, thus, is not required to comply with the disclosure requirements in the City's adopted Conflict of Interest Code. Such written determination shall include a description of the consultant's duties. The City Manager's determination is a public record and shall be retained for public inspection in the same manner and location as the City's adopted Conflict of Interest Code.

EXHIBIT E
LEVINE ACT CERTIFICATION

PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Sonia Carter
Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP? _____ YES ___X___NO
   If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES ___X___NO
   If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

12/29/2025
DATE

_____
(SIGNATURE OF CONSULTANT)
JAMES G. HOLT

Effective April 30, 2025

EXHIBIT F

REQUEST FOR PROPOSALS (RFP)

CITY OF EL CENTRO
PUBLIC WORKS
Serving our community by sustaining and improving life

City of El Centro
Incorporated 1908
Shining with Opportunity

REQUEST FOR PROPOSALS
FOR
ON-CALL SERVICES

1. ***CIVIL ENGINEERING – GENERAL***
2. ***CIVIL ENGINEERING - WATER AND WASTEWATER TREATMENT***

Requested By:

City of El Centro
Department of Public Works
307 W. Brighton Ave.
El Centro, CA 92243
Phone: (760) 336-3152
Abraham Campos, PE
Director of Public Works/ City Engineer
August 2025

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EXHIBITS

A - Civil Engineering – General and Water and Wastewater Treatment. Expanded Scope

B – Sample Proposal Evaluation Form

C – Sample Design Professional Services Agreement

D- Levine Act. Statement

E- Sample Task Order

*****No changes shall be made to consultant agreement by consultant.

II. REQUEST FOR PROPOSAL ("RFP")

NOTICE IS HEREBY GIVEN THAT the City of El Centro (the "City") is requesting proposals from qualified consultants to provide Civil Engineering Design (Roads and Traffic, and Water and Wastewater facilities) (the "Consultant(s)").

DEADLINE

Consultants are requested to submit five hard copies of their proposal before **04:30 p.m.** on Friday, September 19, 2025. Refer to section IX for further information.

Note: late, emailed, or faxed proposals will not be considered.

OBTAINING DOCUMENTS

The Contract Documents are available through Planet Bids, by accessing our website (www.cityofelcentro.org) and selecting "GOVERNMENT > PUBLIC WORKS> BIDS & PROPOSALS> PROCEED TO SITE".

III. INTRODUCTION AND PURPOSE

INTRODUCTION.
The Department of Public Works - Engineering Division of the City of El Centro is seeking professional services from a consulting firm or team (Consultant) for On-Call services for the two (2) disciplines listed below. The City will contract with the primary firm under which subconsultants may operate. The City is requesting services for up the term of the agreement. The term of the agreement shall be for two (2) years, with up to three (3) one (1) year extensions, which extensions shall be at the City's sole option.

Disciplines:

1. Civil Engineering – General Civil Engineering
2. Civil Engineering – Water and Wastewater Treatment

Up to three consultants shall be selected for each discipline. The City reserves the right to increase or decrease the number of consultants awarded a contract under each discipline.

Consultant must submit a separate responsive proposal to each discipline that Consultant wishes to be considered. Each discipline will be judged independently. You are not required to submit a proposal for both disciplines.

PURPOSE. The purpose of this RFP is to:

1. Familiarize prospective consultants with the information necessary to understand the consultant selection process and the required documentation consultant must

submit.

2. Receive, review and consider proposals from prospective consultants, and select a consultant to provide the desired services for each discipline.
3. Execute a contract for on-call services in the form of a Professional Services Agreement (PSA) (see RFP Exhibit C – Sample Standard Agreement), which will include a negotiated rate schedule established at the time of its execution.
4. Advise prospective consultants that the City is not obligated to issue any contract(s) by issuing this proposal.

The Consultant shall provide the Public Works Department with the ability to obtain assistance quickly during peak workload periods, staffing absences and when expedited/fast track support is needed to satisfy City customers. The most important objective is to maintain a level of high-quality, Civil Engineering Design (Roads, Traffic, Water and Wastewater facilities).

Qualified entities are invited to submit written proposals for consideration in accordance with this request. These services will be conducted under a contract with the City.

The City reserves the right to reject any or all responses received as a result of this solicitation; to extend the submission due date for; to modify, amend, reissue or rewrite this document; and to procure any or all services by other means. Consultants that respond to this RFP shall comply with all applicable laws. There are no M/WBE and/or DBE requirements for this RFP.

The contract will be regulated according to the provisions of all Federal, State and local laws and ordinances that are applicable. This includes compliance with prevailing wage rates and their payment in accordance with the California Labor Code, as applicable.

Consultants are advised to consider whether services to be performed include classifications subject to state or federal prevailing wage requirements. Prevailing wages will apply if the services to be performed will involve land surveying (such as flag persons, survey party chief, rodman or chainman), materials sampling and testing (such as drilling rig operators, pile driving, crane operators), inspection work, soils or foundation investigations, environmental hazardous materials and so forth. California State prevailing wage information is available through the California Department of Industrial Relations website at https://www.dir.ca.gov/OPRL/dprewagedetermination.htm

Labor categories subject to prevailing wage requirements, when employed for any work on this project, are wholly the responsibility of the firm or individual named in any Professional Services Agreement approved by the City. City will not assume any responsibility for Consultant's failure to pay prevailing wages in accordance with State law.

IV. BACKGROUND

The City of El Cento incorporated in 1908 and later became a Charter city. El Centro is the center of one of Southern California's most promising new commercial and industrial regions. There are two international border crossings nearby for commercial and noncommercial vehicles. Covering 11.019 square miles, it is the largest city in Imperial County. El Centro is located 616 miles southwest of San Francisco, 117 miles east of San Diego and 245 miles west of Phoenix, Az. and just 15 minutes from the international industrial complexes in Mexicali, Baja California. El Centro is accessible via Interstate 8, State Highway 86 and State Highway 111. The City population is estimated to be over 45,000 residents; however, population increases during the day as the City is the County seat.

The consultant(s) will work under the direction of the Public Works Director or designee to handle engineering service tasks as they are required. The highest rated consultant(s) will be selected to be on contract for on-call services. Consultant(s) will enter into a master agreement which will specify the billing rates, personnel to be assigned, and other terms. No monthly retainer is anticipated.

Letter proposals will be requested from one or more on-call consultants when engineering service tasks are required. The letter proposals will set forth the scope, fee, personnel, and time of performance for the particular task. The letter proposals will be approved through a task order implementing and attached to the master agreement. Consultant selection for a particular task will be based on qualification as set forth in the Statement of Qualifications. Consultant selection will be at the sole discretion of the City. No consultant is guaranteed work.

V. SCOPE OF SERVICES

Consultants shall submit in their proposal in addition to the main scope the discipline(s) for which they wish to be qualified. The disciplines include, but are not necessarily limited to the following areas of experience and expertise.

Civil Engineering - General

The consultant shall design and prepare plan, specifications, and estimate (PS&E) for arterial and local streets; including traffic engineering/design, landscaping, water, sewer and storm drain design. Sample work activities include:

- Preparation of Phase I and II site investigation and soils reports, including field exploration, drill test borings, sample soils, compacting testing, and laboratory tests. Laboratory shall be Caltrans certified.
- Review and/or preparation of traffic plans (signing and striping plans, traffic detour and traffic staging plans, as well as signals), traffic studies/reports.
- Review and/or preparation of street improvement plans.
- Review and/or preparation of domestic or raw water improvement plans and studies.
- Review and/or preparation of sewer improvement plans and studies

- Review and/or preparation of storm drain improvement plans, hydrology and hydraulic reports.
- Review and/or preparation of tract and parcel map, lot line adjustments, certificates of compliance, map/easement or legal descriptions and supporting documentation.
- Review and/or preparation of structure calculations.
- Review and/or preparation of engineering quantity estimates and costs.

Designers shall have a minimum of 10 years' experience in civil design for public facilities. A detailed scope of work is available as Exhibit A of this RFP.

The consultant shall assist City staff to identify and prioritize pavement preservation projects; design and prepare plan, specifications, and estimate (PS&E) for pavement projects. Utilize the latest technologies to design and construct/rehabilitate pavements in the most cost-effective way. Consultant must be experienced with state and federal funded projects and pavement designers shall have a minimum of 10 years' experience in pavement design. A detailed scope of work is available as Exhibit A of this RFP.

Civil Engineering – Water and Wastewater Treatment Facilities

The objective of this discipline is to enable the City to improve the City potable water, sanitary sewer and storm water systems to meet the rules and regulations of the State and Federal mandates as well as public demand. Consultant shall provide all services and work required to complete studies, designs, plans, specifications and estimates for City projects as identified in the current city water, wastewater and storm water master plans or as may be requested by the City. City may request the consultant to update said master plans. The consultant shall have 10 years' experience in the design of potable and sanitary sewer treatment, collection and distribution systems in compliance with State and Federal requirements in the State of California. A detailed scope of work is available as Exhibit A of this RFP.

The above list is not intended to be exclusive; other services will likely be sought as the need arises. The statement of qualifications does not need to include a fee proposal for any of these specific tasks; fee proposals for individual tasks would be requested during the course of the on-call contract.

Periodically, the City has the need for assistance with special engineering studies or general staff augmentation. The consultant must be able to assist the City through this contract to provide the necessary services.

The consultant shall utilize its' in-house staff and/or sub-consultants to complete the assignments to meet the City standards. For specialized work for which the prime consultant will require a sub-consultant, the prime consultant will serve as an administrative liaison between the City and the sub-consultant. The prime consultant mark-up for sub-consultants shall not exceed 10%.

VI. PROJECT SCHEDULE

The following is a tentative schedule for the project:

Release of RFP	**08/22/2025**
Proposal Due	**09/19/2025**
Consultant Interview (if needed)	**Week of October 6th, 2025**
Contract Award	**10/21/2025**

VII. DELIVERABLE ITEMS

The Consultant will be required to verify that all information submitted as services rendered is accurate and current. Furthermore, the Consultant will be required to document the source(s) of all compiled information. All information generated as part of the Consultant's or sub-consultant's work shall become part of City of El Centro record of the project.

VIII. CORRECTIONS

Proposing Consultants are encouraged to amplify the scope of services, to identify any supplemental tasks necessary, and to recommend any alternatives that may enhance the project or reduce costs. Where applicable, consultant is encouraged to describe the anticipated level of effort for each task.

IX. DELIVERY OF PROPOSALS

Proposals must be submitted to 307 W. Brighton Ave., El Centro CA 92243 by at 4:30 pm on Friday, September 19, 2025 with subject reading as follows:

Response for City of El Centro On-Call Services RFP
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

On a separate envelope, submit a hard copy Fee Schedule to the same address and by the same date in a sealed envelope marked:

Fee Proposal for City of El Centro On-Call Services
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

Proposals and Fee Proposals received after the stated deadline will not be accepted. Advance submittals are permitted. The City will not be liable for any costs incurred by the Consultant

incidental to the preparation of proposals or for developing and carrying out interview presentations.

Submission of a proposal indicates acceptance by the Consultant of the conditions contained in this RFP unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of El Centro and the Consultant selected.

Questions concerning the RFP must be submitted via the Planet Bids portal. All questions must arrive at least ten (10) calendar days prior to the proposal due date to allow time for distributing answers and/or clarifications.
No questions or inquiries may be directed to any individual (s) at the location detailed in this document. All inquiries must be submitted in writing per the process described in this document. Attempts to contact any City employee other than the designated contact for this RFP may result in rejection of a submitted proposal. No questions will be answered after the ten-ten-day period.

X. SELECTION PROCESS

City staff will evaluate the proposals based on effectiveness and efficiency in supporting each of the following items.

1. Overall responsiveness to the RFP
2. Consultant (and project team) qualifications, experience and referenced projects
3. Qualifications, experience and commitment of the project manager and team members. The project manager shall preferably have successfully completed at least three (3) projects of similar nature, complexity, and size during the last 10 years
4. Project understanding, innovative approach and proposed scope of work
5. Ability to deliver the project scope of work within the stated estimated level of effort
6. Project management plan and schedule
7. Ability to sign the City's Standard Professional Services Agreement and provide the City's standard insurance coverages listed therein

Based on this evaluation, the City may choose to invite up to three (3) Consultants from each discipline to participate in an oral presentation/interview session or select the Consultant based on the results from the evaluation of the proposal.

In the event the City chooses to conduct interviews as part of the selection process, the selected Consultants will be asked to bring an interview panel including the project manager and up to three (3) (maximum) key staff members who will be directly involved in providing the services. The Consultants selected for the interview will be allowed thirty (30) minutes to present their Consultant experience and project approach. Following the presentation there will be a thirty (30) minute informal question and answer discussion.

At the conclusion of the evaluation, the City may enter into contract negotiations with the top three ranking Consultants. If negotiations with the top-ranking Consultants are unsuccessful, negotiations will terminate and the City may undertake negotiations with the

fourth-ranked Consultant. City staff then will make recommendations to the City Council, which reserves the right to reject any or all proposals. The selection process will be completed when a contract is executed.

Furthermore, the City reserves the right to reject any or all proposals, and to waive any and all irregularities to choose the Consultant which, in the City's opinion, best serves the City's interests. The City will not be liable for any costs incurred by the Consultant incidental to the preparation of proposals or for developing and carrying out interview presentations.

All Consultants issued this RFP were previously asked to certify that they would execute a contract with the City of El Centro with no exceptions or additions.

XI. SUBMITTAL REQUIREMENTS

Proposals shall be formatted for 8-1/2" x 11" portrait pages for written materials and 11" x 17" landscape pages for drawings, consisting only of the specified materials requested below. If interviews are required, presentation boards may be used. Presentation boards shall be 30" x 42", unframed with appropriate scale and identification.

It is imperative that all Proposers responding to the RFP comply exactly and completely with the instructions set forth herein. Proposals must be concise, but with sufficient detail to allow accurate evaluation and comparative analysis. Proposals should be straightforward and provide "layman" explanations of technical terms that are used. Emphasis should be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Do NOT include marketing brochures or other promotional material not connected with this RFP. **Responses must be limited to 30 pages maximum.**

To be responsive, each Proposal must include only the following information in the format indicated. Proposals not organized according to the following format may be rejected.

1. Cover with title and date
2. Cover Letter that documents the proposal offer, lists subconsultants and their roles, location of office where work will be done, is signed by an officer of the Consultant (or by another person with authority to act on behalf of and bind the Consultant), and indicates the contact person for the proposal
3. Table of Contents
4. Executive Summary
5. Approach to satisfying scope of work, which should highlight key issues as well as special processes, tools and lessons learned that will be applied
6. Scope of Work based on the respective discipline above
7. Availability to meet the expected schedule for this work, including current workload and backlog
8. History, general qualifications, employee count by title and discipline, and recent or pending litigation for Consultants and subconsultants

9. Proposer must provide three (3) references for which Proposer has provided similar services performed in California of the nature and scope as set forth in the RFP within the last five (5) years. Include name of business, name of contact person, telephone number of contact person, and description and date of services provided. References for public agency projects are preferred.

10. Qualifications of Project Manager and Key Staff of Consultant and subconsultants, including individual resumes listing required licenses, credentials and relevant experience addressing qualifications requirements specified herein, with relevant experience focused on similar projects completed within the last 10 years. City will place considerable emphasis on the commitment by the Proposer to provide qualified personnel for the services being considered. The Proposer shall furnish resumes in outline form for the key personnel committed to this account. Proposer shall also include the number and type of additional support personnel who will be providing services. The substitution or addition of individuals shall be allowed only with prior written approval of the City.

EXHIBIT A

CIVIL ENGINEERING – GENERAL AND WATER AND WASTEWATER TREATMENT. EXPANDED SCOPE

1.0 Scope of Work

The Scope of Work shall include, but not limited to the following tasks:

In general, the Consultant shall perform engineering design services resulting in contract documents (plans, specifications and cost estimates) for various projects on an as-needed basis. The Consultant shall provide a detailed schedule of the assigned project upon issuance of a Task Order of that particular project. The Consultant shall also provide all field survey works required to complete the designs. In addition to scope of work items necessary to complete the design of approved CIP projects, the selected consultant shall also provide specific Engineering Technician services. The services to be provided are enumerated below.

The Consultant's services shall include, but are not limited to, the following:

1. Research existing records of utility companies and agencies and coordinate the proposed improvements with existing field conditions.

2. Prepare all documentation required to obtain permits from any and all agencies having jurisdiction of the project.

3. Conduct an environmental assessment for each project and prepare all documentation required to comply with the California Environmental Quality Act (CEQA).

4. Provide all field survey and topographic work necessary to complete the design effort. Design level survey and base mapping of the project site shall be prepared in US Customary English units by a California licensed Land Surveyor in accordance with the City guidelines and in AutoCAD Computer Aided Design and Drafting (CADD) format. The horizontal datum shall be NAD 83 and the vertical datum shall be NAVD 88. All survey field notes shall be on forms provided by the City, shall be neatly completed in pencil, and shall become property of the City upon completion of the project. Informal field investigations including marking of removal areas may be required for some of the sidewalk, curb and gutter, and pavement replacement projects.

5. Complete the design of projects including plans, specifications, and engineer's construction cost estimate. The Consultant shall contact manufacturers and/or contractors to verify the engineer's estimate prior to submitting to the City. Specifications shall be prepared in Microsoft Word and an electronic copy of the final version shall be furnished to the City. The City will provide the specification boiler plate to the Consultant.

6. All preliminary and bid sets of plans shall be plotted on bond or velum using the AutoCAD program. All drawings shall be completed per the City of El Centro CADD Standards

7. All original plan sheets, the title sheet of the specifications, calculations, and reports shall be signed and stamped by the Consultant's licensed professional engineer in responsible-charge of the project. These signed originals will then become the property of the City.

8. The Consultant shall provide support services as needed during the bidding and construction phases of the project, including:

   A. The Consultant shall respond to bidder inquiries during the bidding process, including preparation of any addenda. Upon award of the construction contract, the Consultant shall attend the pre- construction meeting.
   B. The Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. The Consultant shall complete shop drawings reviews within one (1) week of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.

   C. The Consultant shall respond to written Requests for Information (RFI) to provide clarification or resolve discrepancies in the contract documents. Responses shall be completed within three (3) working days.
   D. The Consultant shall provide periodic field reviews and bring to the attention of the City of El Centro any defects or deficiencies in the work by the construction contractor which the Consultant may observe. The Consultant shall have no authority to issue instruction on behalf of the City of El Centro, or to deputize another to do so.

9. Upon the completion of construction, as-builts shall be submitted to the City. The Consultant shall incorporate all changes to the plans electronically with all necessary revision notations. Once plans have been updated, a signed set of as-built mylars shall be submitted to the City with an electronic copy (in AutoCAD and pdf formats) of the final as-built drawings via CD or e-mail.

10. The Consultant shall monitor the project progress, maintain project files, and control the quality of the work performed by in-house staff and/or sub-consultants. Incomplete (not meeting targeted completion) or poor-quality work will not be accepted. The Consultant will need to revise the documents within a revised schedule set by the City, which may require overtime. No additional regular or overtime hours shall be approved for the required revisions.

11. Attend meetings with the City staff as required.

12. Coordinate plan check, design topics, permits and any other issues with the City, other Agencies, and all utility companies as required. The Consultant shall be the liaison with affected agencies.

13. The Consultant shall be responsible for to reviewing and approving addenda and clarifications to plans and specifications.

1.1 Preliminary Design

Review available record plans, existing/proposed conditions and requirements. Attend the Field

Review Meeting; prepare Field Review Report

Conduct a field survey in order to confirm the accuracy of any existing drawings, surveys, streets, and utility locations data obtained. Consultant is expected to conduct additional surveys based on the project requirements.

Consultant shall prepare a preliminary Design Report (PDR) of alternatives, preliminary cost estimate and preferred alternative.

1.2 Development of Detail Plans, Specifications and Estimate (PS&E):

All reports, plans, specifications and quantity calculations shall conform to criteria, policies, procedures and standards of Caltrans, APWA and the City, and shall be made available to the City at stages specified in the milestone schedule and upon request.

Construction plans shall adhere to City of El Centro Standard Construction Drawing standards. The Consultant shall produce, at the Consultant's sole cost and expense, blank reproducible sample plan sheets and any needed standard drawings. Standard drawings and standard plans shall be incorporated into the Contract Plans where applicable.

Each plan sheet shall bear the State of California Registered Professional Engineer registration seal within signatures, license number and registration certificate expiration date of the Engineer who is in responsible charge for developing the plan. Each plan sheet shall be signed by the engineer who performed the independent plan check.

Consultant shall prepare complete contract specifications based on the Manuals/Standards section 2.4.

A list of contract pay items with the descriptions, item codes and estimated quantities shall be included in the front of the special provisions.

The Consultant shall prepare quantity calculations for items that are applicable to this project, and prepare cost estimates.

Quantities for all contract pay items shall be substantiated by calculations. Quantity calculations shall be neat and orderly and shall show all sketches, diagrams, and dimensions necessary to allow them to be independently used by field inspectors during construction.

Electronic files for all structural details and calculations shall be submitted at the end of the contract or when requested by the City.

All electronic software developed, databases generated, spreadsheets and intellectual properties developed during the life of the Agreement shall become the property of the City.

1.3 Environmental Documents and Permit Compliance

Specific environmental documentation work as may be required by the funding agency and the City including, but not be limited to the following: prepare Preliminary Environmental Study (PES), CEQA compliance documentation, technical studies, , NPDES permit, Regional Board Section 401 certification, any coordination as required completing the environmental NEPA and

CEQA work, and any encroachment permits required for the project from agencies such as Caltrans, County of Imperial, the City and any other having jurisdiction.

1.4 Utility Research and Coordination

(1) Research and obtain file copy of utility maps within the project limits for existing and/or proposed facilities.
(2) Prepare preliminary plans with utility notices/questionnaires to be sent to utility companies.
(3) Plot existing and proposed utilities in plan (and profile when applicable)
(4) Monitor response of utility notices received by the City and then make recommendations for mitigating conflicts.
(5) Attend coordination meetings when required regarding adjustments and relocations.
(6) Pothole information, where required, shall be coordinated by the Consultant.

1.5 Construction Bidding Phase

Bidding procedures will be the responsibility of the City. While the PS&E construction package is being advertised for bids, all questions concerning the intent shall be referred to the City for resolution. In the event that any items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the Consultant for decision by the City, or by a covering change order after the award of the construction contract.

1.6 Construction Support Phase (As Needed)

(1) All construction support work shall be coordinated with the City.
(2) Consultant shall furnish, at the consultant's sole cost and expense, all necessary drawings for corrections and change orders required by errors and omissions of the Consultant. The original tracing(s) of the drawings and contract wording for the change orders shall be submitted to the city for duplication and distribution.
(3) Consultant will receive written notification of the award of a construction contract. Upon such notification, Consultant will proceed with the services required by the Agreement.
(4) Consultant is required to attend the pre-construction meeting with the successful construction contractor upon notification by the City.
(5) Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. Consultant shall complete shop drawings reviews within two (2) weeks of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.
(6) Consultant shall be available as requested by the City to resolve discrepancies in the contract documents. Consultant shall bring to the attention of the City any defects or deficiencies in the work by the construction contractor which the Consultant may observe. Consultant shall have no authority to issue instruction on behalf of the City, or to deputize another to do so.
(7) The Consultant shall prepare and deliver to the City the final as-built plans incorporating field marked prints supplied by the City. Upon completion of construction, the City will submit field-marked prints to Consultant. Consultant shall incorporate all changes to the plans electronically with all necessary revision notations and submit to the City.

1.7 Description of Required Services

All work shall be performed in conformance with the State of California and/or City of El Centro policies, procedures and standards.

Consultant shall carry out the instructions received from the City and shall cooperate with the City and other involved agencies.

The Consultant has total responsibility for the accuracy and completeness of the plans and related designs, specifications and estimates prepared and shall check all such materials accordingly. The plans will be reviewed by the City for conformity with the requirements of the Agreement. Reviews by the city do NOT include detailed review or checking of design or the accuracy with which such designs are depicted on the plans. The responsibility for accuracy and completeness of such items remains solely that of Consultant.

Consultant or its sub consultants shall not incorporate in the design any materials or equipment of single or sole source origin without written approval of the City.

The plans, specifications, estimates, calculations, and other documents furnished under the Agreement shall be of a quality acceptable to the City and State. The criteria for acceptance shall be a product of neat appearance, well organized, technically and grammatically correct, checked, and dated and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that of similar types produced by the State and set forth in related Caltrans manuals. The Consultant shall modify its work as necessary to meet the level of acceptability defined by the criteria above.

The Consultant shall have a quality control plan in effect during the entire time work is being performed under the Agreement. The Quality control plan shall establish a process whereby plans are independently checked, corrected and back checked, and all job-related correspondence and memoranda dated and received by affected persons and then bound in appropriate job files.

2.0 Construction Plans

2.1 60% PS&E (Unchecked Details)

Unchecked plan details shall consist of 60% design and detailed plans ready for the independent design check.

Three sets (3) full size (24”x36”) of design plans. The following submittals may be submitted electronically: draft SSP, preliminary quantities and estimates, pay item list, and design calculations.

2.2 100% PS&E

The Consultant shall submit the following documents for review and approval: Four sets (4) full

size (24”x36”) signed and sealed prints of checked design Electronic copies of Special Provisions

Electronic copies of cost estimate and check quantity calculations

Electronic copies of design calculations

Electronic copies of design check calculations
Other reports as needed by the City of El Centro

The City will review and comment on the PS&E package as soon as possible. The turnaround goal is within four (4) weeks of receipt of the complete PS&E package. One (1) copy of those documents with comments will be returned to the Consultant.

2.3 Final PS&E

The Consultant shall submit the following documents for review and approval:

Electronic sets of signed final design plans

Electronic copies of signed final specifications

Electronic copies of final cost estimate and final quantity calculations

Electronic copies of final design calculations

Electronic files in its original format and in PDF of all plans, specifications, and estimates

2.4 Manuals/Standards

Where applicable, engineering design of all PROJECT improvements shall be compatible and in accordance with the following as applicable:

Caltrans Highway Design Manual

Caltrans Standard Plans

Caltrans Standard Specifications

Imperial County Hydrology Manual

American Public Works Association Standard Specifications for Public Works Construction

American Public Works Association Standard Plans

American Water Works Association

City of El Centro Standard Plans

San Diego Regional Standard Drawings

It will be the responsibility of the Consultant to verify that it has received the latest version or update of these documents.

Plans for the improvements on the State Highway shall be prepared in accordance with Caltrans recommended practice for detailing and scope of work. Caltrans Standard plans shall be utilized where applicable and may be called out on the plans as reference.

Local street improvement plans shall adhere to City of El Centro Standard Plans and the Standard Specifications for Public Works Construction. Plans shall be computer drafted in AutoCAD compatible format and shall adhere to the current City of El Centro Public Works Department CAD standards.

The Consultant's work will be subject to inspections by representatives of the City, County, State and FHWA

2.5 ***Coordination***

Coordination with the City, other consultants and other involved agencies will be required to

achieve compatible designs, phasing of construction with existing or designed conditions, and timely delivery of the contract PS&E. Coordination may include, but not be limited to, coordination with Caltrans, FHWA, Regional Water Quality Control Board and other agencies.

The City will decide the manner in which the coordination of individual matters is undertaken. At the City's option, coordination efforts may be performed by the Consultant's direct contact, by the Consultant acting though the City or by the City only. When coordination efforts require Agreement, such Agreement shall be coordinated through the City.

EXHIBIT B

SAMPLE PROPOSAL EVALUATION FORM

CONSULTANT/FIRM NAME:		
Criteria	Max Points	Rating
Understanding of the work to be done	25	
Experience with similar kinds of work	25	
Quality of staff for work to be done	15	
Capability of developing innovative or advanced techniques	10	
Familiarity with state and federal procedures	10	
Financial responsibility	10	
Familiarity with local and regional approving agencies	5	
Total	100	

Evaluator

Print Name: _____

Signature: _____

Date: _____

Contract Manager

Initials: _____

Date: _____

EXHIBIT C

SAMPLE DESIGN PROFESSIONAL SERVICES AGREEMENT

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES _____NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES _____NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

_____ _____
DATE (SIGNATURE OF CONSULTANT)

EXIBIT E

SAMPLE TASK ORDER

SAMPLE CONSULTANT TASK ORDER #
FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

EXHIBIT G

SAMPLE CONSULTANT TASK ORDER #
FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works
Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

RESOLUTION NO. 26-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A DESIGN PROFESSIONAL SERVICES AGREEMENT WITH THE HOLT GROUP, INC. FOR ON-CALL CIVIL ENGINEERING – GENERAL SERVICES

WHEREAS, on-call professional Civil Engineering-General services agreements are an effective way to retain consultants to ensure that public works projects and programs are delivered in a timely and cost-effective manner; and

WHEREAS, pursuant to City Code Section 2-174, the City of El Centro ("City") identified a need for on-call, specialized Civil Engineering-General consulting services and released a Request for Proposal for such services through the City's Public Works Department; and

WHEREAS, on October 3, 2025, the City received proposals which were evaluated and ranked to determine the most qualified consultants; and

WHEREAS, The Holt Group, Inc. ("Consultant") was amongst those consultants chosen to enter into an on-call agreement with the City; and

WHEREAS, such services will be awarded on a Task Order basis as the budget allows; and

WHEREAS, it is necessary for the City Council of the City of El Centro, California (the "City Council") to approve a Design Professional Services Agreement with Consultant for On-Call Civil Engineering – General Services ("Agreement"); and

WHEREAS, the City Council finds that its approval of the Agreement is in the best interest of the City.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. That the foregoing is true, correct and adopted.

2. That the City Council authorizes the Agreement in a not-to-exceed amount of one million dollars ($1,000,000) for the total term of the Agreement (for two years, with the possibility of up to three (3) one-year extensions), with the understanding that services will be provided on an as-needed basis and Task Order basis as further set out in the Agreement, with no guarantee of any level of effort from Consultant.

3. That the City Manager is hereby authorized to sign the Agreement on behalf of the City, a copy of which is on file in the Office of the City Clerk.

4. That the Public Works Director is hereby authorized to execute Task Orders up to fifty thousand dollars ($50,000) each for budgeted projects.

5. That the City Manager is hereby authorized to execute Task Orders for budgeted projects above fifty thousand dollars ($50,000) and under two-hundred thousand dollars ($200,000); task orders above that amount shall be approved by the City Council.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026.

CITY OF EL CENTRO

By_____
Michael Crankshaw, Mayor

ATTEST:

By_____
Norma Wyles, City Clerk

APPROVED AS TO FORM:
Office of the City Attorney

By_____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CITY OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California, do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at the regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By_____
Norma Wyles, City Clerk

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH DYNAMIC CONSULTING ENGINEERS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

CITY MANAGER'S RECOMMENDATION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH DYNAMIC CONSULTING ENGINEERS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

FISCAL IMPACT:

Contract is not to exceed one million dollars ($1,000,000.00) through out the term of the agreement. This will be through the approval of various task orders through out the life of the contract.

Award of the contract will not obligate the City to purchase any specific level of effort from any firm as task orders will be issued by the City Manager or Public Works Director to assign work on an as-needed, project-by-project basis. Funding for each project will be budgeted in the Citywide Capital Improvement Program (CIP) budget which is adopted through the annual budget process. If a non-budgeted project arises, staff will return to Council to request funding as needed. Funding sources may include the general fund, enterprise funds as well as other sources such as Measure D, Gas Tax, SB1 and other grants.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

Financial & Governance Stability & Sustainability

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

The consultant went through a request for proposals and an evaluation process. Any missing documentation, such as a business license, will be obtained before issuance of Notice to Proceed ("NTP").

BACKGROUND:

In late 2020, the City Council awarded a series of contracts to on-call consultants. These contracts in essence, pre-approve consultants for design work, construction management work, special studies, etc. This expedites the award of work and eliminates the need to do RFP's, interviews, etc., for contract which may be small in value, which may discourage firms from submitting due to the cost of preparing for a RFP and interview process.

Generally, these contracts are not utilized for certain grant funds, as grant funds have

added language that may not be included in the on-call contracts and that does not apply for all projects. As such, grant funded projects generally go through contracts outside of the on-call approved contract list.

On-call contracts have been used in the past to do design work funded by park impact fees, general fund, water enterprise, wastewater enterprise, Measure D and SB1 funds. Individual Task Orders are issued for projects that fit within the scope of the on-call contract.

Projects in the past have included the Imperial Avenue Extension design, studies and portions of the Southern Pump Station project, various construction management contracts for Measure D projects and some water and wastewater projects to name a few. Task Orders are funded from approved budget funds.

DISCUSSION:
The current list of On-Call contracts began to expire at the beginning of August 2025. To replace the contracts, Public Works' staff divided the on-call disciplines into two groups. One Request for Proposals (RFP) was prepared for Civil Engineering- General and Civil Engineering- Water and Wastewater Treatment, while another was prepared for the On-Call Architectural Design and Construction Management and Inspection Services.

On August 19, 2025, the City Council, during its regular meeting, approved the Request for Proposals(RFP) for four on-call disciplines. Each RFP was advertised and released as follows:

1. Request for Proposals (RFP) for On-Call Civil Engineering - General and On-Call Civil Engineering- Water and Wastewater Treatment was published in the Imperial Valley Press on August 22, 2025, with an initial deadline of September 19, 2025, and then revised via addendum to October 3, 2025.

2. Request for Proposals (RFP) for On-Call Architectural Design, and Construction Management and Inspection Services was published in the Imperial Valley Press on August 26, 2025, with an initial deadline of September 26, 2025, and then revised to October 10th, 2025.

These are the disciplines where we expect to have the need for these contracts. Each applicant was required to specify the discipline for which they were submitting a proposal.

Under this Council approval request, we are focusing on consultants who submitted for the On-Call Civil Engineering-General Services portion of the RFP. For this discipline, the City received six proposals. The proposals were evaluated by a panel of three city staff members. Based on the scores, six firms were selected and will be recommended for contract award, which includes the following in no particular order:

- Dynamic Consulting Engineers
- CR Associates
- Nicklaus Engineering, Inc.
- Psomas
- TYPSA, Inc.
- The Holt Group, Inc.

A separate Council agenda report, agreement and resolution is being prepared for each firm. Each agreement would be limited to $250,000 per fiscal year for each fiscal year the agreement is active. However, as each agreement will be for on-call, as-needed services, there is no guarantee on any level of services from any firm. Each contract has an initial Two (2) year life with the option to provide for three (3) individual one (1) year extensions for a possible total five (5) year contract.

In this report, staff seeks approval of an on-call contract for Civil Engineering- General Services with Dynamic Consulting Engineers.

CONCLUSION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH DYNAMIC CONSULTING ENGINEERS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

ATTACHMENTS:

1. Design Professional Services Agreement- Dynamic Cons. Eng.
2. Resolution 26-

DESIGN PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement"), is made and effective as of the last signature date in this agreement, between the City of El Centro ("City"), a municipal corporation, and Dynamic Consulting Engineers ("Consultant"), a stock corporation. In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

I. TERM

This Agreement shall commence upon the issuance of the Notice to Proceed ("NTP") and shall remain and continue in effect until the professional services described herein are completed, but in no event later than two (2) years from the date of approval and may be extended for up to three (3) one (1) year extensions by mutual agreement unless sooner terminated pursuant to the provisions of this Agreement. All days set out in this Agreement are calendar days unless otherwise provided.

II. SERVICES

Consultant shall perform the tasks described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full (the Tasks to be Performed or Tasks). Consultant shall complete the Tasks according to the schedule of performance which also is set forth in Exhibit A. To the extent that Exhibit A is a proposal from Consultant, such proposal is incorporated only for the description of the scope of services and no other terms and conditions from any such proposal shall apply to this Agreement unless specifically agreed to in writing. A sample Task Order is attached as Exhibit G.

III. PERFORMANCE BY CONSULTANT

A. Consultant shall at all times faithfully, competently, and to the best of their ability, experience, and talent, perform all Tasks. Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing similar services as are required of Consultant hereunder in meeting its obligations under this Agreement.

B. Consultant immediately shall notify the City Representative in writing of any delay in completion of the services. Such notice shall include the reason for such delay and a reasonable estimate of the length of the delay. If the delay materially effects performance of the Services, the City may terminate this Agreement under Section VI (Termination) or VII (Default).

C. Force Majeure. If delays in performance of the services are caused by the following unforeseen events or conditions beyond the reasonable control of City or Consultant, the time for performance may be extended by City only for the period of such events: war, changes in law or government regulation, labor disputes or strikes; fires, floods, adverse weather or other natural conditions preventing work; or inability to obtains materials, equipment or labor when the Consultant provides the City with timely evidence of its inability to obtain personnel.

D. Consultant may terminate this Agreement without cause upon providing at least 60 days prior written notice to the City of such termination. Within such time period, the Consultant shall complete any work necessary for the orderly termination of its consulting services

IV. CITY REPRESENTATIVE

City's Public Works Director shall represent City in all matters pertaining to the administration of this Agreement, review and approve all products submitted by Consultant, but not including the authority to change the compensation due to Consultant except as provided in this Agreement (the "City Representative")

V. PAYMENT

A. The City agrees to pay Consultant in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B, attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. This amount shall not exceed One million dollars ($1,000,000.00) for the total term of the Agreement unless additional payment is approved as provided in this Agreement.

B. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City. Consultant shall be compensated for any such authorized additional services in the amounts and in the manner as agreed to by the City and Consultant at the time City's written authorization is given to Consultant for the performance of such services and/or as set for in Exhibit B.

C. Consultant shall submit invoices monthly for actual services performed. Invoices shall be submitted on or about the first business day of each month, or as soon thereafter as practical, for services provided in the previous month. City shall use reasonable efforts to pay within forty-five (45) days of receipt of each invoice as to all non-disputed fees. If the City disputes any of Consultant's fees, it shall use its best efforts to give written notice to Consultant within forty-five (45) days of receipt of an invoice of any disputed fees set forth on the invoice.

D. It is understood and agreed that the City's obligation to proceed under this Agreement is conditioned upon the appropriation of funds. If anticipated funds for payment under this Agreement are not forthcoming or are insufficient, the City shall have the right to terminate this Agreement without penalty upon ten (10) days prior written notice to Consultant. Notwithstanding, the City also may determine a source of additional funds.

VI. CITY'S SUSPENSION OR TERMINATION OF AGREEMENT

A. Except as otherwise provided herein below, the City may suspend or terminate this Agreement, or any portion hereof, without cause and for convenience by serving written notice of termination upon the other party at least ten (10) calendar days prior to the date of termination. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City terminates a portion of this Agreement, such termination shall not make void or invalidate the remainder of this Agreement.

B. In the event this Agreement is terminated pursuant to this section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, less any disputed amounts. Upon termination of the Agreement pursuant to this section, the Consultant will submit an invoice to the City as provided above.

VII. DEFAULT

A. Either Party's failure to comply with the provisions of this Agreement shall constitute a default. In the event that either party is in default for cause under the terms of this Agreement, the affected party shall promptly notify the deficient party of such default and following such notice shall have no obligation or duty to continue compensating or providing any work after the date of default and terminate this Agreement immediately by written notice to the other party. If such failure hereunder arises out of causes beyond either party's control under Section III C above (force majeure), the provisions of that sub-section shall apply.

B. If the City Representative determines the Consultant is in default in the performance of any of the terms or conditions of this Agreement, City shall cause to be served upon the Consultant a written notice of the default. The Consultant shall have ten (10) days after service of default to cure the default as directed by the City in the notice of default. In the event the Consultant fails to cure its default within such period of time, the City shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

VIII. OWNERSHIP OF DOCUMENTS

A. Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the City at reasonable times to such books and records; shall give City the right to examine and audit said

books and records; shall permit City to make transcripts or copies therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

B. Upon completion of, or in the event of termination of this Agreement, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the City and may be used, reused, or otherwise disposed of by the City without the permission of the Consultant. With respect to computer files, Consultant shall make available to the City, at the Consultant's office and upon reasonable written request by the City, the necessary computer software and hardware for purposes of accessing, compiling, transferring, copying and/or printing computer files. Consultant hereby grants to City all right, title, and interest, including any copyright, in and to the documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared by Consultant in the course of providing the services under this Agreement.

IX. INDEMNIFICATION AND DEFENSE

To the fullest extent permitted by law, Consultant shall indemnify, defend, and hold harmless City and any and all of its officials, employees, agents, and volunteers ("Indemnified Parties") from and against any and all claims, losses, liabilities, damages, costs, and expenses, including attorney's fees and costs, to the extent they arise out of, pertain to or relate to the negligence, recklessness, or willful misconduct of the Consultant.

Consultant's duty to defend shall consist of reimbursement of defense costs incurred by Agency in direct proportion to the Consultant's proportionate percentage of fault.

Consultant's percentage of fault, for both indemnity and defense, shall be determined, as applicable, by a court of law, jury, or arbitrator. In the event any loss, liability, or damage is incurred by way of settlement or resolution without a court, jury or arbitrator having made a determination of the Consultant's percentage of fault, and the parties cannot mutually agree on Consultant's percentage of fault, the parties agree to mediation with a neutral third-party to determine the Consultant's proportionate percentage of fault for purposes of determining the amount of indemnity and defense cost reimbursement owed to the Agency.

X. INDEPENDENT CONTRACTOR

A. Consultant is and shall at all times remain as to the City a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, or agents shall have

control over the conduct of Consultant or any of Consultant's officers, employees, or agents, except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation, or liability whatever against City, or bind City in any manner.

B. No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

XI. INSURANCE

Consultant shall maintain prior to the beginning of and for the duration of this Agreement insurance coverage as specified in Exhibit C attached hereto and incorporated herein by this reference as though set forth in full.

XII. LEGAL RESPONSIBILITIES

A. The Consultant shall keep itself informed of local, state, and federal laws and regulations which in any manner affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. The Consultant shall at all times observe and comply with all such laws and regulations. The City, its officers, agents and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this section.

B. Licenses. At all times during the term of this Agreement, Consultant shall have in effect all licenses required for the performance of the services described in this Agreement.

C. City Business License: At all time during the term of this Agreement, Consultant shall have in effect a City business license.

D. Non-discrimination. Consultant shall not discriminate on the basis of any protected state or federal class or association with such class in its solicitation, selection, hiring or treatment of its employees, vendors or suppliers. Consultant understands that violation of this requirement shall be a material breach of this Agreement and may result in its termination, debarment or other sanctions. This requirement shall be placed in all agreements between the Consultant and its employees, vendors and suppliers.

E. Drug-free Workplace. Consultant agrees to insure a drug free workplace. The Consultant shall certify to the City that it will provide a drug-free workplace by submitting a Consultant Certification for a Drug-Free Workplace form as provided

by the City. The Consultant shall publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the workplace, and specifying the actions that will be taken against employees for violations of the prohibition. The Consultant also shall establish a drug-free awareness program to inform employees about all of the following: the dangers of drug abuse in the workplace; the policy of maintaining a drug free workplace; available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug abuse violations. In addition, the Consultant shall post the drug free policy in a prominent place.

F. No Use of City logo or Product Endorsement. The Consultant agrees that any advertisement or notification identifying or referring to the City as a client of the Consultant requires the prior written approval of the City. No City logo or other identifying mark may be used without the prior written approval of the City.

XIII. CONFLICTS OF INTEREST

A. Undue Influence. Consultant declares and warrants that no undue influence or pressure was used against or in concert with any officer or employee of the City in connection with the award, terms, or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of the City has or will receive compensation, directly or indirectly, from Consultant, or from any officer, employee, or agent of Consultant, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this section shall be a material breach of this Agreement entitling the City to any and all remedies at law or in equity.

B. No Benefit to City Employees. During their tenure and for one year thereafter, no officer or employee of City, or their designees or agents, and no public official who exercises authority over or responsibilities with respect to the services under this Agreement shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the services performed under this Agreement.

C. Consultant covenants that neither Consultant nor any officer or principal of their firm have any interest in, or shall acquire any interest, directly or indirectly, which will conflict in any manner or degree with the performance of their services hereunder. Consultant further covenants that in the performance of this Agreement, no person having such interest shall be employed by them as an officer, employee, agent, or subconsultant. To the extent applicable, Consultant further covenants that Consultant has not contracted with nor is performing any services, directly or indirectly, with any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area and further covenants and agrees that Consultant and/or its subconsultants shall provide no service or enter into any agreement or agreements with a/any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area prior to the completion of the work

under this Agreement.

D. Form 700. Consultant is subject to all applicable federal, state and local conflict of interest laws, regulations and policies applicable to its contract with the City and procurement practices related to such contract, including but not limited to the those under the Political Reform Act and its regulations or California Government Code Section 1090 et seq. Consultant may be required to complete Form 700's or similar forms as determined under Exhibit D, attached and incorporated.

E. Levine Act Compliance. The Consultant shall complete and comply with the provisions of Exhibit E, attached and incorporated, regarding compliance with the Levine Act.

XIV. RELEASE OF INFORMATION

A. All information gained by Consultant in the performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents, or subconsultants, shall not without prior written authorization from the City Attorney or designee, or unless requested by the City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena.

B. Consultant promptly shall notify City should Consultant, its officers, employees, agents, or subconsultants be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request ("Discovery"), court order, or subpoena from any person or party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the City, unless the City is a party to any lawsuit, arbitration, or administrative proceeding connected to such Discovery, or unless Consultant is prohibited by law from informing the City of such Discovery. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding as allowed by law. Unless City is a party to the lawsuit, arbitration, or administrative proceeding and is adverse to Consultant in such proceeding, Consultant agrees to cooperate fully with City and to provide the opportunity to review any response to Discovery requests provided by Consultant. However, City's right to review any such response does not imply or mean the right by City to control, direct, or rewrite said response.

XV. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by: (i) personal service; (ii) delivery by a reputable document delivery service (e.g., Federal Express), which provides a receipt showing date and time of delivery; or (iii) United States mail,

certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To CITY: City of El Centro
1275 Main St.
El Centro, CA 92243
Attention: City Clerk

TO CONSULTANT: Dynamic Consulting Engineers
2415 Imperial Business Park Dr., Suite B
Imperial, CA 92251
Attention: Carlos Beltran, P.E., Principal Engineer

XVI. ASSIGNMENT

A. Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the City. Due to the personal nature of the services to be rendered pursuant to this Agreement, only Consultant shall perform the services described in this Agreement.

B. Before retaining or contracting with any subconsultant for any services under this Agreement, Consultant shall provide City with the identity of the proposed subconsultant, a copy of the proposed written contract between Consultant and such subconsultant which shall include an indemnity provision identical to the one provided herein identifying City as an indemnified party, or an incorporation of the indemnity provision provided herein, and proof that such proposed subconsultant carries insurance at least equal to that required by this Agreement or obtain a written waiver from City for such insurance.

C. Dynamic Consulting Engineers may use assistants, under their direct supervision, to perform some of the services under this Agreement. Consultant shall provide City fourteen (14) days' notice prior to the departure of Carlos Beltran, P.E. from Consultant's employ. Should Carlos Beltran, P.E. leave Consultant's employ, the City shall have the option to immediately terminate this Agreement. Upon termination of this Agreement, Consultant's sole compensation shall be payment for actual services performed up to, and including, the date of termination or as may be otherwise agreed to in writing between the Governing Board and the Consultant.

XVII. GOVERNING LAW

The City and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court with jurisdiction over the City.

XVIII. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, negotiations, understandings, representations, and statements, oral or written and pertaining to the subject of this Agreement or with respect to the terms and conditions of this Agreement, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

A. No waiver or failure of either Party to insist upon the strict performance by the other shall be a continuing waiver of any breach of this Agreement, nor shall such waiver affect or alter this Agreement, and each provision hereof shall continue in full force and effect. No change to any term or condition of this Agreement, nor any verbal understanding of the Parties shall be valid unless in writing as set forth in this Agreement.

B. Nothing contained this Agreement shall be considered a limit upon the charter city powers of the City.

C. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in its drafting.

D. In any conflict between the body of this Agreement and the Exhibits, the body of this Agreement shall control. If a conflict exists between any applicable law, rule, or regulation, that law, rule or regulation shall control. The most stringent requirements shall control. Each Party shall notify the other immediately upon identification of any apparently conflict or inconsistency.

XIX. SEVERABILITY

Any part, provision, or representation of this Agreement or any of its exhibits, including, which is held to be invalid, void or unenforceable by a court of competent jurisdiction, shall be limited to that part, provision or representation and all other parts, provisions, or representations herein shall remain in full force and effect.

XX. CONTENTS OF REQUEST FOR PROPOSAL AND PROPOSAL

Consultant is bound by the contents of the proposal submitted by the Consultant, attached and incorporated as Exhibit A In the event of conflict, the requirements of City's Request for Proposal and this Agreement shall take precedence over those contained in the Consultant's proposal. The incorporation of the Consultant's proposal shall be for the scope of services to be provided only, and any other terms and conditions included in such proposal shall have no force and effect on this Agreement or the relationship between Consultant and/or City, unless expressly agreed to in writing.

XXI. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant warrants and represents that they have the authority to execute this Agreement on behalf of the Consultant and have the authority to bind Consultant to the performance of its obligations hereunder.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

Dynamic Consulting Engineers
By:
(Signature)

_____

Carlos Beltran, P.E.
(Typed Name)

President.
(Title)

City of El Centro
A Municipal Corporation

_____
Robert Sawyer, City Manager

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:
City Attorney

By: _____

Attachments:	Exhibit A	Consultant's Proposal
	Exhibit B	Fee Schedule
	Exhibit C	Insurance Requirements
	Exhibit D	Conflict Financial Disclosure
	Exhibit E	Levine Act Certification
	Exhibit F	City RFP
	Exhibit G	Sample Task Order

EXHIBIT A

CONSULTANT'S PROPOSAL

CITY OF EL CENTRO

Public Works Department

October 3, 2025

REQUEST FOR PROPOSAL FOR ON-CALL SERVICES FOR "CIVIL ENGINEERING – GENERAL"



Dynamic CONSULTING ENGINEERS

2415 IMPERIAL BUSINESS PARK DR. SUITE B
IMPERIAL, CA 92251
PHONE: (760) 545-0162
FAX: (760) 545-0163

CIVIL ENGINEERING

GENERAL

October 3, 2025

Abraham Campos, PE
Public Works Director, City Engineer, City of El Centro
307 W. Brighton Ave. El Centro, CA 92243

SUBJECT: **PROPOSAL FOR ON CALL SERVICES FOR "CIVIL ENGINEERING – GENERAL"**

Dynamic Consulting Engineers, Inc. (DCE) appreciates the opportunity to submit this proposal to the City of El Centro for **Civil Engineering – General Services**. We will provide the City with a team that has extensive experience working with the City of El Centro and other local public agencies. Our team as a great understanding of Local, State and Federal policies including local agencies procedures and guidelines.

Dynamic Consulting Engineers, Inc. was founded with the **vision** to provide clients with high quality work. It is our **commitment** to go above and beyond and provide our clients with an exceptional level of service. Our project managers, design engineers and land surveyors are dedicated to completing projects on time no matter how challenging schedules are. With upmost **integrity**, we believe we have assembled a team of design professionals and land surveyors that are not only committed to assisting the City with its projects but share the same intrinsic goals of preserving the public's interests.

Our engineering and land surveying team is especially well suited to provide professional services as requested in this RFQ as we have extensive and recent experience working on similar on-call contracts for the County of Imperial, City of Calexico, City of Brawley and the City of Imperial. The DCE team includes professional subconsultants **Aztec Engineering and Landmark Consultants.** Aztec Engineering will provide the team with technical expertise in transportation and traffic signal projects. Landmark Consultants will provide geotechnical engineering services.

All work by DCE will be performed from our local office located in Imperial CA. Carlos Beltran, P.E. Principal Engineer will be the main contact for this proposal, projects and task order requests.

In closing, we are excited about the possibility of serving you and the possibility to provide the City with our expertise in similar projects. Thank you for your consideration. If there are any questions or comments, please feel free to contact me at (760) 545-0162.

Sincerely,

Carlos Beltran, P.E.
Principal Engineer

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COMPANY INFORMATION

Dynamic Consulting Engineers, Inc. (DCE) is a local firm based in the Imperial Valley. DCE has a simple, yet efficient company structure, which stresses client needs, quality project management, and efficient technical excellence.

Dynamic Consulting Engineers, Inc. (DCE) is a California Corporation. DCE office is located at: 2415 Imperial Business Park Drive, Suite B, Imperial California 92251. All work is anticipated to be performed at project sites and at the DCE Imperial office. DCE has on staff two (2) Registered Professional Civil Engineers, two (2) Registered Professional Land Surveyors, eight (8) project engineers/surveyors including two (2) Federal Aviation Administration (FAA) Certified Drone Pilots and two (2) office administrators on staff.

Dynamic Consulting Engineers, Inc. is certified by the State Department of Transportation as a **Disadvantaged Business Enterprise** (DBE No. 37931)
Federal Tax ID Number 26-1842803

Company Owners
Carlos Beltran, P.E. (50%), Principal Engineer, cbeltran@dceinc.pro (760) 545-0162
David Beltran, P.L.S. (50%), Lead Surveyor, dbeltran@dceinc.pro (760) 545-0162

Dynamic Consulting Engineers, Inc. carries:
$2,000,000 General Liability Insurance, $2,000,000 Professional Liability Insurance (E&O)
$1,000,000 Automobile Insurance, $1,000,000 Workers Compensation Insurance

DCE complies with all applicable laws regarding affirmative action and equal opportunity employment and does not discriminate against anyone based on age, color, disability, national origin, race, religion, sex, sexual orientation, handicap and status as a veteran or disabled veteran.

Contact Information: Carlos Beltran, P.E., President
Dynamic Consulting Engineers, Inc.
2415 Imperial Business Park Drive, Suite B
Imperial, California
Phone 760/545-0162
Fax 760/545-0163
Email: cbeltran@dceinc.pro

EXECUTIVE SUMMARY

Dynamic Consulting Engineers, Inc. (DCE) is pleased to present this proposal and statement of qualifications to the City of El Centro. DCE has a simple, yet efficient company structure, which stresses client needs, quality project management, and technical excellence.
We are pleased to offer our experience in general civil engineering and land surveying in projects that are similar to this RFP. We are excited to have the opportunity to present our proposal because these are the type of projects that are very important to the City and the community. We understand the driving forces of this request for proposal and are prepared to undertake the challenge of providing solutions that adhere to the City's goals and missions. DCE is currently providing on call civil engineering and land surveying services to the City of Imperial, City of Brawley, City of Calexico and the County of Imperial Public Works Department.

PROJECT UNDERSTANDING
The City of El Centro Department of Public Works is requesting proposals from qualified engineering professionals to provide on-call General Civil Engineering Services. **DCE, Aztec Engineering and Landmark Consultants are well suited to provide the City of El Centro professional services in General Civil Engineering including Transportation Engineering, Land Surveying and Geotechnical Engineering.**

The purpose of the Request for Proposal ("RFP") is to provide the Public Works Department with the ability to obtain assistance quickly during peak workload periods, staffing absences and when expedited/fast track support is needed to satisfy City of El Centro continuous growth. An important objective is to maintain a level of high-quality engineering and surveying in the most cost-effective and efficient manner possible.

COMPREHENSIVE EXPERIENCE
Comprehensive Experience Provides Knowledge of the Local Environment and Relevant Project Issues. DCE has been providing professional engineering and land surveying services to local public agencies throughout Imperial Valley for over 17 years. Our staff is very knowledgeable of the City's standards and specifications, contracts, terms and conditions, billing procedures and project administration requirements. Our staff has worked very well and continues to work successfully with local agencies including the City of El Centro on past and current projects.

DCE will provide the required technical expertise. DCE has experience coordinating with full range of stakeholder that would be involved in City projects including but not limited to IID Water and Energy Departments, The Gas Company, AT&T, Time Warner Spectrum, Verizon, Caltrans and County of Imperial.

COORDINATION AND COMMUNICATION
Coordination and Communication Provides Streamlined and Efficient Delivery of Services.
The Project Team will be led by Carlos Beltran. Mr. Beltran has been responsible for providing professional services to local public agencies including the City of El Centro for the last

seventeen years. Mr. Beltran has been working in engineering design and construction management in Imperial County for over 25 years.

Our team is very knowledgeable of the City standards and specifications, contracts, terms and conditions, billing procedures and project administration. As task orders are assigned, Mr. Beltran will be responsible for coordinating the work. Protocols will be established prior to any task order being issued under this contract to ensure that the approach to project scoping, negotiations, performance of the work, project deliverables, and billing and administrative functions are consistent, streamlined and that a high standard of quality is maintained on every task order.

Our team understands that the City has a high-level of responsibility and accountability in providing services to its residents. Our goal is to be efficient, cost-effective and highly responsive to your needs so that you can focus on planning and implementing your priorities. Our technical team has sufficient resources and specialized expertise that will work in concert with the City's mission. We stand ready to serve with integrity, trust and respect as an extension of your organization.

Our office is conveniently located a few miles from the City of El Centro and our staff is available to meet with City staff on projects within minutes. Dynamic Consulting Engineers, Inc. will work closely with the City Public Works department staff to assure the City the projects are completed precisely and in a timely manner.

PROJECT APPROACH

Dynamic Consulting Engineers, Inc. (DCE) understands that every project is different, unique and they all have many challenges. DCE's approach to complete projects successfully is simple and yet efficient. DCE follows the following standards/guidelines for all projects whether design of new wet utility lines, new street improvements, survey, plan checking or improvements to existing infrastructure projects:

- **PROJECT UNDERSTANDING:** it is important for a project to be successful that the project manager and lead designer understand in detail the client needs. The project manager/lead designer needs to fully understand the requirements of the project including the project background, driving forces, project budgets, schedules, project timelines and any special conditions.

- **RIGHT OF WAY IDENTIFICATION:** DCE has two registered professional land surveyors on staff. DCE starts every project by obtaining and reviewing existing recorded survey documents and properly identifying existing right of aways and existing easements. The identification of existing right of way will determine our project boundaries and our project limits. If not enough recorded survey documents are available, DCE can prepare records of survey, corner cards and any survey maps needed for any project. It is very

important to start every project by properly identifying the project boundary limits and existing right of ways.

- **FIELD SURVEY AND DOCUMENTING EXISTING CONDITIONS:** Once the project manager/lead designer has a clear understanding of the project and the existing right of ways have been identified, the existing conditions must be accurately documented and depicted on the plans. For any successful design project the existing conditions must be properly documented since most improvement projects will likely connect or tie-in to existing improvements. DCE documents existing conditions using several means of field survey equipment including survey by aerial drone, survey by total station, scanner, survey by GPS and survey by survey/engineering level.

- **FIELD SURVEY PROCESS**
  DCE starts every project with right of way identification. DCE sets vertical and horizontal control tied to existing survey monuments and benchmarks. DCE starts every project with an aerial drone survey. DCE has two (2) Federal Aviation Administration (FAA) certified drone pilots. If the project site is in a FAA Restricted or no-fly area, our certified pilots can process a permit with the FAA to allow the project to be flown. DCE has processed FAA applications for projects adjacent to airports and military bases. DCE will also use total station or GPS survey to document existing field conditions. DCE will document X, Y and Z coordinates for existing infrastructure including existing edge of pavement, curb and gutter, sidewalks, driveways, cross gutters, other concrete structures, existing trees, fences, power poles, existing structures, utilities, street lights, signal lights and any other visual infrastructure.
  For Wet Utility Projects, especially sewer collection design projects, DCE will pothole and document X, Y and Z coordinates at all points of connections. DCE will use survey/engineering level to properly document the invert elevations at all points of connections and utility crossings. It is imperative that all points of connections are properly and accurately identify since sewer pipelines are critical and have minimal slopes.
  For Street Improvement Projects, DCE will use a combination of GPS and Survey/Engineering Level. DCE will use GPS to document horizonal alignments and locations and will use Survey/Engineering Level to precisely document invert elevations and flow lines at tie-in points including cross gutters, curb and gutters and drainage infrastructure.

- **IDENTIFICATION OF EXISTING UTILITIES:** DCE will identify existing utilities above ground and underground. DCE will coordinate with Underground Service Alert (USA) and utility companies location of their existing utilities. DCE also uses Subsurface Alert, Inc. to locate existing utilities during design. Identifying existing utilities is very important in the development of improvement plans and to help prevent projects from having potential issues in the field when it goes to construction. Utilities not properly identified can lead to construction conflicts, change orders and project delays. DCE also has been

using and will continue to use a contractor during the design phase of a project to pothole and document horizontal location and vertical elevations of utilities. DCE will continue to propose the use of potholing to locate existing utilities during the design stage. DCE works with local contractors during potholing, the contractor exposes the existing utilities and DCE surveyors document X, Y and Z coordinates with GPS survey equipment. In summary, DCE uses multiple options to identify existing utilities during design. DCE communicates directly with utility companies, coordinates with Underground Service Alert (USA), contracts with Subsurface Alert, Inc and uses a local contractor to pothole and expose existing utilities.

- **PREPARATION OF BASE MAP:** Once the right of way has been identified, the field survey is complete and all utilities have been properly identified, DCE will proceed to prepare the topographic base map. This map will show all existing infrastructure and topographic contours. This base map will be the key element used during the design process. A good topographic base map will facilitate the design of any wet utility or street improvements project. The base map will be prepared using AutoCAD and Civil 3D.

- **PRELIMINARY DESIGN:** Once the base map is prepared DCE will proceed with the preliminary design. DCE will prepare all required reports during the preliminary design phase. Reports will include, Geotechnical Investigation, Hydrology Report and WQMP if needed. These reports will assist with the design process. DCE will meet with City staff and coordinate the development of the preliminary design report. Preliminary design will include design alternatives, preliminary cost estimates and the recommended alternative.

- **PERMITTING AND ENCROACHMENT PERMIT APPLICATIONS:** During the preliminary design stage it will be determined which permit applications and encroachment permits will be required. DCE will assist the city with permitting process as required by the project. DCE can process permit and encroachment applications with Caltrans, County of Imperial, Imperial Irrigation District Water and Energy Departments, State Regional Water Control Board, Army Corps of Engineers and Utility Companies.

- **DESIGN PHASE (60%, 100% AND FINAL SUBMITTAL):** Once the preliminary design has been completed and the City selected an alternative, DCE will proceed with the preparation of the final plans, specifications and cost estimates. DCE will work closely with City staff to get the plans, specification and cost estimates to the finish line. DCE will make sure all City Standards and Specifications are incorporated in the project documents.

- **BIDDING PROCESS:** DCE will assist the city with the bidding process. DCE will assist with the preparation of Bid Package, Addendums, Answers to Contractor's Questions and Review of Contractor's Bids.

LESSONS LEARNED FROM PREVIOUS EXPERIENCE

DCE has been providing Engineering and Land Surveying Services in Imperial Valley for over 17 years. DCE project manager Carlos Beltran, P.E. and Surveyors David Beltran, P.L.S have been working in Imperial County for over 25 years and 23 years respectively. DCE staff has a great deal of experience working on public works projects.

DCE provides Civil Engineering, Land Surveying and Construction Management Services. DCE has seen both sides of many projects, DCE has been involved in the design side of many projects as well as the construction management and inspections side of many projects. This experience has given DCE and great deal of knowledge in design and construction. The following list itemizes some of the issues/lessons learned on previous projects DCE was a part of in the inspections phase and how DCE addressed them.

- **LaBrucherie Ave CM and Inspections, El Centro**. DCE was the construction manager and project inspector on this project. The design engineer was not available to address any issues uncovered during construction. The project plans did not identify the existing storm drain accurately and had conflicts with the design finish grade. DCE had to redesign LaBrucharie Ave during construction. Project had extensive delays and contractor Granite Construction had to be issued a change order for delays and change of scope. DCE learned from this project that showing existing utilities accurately is imperative to the successful design and construction of any project.
- **Existing Asphalt Pavement Grind and Overlay Project**. DCE was the project inspector. Once contractor started grinding asphalt it was determined the asphalt was only 2 inch thick placed on native material. The project had to install a new AC and Class II Base Section. A change order had to be issued to the contractor. DCE learned from this project that taking asphalt core samples is imperative and a must for projects that include asphalt repairs and/or grind and overlay projects.
- **Plans Prepared Using Google Earth Maps**. DCE was the project inspector on a project designed by another engineering firm using google earth maps. Project was completed and quantities placed by contractor did not match the bid quantities. DCE had to performed combination of aerial drone and GPS survey to determine exact quantities. A quantities change order had to issued. DCE learned from this project that an accurate field survey during design phase is the most accurate way to prepare improvement plans and determine project boundaries and quantities for any design project.
- **Plans Prepared Using Wrong Benchmarks**. DCE was the project inspector on a project that listed multiple benchmarks on the plans. The design engineer noted the wrong elevation on one of the benchmarks. Once project started construction, the new improvements did not match existing improvements. DCE surveyors had to assist the public agency and re-design the entire project. DCE was the Construction Manager and Inspector on that project and ended up doing the design during construction. Project was delayed during construction.

SCOPE OF WORK:

* CIVIL ENGINEERING GENERAL

Dynamic Consulting Engineers, Inc. (DCE) has extensive experience working with local public agencies. DCE will provide professional civil engineering design services and related work to include preparation of engineering plans, specifications, cost estimates and provide consultation and recommendations. DCE continues to provide exceptional services in Civil Engineering Design including:

- Design of Street Improvements Projects including Striping Plans, Drainage Plans, Lighting Plans, Traffic Control Plans, Roadway Design, Utilities, and Surface Improvements.
- Grading and Drainage Design including storm drainage system design, earthwork calculations, erosion control plans, dust control and PM 10 Plans.



- Hydrology and Hydraulic Reports. Prepare Calculations including preparation of Hydrology Reports using the Rational Method or Synthetic Unit Hydrograph Method for larger projects. DCE is very knowledgeable of the Riverside County Flood Control Manual and can apply some of those hydrology and hydraulic models for projects locally.
- Under Ground Utility Design including design of Sanitary Sewer Collection Systems, Water Distribution Systems, Storm Drain Collection Systems and assistance and coordination in the design of dry utilities including coordination with IID Energy, The Gas Company, ATT and Cable Company.
- Structural Design – Preparation of Structural Calculations and Details for Retaining Walls, Steel Frame Structures, Liquid Containing Concrete Structure and Concrete Foundations.
- Preparation and/or review of Engineering Plans, Technical Specifications and Cost Estimates.
- Preparation of Preliminary Engineering Reports.
- Traffic Engineering and Transportation Design including roadway geometrics, intersection improvements, traffic signal design, signing and striping, roundabouts, safety studies, and multimodal planning. These services will be provided by Aztec Engineering and DCE.

AZTEC TYPSA

* LAND SURVEYING

Dynamic Consulting Engineers, Inc. has two (2) registered land surveyor on staff. David Beltran, P.L.S has served as the Acting County Surveyor for the County of Imperial. Mr. Beltran has extensive experience preparing and reviewing record survey maps. DCE can proudly say that is has one of the best and strongest land surveying departments in the Imperial Valley.

DCE has sophisticated Land Surveying Aerial Drone, Total Station, Scanner, GPS and Survey/Engineering Level equipment. Our surveyors are ready to complete the most challenging survey projects. DCE has experience in these and other related areas of land surveying and will provide the City of El Centro with:

- **Topographic Survey Maps, Boundary Surveys and ALTA Survey Maps.**
- **GIS (Geographical Information System)**
- Earthwork Calculations.
- Tentative Maps.
- Record of Surveys.
- Final Maps and Parcel Maps.
- Preparation of Legal Descriptions.
- Corner Records.
- **Lot Line Adjustments and Parcel Mergers.**
- Right of Way Maps.
- Appraisal Maps.
- Preparation of Grading and Precise Grading Plans.
- Construction Staking.
- Lot and Boundary Closure Calculations.
- Certificates of Compliance.
- **Survey Mapping Review Services.**
- **Aerial Survey by Drones to Prepare Topographic Survey Maps, Earthwork Calculations and Construction Progress Reports.**



Dynamic Consulting Engineers, Inc. (DCE) uses conventional total station equipment and GPS to construct topographic maps illustrating the existing characteristics of the site, including topographic contours, natural features, vegetation and trees, buildings, roadways, utilities, and associated elevation and attribute data. These topographic surveys provide the basis for all subsequent project site design and engineering. **DCE also provides aerial survey by drones including aerial imaging.**

* GEOTECHNICAL ENGINEERING SERVICES

Dynamic Consulting Engineers, Inc. has included Landmark Consultants s a sub-consultant to provide Geotechnical Engineering Services. Services Include:

- Preparation of Site Investigation and Soils Report.
- Compaction and Laboratory Material Testing (Caltrans Certified)
- Pavement Structural Section Recommendations.

LANDMARK
Geo-Engineers and Geologists

* ENGINEERING AND LAND SURVEYING PLAN CHECKING

As an extension of City staff, DCE can provide plan checking services. DCE can assist the city with General Civil Engineering Plan check as well as Land Surveying Plan Check. DCE can provide plan checking services for the following:

- Street Improvement Plans
- Grading Plans
- Structural Engineering Plans and Calculations
- Final Maps and Parcel Maps
- Record of Surveys
- Legal Descriptions
- Lot and Boundary Closure Reports
- Corner Records

* PLANNING AND PERMITTING

Dynamic Consulting Engineers, Inc. (DCE) has experience assisting local public agencies with planning and permitting. DCE has the experience and resources to assist our clients with the following services:

- **Utility Coordination Services and Permitting.**
- Planning, Preparation of Preliminary Engineering Reports, Preparation of Conceptual Plans, Cost Estimates, Encroachment Applications, Utility Crossing Agreements Assistance and Bidding and Advertising Assistance.
- Permitting, including assistance in obtaining encroachment permits or construction permits with County of Imperial Planning and Public Works Departments, Imperial County Air Pollution Control District, County Health Department, Caltrans, IID Water and Energy Departments, CA Regional Water Quality Control Board, CA Fish and Game, Union Pacific Railroad, and crossing agreements with utility companies.

* STRUCTURAL ENGINEERING

Dynamic Consulting Engineers, Inc. has specialized expertise in structural engineering including:

- Structural Analysis.
- Design of Liquid Containing Concrete Tanks.
- Bridge Design - Pre-Stressed Concrete Box Beam Bridge Design per AASHTO LRFD.
- Overhead Advertising Signs including Seismic and Wind Analysis.
- Pump Station Structural Design.
- Foundation Design.
- Retaining Walls.



ANALYSIS OF EFFORT/METHODOLOGY:

As Needed Engineering Services:

RECOMMENDATIONS/SCOPE OF WORK
The following is the interpretation of the project scope of work:

General:
As needed, DCE will provide the City with the general civil engineering services in accordance with City policies, procedures and guidelines. We will prepare and/or review the design calculations, technical specifications and other related materials and check for conformance as requested by the City.
DCE will not offer any services that might be construed as a conflict of interest.

Engineering Documents:
DCE will reference the latest revisions of the following documents when preparing engineering documents and plan checks (if needed) for the City:

a. Written communication/direction from the City. Any related oral communication or direction by the City will be memorialized and a copy sent to the City.
b. City of El Centro Conditions of Approval.
c. City of El Centro Water, Sewer and Storm Drain Master Plans.
d. City of El Centro General Plan
e. Project design documents such as the Geotechnical, Environmental and Title Reports.
f. City of El Centro Ordinances and Standard Plans.
g. Subdivision Map Act, latest revision.
h. American Water Works Association AWWA.
i. A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO).
j. San Diego Regional Standard Drawings.
k. Highway Capacity Manual, Transportation Research Board, National Research Council.
l. Highway Design Manual, CALTRANS.
m. Standard Specifications for Public Works Construction (Greenbook)
n. Imperial County Hydrology Manual
o. Manual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, Federal Highway Administration.
p. Planning and Design Criteria for Bikeways in California, CALTRANS.
q. Standard Specifications, CALTRANS.
r. Standard Plans, CALTRANS.
s. Standard Specifications for Highway Bridges, American Association of State Highway and Transportation Officials, (AASHTO).
t. Traffic Manual, CALTRANS.
u. Local Assistance Procedure Manual (LAPM), CALTRANS
v. California Building Code and ACI Manuals.
w. Professional Engineer's Act (Business and Professions Code §§ 6700 – 6799)
x. Rules of the Board for Professional Engineers and Land Surveyors California Code of Regulations Title 16, Division 5 §§ 400-476
y. Any other documents as directed or approved by the City.

Engineering Methodology:

We will use our engineering experience to prepare design plans that will meet State, Federal, local and City policies, procedures and guidelines and ensure the health and safety of the public.
During the preparation of engineering documents, DCE will:

1. Prepare plans assuring consistency with other planned improvements.
2. Prepare engineering documents that will reflect the recommendations of specific project studies and reports.
3. Identify and evaluate existing conditions of the project and provide for innovative flexible improvement solutions that will reflect the city's goals and recommendations.

DCE has extensive experience preparing engineering plans and specifications for:

a. Street Improvements including striping and signage plans
b. Onsite and offsite grading plans, including precise grading and drainage for individual lots as well as the entire development, utility plans (water, sewer, storm, etc.), street improvement plans, lighting plans, erosion control plans, and detail sheets.
c. Structural projects
d. Domestic and raw water improvement plans
e. Wastewater collection system improvement plans
f. Pump Stations
g. Submittal reports, including:
    1. Quantity and cost estimates
    2. Hydrology and hydraulic calculations and report including Rational Method and Synthetic Unit Hydrograph
    3. Hydraulic calculations. Water, sewer and storm drain pipeline sizing using WaterCAD, SewerCAD and StormCAD
    4. Street layout and designs
    5. Preliminary Engineering Reports
    6. Storm water best management practices & erosion control designs
    7. Water and sewer pressure and capacity calculations and analyses
    8. Traffic reports and studies
    9. Structural Calculations
    10. Road Structural Section Calculations
    11. Compliance with Geotechnical Report
h. Technical Specifications
    1. Road Structural Section components
    2. Trench backfill and restoration
    3. Signing and striping
    4. Storm Drain line and appurtenances
    5. Water/Sewer line and appurtenances
    6. Traffic Signal Components

As-Needed Surveying Services

General:
Generally, residential subdivision projects require the preparation of Tentative Tract Maps (TTMs) for approval by local agency planning departments and Final Tract Maps for recordation with the County in question. Residential Tentative Tract Map (TTM) local agency approval and acquisition of entitlements/permits generally requires the preparation of an overall application package. As needed, DCE will provide the City with map review services and preparation of survey documents in accordance with the following:

1) City of El Centro Ordinances
2) Subdivision Map Act, latest revision
3) City of El Centro General Plan:
4) City of El Centro Conditions of Approval
5) Project Title Reports
6) County of Imperial Surveying Division Policies and Procedures
7) Professional Land Surveyor's Act - (Business and Professions Code §§ 8700 – 8805)
8) Rules of the Board for Professional Engineers and Land Surveyors California Code of Regulations Title 16, Division 5 §§ 400-476

DCE has two registered California Professional Land Surveyors who will review the maps and survey calculations or prepare the survey documents as requested including:

- Lot and boundary closure calculations
- Dedications and easement provisions
- Legal descriptions and completeness and accuracy of data notation
- Lot Line Adjustments
- Reversion to Acreage
- Parcel Maps
- Final Maps including associated easement and/or right-of-way dedications, street vacations, access agreements, and other legal documents for recordation with the County.
- Tentative Maps
- Record of Surveys
- Tract Maps
- Right of Way Maps
- Lot Mergers
- Topographic Surveys and Data Collection
- Construction Staking
- "As-built" surveys and the subsequent preparation of "as-built" plans to be filed with local agencies.
- Manhole surveys and inspections
- Mapping

AVAILABILITY TO MEET SCHEDULES AND CURRENT WORKLOAD

Our team understands that the City has a high-level of responsibility and accountability in providing services to its residents. Our goal is to be efficient, cost-effective and highly responsive to your needs.

Our technical team has sufficient resources and specialized expertise that will work in concert with the City's mission. Our office continues to grow as we see the local demand for local civil engineering and land survey grow. Over the last few years DCE has grown from an office of 9 to an office of 16. DCE has two registered civil engineers and two registered land surveyors ready to provide the City of El Centro with engineering and land surveying services.

Our office is conveniently located a few miles from the City of El Centro and our staff is available to meet with City staff on projects within minutes. Dynamic Consulting Engineers, Inc. will work closely with the City Public Works department staff to assure the City the projects are completed precisely and in a timely manner.

DCE's workload fluctuates. We have enough staff, field surveyors and project engineers ready to go on short notice on any project.

HISTORY

Dynamic Consulting Engineers, Inc. (DCE) is a local firm based in the Imperial Valley. DCE has been providing Engineering and Land Surveying Services in Imperial Valley for over 17 years. DCE project manager Carlos Beltran, P.E. and Surveyors David Beltran, P.L.S have been working in Imperial County for over 25 years and 23 years respectively. DCE staff has a great deal of experience working on public works projects. DCE continues to work successfully with local public agencies in projects similar to this one.

PROJECT PERSONNEL ORGANIZATIONAL CHART AND TEAM QUALIFICATIONS

DCE proposes that Carlos Beltran, P.E. be the Project Manager and main contact for projects related to this RFQ. Mr. Beltran has been working in Imperial County for over 25 years. Mr. Beltran has extensive experience working on similar On-Call Engineering Services with local public agencies including City of Imperial, City of Brawley, City of Calexico and the County of Imperial Public Works. His experience in the Imperial Valley includes coordination of projects with IID, Caltrans, County Public Works, County Planning Department, Air Pollution Control District, US Army Corps of Engineers, local cities and utility companies.

The DCE team includes professional subconsultants Aztec Engineering (TYPSA) and Landmark Consultants. Aztec Engineering will provide the team with technical expertise in transportation and traffic signal projects. Landmark Consultants will provide geotechnical engineering services.

Aztec Engineering (TYPSA) will provide technical expertise in traffic engineering and transportation design that includes roadway geometrics, intersection improvements, traffic signal design, signing and striping, roundabouts, safety studies, and multimodal planning.

TYPSA is a multi-discipline engineering and environmental consulting firm assisting public and private clients in planning, developing, designing, constructing, and maintaining critical infrastructure projects across the United States. Headquartered in Phoenix, Arizona, TYPSA also operates satellite offices in California and Colorado, providing local expertise with the backing of a global network.

LandMark Consultants will provide geotechnical engineering services including compaction and material testing.

LandMark Consultants is accredited by the American Association of State Highways and Transportation Officials (AASHTO) and participates in the Cement and Concrete Reference Laboratory (CCRL) and AASHTO Materials Reference Laboratories (AMRL) inspection program administered by the National Institute of Standards and Technology. This biannual inspection assures that LandMark laboratories are providing testing services according to the latest American Society for Testing and Materials (ASTM) methods. LandMark periodically reviews their test methodology to verify compliance with the latest test methods and procedures. LandMark also participates in CALTRANS proficiency sampling and holds laboratory certifications with CCRL, AMRL, AASHTO and CALTRANS.

Dynamic CONSULTING ENGINEERS

Education
B.S. Civil Engineering, University of California Los Angeles (UCLA)

Registrations
Professional Engineer, Civil, CA, No. 69121

Years of Experience
25 years

CARLOS BELTRAN, P.E.

Project Manager/Lead Designer

Carlos is a cofounder of Dynamic Consulting Engineers and has been providing project management and engineering design services for both the private and public sectors of the civil engineering industry. His professional and academic experience provides a broad-base, multi-disciplinary background in the field of civil engineering. Carlos is one of the principals at Dynamic Consulting Engineers and is responsible for project management and design of street improvement projects, water and sewer improvement projects, preparation of grading and drainage plans and the preparation of hydrology and hydraulic reports. Mr. Beltran has substantial experience working in municipal projects throughout Imperial County. Carlos is very knowledgeable of the local agencies and Caltrans standards and specifications

Project Experience

New River Improvement Project – Calexico Reach, City of Calexico/CA Department of Water Resources, Calexico, CA. Construction Manager overseeing all construction activities of the New River Improvements Project. Construction Includes diversion structure, 8,200 LF of 72 inch diameter pipe, pump station, 5,000 LF of 16 inch diameter force main, outlet structure and grading of New River banks. Project administered by the City of Calexico and Funded by the California Department of Water Resources. Project Construction Cost $42,500,000.

City of El Centro Imperial Ave. Extension Phase 1 and Phase 2, El Centro, CA. Construction Manager, provided construction management and inspection services for all construction activities for both Phase 1 and Phase 2 of the Project. Project included roadway extension from Interstate 8 to Dannenberg Drive. Project also included new sidewalks, driveways, curb and gutter, storm drain collection system, street lighting and a new signal light at Wake Ave. and Imperial Ave. Responsible for coordinating work within Caltrans Right of Way and coordinating work with IID energy and water department.

City of El Centro Jacaranda Gardens Street Improvements, El Centro, CA. Lead Designer for the design of New Bike Lanes along Waterman Ave, New Raised Median along Bradshaw Ave. and New Street Improvements at 12th Street between Pico Ave. and Oleander Ave.

Imperial County Clark Road Bridge, Heber CA, Lead Designer, Responsible for the design of the new 110 ft span Clark Road Bridge. Project included structural design of abutments, drilled piles, wing walls and bridge deck. Prepared structural details and structural analysis. Project also included the design of a new four way stop at Clark Rd and Wiloughby Rd. Project included coordination with IID water department and local farmers. Responsible for the preparation of plans, technical specification, cost estimates and bid documents.

Imperial County Niland Main Street Improvements Projects Phase1 and Phase 2, Niland CA, Lead Designer, Responsible for the design of Main Street Improvements for both Phase 1 and Phase 2. Improvements Included widening of Main Street, new curb and gutter, new driveways, sidewalks, spandrels, cross gutters and ADA ramps. Also prepared striping plan, temporary traffic control plan specifications and bid documents.

City of Brawley Ocotillo Springs Class II Bike Lanes and Sidewalks Installation, Brawley, CA. Lead Designer, responsible for the design of Class II Bike Lanes and New Sidewalk Improvements throughout many streets in the City of Brawley. Prepared plans, specifications, cost estimates and bid documents.

IID and CA Fish and Wildlife - Red Hill Bay Shallow Water Habitat Project, Salton Sea, CA. Project manager and lead designer. Designed shallow water ponds, berms, fresh water pump station, saline water pump station, desilting basins, mixing station, gravity pipelines and force main pipelines.

City of Imperial Plan Checking Services, Imperial, CA Plan Checker. Responsible for plan checking services to the City of Imperial for new housing developments and new commercial projects. Plan Checking services include review of street improvement plans, grading and drainage plans.

Dynamic CONSULTING ENGINEERS

Education
B.S. Civil Engineering, Cal Poly Pomona

Registrations
Professional Land Surveyor, CA, No. LS 8482

Years of Experience
23 years

DAVID BELTRAN, P.L.S.

Survey Manager

Mr. Beltran is a cofounder of Dynamic Consulting Engineers and a registered professional land surveyor with more than twenty years of experience in the industry. David has broad experience in coordinating survey services for large-scale projects for private developments and local agencies. He is also experienced in the preparation of topographic surveys, Subdivision Maps, Record of Surveys, Right of Way Mapping and construction staking.
Mr. Beltran has substantial experience working in topographic survey projects in Imperial County. David also has substantial experience preparing record maps locally and is very knowledgeable of the County of Imperial guidelines.

Project Experience

County of Imperial, On Call Plan Check, Survey Maps Plan Checker, Mr. Beltran has been providing plan checking services to the County of Imperial for over ten years. Plan Checking services include review of records of survey, legal descriptions, tentative maps and parcel maps.

City of Imperial, On Call Plan Check, Survey Maps Plan Checker, Mr. Beltran is currently providing Survey Maps Plan Checking Services. Plan check includes review of records of survey, legal descriptions, tentative maps and parcel maps.

City of Calexico, On Call Plan Check, Survey Maps Plan Checker, Mr. Beltran is currently providing Survey Maps Plan Checking Services. Plan check includes review of records of survey, legal descriptions, tentative maps and parcel maps.

Survey Benchmark Elevation Adjustment Due to Earthquake Movement Project; FEMA-1911-DR Baja Earthquake; FEMA ID 025-99025-00 CalEMA ID 025-00000; County of Imperial Project No. 5212 EQ. (Imperial County, State of California) Responsible for the adjustment of the Primary GPS network of the Imperial County's geodetic control system. The network consisted of 167 existing monuments. The existing survey monuments were correlated to the Continuous GPS (CGPS) and the California Real Time Network (CRTN) stations using California Spatial Reference Center (CSRC's) and National Geodetic Survey (NGS) database. The final geodetic coordinates were presented on one datum; NAD83(2011), epoch of 2010.0.

Clark Road Bridge Emergency Replacement Over the Central Main Canal, Imperial County, CA. Prepared the topographical surveying, right of way mapping, new roadway design and structural design of bridge abutments, drilled piers and bridge deck.

N. International Avenue Improvement Project, City of Calipatria, CA. Prepared the preliminary design report, which included and identified design parameters, existing conditions, existing infrastructure, site topography, existing utilities, and hydrology and storm drain conditions. Prepare right of way maps.

City of Brawley Ocotillo Springs Class II Bike Lanes and Sidewalks Installation, Brawley CA. Design support. Mr. Beltran prepared the topographic survey map and identified existing right of way and easements for this project. Mr. Beltran also assisted with the design of the Class II Bike Lanes and New Sidewalk Improvements throughout many streets in the City of Brawley.

County of Imperial, Niland Main Street Improvements Projects Phase1 and Phase 2, Niland, CA, Design Support, Responsible for the field topographic survey and preparation of the topographic base map and right of way maps.

Construction Staking for Numerous Public Works Projects: Have been continuously providing construction staking for numerous public works projects in Imperial Valley including projects administered by the County of Imperial, City of Calexico, City of Brawley, City of Imperial and numerous water districts. Mr. Beltran been providing construction staking services in Imperial Valley for over 20 years.

Dynamic CONSULTING ENGINEERS

Education
B.S. Civil Engineering, San Diego State University (SDSU; 1987

Registrations
Professional Engineer, Civil, CA, No. 45683

Years of Professional Experience
31 years

FRANK FIORENZA, P.E.

Project Manager

Frank has 31 years combined experience, working as a P.E. for County of Imperial Department of Public Works, and the Imperial Irrigation District on a variety of road, bridge, landfill, municipal, water and drain canals, pipelining and structure projects within the County. He has coordinated with all local agencies, Caltrans, Bureau of Reclamation, and private sector developers in a wide range of civil engineering and construction projects. He has been involved in the planning, design and engineering, plan checking, construction inspection and management of projects under contract. He has expertise in obtaining grant funding, program management and final reporting and invoicing of federal and state funded transportation projects. With 19 years at County of Imperial as Deputy Director of Public Works-Engineering and 11 years at Imperial Irrigation as Principal Engineer, Frank is well versed in the broad base of civil engineering within the Imperial Valley, whether planning, design, engineering, plan checking, project development for road and street transportation improvements, subdivisions or utility relocations.

Mr. Fiorenza has substantial experience working in municipal projects throughout Imperial County. Frank is very knowledgeable of the local agencies, including Caltrans, County of Imperial and Imperial Irrigation District standards and specifications.

Project Experience

2022-Present, Dynamic Consulting Engineers, Inc– As a Project Manager, Mr. Fiorenza is responsible for coordination and design of improvement projects as well as construction management and inspections of capital improvements projects. Mr. Fiorenza was the Project Manager/RE for the two year construction Calexico New River Improvements Project with a construction budget of over 42 Million dollars. Mr. Fiorenza is currently providing Construction Management and Inspections Services for two street improvements projects in Calexico and one tank rehabilitation project for the City of Imperial.

2022-2011, Imperial Irrigation District– As Principal Engineer, supervised seven (7) engineers and technicians in the design, bidding, and construction/construction management of water department capital and customer projects. Typical projects include pipelining, canal lining, structure replacements, driveway access crossings. Specialty projects included the Managed Marsh Phase 2 and 3 and technical support for IID General Services & Energy department for review, design and construction support of civil projects including parking lots, driveways, substation & generator pads. Coordinated with Energy department for distribution and transmission poles and pole lines for rehabilitation and new construction of energy facilities. Coordination with local cities, Caltrans, USBR Yuma Area Office on water infrastructure, Imperial Dam, and various transportation impacts to IID infrastructure. Reviewed private and other agency development projects for impacts to IID water canals and drain infrastructure. Provided technical support and review of agricultural development projects including impact assessment to local farmers. Provided technical support for IID operated and maintained bridges along the All-American Canal. Reviewed and assigned conditions for IID encroachment permits for various public agency and private development permit applications. Assigned and reviewed engineering requests for proposals, engineering studies, design plans, calculations and projects for procurement, bidding, construction and provided oversight review of construction management by consultants.

1992-2011, County of Imperial Department of Public Works – As Deputy Director of Public Works-Engineering, managed and supervised the engineering section to provide plan checking/reviewing, design, bidding, procurement of consultants, construction management of public works/civil projects under construction. Prepared County's Design Guidelines Manual for adoption of standards for use within Imperial County. Served as acting Director of Public Works 8 months, served as Environmental Evaluation Committee member, Reviewed EIRs and Traffic Studies/Reports, made conditions of approval on wide variety of public and private development projects affecting County roads, bridges, transportation and solid waste sites, provided technical support and coordinated with County, State, Federal agencies on road/bridge transportation, solid waste and storm water issues within Imperial County. Served as main technical support to Director of Public Works.

Dynamic CONSULTING ENGINEERS

JOSE DENNIS, P.L.S.

Land Surveyor

Education
Land Surveyor, Industrial Engineer and Master of Science in Computer Systems.

Registrations
Professional Land Surveyor, CA, No. LS 8865

Years of Experience: 19

Mr. Dennis is a new member of Dynamic Consulting Engineers, Inc and is a registered professional land surveyor with more than 19 years of experience in the industry. Mr. Dennis is responsible for the preparation of Records of Survey Maps, Parcel Maps, Final Maps, SB9, Lot Consolidation, Street dedication, Lot Mergers, Monument preservation, Easements, staking, and GPS field survey.

Project Experience

- Records of Surveys and Corner Records throughout Imperial County.
- Numerous Parcel Maps
- Monument Preservations, Corner Records

MARK BAUTISTA

Project Engineer / Inspector

Education
B.S. Civil Engineering, Cal Poly Pomona

Years of Experience
14 years

Mr. Bautista works as a civil designer, land surveyor and a project inspector. Mr. Bautista has experience in civil engineering design for street improvement projects and land surveying.

Project Experience

- Calexico New River Project (42.5 Million Const.) Lead Inspector
- Niland Main Street Design of Street Improvements
- IID Dam Sludge Replacement Project (16 Million Const.) Lead Inspector
- IID Dam Gila Canal Headworks Project (6 Million Const.) Lead Inspector
- El Centro LaBrucherie Ave Road Widening Project - Inspector

ROBERTO ROMO

Project Engineer / Inspector

Education
B.S. Civil Engineering, Cal Poly Pomona

Years of Experience
22 years

Mr. Romo is a civil designer and a senior inspector. Mr. Romo has extensive experience in providing inspection services for irrigation canals and drains as well as street improvements, water, sewer and storm drain projects. Mr. Romo also has extensive experience in design of major construction projects such as underground utilities and street improvement projects.

Project Experience

- Calexico New River Project (42.5 Million Const.) - Project Inspector
- El Centro Imperial Ave Extension Phase 1 and Phase 2- Inspector
- City of Imperial Aten Road Bike Lane Design Project
- City of Imperial N Street Project Design of Street Improvements

MIGUEL VIZCARRA

Project Engineer / Inspector

Education
B.S. Civil Engineering, UABC Mexicali

Years of Experience
12 years

Mr. Vizcarra works as a project engineer designer, land surveyor and a project inspector. Mr. Vizcarra has experience in civil engineering design for street improvement projects and land surveying. Mr. Vizcarra also has extensive experience in project inspections for road construction, road rehabilitation projects throughout the Imperial Valley.

Project Experience

- El Centro Alder Sewer (Aztec Engr) Replacement Project - Inspector
- El Centro ATP Cycle Improvement Project (Aztec Engr) – Inspector
- Ormat Niland Solar Power Plan Grading and Drainage Design
- Project Inspector for Numerous County of Imperial Street Imps. Projects



EXPERIENCE

2021 - Present with TYPSA

18 Years with Other Firms

EDUCATION

MS Civil Engineering, University of Memphis, 2003

BS Civil Engineering Sri Venkateswara University, 1999

REGISTRATIONS

2006 / Professional Engineer / Arizona #45911

2020 / Professional Engineer / Texas #137550

2006 / Professional Traffic Operations Engineer, ITE, #2026

AFFILIATIONS

Institute of Transportation Engineers

Intelligent Transportation Systems of Arizona

TYPSA

SRINIVAS GOUNDLA, PE, PTOE

Senior Traffic Project Engineer

BACKGROUND

Srinivas (Srini) Goundla is a Senior Traffic Project Engineer experienced in providing traffic engineering/Intelligent Transportation Systems (ITS) expertise for planning, design and construction of transportation projects. He has extensive knowledge of federal, state, and local agency design standards, guidelines, rules and regulations acquired while working on transportation projects throughout the United States. Srini is very familiar with the project development process for public work projects, from planning to construction. He has performed traffic design, transportation planning and traffic studies, transportation related research, and ITS design in Arizona, Texas and Missouri. His areas of expertise include ITS, traffic analysis and signal design, work zone traffic control, signing, and pavement marking. Srini is fluent in many engineering computer applications including highway capacity software, Synchro, and VISSIM. In addition, he has experience managing Traffic Management Center, Signal Operations and Lighting staff for the City of Chandler, City of Tempe, and the Missouri Department of Transportation District 4.

RELEVANT EXPERIENCE

Engineering On-Call Services; El Centro, CA (City of El Centro): TYPSA is one of five consultants providing on-call engineering services to the City of El Centro. To date, TYPSA has delivered the following Task Orders:

- **Active Transportation Plan (ATP) Cycle 5 Improvements Task Order:** Traffic Engineer. This project includes the design of pedestrian HAWK crossings with associated ADA ramps and sidewalks, traffic calming devices (bulb outs, narrower traffic lanes), a new traffic signal in front of the City hospital and drainage improvements. This project posed challenges pertaining to existing drainage where the bulb-outs/HAWKs were being placed and addressed existing intersection sight distance limitations where current standards were not met. Coordination for new services were coordinated with the Imperial Irrigation District to ensure the new traffic signal and HAWK signals would have power service. Additional project features included designing all signals to be compatible with a future interconnect connection along Imperial Avenue. Underground infrastructure to tie into the future system was included with the TYPSA project. GPS controlled timing modules were added to the project in order to coordinate the new signals before the future interconnect project was constructed. Srini's responsibilities included the design of pedestrian HAWK crossings, ADA ramps, sidewalks, traffic calming features, and a new traffic signal with full drainage coordination, IID utility coordination, and signal system compatibility for future interconnect and GPS-based timing.

4th Street – Cedar Avenue, Lockett Road Roundabout; Flagstaff, AZ (ADOT/City of Flagstaff): Traffic Engineer. Srini provided signing and marking engineering services on this project. The City of Flagstaff is using federal HSIP funds to assist with the design and construction of improvements at the 4th Street and Cedar Avenue/Lockett Road intersection. The intersection currently exists as a signalized four-legged intersection and is proposed to be revised into a roundabout configuration. This change in configuration is intended to improve safety for all modes of transportation as well as improve the functional Level of Service of the intersection.

Mr. Peter LaBrucherie, PE, GE
Vice President/Principal Geotechnical Engineer
El Centro, CA

LANDMARK Geo-Engineers and Geologists

Mr. LaBrucherie has ten (10) years of experience in the geotechnical field, having performed geotechnical investigations in the Coachella and Imperial Valleys. His field experience includes logging of soil borings and exploratory trenches, collection and documentation of soil samples, collection of field geotechnical data, and soils testing. Mr. LaBrucherie is also experienced in Phase I Environmental Site Assessments, soil infiltration and percolation testing, soil compaction testing, concrete testing, geopier installation inspection, and rebar inspection. Mr. LaBrucherie is a registered professional engineer in California.

Mr. Steven K. Williams, PG, CEG
Senior Engineering Geologist
El Centro, CA

Mr. Williams is an engineering geologist with over thirty (30) years of experience in engineering geology, geotechnical and environmental site assessment in southwestern Arizona and southern California. In addition, his experience includes two years in the mining exploration industry in Utah and Nevada. He has served as a project geologist on transmission lines, substations, bridges, pipelines, canals, reservoirs, residential subdivisions, schools, geothermal power plants, public works facilities, and water and wastewater treatment facilities. Mr. Williams is a Registered/Professional Geologist in the states of Arizona and California and a Certified Engineering Geologist in California.

Mr. Julian Avalos, PE, GE
Senior Geotechnical Engineer
El Centro, CA

Mr. Avalos has over twenty-five (25) years of experience in the geotechnical field, having performed geotechnical investigations throughout Mexico, Mexico City, and in the Mexicali and Imperial Valleys. His field experience includes logging of soil borings and exploratory trenches, collection and documentation of soil samples, collection of field geotechnical data, and soils testing. Mr. Avalos is also responsible for preparing computer-generated slope stability analysis, liquefaction analysis, and subsequent writing of geotechnical reports for transmission lines, substations, bridges, pipelines, canals, reservoirs, residential subdivisions, schools, geothermal power plants, public works facilities, and water and wastewater treatment facilities. Mr. Avalos has also provided construction management for soil cement channel and Caltrans highway improvements. Mr. Avalos is a registered professional engineer in California and Arizona and a registered geotechnical engineer in California.

EMPLOYEE COUNT AND STAFF AVAILABILITY

Dynamic Consulting Engineers, Inc.

Employee Count by Title and Discipline

Title/Discipline	Count
Licensed Professional Engineers	2
Licensed Professional Surveyors	2
Project Engineers/Surveyors	7
CAD and Survey Technicians	3
Administrative/Office/Clerical	2
TOTAL	16

Staff Availability

Staff Name	Title	Education	Office Location	Expected Availability
Carlos Beltran, P.E	Project Manager/Lead Designer	UCLA Civil Engineering	Imperial, CA	50%
Frank Fiorenza, P.E.	Project Manager	San Diego State University Civil Engineering	Imperial, CA	50%
David Beltran, P.L.S	Project Manager/Land Surveyor	Cal Poly Pomona Civil Engineering	Imperial, CA	50%
Jose Dennis, P.L.S	Land Surveyor	Cetys Mexicali Industrial Engineering	Imperial, CA	50%
Mark Bautista	Project Engineer/Inspector	Cal Poly Pomona Civil Engineering	Imperial, CA	80%
Roberto Romo	Project Engineer/Inspector	Cal Poly Pomona Civil Engineering	Imperial, CA	80%
Miguel Vizcarra	Project Engineer/Inspector	UABC Mexicali Civil Engineering	Imperial, CA	100%
Sam Silva	Project Engineer Aerial Drone Survey Pilot	Cal Poly Pomona, Masters Degree in Mathematics	Imperial, CA	100%
Isacc Gutierrez	Project Engineer/Designer	Long Beach State University Civil Engineering	Imperial, CA	100%
Francisco Mayoral, EIT, LSIT	GIS Analyst/ /Aerial Drone Survey Pilot	Instituto Tecnologico de Mexicali Industrial Engineering	Imperial, CA	50%
Luis Sanchez	Project Engineer/Field Survey	Instituto Tecnologico De Mazatlan, Civil Engineering	Imperial, CA	50%
Carlos Jimenez	Field Survey	Imperial Valley College	Imperial	50%
Berenice F. Valle	Project Coordinator	National University Masters of Forensic Science	Imperial, CA	25%
Camila Beltran	CAD Technician	Currently Attending University of Arizona	Imperial, CA	50%
Joseph Enders	Field Survey	Imperial Valley College	Imperial, CA	25%

DCE'S PROJECT EXPERIENCE

Dynamic Consulting Engineers, Inc. staff has extensive experience working on Capital Improvement Projects for local public agencies throughout Imperial Valley. Our professional engineers and project management team is very knowledgeable of the local standards and specifications.

*CITY OF EL CENTRO PROJECT EXPERIENCE

BUCKLIN PARK RETAINING WALL AND VETERANS MEMORIAL IMPROVEMENTS, EL CENTRO CA. DCE is currently providing engineering design services for this project. The project includes the design of new retaining walls for the existing ponds. The existing retaining walls are deteriorating and have started collapsing. DCE is preparing structural engineering details for the new retaining walls. DCE is also preparing the design of a new walkway to the existing Veterans Memorial.

JACARANDA GARDENS AHSC GRANT BIKE LANES AND STREE IMPROVEMENTS PROJECT, EL CENTRO CA. DCE is currently providing engineering design services for this project. The project includes the design of Class III bike lanes along Waterman Ave. and Villa Way. The project also includes design of street improvements to Bradshaw Ave. These improvements include installing new raised mediums, new left turn lanes, new bike lanes and re-stripping of Bradshaw Ave. This project also includes design of new street improvements for 12th St. These improvements include design of new roadway section, new curb and gutter, new sidewalks, new driveways, new cross gutters, road striping and street lighting.

PUMP STATION NO. 2 RELOCATION PROJECT AT WAKE AVE. AND LaBRUCHERIE AVE., EL CENTRO CA. DCE prepared engineering design plans, technical specifications and cost estimates for this project. Design included a new pump station and a 19 ft deep wet well at the intersection of Wake Ave. and LaBrucherie Ave. The project included the design of a 12 inch diameter force main along LaBrucherie Ave. This project also included the design of a 24 inch diameter sewer collection system along Wake Ave. The depth of the new sewer collection pipe ranged between 18 ft to 22 ft in depth. DCE prepared buoyancy force calculations for all manholes and for the new wet well.



El CENTRO TOWNCENTER STREET IMPROVEMENTS DESIGN, EL CENTRO CA. DCE prepared plans, specifications and cost estimates and completed the construction management for the project. DCE prepared the design plans and specifications for water distribution system, sanitary sewer collection system, storm water collection system, street improvements plans, street rehabilitation plans, traffic signal lights at the intersection of 8th Street and Cruickshank. The striping and signage plans and SWPPP were prepared and inspected by DCE. The specifications were prepared per City of El Centro and Economic Development Administration requirements. DCE assisted the City of El Centro with coordination and preparation of encroachment permits application with IID to relocate existing overhead power lines. DCE also coordinated with dry utilities the design and installation of gas lines, cable and underground power. DCE also prepared the contract and bid documents and assisted the city during the bidding process



IMPERIAL AVE. EXTENSION PHASE 1 AND PHASE 2 CONSTRUCTION MANAGEMENT AND INSPECTIONS, EL CENTRO CA. DCE provided construction management and inspections for this project. Our services included full time inspections during construction of both phases. Our inspectors oversaw the grading operations and construction of the off ramp slopes, installation of underground utilities, installation of class II base, asphalt concrete pavement, construction of new sidewalks, curb and gutter, driveways, new signal light, new streetlights and road striping. DCE inspectors assured the city that all construction met the project plans and specifications. DCE project manager assisted the city with project coordination, scheduling, submittals, RFI's and contractor payment applications. DCE used aerial drone surveys to calculate earthwork volumes. DCE flew the project site weekly to update earthwork volumes. The earthwork calculations by aerial drone survey assisted in calculating the pay applications in bid items that included earthwork volume quantities.





LaBRUCHERIE ROAD CONSTRUCTION MANAGEMENT AND INSPECTIONS BETWEEN BARBARA WORTH DR. AND ORANGE AVE., EL CENTRO CA. DCE provided construction management and inspections for this project. Our services included full time inspections during construction. Our inspectors oversaw demolition operations, earthwork and grading, installation of water line, sewer manholes repairs, installation of class II base, asphalt concrete pavement, construction of new sidewalks, curb and gutter, driveways, new signal light, new streetlights and road striping. DCE inspectors assured the city that all construction met the project plans and specifications. DCE project manager assisted the city with project coordination, scheduling, submittals, RFI's and contractor payment applications.





CITY OF EL CENTRO LAND SURVEY AND SURVEY MAPS PLAN CHECK PROJECTS

- Gomez Park Legal Description
- El Centro Library IID Conduits Legal Description
- Imperial Avenue Quit Claim Legal Description and Plat Map
- LaBrucherie Road Record of Survey
- Imperial Avenue Extension Right of Way Documents
- Numerous Survey Maps Plan Checks

*CITY OF CALEXICO PROJECT EXPERIENCE

ENGINEERING DESIGN PROJECTS

ALLEY IMPROVEMENTS PHASE I, PHASE II AND PHASE III AT VARIOUS ALLEYS AND ROADS, CALEXICO CA. DCE prepared engineering design plans, technical specifications and cost estimates for this project. As part of a Grant from Imperial County Air Pollution Control Department for dust mitigation, the City of Calexico placed asphalt concrete and class II base for numerous alleys and streets. DCE prepared the field and aerial survey for every alley (over 20 alleys) and several streets. DCE prepared improvements plans which included removal of existing driveways and installation of new driveways, curb and gutters, ADA ramps and class II base.

NEW RIVER IMPROVEMENT PROJECT – CALEXICO REACH, CITY OF CALEXICO/CA DEPARTMENT OF WATER RESOURCES, CALEXICO, CA. Construction Manager overseeing all construction activities of the New River Improvements Project. Construction Includes diversion structure, 8,200 LF of 72 inch diameter pipe, pump station, 5,000 LF of 16 inch diameter force main, outlet structure and grading of New River banks. DCE is currently providing three full time inspectors and two project managers. Project administered by the City of Calexico and Funded by the California Department of Water Resources. Project Construction Cost $42,500,000.





5th STREET AND GRANT AVE. WATER MAINS IMPROVEMENTS PROJECT, CALEXICO CA. DCE prepared engineering design plans, technical specifications and cost estimates for this project. Design included the installation of approximately 1,700 ft of 24-inch diameter water pipeline along Pierce Ave and 5th Street. DCE assisted the City in obtaining the permit with the Southern Pacific Railroad for crossing the railroad with the new water line. The project also included the design of a new 12 inch water line along Grant Ave. DCE also prepared a detailed traffic control plan and detour plan.

2ND STREET, DOOL AVE. AND BEACH AVE. WATER PIPELINE REPLACEMENT PROJECT , CALEXICO CA. DCE prepared engineering design plans, technical specifications and cost estimates for this project. Design included the installation of approximately 7,200 ft of 8-inch diameter water pipeline, new fire hydrants, connections to existing water lines and installation of new service laterals. DCE also prepared a detailed traffic control plan and detour plan. DCE also prepared the erosion control plan for this project.

36" DIAM. WATER METER AND VAULT AND THE CITY OF CALEXICO WATER TREATMENT PLANT PROJECT, CALEXICO CA. DCE prepared engineering design plans, technical specifications and cost estimates for the construction of new 30 inch diameter electromagnetic sensor/meter. DCE prepared piping plan including bypass and 36 inch diameter HP-350 Pratt Butterfly Valves. DCE also prepared the structural details for the concrete vault. DCE assisted the City with RFI's and submittals during bidding and construction.

CITY OF CALEXICO COLE ROAD AND VAN DE GRAAFF SIGNAL PROJECT, CALEXICO CA. DCE designed a traffic signal project for the City of Calexico. Project is located within Caltrans right of way at Hwy 111. Project included design of signalized intersection, street improvements, striping plan and traffic control plans. Project required approval by City of Calexico and Caltrans. DCE assisted the City with the Caltrans encroachment permit.

CALEXICO ENGINEERING PLAN CHECKING SERVICES

- Sun Community Bank Site Grading and Improvements
- Chick Fil A Site Grading and Improvements
- Jack In the Box Site Grading and New Improvements
- New Warehouse at Town Center Grading and Improvements
- Spud Moreno Street
- 363 Second Street Commercial Building Grading and Improvements
- Walmart Gas Station Grading, Site Improvements and Retention Basin
- Plan Check Alley Improvements Project
- Grand Plaza Phase 2 Power Center Grading and Site Improvements
- 2nd Street Bridge Roadway Improvements

CALEXICO SURVEY PLAN CHECKING SERVICES

- Oasis Palms Final Map
- Tentative Parcel Map 310 Camacho Road
- Lot Line Adjustment No, 2023-02
- Parcel Map Waiver No. 2022-30
- Lot Merger 1101 Paulin Ave.
- Parcel Map Cole and Van De Graff
- Grand Plaza Phase 2 Power Center
- Sunset Subdivision Maps
- Lot Meger Town Center Lots
- Lot Line Adjustment Town Center Subdivision

*COUNTY OF IMPERIAL PROJECT EXPERIENCE

IMPERIAL COUNTY NILAND MAIN STREET IMPROVEMENTS PROJECTS PHASE 1 AND PHASE 2, NILAND CA, Lead Designer, Responsible for the design of Main Street Improvements for both Phase 1 and Phase 2. Improvements Included widening of Main Street, new curb and gutter, new driveways, sidewalks, spandrels, cross gutters and ADA ramps. Also prepared striping plan, temporary traffic control plan specifications and bid documents.

KALIN ROAD BRIDGE STREET IMPROVEMENTS - BRIDGE NO. 58C0100. DCE prepared engineering design plans including the vertical curve for the newly designed road over the Kalin Road Bridge at the New River. DCE performed the field topographic survey, prepared the base map, grading, drainage and improvement plans. Project was recently completed.

IMPERIAL COUNTY CLARK ROAD BRIDGE, HEBER CA, Lead Designer, Responsible for the design of the new 110 ft span Clark Road Bridge. Project included structural design of abutments, drilled piles, wing walls and bridge deck. Prepared structural details and structural analysis. Project also included the design of a new four way stop at Clark Rd and Wiloughby Rd. Project included coordination with IID water department and local farmers. Responsible for the preparation of plans, technical specification, cost estimates and bid documents.





COUNTY OF IMPERIAL LIST OF ENGINEERING DESING PROJECTS:

- SB1 Gateway Road Rehabilitation Project
- Brawley Old Highway 111 Road Rehabilitation Project
- Ogilby Road Drainage Washes Crossing Improvements
- Salton City LTA Phase 3 Street Improvements
- Azure Road (Salton City) Drainage Wash Road Repair Project
- Weist Lake Boat Launching Facility, Site Improvements, Grading, Drainage and Ramada Shade Design
- Winterhaven Public Safety Facility, Site Grading, Improvements and Structural Design
- 9th Street Parking Lot Design at County Administrative Building
- Washout Road Repair at Dalton and Dolphin Road.

COUNTY OF IMPERIAL LIST OF ENGINEERING PLAN CHECK PROJECTS:

- Heberwood Estates Subdivision, Grading, Utilities and Street Improvements Plan Check.
- Gateway Maggio Rd Building Site Grading and Improvements.
- Westside Main Canal Bridge Roadway.
- Emory Airstrip Extension Site and Runway Improvements.
- Gateway Maggio Road Street Improvements.
- Drew Solar Substation Site Grading and Improvements.
- Imperial County Landfill Extension Site Grading and Improvements.
- Southern California Gas Company Gas Lines Design Plans Review and Plan Check
- Titan Solar Project Site Grading and Improvements.
- All American Grain Bridge Plan Check Review.
- Drew Solar Power Generating Plant Site Grading and Improvements.
- Wisteria Solar Power Generating Plant Site Grading and Improvements.
- Hells Kitchen ell Pads 3 and 4 Site Grading and Improvements.

COUNTY OF IMPERIAL LIST OF LAND SURVEY PROJECTS:

- Prepared Forrester Road Bridge Record of Survey.
- Prepared Picacho Road Bridge Corner Record.
- Prepared School Verde Road Bridge Record of Survey.
- Prepared Sperber Road Corner Record.
- Prepared Rice Road Record of Survey.
- Prepared Niland Waste Water Treatment Plant Record of Survey.
- Prepared Cole Road Right of Way Maps
- Prepared County Airport Record of Survey.
- Numerous County Records of Survey Plan Check Review.
- Numerous Parcel Map Plan Check Review.
- Numerous Corner Records Plan Check Review.
- Numerous Lot Line Adjustment Plan Check Review
- Numerous Lot Merger Plan Check Review.

*OTHER LOCAL PUBLIC AGENCIES PROJECT EXPERIENCE

CITY OF IMPERIAL LIST OF ENGINEERING DESING PROJECTS:

- Aten Road and Imperial Ave 21" Diameter Sewer Collection System Design
- Claypool Pump Station Wet Well Design, 12 ft diameter and 20 ft deep.
- Aten Road Bicycle Lane Design Project from Dogwood Road to Clark Road.
- N Street Preparation of Street Improvement Planks.
- Aten and Cross Intersection Signal Light Improvements. Prepared street improvements and timing sheets.

CITY OF IMPERIAL LIST OF LAND SURVEY PROJECTS:

- Prepared Water Treatment Plant Record of Survey.
- Prepared Waste Water Treatment Plant Record of Survey.
- Davis Subdivision Record of Survey
- Right of Way Deeds at Aten and LaBrucherie
- Easement Acquisition for Water and Sewer

CITY OF BRAWLEY LIST OF ENGINEERING DESING PROJECTS:

- Ocotillo Springs Bike Lanes, Sidewalks and Driveway Improvements.
- Allen Street Flowline Design
- Brawley Public Works Yard Structural Shades
- Brawley Waste Water Treatment Plant Structural Shades
- Wildcat Drive Design from Walmart to Dogwood Road.

CITY OF BRAWLEY LIST OF LAND SURVEY PROJECTS:

- Wildcat Dr. Right of Way Description.
- Parcel Map 05-01 Eastern Avenue
- Adams Park Subdivision Track Map No. 16-03

DCE LOCAL FIRM AND COMMUNITY INVOLVEMENT

DCE opened its doors in Imperial County back in February of 2008. DCE has been a very succesful local engineering and land surveying firm. The project owners are local and attended Kenndy Middle School and Central Union High School in El Centro before attending College. DCE is proud to say that all of our engineers, surveyors and office staff live and grew up in the Imperial Valley. One hundred percent of the contracts that go to DCE is spent locally.

DCE is very greatful of the entire Imperial Valley Community. Local Public Agencies and Local Developers have been great to DCE and DCE likes to give back to the Communinty. DCE has donated work and continues to donate work to local entities and non profit organizations. The following is a list of some of the projects DCE has donated 100% of the engineering and surveying work with not a dollar charged to the project or non profit agency:

- **Imperial County Veterans Memorial Project – Eagle Scout Project** at Imperial County Airport. DCE donated 100% of the structural plans and details, site survey, mapping, and construction staking for the parking lot and memorial. DCE also donated all seals of the military branches installed wihin the wall of the memorial. Estimated Cost of Donated Work: $16,500.00



- **Imperial Valley Desert Museum – Parking Lot Improvements** DCE designed the road leading to the parking lot of the museum and prepared the parking lot improvement plans. DCE donated 100% of the field topographic survey, road improvements, parking lot improvements, drainage analysis, cost estimate and construction staking. Estimated Cost of Donated Work: $19,700.00



- **Imperial Valley 9/11 Memorial at Imperial Valley Fairgrounds – IV 9/11 Committee** DCE designed the currently under construction 9/11 Memorial at the fairgrounds. DCE donated 100% of the field topographic survey, base map, general and structural engineering. Estimated Cost of Donated Work: $23,500.00
- **Saint Mary's School, El Centro – Basketball/Volleyball Courts** DCE donated all the labor for the installation of the new tiles for the baskeball and volleyball courts. Estimated Cost of Donated Work: $6,500.00
- **Vincent Memorial Catholic High School – Site and Drainage Improvements** Due to the recent September 18th 2025 flooding in Calexico CA, the high school flooded. Storm water got into the new class rooms and gymnasium. DCE is donating 100% of all survey and engineering work to the school for site improvements to prevent future floodings within the school. DCE performed the field survey and is currently analyzing the drainage issues. Estimated Cost of Donated Work: $35,000.00

REFERENCES

	REFERENCE /CLIENT:	CONTACT INFORMATION:	SERVICES PROVIDED:
1.	**City of Calexico** Department of Public Worls 549 Pierce Avenue Calexico CA, 92231	Jesus Villegas, Public Works Director/City Engineer (760) 768-2160 Email: jvillegas@calexico.ca.gov Liliana Falomir Public Works Manager (760) 768-2160 Email: falomirl@calexico.ca.gov	DCE has been providing On Call Civil Engineering, Land Surveying and Plan Checking Services Since 2016
2.	**County of Imperial** Public Works Department 155 S. 11th Street El Centro, CA 92243	John Gay, P.E. Public Works Director (760) 482-4462 Email: JohnGay@co.imperial.ca.us	DCE has been providing On Call Civil Engineering, Land Surveying and Plan Checking Services Since 2012
3.	**City of Imperial** 420 South Imperial Ave. Imperial, CA 92251	David Dale, P.E, P.L.S Public Services Director (760) 355-3336 Email: ddale@imperial.ca.gov	DCE has been providing On Call Civil Engineering, Land Surveying and Plan Checking Services Since 2013

ADDENDUMS ACKNOWLEDGEMENT

DCE has received and reviewed the following addendums:

- Addendum No. 1 – received 9/17/2025
- Addendum No. 2 – received 10/1/2025

STATEMENT REGARDING LITIGATION HISTORY:

Dynamic Consulting Engineers, Inc (DCE) has no history of any litigation. DCE, Aztec Engineering and Landmark Consultants do not have any recent or pending litigation that would affect or impact our ability to provide professional services to the City of El Centro.

STATEMENT REGARDING EXISTING OF POTENTIAL CONFLICT OF INTEREST:

DCE assures there are no conflicts of interest with the City of El Centro, the existing projects or the existing clients DCE has contracted with. Should DCE have any interest in a private project in any way, DCE will notify the City in writing and not participate on behalf of the City.

STATEMENT REGARDING TERMS AND CONDITIONS OF THE CITY OF EL CENTRO:

DCE has contracted with the City in a past project and is willing to accept the terms and conditions of the City of El Centro as stated in previous Agreements of Professional Services.

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES _____X__NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES _____X__NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

8/28/2025
DATE

(SIGNATURE OF CONSULTANT)

Carlos Beltran, P.E.
Dynamioc Consulting Engineers, Inc.

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
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If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

09/19/2025
DATE

(SIGNATURE OF CONSULTANT)

TYPSA, Inc.
Tim Mahon, PE, Vice President

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
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Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

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_____ YES ___X___ NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES ___X___ NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

8/27/25
DATE

(SIGNATURE OF CONSULTANT)
Landmark Consultants

EXHIBIT B
FEE SCHEDULE

Dynamic CONSULTING ENGINEERS

FEE SCHEDULE FOR PROFESSIONAL SERVICES 2025

Personnel Hourly Rate	
Principal Engineer	$230.00
Principal Surveyor (PLS)	$230.00
Project Manager	$180.00
Project Engineer II	$155.00
Project Engineer I	$130.00
Construction Inspector (Non Prevailing Wage)	$125.00
Construction Inspector (Prevailing Wage)	$195.00
2 Man Survey Crew (Prevailing Wage)	$360.00
1-Man Survey Crew (Prevailing Wage)	$225.00
2 Man Survey Crew (Non Prevailing Wage)	$260.00
1-Man Survey Crew (Non-Prevailing Wage)	$185.00
CAD Technician	$105.00
Administrative Assistant	$75.00

Reimbursable Expenses.....Cost plus 10%
Mileage.....$0.70 per mile

Dynamic CONSULTING ENGINEERS

FEE SCHEDULE FOR PROFESSIONAL SERVICES 2026

Personnel Hourly Rate	
Principal Engineer	$230.00
Principal Surveyor (PLS)	$230.00
Project Manager	$180.00
Project Engineer II	$155.00
Project Engineer I	$130.00
Construction Inspector (Non Prevailing Wage)	$125.00
Construction Inspector (Prevailing Wage)	$195.00
2 Man Survey Crew (Prevailing Wage)	$360.00
1-Man Survey Crew (Prevailing Wage)	$225.00
2 Man Survey Crew (Non Prevailing Wage)	$260.00
1-Man Survey Crew (Non-Prevailing Wage)	$185.00
CAD Technician	$105.00
Administrative Assistant	$75.00

Reimbursable Expenses.....Cost plus 10%
Mileage.....$0.70 per mile

Dynamic CONSULTING ENGINEERS

FEE SCHEDULE FOR PROFESSIONAL SERVICES 2027

Personnel Hourly Rate	
Principal Engineer	$240.00
Principal Surveyor (PLS)	$240.00
Project Manager	$190.00
Project Engineer II	$165.00
Project Engineer I	$135.00
Construction Inspector (Non Prevailing Wage)	$135.00
Construction Inspector (Prevailing Wage)	$210.00
2 Man Survey Crew (Prevailing Wage)	$400.00
1-Man Survey Crew (Prevailing Wage)	$240.00
2 Man Survey Crew (Non Prevailing Wage)	$280.00
1-Man Survey Crew (Non-Prevailing Wage)	$195.00
CAD Technician	$110.00
Administrative Assistant	$78.00

Reimbursable Expenses.....Cost plus 10%
Mileage.....$0.72 per mile

Landmark Consultants, Inc.
2025 Standard Fee Schedule

PROFESSIONAL RATES (HOURLY)

Principal Engineer	$260
Geotechnical Engineer	$255
Senior Engineer	$235
Project Engineer	$220
Staff Engineer	$190
Operations Manager	$170
Senior Geologist	$235
Project Geologist	$220
Staff Geologist	$190
Legal Cases-Principal Engineer (investigative work)	$425
Legal Cases-Principal Engineer (depositions and trial)	$525

TECHNICAL RATES

Testing Technician-(Concrete/Masonry/Soils/Asphalt)	$110
Prevailing Wage Technician-(Concrete/Masonry/Soils/Asphalt)	$120
Special Inspector-(Masonry, Steel, Concrete, Welding & Bolt)	$120
PW Special Inspector-(Masonry, Steel, Concrete, Welding & Bolt)	$125
DSA Project Technician/Inspector	$125
Laboratory Personnel	$110
Admin. Support Staff	$95
Drafting	$120
Copies of Reports (Min)	$60
Blueprints	$18

EQUIPMENT/MATERIAL CHARGES

2 & 4 WD Vehicle (per mile)	$1.00
Tow-Behind Auger (per day)	$150.00
Truck Mounted Drilling (Flight Auger per hr.)	$550
Truck Mounted Drilling-(Prevailing Wage and Env. per hr.)	$650
Per Diem Drillers (per day)	$600
Cone Penetrometer Mob	$3,800
Piezocone and Stratigraphic Plots (per ft.)	quote
Resistivity, Piezocone Testing (per ft.)	quote
Seismic Piezocone Testing (per ft.)	$45
Per Diem (CPT)	$600
Grouting (per ft.)	$20
Dozers, Backhoe, Portable Auger, etc.	$Cost+20%
2" diameter slotted PVC Piezometer (w/filter sock & gravel pack per ft.)	quote
8" diameter cast-iron Piezometer cover	$130

MATERIALS TESTING EQUIPMENT-FIELD (DAILY RATES)

Swiss Hammer (Concrete)	$95
Masonry Mortar Penetrometer	$95
Vibrating Probe (Concrete)	$110
Generator	$175
Coring Machine	$175
2" Diamond Bit/Core	$35
3" Diamond Bit/Core	$75
4" Diamond Bit/Core	$85
6" Diamond Bit/Core	$105
8" Diamond Bit/Core	$125
Rebar Locator (R-Meter)	$100

COMPACTION CURVES

Relative Compaction (CAL 216)	$300
Standard 4" Mold, D698 Method A	$300
Standard 6" Mold, D698 Method B,C,D	$300
Modified 4" Mold, D1557 Method A	$300
Modified 6" Mold, D1557 Method B,C,D	$300
Relative Density	$300
Relative Compaction	$300

SOIL & AGGREGATE STABILITY

R-Value (CAL 301)	$375
CBR 100% Compaction	$750
Soil Cement, CTB, Mix Design	$6,500
CTB Compression Test	$130
Soil-Lime Compression Test (Includes Prep)	$900

BASIC SOIL & AGGREGATE PROPERTIES

Sieve Analysis, Coarse & Fine Including Wash	$190
Sieve Analysis, Coarse (CAL 202)	$160
Sieve Analysis, Fine Including Wash	$160
#200 Wash (CAL 202)	$135
Sand Equivalent-Average of 3 (CAL 217)	$185
Plasticity Index (CAL 204)	$235
Expansion Index (UBC 29-2)	$185
Moisture Determination and Unit Weight	$80
Moisture Determination Only	$55
Permeability Test (Undisturbed Samples) (D5084)	$550
Permeability Test (Remolded Samples) (D5084)	$650
Resistivity of Soil (CAL 643)	$200
PH Test (Lab Measurement)	$85
Hydrometer (Without Specific Gravity)	$375
Sulfates (CAL 417)	$85
Chlorides (CAL 422)	$85
Corrosivity Series (Resistivity, Ph, Sulfates, Chlorides)	$425

EXHIBIT C
INSURANCE REQUIREMENTS

Without limiting Consultant's indemnification of City, and prior to commencement of work and/or services under this Agreement, Consultant shall obtain, provide, and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to City.

General liability insurance. Consultant shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office (Form CG 00 01), in an amount not less than $1,000,000 per occurrence, $2,000,000 general aggregate, for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. Consultant shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned, or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Professional liability (errors & omissions) insurance. Consultant shall maintain professional liability insurance that covers the Services to be performed in connection with this Agreement, in the minimum amount of $1,000,000 per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this agreement and Consultant agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this agreement.

Workers' compensation insurance. Consultant shall maintain Workers' Compensation Insurance (statutory limits) and Employer's Liability insurance (with limits of at least $1,000,000).

Consultant shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of City, its officers, agents, employees, and volunteers.

Umbrella or excess liability insurance. [If required to meet higher limits.]. Consultant shall obtain and maintain an umbrella liability insurance policy with limits that will provide bodily injury, personal injury, and property damage liability coverage, including commercial general liability, automobile liability, and employer's liability. Such policy or policies shall include the following terms and conditions:

- A drop-down feature requiring the policy to respond if any primary insurance that would otherwise have applied proves to be uncollectible in whole or in part for any reason, other than bankruptcy or insolvency of said primary insurer;
- "Pay on behalf of" wording as opposed to "reimbursement";
- Concurrency of effective dates with primary policies.

Should Consultant obtain and maintain an excess liability policy, such policy shall be

excess over commercial general liability, automobile liability, and employer's liability policies. Such policy or policies shall include wording that the excess liability policy follows the terms and conditions of the underlying policies.

Other provisions or requirements

Proof of insurance. Consultant shall provide certificates of insurance and required endorsements to City as evidence of the insurance coverage required herein. Insurance certificates and endorsements must be approved by City's Risk Manager prior to commencement of performance. Current certification of insurance shall be kept on file with City for the contract period and any additional length of time required thereafter. City reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Consultant shall procure and maintain for the contract period, and any additional length of time required thereafter, insurance against claims for injuries to persons or damages to property, or financial loss which may arise from or in connection with the performance of the Work hereunder by Consultant, their agents, representatives, employees, or subconsultants.

Primary/noncontributing. Coverage provided by Consultant shall be primary and any insurance or self-insurance procured or maintained by City shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City before the City's own insurance or self- insurance shall be called upon to protect it as a named insured.

City's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary, and any premium paid by City will be promptly reimbursed by Consultant or City will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, City may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the City's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against City, its elected or appointed officers, agents, officials, employees, and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against City and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non-estoppel). Consultant acknowledges and agrees that any actual or alleged failure on the part of the City to inform Consultant of non-compliance with any requirement imposes no additional obligations on the City nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Consultant maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Notice of cancellation. Consultant agrees to oblige its insurance agent or broker and insurers to provide the City with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage. If any of the Consultant's insurers are unwilling to provide such notice, then Consultant shall have the responsibility of notifying the City immediately in the event of Consultant's failure to renew any of the required insurance coverages, or insurer's cancellation or non-renewal.

Additional insured status. General liability, automobile liability, and umbrella/excess liability insurance policies shall provide or be endorsed to provide that City and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to City and approved of in writing.

Separation of insureds. A severability of interests provision must apply for all additional insureds ensuring that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass through clause. Consultant agrees to ensure that its subconsultants, subcontractors, and any other party who is brought onto or involved in the project/service by Consultant (hereinafter collectively "Subcontractor"), provide the same minimum insurance coverage and endorsements required of Consultant under this Agreement. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. However, in the event Consultant's Subcontractor cannot comply with this requirement, which proof must be submitted to the City, Consultant may still be able to utilize the Subcontractor provided Consultant shall be required to ensure that its Subcontractor provide and maintain insurance coverage and endorsements sufficient to the specific risk of exposure involved with Subcontractor's scope of work and services, with limits less than required of the Consultant, but in all

other terms consistent with the Consultant's requirements under this Agreement. This provision does not relieve the Consultant of its contractual obligations under the Agreement and/or limit its liability to the amount of insurance coverage provided by its subcontractors. This provision is intended solely to provide Consultant with the ability to utilize a Subcontractor who may be otherwise qualified to perform the work or services but may not carry the same insurance limits as required of the Consultant under this Agreement given the limited scope of work or services provided by the subcontractor. Consultant agrees that upon request, all agreements with Subcontractors, and others engaged in the project and/or services, will be submitted to City for review.

City's right to revise specifications. The City reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Consultant ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Consultant, the City and Consultant may renegotiate Consultant's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by City. City reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible, or require proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention through confirmation from the underwriter.

Timely notice of claims. Consultant shall give City prompt and timely notice of claims made or suits instituted that arise out of or result from Consultant's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

Claims made: The following provisions shall apply if any of the required policies are written on a claims-made basis:

a. The Retroactive Date of the policy must be shown and must be before the date of the Agreement or the beginning of the contracted work.

b. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement or the work.

c. If coverage is canceled or not renewed and it is not replaced with another claims-made policy form with a Retroactive Date that precedes the date of this Agreement, Consultant must provide extended reporting coverage for a minimum of five (5) years after completion of the Agreement or the work. The City shall have the right to exercise, at the Consultant's sole cost and expense, any extended reporting provisions of the policy, if the Consultant cancels or does not renew the coverage.

d. A copy of the claim reporting requirements must be submitted to the City prior to the commencement of any work under this Agreement.

EXHIBIT D
CONSULTANT'S FINANCIAL DISCLOSURE STATEMENT [1]

Consultant will comply with all conflict-of-interest laws and regulations including, without limitations, City's Conflict of Interest Code (on file in the City Clerk's Office) as required by Section 4.10 of this Agreement. It is incumbent upon the Consultant to notify the City pursuant to Sections 7.1 and 7.5 of any staff changes relating to this Agreement. The City Manager has made the following determination and Consultant, by his/her signature, acknowledges said determination. [2]

A. In accomplishing the scope of services of this Agreement, all officers, employees and/or agents of Consultant will be performing a very limited and closely supervised function, and, therefore, unlikely to have a conflict of interest arise. No disclosures are required of any officers, employees, and/or agents of Consultant. Consultant duties are as follows:

City Manager

President
Consultant Signature & Title

B. In accomplishing the scope of services of this Agreement, Consultant will be performing a specialized or general service for the City, and there is substantial likelihood that the Consultant may make or participate in making a governmental decision, which may have a foreseeable material effect on a financial interest. As a result, the Consultant shall be subject to the Disclosure Category "Consultant" of the City's Conflict of Interest Code.

City Manager

President
Consultant Signature & Title

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1. Fair Political Practices Commission Section 18700.3 defines a consultant as follows:
(a) For purposes of Sections 82019 and 82048, "consultant" means an individual who, pursuant to a contract with a state or local government agency:
(1) Makes a governmental decision whether to:
(A) Approve a rate, rule, or regulation;
(B) Adopt or enforce a law;
(C) Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order, or similar authorization or entitlement;
(D) Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract that requires agency approval;
(E) Grant agency approval to a contract that requires agency approval and to which the agency is a party, or to the specifications for such a contract;
(F) Grant agency approval to a plan, design, report, study, or similar item;
(G) Adopt, or grant agency approval of, policies, standards, or guidelines for the agency, or for any subdivision thereof; or
(2) Serves in a staff capacity with the agency and in that capacity participates in making a governmental decision as defined in Regulation 18704(a) and (b) or performs the same or substantially all the same duties for the agency that would otherwise be performed by an individual holding a position specified in the agency's Conflict of Interest Code under Section 87302.
2. Disclosure by Consultants: Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the City's adopted Conflict of Interest Code, subject to the following limitations: The City Manager may determine in writing that a particular consultant, although a "designated position", is hired to perform a range of duties that is limited in scope and closely supervised, and, thus, is not required to comply with the disclosure requirements in the City's adopted Conflict of Interest Code. Such written determination shall include a description of the consultant's duties. The City Manager's determination is a public record and shall be retained for public inspection in the same manner and location as the City's adopted Conflict of Interest Code.

EXHIBIT E
LEVINE ACT CERTIFICATION

PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Sonia Carter
Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP? _____ YES ____✓__NO
   If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES ____✓__NO
   If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

12/29/
DATE

(SIGNATURE OF CONSULTANT)

Effective April 30, 2025

EXHIBIT F

REQUEST FOR PROPOSALS (RFP)

CITY OF EL CENTRO
PUBLICWORKS
Serving our community by sustaining and improving life

City of El Centro
Incorporated 1908
Shining with Opportunity

REQUEST FOR PROPOSALS
FOR
ON-CALL SERVICES

1. ***CIVIL ENGINEERING – GENERAL***
2. ***CIVIL ENGINEERING - WATER AND WASTEWATER TREATMENT***

Requested By:

City of El Centro
Department of Public Works
307 W. Brighton Ave.
El Centro, CA 92243
Phone: (760) 336-3152
Abraham Campos, PE
Director of Public Works/ City Engineer
August 2025

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EXHIBITS

A - Civil Engineering – General and Water and Wastewater Treatment. Expanded Scope

B – Sample Proposal Evaluation Form

C – Sample Design Professional Services Agreement

D- Levine Act. Statement

E- Sample Task Order

*****No changes shall be made to consultant agreement by consultant.

II. REQUEST FOR PROPOSAL ("RFP")

NOTICE IS HEREBY GIVEN THAT the City of El Centro (the "City") is requesting proposals from qualified consultants to provide Civil Engineering Design (Roads and Traffic, and Water and Wastewater facilities) (the "Consultant(s)").

DEADLINE

Consultants are requested to submit five hard copies of their proposal before **04:30 p.m.** on Friday, September 19, 2025. Refer to section IX for further information.

Note: late, emailed, or faxed proposals will not be considered.

OBTAINING DOCUMENTS

The Contract Documents are available through Planet Bids, by accessing our website (www.cityofelcentro.org) and selecting "GOVERNMENT > PUBLIC WORKS> BIDS & PROPOSALS> PROCEED TO SITE".

III. INTRODUCTION AND PURPOSE

INTRODUCTION.
The Department of Public Works - Engineering Division of the City of El Centro is seeking professional services from a consulting firm or team (Consultant) for On-Call services for the two (2) disciplines listed below. The City will contract with the primary firm under which subconsultants may operate. The City is requesting services for up the term of the agreement. The term of the agreement shall be for two (2) years, with up to three (3) one (1) year extensions, which extensions shall be at the City's sole option.

Disciplines:

1. Civil Engineering – General Civil Engineering
2. Civil Engineering – Water and Wastewater Treatment

Up to three consultants shall be selected for each discipline. The City reserves the right to increase or decrease the number of consultants awarded a contract under each discipline.

Consultant must submit a separate responsive proposal to each discipline that Consultant wishes to be considered. Each discipline will be judged independently. You are not required to submit a proposal for both disciplines.

PURPOSE. The purpose of this RFP is to:

1. Familiarize prospective consultants with the information necessary to understand the consultant selection process and the required documentation consultant must

submit.

2. Receive, review and consider proposals from prospective consultants, and select a consultant to provide the desired services for each discipline.
3. Execute a contract for on-call services in the form of a Professional Services Agreement (PSA) (see RFP Exhibit C – Sample Standard Agreement), which will include a negotiated rate schedule established at the time of its execution.
4. Advise prospective consultants that the City is not obligated to issue any contract(s) by issuing this proposal.

The Consultant shall provide the Public Works Department with the ability to obtain assistance quickly during peak workload periods, staffing absences and when expedited/fast track support is needed to satisfy City customers. The most important objective is to maintain a level of high-quality, Civil Engineering Design (Roads, Traffic, Water and Wastewater facilities).

Qualified entities are invited to submit written proposals for consideration in accordance with this request. These services will be conducted under a contract with the City.

The City reserves the right to reject any or all responses received as a result of this solicitation; to extend the submission due date for; to modify, amend, reissue or rewrite this document; and to procure any or all services by other means. Consultants that respond to this RFP shall comply with all applicable laws. There are no M/WBE and/or DBE requirements for this RFP.

The contract will be regulated according to the provisions of all Federal, State and local laws and ordinances that are applicable. This includes compliance with prevailing wage rates and their payment in accordance with the California Labor Code, as applicable.

Consultants are advised to consider whether services to be performed include classifications subject to state or federal prevailing wage requirements. Prevailing wages will apply if the services to be performed will involve land surveying (such as flag persons, survey party chief, rodman or chainman), materials sampling and testing (such as drilling rig operators, pile driving, crane operators), inspection work, soils or foundation investigations, environmental hazardous materials and so forth. California State prevailing wage information is available through the California Department of Industrial Relations website at https://www.dir.ca.gov/OPRL/dprewagedetermination.htm

Labor categories subject to prevailing wage requirements, when employed for any work on this project, are wholly the responsibility of the firm or individual named in any Professional Services Agreement approved by the City. City will not assume any responsibility for Consultant's failure to pay prevailing wages in accordance with State law.

IV. BACKGROUND

The City of El Cento incorporated in 1908 and later became a Charter city. El Centro is the center of one of Southern California's most promising new commercial and industrial regions. There are two international border crossings nearby for commercial and noncommercial vehicles. Covering 11.019 square miles, it is the largest city in Imperial County. El Centro is located 616 miles southwest of San Francisco, 117 miles east of San Diego and 245 miles west of Phoenix, Az. and just 15 minutes from the international industrial complexes in Mexicali, Baja California. El Centro is accessible via Interstate 8, State Highway 86 and State Highway 111. The City population is estimated to be over 45,000 residents; however, population increases during the day as the City is the County seat.

The consultant(s) will work under the direction of the Public Works Director or designee to handle engineering service tasks as they are required. The highest rated consultant(s) will be selected to be on contract for on-call services. Consultant(s) will enter into a master agreement which will specify the billing rates, personnel to be assigned, and other terms. No monthly retainer is anticipated.

Letter proposals will be requested from one or more on-call consultants when engineering service tasks are required. The letter proposals will set forth the scope, fee, personnel, and time of performance for the particular task. The letter proposals will be approved through a task order implementing and attached to the master agreement. Consultant selection for a particular task will be based on qualification as set forth in the Statement of Qualifications. Consultant selection will be at the sole discretion of the City. No consultant is guaranteed work.

V. SCOPE OF SERVICES

Consultants shall submit in their proposal in addition to the main scope the discipline(s) for which they wish to be qualified. The disciplines include, but are not necessarily limited to the following areas of experience and expertise.

Civil Engineering - General

The consultant shall design and prepare plan, specifications, and estimate (PS&E) for arterial and local streets; including traffic engineering/design, landscaping, water, sewer and storm drain design. Sample work activities include:

- Preparation of Phase I and II site investigation and soils reports, including field exploration, drill test borings, sample soils, compacting testing, and laboratory tests. Laboratory shall be Caltrans certified.
- Review and/or preparation of traffic plans (signing and striping plans, traffic detour and traffic staging plans, as well as signals), traffic studies/reports.
- Review and/or preparation of street improvement plans.
- Review and/or preparation of domestic or raw water improvement plans and studies.
- Review and/or preparation of sewer improvement plans and studies

- Review and/or preparation of storm drain improvement plans, hydrology and hydraulic reports.
- Review and/or preparation of tract and parcel map, lot line adjustments, certificates of compliance, map/easement or legal descriptions and supporting documentation.
- Review and/or preparation of structure calculations.
- Review and/or preparation of engineering quantity estimates and costs.

Designers shall have a minimum of 10 years' experience in civil design for public facilities. A detailed scope of work is available as Exhibit A of this RFP.

The consultant shall assist City staff to identify and prioritize pavement preservation projects; design and prepare plan, specifications, and estimate (PS&E) for pavement projects. Utilize the latest technologies to design and construct/rehabilitate pavements in the most cost-effective way. Consultant must be experienced with state and federal funded projects and pavement designers shall have a minimum of 10 years' experience in pavement design. A detailed scope of work is available as Exhibit A of this RFP.

Civil Engineering – Water and Wastewater Treatment Facilities

The objective of this discipline is to enable the City to improve the City potable water, sanitary sewer and storm water systems to meet the rules and regulations of the State and Federal mandates as well as public demand. Consultant shall provide all services and work required to complete studies, designs, plans, specifications and estimates for City projects as identified in the current city water, wastewater and storm water master plans or as may be requested by the City. City may request the consultant to update said master plans. The consultant shall have 10 years' experience in the design of potable and sanitary sewer treatment, collection and distribution systems in compliance with State and Federal requirements in the State of California. A detailed scope of work is available as Exhibit A of this RFP.

The above list is not intended to be exclusive; other services will likely be sought as the need arises. The statement of qualifications does not need to include a fee proposal for any of these specific tasks; fee proposals for individual tasks would be requested during the course of the on-call contract.

Periodically, the City has the need for assistance with special engineering studies or general staff augmentation. The consultant must be able to assist the City through this contract to provide the necessary services.

The consultant shall utilize its' in-house staff and/or sub-consultants to complete the assignments to meet the City standards. For specialized work for which the prime consultant will require a sub-consultant, the prime consultant will serve as an administrative liaison between the City and the sub-consultant. The prime consultant mark-up for sub-consultants shall not exceed 10%.

VI. PROJECT SCHEDULE

The following is a tentative schedule for the project:

Release of RFP	**08/22/2025**
Proposal Due	**09/19/2025**
Consultant Interview (if needed)	**Week of October 6th, 2025**
Contract Award	**10/21/2025**

VII. DELIVERABLE ITEMS

The Consultant will be required to verify that all information submitted as services rendered is accurate and current. Furthermore, the Consultant will be required to document the source(s) of all compiled information. All information generated as part of the Consultant's or sub-consultant's work shall become part of City of El Centro record of the project.

VIII. CORRECTIONS

Proposing Consultants are encouraged to amplify the scope of services, to identify any supplemental tasks necessary, and to recommend any alternatives that may enhance the project or reduce costs. Where applicable, consultant is encouraged to describe the anticipated level of effort for each task.

IX. DELIVERY OF PROPOSALS

Proposals must be submitted to 307 W. Brighton Ave., El Centro CA 92243 by at 4:30 pm on Friday, September 19, 2025 with subject reading as follows:

Response for City of El Centro On-Call Services RFP
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

On a separate envelope, submit a hard copy Fee Schedule to the same address and by the same date in a sealed envelope marked:

Fee Proposal for City of El Centro On-Call Services
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

Proposals and Fee Proposals received after the stated deadline will not be accepted. Advance submittals are permitted. The City will not be liable for any costs incurred by the Consultant

incidental to the preparation of proposals or for developing and carrying out interview presentations.

Submission of a proposal indicates acceptance by the Consultant of the conditions contained in this RFP unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of El Centro and the Consultant selected.

Questions concerning the RFP must be submitted via the Planet Bids portal. All questions must arrive at least ten (10) calendar days prior to the proposal due date to allow time for distributing answers and/or clarifications.
No questions or inquiries may be directed to any individual (s) at the location detailed in this document. All inquiries must be submitted in writing per the process described in this document. Attempts to contact any City employee other than the designated contact for this RFP may result in rejection of a submitted proposal. No questions will be answered after the ten-ten-day period.

X. SELECTION PROCESS

City staff will evaluate the proposals based on effectiveness and efficiency in supporting each of the following items.

1. Overall responsiveness to the RFP
2. Consultant (and project team) qualifications, experience and referenced projects
3. Qualifications, experience and commitment of the project manager and team members. The project manager shall preferably have successfully completed at least three (3) projects of similar nature, complexity, and size during the last 10 years
4. Project understanding, innovative approach and proposed scope of work
5. Ability to deliver the project scope of work within the stated estimated level of effort
6. Project management plan and schedule
7. Ability to sign the City's Standard Professional Services Agreement and provide the City's standard insurance coverages listed therein

Based on this evaluation, the City may choose to invite up to three (3) Consultants from each discipline to participate in an oral presentation/interview session or select the Consultant based on the results from the evaluation of the proposal.

In the event the City chooses to conduct interviews as part of the selection process, the selected Consultants will be asked to bring an interview panel including the project manager and up to three (3) (maximum) key staff members who will be directly involved in providing the services. The Consultants selected for the interview will be allowed thirty (30) minutes to present their Consultant experience and project approach. Following the presentation there will be a thirty (30) minute informal question and answer discussion.

At the conclusion of the evaluation, the City may enter into contract negotiations with the top three ranking Consultants. If negotiations with the top-ranking Consultants are unsuccessful, negotiations will terminate and the City may undertake negotiations with the

fourth-ranked Consultant. City staff then will make recommendations to the City Council, which reserves the right to reject any or all proposals. The selection process will be completed when a contract is executed.

Furthermore, the City reserves the right to reject any or all proposals, and to waive any and all irregularities to choose the Consultant which, in the City's opinion, best serves the City's interests. The City will not be liable for any costs incurred by the Consultant incidental to the preparation of proposals or for developing and carrying out interview presentations.

All Consultants issued this RFP were previously asked to certify that they would execute a contract with the City of El Centro with no exceptions or additions.

XI. SUBMITTAL REQUIREMENTS

Proposals shall be formatted for 8-1/2" x 11" portrait pages for written materials and 11" x 17" landscape pages for drawings, consisting only of the specified materials requested below. If interviews are required, presentation boards may be used. Presentation boards shall be 30" x 42", unframed with appropriate scale and identification.

It is imperative that all Proposers responding to the RFP comply exactly and completely with the instructions set forth herein. Proposals must be concise, but with sufficient detail to allow accurate evaluation and comparative analysis. Proposals should be straightforward and provide "layman" explanations of technical terms that are used. Emphasis should be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Do NOT include marketing brochures or other promotional material not connected with this RFP. **Responses must be limited to 30 pages maximum.**

To be responsive, each Proposal must include only the following information in the format indicated. Proposals not organized according to the following format may be rejected.

1. Cover with title and date
2. Cover Letter that documents the proposal offer, lists subconsultants and their roles, location of office where work will be done, is signed by an officer of the Consultant (or by another person with authority to act on behalf of and bind the Consultant), and indicates the contact person for the proposal
3. Table of Contents
4. Executive Summary
5. Approach to satisfying scope of work, which should highlight key issues as well as special processes, tools and lessons learned that will be applied
6. Scope of Work based on the respective discipline above
7. Availability to meet the expected schedule for this work, including current workload and backlog
8. History, general qualifications, employee count by title and discipline, and recent or pending litigation for Consultants and subconsultants

9. Proposer must provide three (3) references for which Proposer has provided similar services performed in California of the nature and scope as set forth in the RFP within the last five (5) years. Include name of business, name of contact person, telephone number of contact person, and description and date of services provided. References for public agency projects are preferred.

10. Qualifications of Project Manager and Key Staff of Consultant and subconsultants, including individual resumes listing required licenses, credentials and relevant experience addressing qualifications requirements specified herein, with relevant experience focused on similar projects completed within the last 10 years. City will place considerable emphasis on the commitment by the Proposer to provide qualified personnel for the services being considered. The Proposer shall furnish resumes in outline form for the key personnel committed to this account. Proposer shall also include the number and type of additional support personnel who will be providing services. The substitution or addition of individuals shall be allowed only with prior written approval of the City.

EXHIBIT A

CIVIL ENGINEERING – GENERAL AND WATER AND WASTEWATER TREATMENT. EXPANDED SCOPE

1.0 Scope of Work

The Scope of Work shall include, but not limited to the following tasks:

In general, the Consultant shall perform engineering design services resulting in contract documents (plans, specifications and cost estimates) for various projects on an as-needed basis. The Consultant shall provide a detailed schedule of the assigned project upon issuance of a Task Order of that particular project. The Consultant shall also provide all field survey works required to complete the designs. In addition to scope of work items necessary to complete the design of approved CIP projects, the selected consultant shall also provide specific Engineering Technician services. The services to be provided are enumerated below.

The Consultant's services shall include, but are not limited to, the following:

1. Research existing records of utility companies and agencies and coordinate the proposed improvements with existing field conditions.

2. Prepare all documentation required to obtain permits from any and all agencies having jurisdiction of the project.

3. Conduct an environmental assessment for each project and prepare all documentation required to comply with the California Environmental Quality Act (CEQA).

4. Provide all field survey and topographic work necessary to complete the design effort. Design level survey and base mapping of the project site shall be prepared in US Customary English units by a California licensed Land Surveyor in accordance with the City guidelines and in AutoCAD Computer Aided Design and Drafting (CADD) format. The horizontal datum shall be NAD 83 and the vertical datum shall be NAVD 88. All survey field notes shall be on forms provided by the City, shall be neatly completed in pencil, and shall become property of the City upon completion of the project. Informal field investigations including marking of removal areas may be required for some of the sidewalk, curb and gutter, and pavement replacement projects.

5. Complete the design of projects including plans, specifications, and engineer's construction cost estimate. The Consultant shall contact manufacturers and/or contractors to verify the engineer's estimate prior to submitting to the City. Specifications shall be prepared in Microsoft Word and an electronic copy of the final version shall be furnished to the City. The City will provide the specification boiler plate to the Consultant.

6. All preliminary and bid sets of plans shall be plotted on bond or velum using the AutoCAD program. All drawings shall be completed per the City of El Centro CADD Standards

7. All original plan sheets, the title sheet of the specifications, calculations, and reports shall be signed and stamped by the Consultant's licensed professional engineer in responsible-charge of the project. These signed originals will then become the property of the City.

8. The Consultant shall provide support services as needed during the bidding and construction phases of the project, including:

   A. The Consultant shall respond to bidder inquiries during the bidding process, including preparation of any addenda. Upon award of the construction contract, the Consultant shall attend the pre- construction meeting.
   B. The Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. The Consultant shall complete shop drawings reviews within one (1) week of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.

   C. The Consultant shall respond to written Requests for Information (RFI) to provide clarification or resolve discrepancies in the contract documents. Responses shall be completed within three (3) working days.
   D. The Consultant shall provide periodic field reviews and bring to the attention of the City of El Centro any defects or deficiencies in the work by the construction contractor which the Consultant may observe. The Consultant shall have no authority to issue instruction on behalf of the City of El Centro, or to deputize another to do so.

9. Upon the completion of construction, as-builts shall be submitted to the City. The Consultant shall incorporate all changes to the plans electronically with all necessary revision notations. Once plans have been updated, a signed set of as-built mylars shall be submitted to the City with an electronic copy (in AutoCAD and pdf formats) of the final as-built drawings via CD or e-mail.

10. The Consultant shall monitor the project progress, maintain project files, and control the quality of the work performed by in-house staff and/or sub-consultants. Incomplete (not meeting targeted completion) or poor-quality work will not be accepted. The Consultant will need to revise the documents within a revised schedule set by the City, which may require overtime. No additional regular or overtime hours shall be approved for the required revisions.

11. Attend meetings with the City staff as required.

12. Coordinate plan check, design topics, permits and any other issues with the City, other Agencies, and all utility companies as required. The Consultant shall be the liaison with affected agencies.

13. The Consultant shall be responsible for to reviewing and approving addenda and clarifications to plans and specifications.

1.1 Preliminary Design

Review available record plans, existing/proposed conditions and requirements. Attend the Field

Review Meeting; prepare Field Review Report

Conduct a field survey in order to confirm the accuracy of any existing drawings, surveys, streets, and utility locations data obtained. Consultant is expected to conduct additional surveys based on the project requirements.

Consultant shall prepare a preliminary Design Report (PDR) of alternatives, preliminary cost estimate and preferred alternative.

1.2 Development of Detail Plans, Specifications and Estimate (PS&E):

All reports, plans, specifications and quantity calculations shall conform to criteria, policies, procedures and standards of Caltrans, APWA and the City, and shall be made available to the City at stages specified in the milestone schedule and upon request.

Construction plans shall adhere to City of El Centro Standard Construction Drawing standards. The Consultant shall produce, at the Consultant's sole cost and expense, blank reproducible sample plan sheets and any needed standard drawings. Standard drawings and standard plans shall be incorporated into the Contract Plans where applicable.

Each plan sheet shall bear the State of California Registered Professional Engineer registration seal within signatures, license number and registration certificate expiration date of the Engineer who is in responsible charge for developing the plan. Each plan sheet shall be signed by the engineer who performed the independent plan check.

Consultant shall prepare complete contract specifications based on the Manuals/Standards section 2.4.

A list of contract pay items with the descriptions, item codes and estimated quantities shall be included in the front of the special provisions.

The Consultant shall prepare quantity calculations for items that are applicable to this project, and prepare cost estimates.

Quantities for all contract pay items shall be substantiated by calculations. Quantity calculations shall be neat and orderly and shall show all sketches, diagrams, and dimensions necessary to allow them to be independently used by field inspectors during construction.

Electronic files for all structural details and calculations shall be submitted at the end of the contract or when requested by the City.

All electronic software developed, databases generated, spreadsheets and intellectual properties developed during the life of the Agreement shall become the property of the City.

1.3 Environmental Documents and Permit Compliance

Specific environmental documentation work as may be required by the funding agency and the City including, but not be limited to the following: prepare Preliminary Environmental Study (PES), CEQA compliance documentation, technical studies, , NPDES permit, Regional Board Section 401 certification, any coordination as required completing the environmental NEPA and

CEQA work, and any encroachment permits required for the project from agencies such as Caltrans, County of Imperial, the City and any other having jurisdiction.

1.4 Utility Research and Coordination

(1) Research and obtain file copy of utility maps within the project limits for existing and/or proposed facilities.
(2) Prepare preliminary plans with utility notices/questionnaires to be sent to utility companies.
(3) Plot existing and proposed utilities in plan (and profile when applicable)
(4) Monitor response of utility notices received by the City and then make recommendations for mitigating conflicts.
(5) Attend coordination meetings when required regarding adjustments and relocations.
(6) Pothole information, where required, shall be coordinated by the Consultant.

1.5 Construction Bidding Phase

Bidding procedures will be the responsibility of the City. While the PS&E construction package is being advertised for bids, all questions concerning the intent shall be referred to the City for resolution. In the event that any items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the Consultant for decision by the City, or by a covering change order after the award of the construction contract.

1.6 Construction Support Phase (As Needed)

(1) All construction support work shall be coordinated with the City.
(2) Consultant shall furnish, at the consultant's sole cost and expense, all necessary drawings for corrections and change orders required by errors and omissions of the Consultant. The original tracing(s) of the drawings and contract wording for the change orders shall be submitted to the city for duplication and distribution.
(3) Consultant will receive written notification of the award of a construction contract. Upon such notification, Consultant will proceed with the services required by the Agreement.
(4) Consultant is required to attend the pre-construction meeting with the successful construction contractor upon notification by the City.
(5) Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. Consultant shall complete shop drawings reviews within two (2) weeks of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.
(6) Consultant shall be available as requested by the City to resolve discrepancies in the contract documents. Consultant shall bring to the attention of the City any defects or deficiencies in the work by the construction contractor which the Consultant may observe. Consultant shall have no authority to issue instruction on behalf of the City, or to deputize another to do so.
(7) The Consultant shall prepare and deliver to the City the final as-built plans incorporating field marked prints supplied by the City. Upon completion of construction, the City will submit field-marked prints to Consultant. Consultant shall incorporate all changes to the plans electronically with all necessary revision notations and submit to the City.

1.7 Description of Required Services

All work shall be performed in conformance with the State of California and/or City of El Centro policies, procedures and standards.

Consultant shall carry out the instructions received from the City and shall cooperate with the City and other involved agencies.

The Consultant has total responsibility for the accuracy and completeness of the plans and related designs, specifications and estimates prepared and shall check all such materials accordingly. The plans will be reviewed by the City for conformity with the requirements of the Agreement. Reviews by the city do NOT include detailed review or checking of design or the accuracy with which such designs are depicted on the plans. The responsibility for accuracy and completeness of such items remains solely that of Consultant.

Consultant or its sub consultants shall not incorporate in the design any materials or equipment of single or sole source origin without written approval of the City.

The plans, specifications, estimates, calculations, and other documents furnished under the Agreement shall be of a quality acceptable to the City and State. The criteria for acceptance shall be a product of neat appearance, well organized, technically and grammatically correct, checked, and dated and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that of similar types produced by the State and set forth in related Caltrans manuals. The Consultant shall modify its work as necessary to meet the level of acceptability defined by the criteria above.

The Consultant shall have a quality control plan in effect during the entire time work is being performed under the Agreement. The Quality control plan shall establish a process whereby plans are independently checked, corrected and back checked, and all job-related correspondence and memoranda dated and received by affected persons and then bound in appropriate job files.

2.0 Construction Plans

2.1 60% PS&E (Unchecked Details)

Unchecked plan details shall consist of 60% design and detailed plans ready for the independent design check.

Three sets (3) full size (24”x36”) of design plans. The following submittals may be submitted electronically: draft SSP, preliminary quantities and estimates, pay item list, and design calculations.

2.2 100% PS&E

The Consultant shall submit the following documents for review and approval: Four sets (4) full

size (24”x36”) signed and sealed prints of checked design Electronic copies of Special Provisions

Electronic copies of cost estimate and check quantity calculations

Electronic copies of design calculations

Electronic copies of design check calculations
Other reports as needed by the City of El Centro

The City will review and comment on the PS&E package as soon as possible. The turnaround goal is within four (4) weeks of receipt of the complete PS&E package. One (1) copy of those documents with comments will be returned to the Consultant.

2.3 Final PS&E

The Consultant shall submit the following documents for review and approval:

Electronic sets of signed final design plans

Electronic copies of signed final specifications

Electronic copies of final cost estimate and final quantity calculations

Electronic copies of final design calculations

Electronic files in its original format and in PDF of all plans, specifications, and estimates

2.4 Manuals/Standards

Where applicable, engineering design of all PROJECT improvements shall be compatible and in accordance with the following as applicable:

Caltrans Highway Design Manual

Caltrans Standard Plans

Caltrans Standard Specifications

Imperial County Hydrology Manual

American Public Works Association Standard Specifications for Public Works Construction

American Public Works Association Standard Plans

American Water Works Association

City of El Centro Standard Plans

San Diego Regional Standard Drawings

It will be the responsibility of the Consultant to verify that it has received the latest version or update of these documents.

Plans for the improvements on the State Highway shall be prepared in accordance with Caltrans recommended practice for detailing and scope of work. Caltrans Standard plans shall be utilized where applicable and may be called out on the plans as reference.

Local street improvement plans shall adhere to City of El Centro Standard Plans and the Standard Specifications for Public Works Construction. Plans shall be computer drafted in AutoCAD compatible format and shall adhere to the current City of El Centro Public Works Department CAD standards.

The Consultant's work will be subject to inspections by representatives of the City, County, State and FHWA

2.5 ***Coordination***

Coordination with the City, other consultants and other involved agencies will be required to

achieve compatible designs, phasing of construction with existing or designed conditions, and timely delivery of the contract PS&E. Coordination may include, but not be limited to, coordination with Caltrans, FHWA, Regional Water Quality Control Board and other agencies.

The City will decide the manner in which the coordination of individual matters is undertaken. At the City's option, coordination efforts may be performed by the Consultant's direct contact, by the Consultant acting though the City or by the City only. When coordination efforts require Agreement, such Agreement shall be coordinated through the City.

EXHIBIT B

SAMPLE PROPOSAL EVALUATION FORM

CONSULTANT/FIRM NAME:		
Criteria	Max Points	Rating
Understanding of the work to be done	25	
Experience with similar kinds of work	25	
Quality of staff for work to be done	15	
Capability of developing innovative or advanced techniques	10	
Familiarity with state and federal procedures	10	
Financial responsibility	10	
Familiarity with local and regional approving agencies	5	
Total	100	

Evaluator

Print Name: _____

Signature: _____

Date: _____

Contract Manager

Initials: _____

Date: _____

EXHIBIT C

SAMPLE DESIGN PROFESSIONAL SERVICES AGREEMENT

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES _____NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES _____NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

_____ _____
DATE (SIGNATURE OF CONSULTANT)

EXIBIT E

SAMPLE TASK ORDER

SAMPLE CONSULTANT TASK ORDER #
FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

EXHIBIT G

SAMPLE CONSULTANT TASK ORDER # FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

RESOLUTION NO. 26-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A DESIGN PROFESSIONAL SERVICES AGREEMENT WITH DYNAMIC CONSULTING ENGINEERS FOR ON-CALL CIVIL ENGINEERING – GENERAL SERVICES

WHEREAS, on-call professional Civil Engineering-General services agreements are an effective way to retain consultants to ensure that public works projects and programs are delivered in a timely and cost-effective manner; and

WHEREAS, pursuant to City Code Section 2-174, the City of El Centro ("City") identified a need for on-call, specialized Civil Engineering-General consulting services and released a Request for Proposal for such services through the City's Public Works Department; and

WHEREAS, on October 3, 2025, the City received proposals which were evaluated and ranked to determine the most qualified consultants; and

WHEREAS, Dynamic Consulting Engineers ("Consultant") was amongst those consultants chosen to enter into an on-call agreement with the City; and

WHEREAS, such services will be awarded on a Task Order basis as the budget allows; and

WHEREAS, it is necessary for the City Council of the City of El Centro, California (the "City Council") to approve a Design Professional Services Agreement with Consultant for On-Call Civil Engineering – General Services ("Agreement"); and

WHEREAS, the City Council finds that its approval of the Agreement is in the best interest of the City.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. That the foregoing is true, correct and adopted.

2. That the City Council authorizes the Agreement in a not-to-exceed amount of one million dollars ($1,000,000) for the total term of the Agreement (for two years, with the possibility of up to three (3) one-year extensions), with the understanding that services will be provided on an as-needed basis and Task Order basis as further set out in the Agreement, with no guarantee of any level of effort from Consultant.

3. That the City Manager is hereby authorized to sign the Agreement on behalf of the City, a copy of which is on file in the Office of the City Clerk.

4. That the Public Works Director is hereby authorized to execute Task Orders up to fifty thousand dollars ($50,000) each for budgeted projects.

5. That the City Manager is hereby authorized to execute Task Orders for budgeted projects above fifty thousand dollars ($50,000) and under two-hundred thousand dollars ($200,000); task orders above that amount shall be approved by the City Council.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026.

CITY OF EL CENTRO

By_____
Michael Crankshaw, Mayor

ATTEST:

By_____
Norma Wyles, City Clerk

APPROVED AS TO FORM:
Office of the City Attorney

By_____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CITY OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California, do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at the regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By_____
Norma Wyles, City Clerk

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH NICKLAUS ENGINEERING, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

CITY MANAGER'S RECOMMENDATION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH NICKLAUS ENGINEERING, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

FISCAL IMPACT:

Contract is not to exceed one million dollars ($1,000,000.00) through out the term of the agreement. This will be through the approval of various task orders through out the life of the contract.

Award of the contract will not obligate the City to purchase any specific level of effort from any firm as task orders will be issued by the City Manager or Public Works Director to assign work on an as-needed, project-by-project basis. Funding for each project will be budgeted in the Citywide Capital Improvement Program (CIP) budget which is adopted through the annual budget process. If a non-budgeted project arises, staff will return to Council to request funding as needed. Funding sources may include the general fund, enterprise funds as well as other sources such as Measure D, Gas Tax, SB1 and other grants.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

Financial & Governance Stability & Sustainability

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

The consultant went through a request for proposals and an evaluation process. Any missing documentation, such as a business license, will be obtained before issuance of Notice to Proceed ("NTP").

BACKGROUND:

In late 2020, the City Council awarded a series of contracts to on-call consultants. These contracts in essence, pre-approve consultants for design work, construction management work, special studies, etc. This expedites the award of work and eliminates the need to do RFP's, interviews, etc., for contract which may be small in value, which may discourage firms from submitting due to the cost of preparing for a RFP and interview process.

Generally, these contracts are not utilized for certain grant funds, as grant funds have

added language that may not be included in the on-call contracts and that does not apply for all projects. As such, grant funded projects generally go through contracts outside of the on-call approved contract list.

On-call contracts have been used in the past to do design work funded by park impact fees, general fund, water enterprise, wastewater enterprise, Measure D and SB1 funds. Individual Task Orders are issued for projects that fit within the scope of the on-call contract.

Projects in the past have included the Imperial Avenue Extension design, studies and portions of the Southern Pump Station project, various construction management contracts for Measure D projects and some water and wastewater projects to name a few. Task Orders are funded from approved budget funds.

DISCUSSION:
The current list of On-Call contracts began to expire at the beginning of August 2025. To replace the contracts, Public Works' staff divided the on-call disciplines into two groups. One Request for Proposals (RFP) was prepared for Civil Engineering- General and Civil Engineering- Water and Wastewater Treatment, while another was prepared for the On-Call Architectural Design and Construction Management and Inspection Services.

On August 19, 2025, the City Council, during its regular meeting, approved the Request for Proposals(RFP) for four on-call disciplines. Each RFP was advertised and released as follows:

1. Request for Proposals (RFP) for On-Call Civil Engineering - General and On-Call Civil Engineering- Water and Wastewater Treatment was published in the Imperial Valley Press on August 22, 2025, with an initial deadline of September 19, 2025, and then revised via addendum to October 3, 2025.

2. Request for Proposals (RFP) for On-Call Architectural Design, and Construction Management and Inspection Services was published in the Imperial Valley Press on August 26, 2025, with an initial deadline of September 26, 2025, and then revised to October 10th, 2025.

These are the disciplines where we expect to have the need for these contracts. Each applicant was required to specify the discipline for which they were submitting a proposal.

Under this Council approval request, we are focusing on consultants who submitted for the On-Call Civil Engineering-General Services portion of the RFP. For this discipline, the City received six proposals. The proposals were evaluated by a panel of three city staff members. Based on the scores, six firms were selected and will be recommended for contract award, which includes the following in no particular order:

- Dynamic Consulting Engineers
- CR Associates
- Nicklaus Engineering, Inc.
- Psomas
- TYPSA, Inc.
- The Holt Group, Inc.

A separate Council agenda report, agreement and resolution is being prepared for each firm. Each agreement would be limited to $250,000 per fiscal year for each fiscal year the agreement is active. However, as each agreement will be for on-call, as-needed services, there is no guarantee on any level of services from any firm. Each contract has an initial Two (2) year life with the option to provide for three (3) individual one (1) year extensions for a possible total five (5) year contract.

In this report, staff seeks approval of an on-call contract for Civil Engineering- General Services with Nicklaus Engineering, Inc.

CONCLUSION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH NICKLAUS ENGINEERING, INC. FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

ATTACHMENTS:

1. Design Professional Services Agreement- Nicklaus Engineering
2. Resolution 26-

DESIGN PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement"), is made and effective as of the last signature date in this agreement, between the City of El Centro ("City"), a municipal corporation, and Nicklaus Engineering, Inc. ("Consultant"), a stock corporation. In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

I. TERM

This Agreement shall commence upon the issuance of the Notice to Proceed ("NTP") and shall remain and continue in effect until the professional services described herein are completed, but in no event later than two (2) years from the date of approval and may be extended for up to three (3) one (1) year extensions by mutual agreement unless sooner terminated pursuant to the provisions of this Agreement. All days set out in this Agreement are calendar days unless otherwise provided.

II. SERVICES

Consultant shall perform the tasks described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full (the Tasks to be Performed or Tasks). Consultant shall complete the Tasks according to the schedule of performance which also is set forth in Exhibit A. To the extent that Exhibit A is a proposal from Consultant, such proposal is incorporated only for the description of the scope of services and no other terms and conditions from any such proposal shall apply to this Agreement unless specifically agreed to in writing. A sample Task Order is attached as Exhibit G.

III. PERFORMANCE BY CONSULTANT

A. Consultant shall at all times faithfully, competently, and to the best of their ability, experience, and talent, perform all Tasks. Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing similar services as are required of Consultant hereunder in meeting its obligations under this Agreement.

B. Consultant immediately shall notify the City Representative in writing of any delay in completion of the services. Such notice shall include the reason for such delay and a reasonable estimate of the length of the delay. If the delay materially effects performance of the Services, the City may terminate this Agreement under Section VI (Termination) or VII (Default).

C. Force Majeure. If delays in performance of the services are caused by the following unforeseen events or conditions beyond the reasonable control of City or Consultant, the time for performance may be extended by City only for the period of such events: war, changes in law or government regulation, labor disputes or strikes; fires, floods, adverse weather or other natural conditions

preventing work; or inability to obtains materials, equipment or labor when the Consultant provides the City with timely evidence of its inability to obtain personnel.

D. Consultant may terminate this Agreement without cause upon providing at least 60 days prior written notice to the City of such termination. Within such time period, the Consultant shall complete any work necessary for the orderly termination of its consulting services

IV. CITY REPRESENTATIVE

City's Public Works Director shall represent City in all matters pertaining to the administration of this Agreement, review and approve all products submitted by Consultant, but not including the authority to change the compensation due to Consultant except as provided in this Agreement (the "City Representative")

V. PAYMENT

A. The City agrees to pay Consultant in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B, attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. This amount shall not exceed One million dollars ($1,000,000.00) for the total term of the Agreement unless additional payment is approved as provided in this Agreement.

B. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City. Consultant shall be compensated for any such authorized additional services in the amounts and in the manner as agreed to by the City and Consultant at the time City's written authorization is given to Consultant for the performance of such services and/or as set for in Exhibit B.

C. Consultant shall submit invoices monthly for actual services performed. Invoices shall be submitted on or about the first business day of each month, or as soon thereafter as practical, for services provided in the previous month. City shall use reasonable efforts to pay within forty-five (45) days of receipt of each invoice as to all non-disputed fees. If the City disputes any of Consultant's fees, it shall use its best efforts to give written notice to Consultant within forty-five (45) days of receipt of an invoice of any disputed fees set forth on the invoice.

D. It is understood and agreed that the City's obligation to proceed under this Agreement is conditioned upon the appropriation of funds. If anticipated funds for payment under this Agreement are not forthcoming or are insufficient, the City shall have the right to terminate this Agreement without penalty upon ten (10) days prior written notice to Consultant. Notwithstanding, the City also may determine a source of additional funds.

VI. CITY'S SUSPENSION OR TERMINATION OF AGREEMENT

A. Except as otherwise provided herein below, the City may suspend or terminate this Agreement, or any portion hereof, without cause and for convenience by serving written notice of termination upon the other party at least ten (10) calendar days prior to the date of termination. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City terminates a portion of this Agreement, such termination shall not make void or invalidate the remainder of this Agreement.

B. In the event this Agreement is terminated pursuant to this section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, less any disputed amounts. Upon termination of the Agreement pursuant to this section, the Consultant will submit an invoice to the City as provided above.

VII. DEFAULT

A. Either Party's failure to comply with the provisions of this Agreement shall constitute a default. In the event that either party is in default for cause under the terms of this Agreement, the affected party shall promptly notify the deficient party of such default and following such notice shall have no obligation or duty to continue compensating or providing any work after the date of default and terminate this Agreement immediately by written notice to the other party. If such failure hereunder arises out of causes beyond either party's control under Section III C above (force majeure), the provisions of that sub-section shall apply.

B. If the City Representative determines the Consultant is in default in the performance of any of the terms or conditions of this Agreement, City shall cause to be served upon the Consultant a written notice of the default. The Consultant shall have ten (10) days after service of default to cure the default as directed by the City in the notice of default. In the event the Consultant fails to cure its default within such period of time, the City shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

VIII. OWNERSHIP OF DOCUMENTS

A. Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the City at reasonable times to such books and records; shall give City the right to examine and audit said

books and records; shall permit City to make transcripts or copies therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

B. Upon completion of, or in the event of termination of this Agreement, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the City and may be used, reused, or otherwise disposed of by the City without the permission of the Consultant. With respect to computer files, Consultant shall make available to the City, at the Consultant's office and upon reasonable written request by the City, the necessary computer software and hardware for purposes of accessing, compiling, transferring, copying and/or printing computer files. Consultant hereby grants to City all right, title, and interest, including any copyright, in and to the documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared by Consultant in the course of providing the services under this Agreement.

IX. INDEMNIFICATION AND DEFENSE

To the fullest extent permitted by law, Consultant shall indemnify, defend, and hold harmless City and any and all of its officials, employees, agents, and volunteers ("Indemnified Parties") from and against any and all claims, losses, liabilities, damages, costs, and expenses, including attorney's fees and costs, to the extent they arise out of, pertain to or relate to the negligence, recklessness, or willful misconduct of the Consultant.

Consultant's duty to defend shall consist of reimbursement of defense costs incurred by Agency in direct proportion to the Consultant's proportionate percentage of fault.

Consultant's percentage of fault, for both indemnity and defense, shall be determined, as applicable, by a court of law, jury, or arbitrator. In the event any loss, liability, or damage is incurred by way of settlement or resolution without a court, jury or arbitrator having made a determination of the Consultant's percentage of fault, and the parties cannot mutually agree on Consultant's percentage of fault, the parties agree to mediation with a neutral third-party to determine the Consultant's proportionate percentage of fault for purposes of determining the amount of indemnity and defense cost reimbursement owed to the Agency.

X. INDEPENDENT CONTRACTOR

A. Consultant is and shall at all times remain as to the City a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, or agents shall have

control over the conduct of Consultant or any of Consultant's officers, employees, or agents, except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation, or liability whatever against City, or bind City in any manner.

B. No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

XI. INSURANCE

Consultant shall maintain prior to the beginning of and for the duration of this Agreement insurance coverage as specified in Exhibit C attached hereto and incorporated herein by this reference as though set forth in full.

XII. LEGAL RESPONSIBILITIES

A. The Consultant shall keep itself informed of local, state, and federal laws and regulations which in any manner affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. The Consultant shall at all times observe and comply with all such laws and regulations. The City, its officers, agents and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this section.

B. Licenses. At all times during the term of this Agreement, Consultant shall have in effect all licenses required for the performance of the services described in this Agreement.

C. City Business License: At all time during the term of this Agreement, Consultant shall have in effect a City business license.

D. Non-discrimination. Consultant shall not discriminate on the basis of any protected state or federal class or association with such class in its solicitation, selection, hiring or treatment of its employees, vendors or suppliers. Consultant understands that violation of this requirement shall be a material breach of this Agreement and may result in its termination, debarment or other sanctions. This requirement shall be placed in all agreements between the Consultant and its employees, vendors and suppliers.

E. Drug-free Workplace. Consultant agrees to insure a drug free workplace. The Consultant shall certify to the City that it will provide a drug-free workplace by submitting a Consultant Certification for a Drug-Free Workplace form as provided

by the City. The Consultant shall publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the workplace, and specifying the actions that will be taken against employees for violations of the prohibition. The Consultant also shall establish a drug-free awareness program to inform employees about all of the following: the dangers of drug abuse in the workplace; the policy of maintaining a drug free workplace; available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug abuse violations. In addition, the Consultant shall post the drug free policy in a prominent place.

F. No Use of City logo or Product Endorsement. The Consultant agrees that any advertisement or notification identifying or referring to the City as a client of the Consultant requires the prior written approval of the City. No City logo or other identifying mark may be used without the prior written approval of the City.

XIII. CONFLICTS OF INTEREST XX

A. Undue Influence. Consultant declares and warrants that no undue influence or pressure was used against or in concert with any officer or employee of the City in connection with the award, terms, or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of the City has or will receive compensation, directly or indirectly, from Consultant, or from any officer, employee, or agent of Consultant, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this section shall be a material breach of this Agreement entitling the City to any and all remedies at law or in equity.

B. No Benefit to City Employees. During their tenure and for one year thereafter, no officer or employee of City, or their designees or agents, and no public official who exercises authority over or responsibilities with respect to the services under this Agreement shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the services performed under this Agreement.

C. Consultant covenants that neither Consultant nor any officer or principal of their firm have any interest in, or shall acquire any interest, directly or indirectly, which will conflict in any manner or degree with the performance of their services hereunder. Consultant further covenants that in the performance of this Agreement, no person having such interest shall be employed by them as an officer, employee, agent, or subconsultant. To the extent applicable, Consultant further covenants that Consultant has not contracted with nor is performing any services, directly or indirectly, with any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area and further covenants and agrees that Consultant and/or its subconsultants shall provide no service or enter into any agreement or agreements with a/any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area prior to the completion of the work

under this Agreement.

D. Form 700. Consultant is subject to all applicable federal, state and local conflict of interest laws, regulations and policies applicable to its contract with the City and procurement practices related to such contract, including but not limited to the those under the Political Reform Act and its regulations or California Government Code Section 1090 et seq. Consultant may be required to complete Form 700's or similar forms as determined under Exhibit D, attached and incorporated.

E. Levine Act Compliance. The Consultant shall complete and comply with the provisions of Exhibit E, attached and incorporated, regarding compliance with the Levine Act.

XIV. RELEASE OF INFORMATION

A. All information gained by Consultant in the performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents, or subconsultants, shall not without prior written authorization from the City Attorney or designee, or unless requested by the City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena.

B. Consultant promptly shall notify City should Consultant, its officers, employees, agents, or subconsultants be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request ("Discovery"), court order, or subpoena from any person or party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the City, unless the City is a party to any lawsuit, arbitration, or administrative proceeding connected to such Discovery, or unless Consultant is prohibited by law from informing the City of such Discovery. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding as allowed by law. Unless City is a party to the lawsuit, arbitration, or administrative proceeding and is adverse to Consultant in such proceeding, Consultant agrees to cooperate fully with City and to provide the opportunity to review any response to Discovery requests provided by Consultant. However, City's right to review any such response does not imply or mean the right by City to control, direct, or rewrite said response.

XV. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by: (i) personal service; (ii) delivery by a reputable document delivery service (e.g., Federal Express), which provides a receipt showing date and time of delivery; or (iii) United States mail,

certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To CITY: City of El Centro
1275 Main St.
El Centro, CA 92243
Attention: City Clerk

TO CONSULTANT: Nicklaus Engineering, Inc.
1461 Main St.
El Centro, CA 92243
Attention: Antonio Alvarez, P.E., Vice President

XVI. ASSIGNMENT

A. Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the City. Due to the personal nature of the services to be rendered pursuant to this Agreement, only Consultant shall perform the services described in this Agreement.

B. Before retaining or contracting with any subconsultant for any services under this Agreement, Consultant shall provide City with the identity of the proposed subconsultant, a copy of the proposed written contract between Consultant and such subconsultant which shall include an indemnity provision identical to the one provided herein identifying City as an indemnified party, or an incorporation of the indemnity provision provided herein, and proof that such proposed subconsultant carries insurance at least equal to that required by this Agreement or obtain a written waiver from City for such insurance.

C. Nicklaus Engineering, Inc. may use assistants, under their direct supervision, to perform some of the services under this Agreement. Consultant shall provide City fourteen (14) days' notice prior to the departure of Antonio Alvarez, P.E. from Consultant's employ. Should Antonio Alvarez, P.E. leave Consultant's employ, the City shall have the option to immediately terminate this Agreement. Upon termination of this Agreement, Consultant's sole compensation shall be payment for actual services performed up to, and including, the date of termination or as may be otherwise agreed to in writing between the Governing Board and the Consultant.

XVII. GOVERNING LAW

The City and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court with jurisdiction over the City.

XVIII. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, negotiations, understandings, representations, and statements, oral or written and pertaining to the subject of this Agreement or with respect to the terms and conditions of this Agreement, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

A. No waiver or failure of either Party to insist upon the strict performance by the other shall be a continuing waiver of any breach of this Agreement, nor shall such waiver affect or alter this Agreement, and each provision hereof shall continue in full force and effect. No change to any term or condition of this Agreement, nor any verbal understanding of the Parties shall be valid unless in writing as set forth in this Agreement.

B. Nothing contained this Agreement shall be considered a limit upon the charter city powers of the City.

C. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in its drafting.

D. In any conflict between the body of this Agreement and the Exhibits, the body of this Agreement shall control. If a conflict exists between any applicable law, rule, or regulation, that law, rule or regulation shall control. The most stringent requirements shall control. Each Party shall notify the other immediately upon identification of any apparently conflict or inconsistency.

XIX. SEVERABILITY

Any part, provision, or representation of this Agreement or any of its exhibits, including, which is held to be invalid, void or unenforceable by a court of competent jurisdiction, shall be limited to that part, provision or representation and all other parts, provisions, or representations herein shall remain in full force and effect.

XX. CONTENTS OF REQUEST FOR PROPOSAL AND PROPOSAL

Consultant is bound by the contents of the proposal submitted by the Consultant, attached and incorporated as Exhibit A In the event of conflict, the requirements of City's Request for Proposal and this Agreement shall take precedence over those contained in the Consultant's proposal. The incorporation of the Consultant's proposal shall be for the scope of services to be provided only, and any other terms and conditions included in such proposal shall have no force and effect on this Agreement or the relationship between Consultant and/or City, unless expressly agreed to in writing.

XXI. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant warrants and represents that they have the authority to execute this Agreement on behalf of the Consultant and have the authority to bind Consultant to the performance of its obligations hereunder.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

Nicklaus Engineering, Inc. By:



(Signature)

ANTONIO ALVAREZ

(Typed Name)

VICE PRESIDENT

(Title)

City of El Centro
A Municipal Corporation

Robert Sawyer, City Manager

ATTEST:

City Clerk

APPROVED AS TO FORM:
City Attorney

By: _____

Attachments:		
	Exhibit A	Consultant's Proposal
	Exhibit B	Fee Schedule
	Exhibit C	Insurance Requirements
	Exhibit D	Conflict Financial Disclosure
	Exhibit E	Levine Act Certification
	Exhibit F	City RFP
	Exhibit G	Sample Task Order

EXHIBIT A

CONSULTANT'S PROPOSAL

Request for Proposals for

ON-CALL SERVICES CIVIL ENGINEERING GENERAL

October 3, 2025



Submitted by:

NICKLAUS ENGINEERING, INC.

October 3, 2025

City of El Centro Department of Public Works
Engineering Division
1249 W. Main Street
El Centro, CA 92243

Attention: **Abraham Campos, PE, Public Works Director/City Engineer**
Reference: **ON-CALL SERVICES FOR CIVIL ENGINEERING – GENERAL**

Dear Mr. Campos,

On behalf of the **Nicklaus Engineering, Inc. (Nicklaus) team**, please accept the following as our formal response to the City of El Centro's Request for Proposals (RFP) for On-Call Services for General Civil Engineering. We respectfully submit our qualifications, as outlined herein, and are excited about the possibility of continuing to work with the City of El Centro on this important contract. Addendum No. 1 and 2 have been received and acknowledged.

Nicklaus is a Woman-Owned Small Business (WOSB) with over four decades of experience in civil engineering. In the following pages, we have outlined our team's relevant experience in designing, including arterial and local streets, traffic engineering/design, landscaping, water, sewer, and storm drain design projects, as well as working within the mechanisms of similar on-call professional service contracts.

To support this contract, we have engaged with four sub-consultants listed below. We've always appreciated the expertise each of their firm brings to each project and the quality of their work. We will supplement our professionals with theirs, as necessary, and we will effectively utilize their resources to ensure that the demands of this contract are met with a professional at every level, completing each task on time and within budget.

SUB-CONSULTANT TEAM MEMBER	TEAM ROLE
Robert Campbell Structural Engineering (RCSE)	Structural Engineering
JOL Enterprises, Inc. (JOL)	Electrical Engineering
Desert Surveying & Engineering PLLC (DS&E)	Surveying Support
Sierra Materials Testing & Inspection (Sierra)	Materials Testing Support

We anticipate that the work will be managed out of our El Centro office, located at 1461 Main St, El Centro, CA, with support from our Yuma office. Antonio Alvarez, PE, will be the point of contact for this on-call contract and can be contacted at (928) 246-1616 (Cell).

Sincerely,
NICKLAUS ENGINEERING, INC.

Antonio Alvarez, PE
Vice President

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Within the following pages, we have included our qualifications for performing services under an On-Call Contract for General Civil Engineering Services.

Nicklaus has proudly served clients within Imperial County and the desert southwest for nearly 50 years, helping the local community navigate infrastructure projects from design through construction. We respectfully submit our qualifications herein to the City of El Centro for consideration for On-Call General Civil Engineering Services. We've outlined relevant projects within our portfolio, demonstrating our ability to perform the services described in the RFP, showing our past performance in similar scope elements. Table 1 below represents a snapshot of the completed scope elements of a few projects by Nicklaus. These projects are detailed later in our proposal and further describe our diverse capabilities and our exposure to projects we feel will be similar to task orders stemming from this contract. In addition, we have also included our approach to the On-Call General Civil Engineering contract, a continuation of our past successful approach to the last contract cycle. Every project presents a new set of challenges, and we understand that having a process in place can be the difference between a project riddled with change orders and one that is not. We've highlighted our proficiency in each facet of a typical project in the descriptions we've listed and identified the relevant team members who contributed to each.

RELEVENT PROJECTS	Records Research	Permit Documentation Preparation	Environmental Assessment (CEQA)	Field Survey & Topo Survey	Plans, Specs & Estimates (PS&E)	Plan Plotting	Sealed Construction Documents	Bid Assistance	Attend Pre-Construction Meeting	RFI Assistance	Periodic Field Reviews	Design Schedule & Quality Control	Attend Design Meetings	Review & Appr. Addenda & Clarity
1. **CITY OF EL CENTRO POLICE STATION** | El Centro, CA	✖			✖	✖		✖	✖		✖	✖	✖	✖	
2. **CALIFORNIA HIGHWAY PATROL FACILITY** | El Centro, CA	✖				✖		✖	✖		✖	✖	✖	✖	✖
3. **VALLEY CENTER POINT PLAZA DEMOLITION** | El Centro, CA	✖			✖	✖	✖	✖	✖						
4. **BUENA VISTA PARK** | El Centro, CA	✖			✖	✖	✖	✖	✖		✖	✖		✖	✖
5. **CITY OF CALEXICO VARIOUS PARKING LOTS PROJECT** | Calexico, CA	✖			✖	✖	✖	✖	✖		✖	✖		✖	✖
6. **IMPERIAL COUNTY AIRPORT RUNWAY 14/32 EMERG. REPAIRS** | Imperial, CA	✖			✖	✖	✖		✖	✖	✖	✖	✖	✖	✖
7. **WINTERHAVEN SEWER FORCE MAIN** | Winterhaven, CA	✖	✖	✖	✖	✖	✖	✖	✖						
8. **CR&R ENVIROMENTAL SERVICES TRANSFER STATION** | El Centro, CA	✖	✖		✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
9. **COUNTY 12TH ST. AND 4TH AVE. INTERSECTION** | San Luis, AZ	✖	✖		✖	✖	✖	✖	✖		✖	✖	✖	✖	✖

The Nicklaus staff of 129 employees have professional and technical backgrounds in civil engineering, construction management, environmental science, geotechnical engineering, surveying, and architecture.

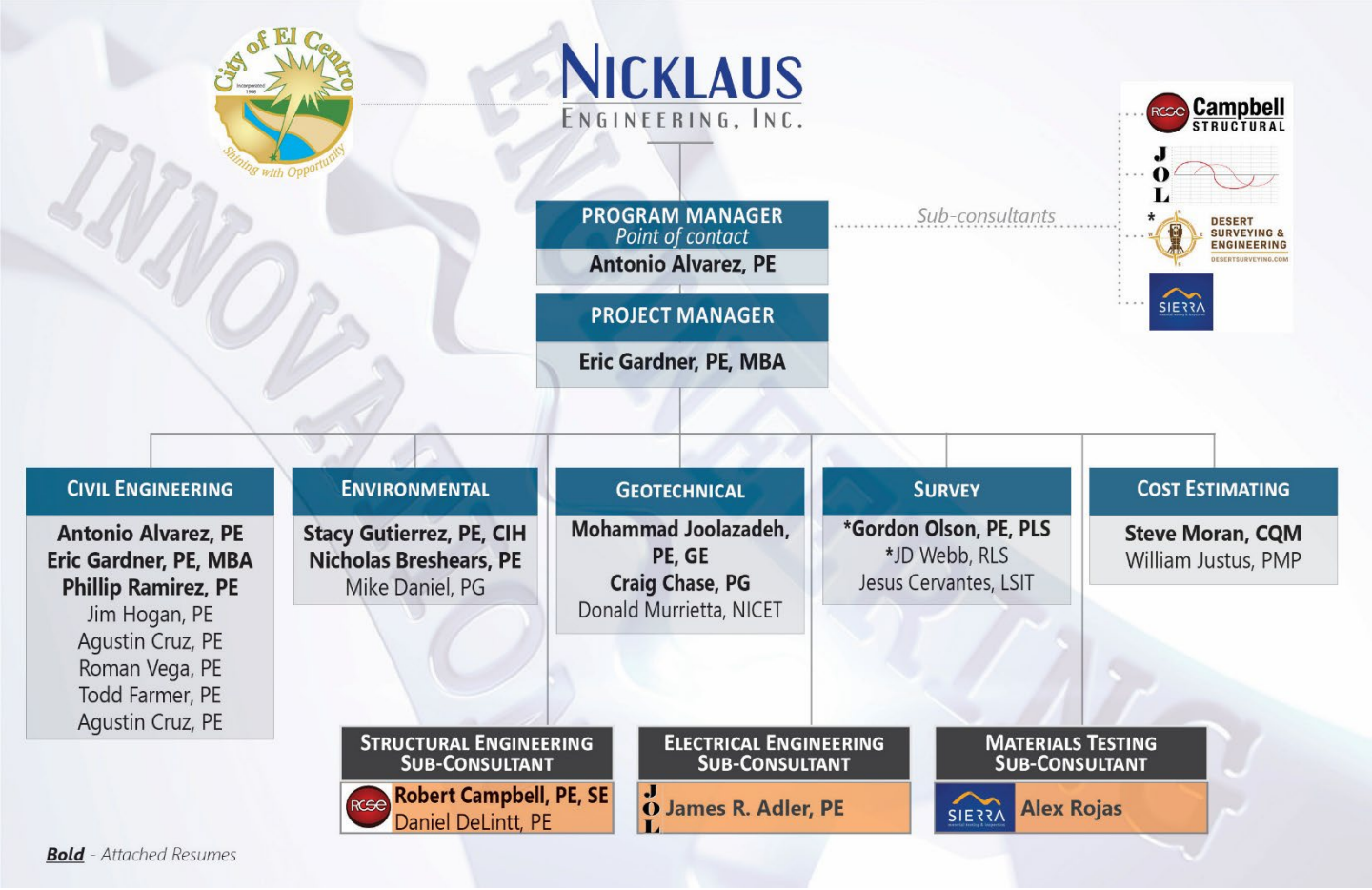
We are proud that they all continue to work hard to better themselves, learning efficient ways to service contracts and get the job done right. In turn, we've worked hard to provide them with the tools and resources they need to do their job efficiently, free from obstacles, so that they can deliver on contractual promises.

Together, we set out to accomplish our goals as a unified team.

We've also provided a brief description of our history, along with an introduction to our team members. **We have included references from clients in California as "Point of Contact" with each key project in section (9)** as requested, each of whom may speak of our past work performance for them on similar type projects.

We have included resumes introducing our key personnel from Nicklaus and our subconsultants, **Rob Campbell Structural Engineers (RCSE), JOL Enterprises (JOL), Desert Surveying & Engineering (DSE)**, and **Sierra Material Testing & Inspection (Sierra),** and are included on the following pages.

Below is an **organizational chart** illustrating the single point of contact for the City of El Centro and the flow down to our subconsultants. Nicklaus' capabilities are showcased through our multiple disciplines in engineering, augmented by our teaming partners with over four decades of experience in serving the needs of the desert southwest communities.



Finally, we address our capacity. In short, we are ready and able to support this contract and any task order that may originate from it. It will come as no surprise if most submissions express a similar definitive sentiment; therefore, we believe it's prudent to provide a tangible calculation of the number of full-time employees (FTE) we expect this contract to require.

Using some conservative assumptions, we believe this contract will require roughly 3 FTEs to service during any given year.

Nicklaus alone has over twice as many relevant FTEs available for the City of El Centro, even under the highest demands. We continue to forecast our five-year workload and have committed to adding two new hires each year over that period to our company, a goal we surpassed in the last contract cycle. Finally, we are currently under an On-Call contract with the City of El Centro, thus familiar with and prepared to adhere to the City's Standard Professional Services Agreement, and continuing to provide the standard insurance coverages.

Nicklaus has established internal processes to initiate, conduct, and finalize task orders in a cost-effective and high-quality manner, thereby meeting the City of El Centro's requirements and expectations.

The City of El Centro continues to implement its improvement programs to support existing and future infrastructure. As a local firm, we understand that the City of El Centro needs a local, technically diverse, and proven team with a flexible, deep bench of resources that can quickly mobilize and deliver multiple, simultaneous task orders without delay. **Nicklaus has a history of successfully delivering both single-procurement and on-call services.** We've read, understand, and have tailored our team to perform the Scope of Work outlined in Exhibit A, as we have provided in the last contract cycle. Coupled with the in-depth experience of our Program and Project Management, we are confident in our ability to promptly initiate and successfully complete any task order request from the City of El Centro under this contract. To facilitate this, we will employ a proven delivery approach developed for on-call services, focusing on a comprehensive task order development process, continuous communication, and reliable implementation.

The Nicklaus Program Manager, Antonio Alvarez, P.E., will lead our team and serve as the primary point of contact with the City of El Centro. Based on the tasks requested by the City of El Centro, Nicklaus will engage the best personnel within Nicklaus for each service required.

Nicklaus Will Quickly Mobilize and Deliver Upon Request Without Delay

Mobilizing quickly is a key component of our success. **Our Program Manager is located in our El Centro office, just one block from City Hall, and is within walking distance.** Our accessibility to the City of El Centro staff allows us to conduct site visits on demand to assess future and ongoing work quickly.

This ability to mobilize swiftly has proven beneficial to many local agencies, including the City of El Centro. The City can be confident that Nicklaus will continue to deliver the exceptional project management and design services that you are accustomed to receiving from us under this contract.

Engineering Experts Able to Solve Critical Challenges

To meet your needs and challenges over the contract cycle, Nicklaus will provide an integrated project team of experts, coupled with local and regional engineering resources specifically tailored to address the assignment and situation. Our team brings the expertise and experience to provide on-call project management, planning, design, construction management, and emergency response services for your projects related to all the scope elements identified in the RFP.

Our management team is committed to delivering exceptional professional services to the City of El Centro. We have the ability to provide a fully integrated project team to address the following specific project needs:

a) **SOIL AND GEOTECHNICAL ENGINEERING SERVICES.** Our team provides a range of services, including field services, seismic fault investigations, dewatering development, foundation engineering, pavement evaluations, and more. Inclusive of our services, Nicklaus is unique in that we have the in-house capability to provide geotechnical laboratory testing, CCTV, Vacuum Truck, and drilling services within our organization.

b) **ROADWAY AND TRAFFIC ENGINEERING SERVICES.** Our team has specialized expertise in performing design services for roadways, including the development of rigid and flexible pavement systems, unpaved roadways, and the evaluation and calculation of Pavement Condition Indices using Paver. We have cost estimators on staff, experts in the development of cost factors rooted in relevant historical data, and inclusive of each road system component, whether the project includes localized stopgap, localized preventative, or global preventative repairs.

c) **SURVEYING SERVICES AND RIGHT-OF-WAY ENGINEERING.** Our key subconsultant, DSE, will be used to augment Nicklaus' in-house specialized services, as required. Nicklaus has surveying equipment to support

the rapid mobilization of project support in times of need.

d) **CIVIL ENGINEERING SERVICES.** Our team performs in-house civil engineering services, including site development, hydrology analyses/drainage design, roadway engineering, and general civil engineering needs. In addition to our civil engineering services, Nicklaus provides planning studies, economic analyses, and supporting business case/life cycle analyses. Bidding, construction support, and project closeout services are included in all engineering efforts as may be required to fulfill the entire project life span.

e) **AGENCY PERMITTING SERVICES.** Our team has in-house capabilities to gather the documentation required for encroachment, environmental, or other agency permits.

Successfully Managing a Task Order-Based Contract

As-needed services contracts, by design, are intended to provide the City of El Centro with a readily available contracting vehicle to address specific tasks, studies, and projects, thereby bypassing the rigorous/time-consuming RFP process for each individual project.

Nicklaus fully understands the flexibility required to fulfill the needs of the City of El Centro. Figure 1 illustrates our typical four-step approach to Task Order development, execution, & management; **Define, Communicate, Incorporate,** and **Deliver.** Day-to-day communication through project reporting, our job is to make your job easier.

Step 1 – Define

A Task Order review ensures a thorough understanding of the project's needs and the City of El Centro's goals. Upon notification of a pending Task Order assignment, our Nicklaus project manager will work jointly with the City of El Centro and our internal experts to develop a project team that meets the unique needs of the specific tasks considered. Nicklaus intends to initiate the City of El Centro/Consultant partnership early in the Task Order development process by collaborating with City of El Centro representatives to define the goals and timeline required for the project. Nicklaus will establish the internal work team, identify additional stakeholders, and work with the City of El Centro staff and pertinent team members to further refine the scope of services and work schedule, as well as develop the appropriate level of effort.

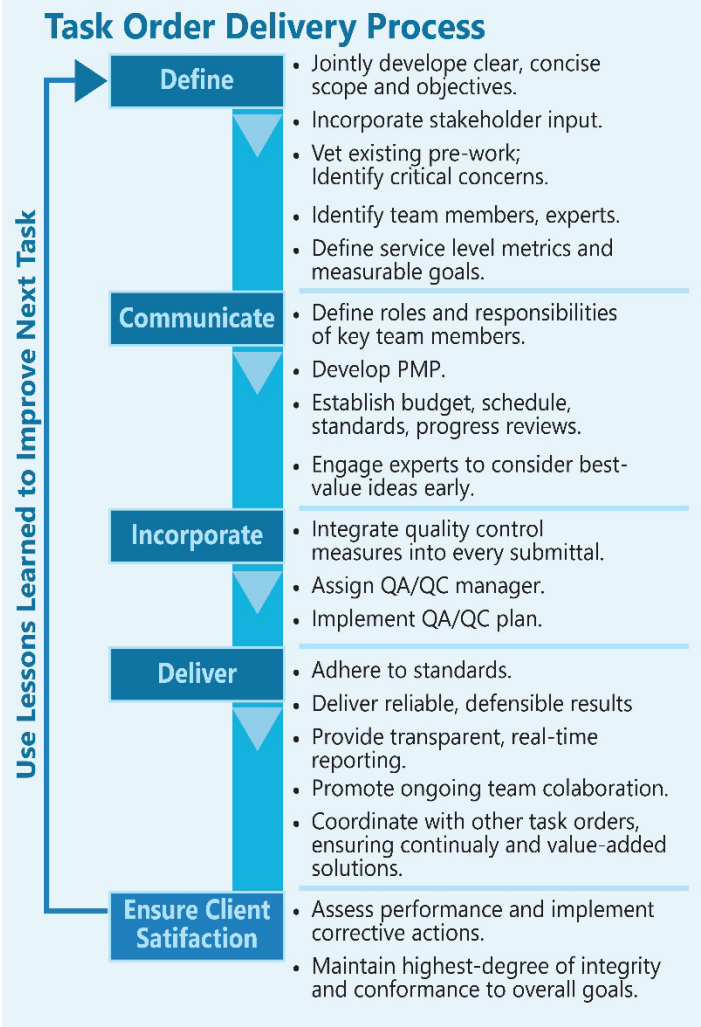


Figure 1. Nicklaus will use a standard task order delivery process to ensure consistent task order definition, communication, and delivery standards.

Once the Task Order scope of services is established, the Nicklaus team will develop the Work Breakdown Structure, which defines the specific elements of work, and prepare a draft Project Management Plan (PMP) to initiate our project communication process.

Step 2 – Communicate

Established lines of communication provide easy decision-making and seamless task order execution. The PMP is a key component in the project communication process. It gives the project team specific and measurable goals,

assignments, and expectations. The PMP is also considered a "living document" and will be adjusted, revised, and distributed to the entire project team as new issues and solutions are identified during the project's execution phase and/or task assignments. Key elements of the PMP include:

- Team roles and responsibilities
- Critical technical needs and expertise
- Draft scope and schedule
- Work breakdown structure (WBS)
- Lines of communication
- Adherence to standards and procedures
- Quality assurance/quality control process
- Risk identification and documentation
- Subconsultant involvement and management

Nicklaus will finalize the overall scope of services and budget required to accomplish the assigned project and/or tasks based on the information presented in the PMP. Communication is key to collaborating and identifying creative, innovative ideas that may result in cost savings, efficiencies, and sustainable features, while also maintaining the project's overall schedule and budget. As part of the PMP, a communication plan will be implemented, ensuring that all team members, including City of El Centro staff, are aware of the project's progress.

Nicklaus will implement the collaboration process through regularly scheduled project meetings with all project stakeholders and, as necessary, with outside project stakeholders, including franchise utility owners, resource agencies, regulatory entities, and various community groups. Our project meetings are organized to address and resolve project issues early.

In-house schedule and management software facilitates project reporting. Nicklaus has fully developed scheduling and management reporting tools, which were previously used on single procurement and multiple task order contracts, including during the last cycle of this contract. Nicklaus will manage and monitor the following four basic, but crucial, phases: project setup, analysis, tracking, and reporting. Project managers can report project costs, task implementation, and schedule progress on a weekly basis. This benefits both the City of El Centro and Nicklaus by providing a real-time assessment of project budgets and schedules. This process is also used to identify potential project issues requiring specific attention. **Nicklaus will tailor a project reporting structure that best suits both the project's needs and the City of El Centro's requirements.**

Step 3 – Incorporate

Establishing service level metrics early results in smooth execution and delivery.

Initiating Quality. Quality begins with Nicklaus and our subconsultants having a thorough understanding of project goals and objectives, emphasizing communication, and thoroughly reviewing project inputs. Nicklaus will develop a project-specific checklist and the City of El Centro guidelines concurrently with the development of the scope of work. The submittal checklist will be distributed to Nicklaus' subconsultants before project scoping and fee negotiations, ensuring that everyone has a clear understanding of the requirements at each delivery point in the project.

Producing Quality. Nicklaus will require a PMP on all tasks. As part of the PMP, the project-specific Quality Management Plan (QMP) will provide the foundation and guidance for the critical technical activities undertaken.

Confirming Quality. While it is important to build quality into the work, formal checking and reviews are also critical QMS activities. Quality checking activities will be a customary part of each submittal's permanent records.

Delivering Quality. All deliverables undergo a final verification check before submission. An independent reviewer evaluates the deliverable for completeness and consistency, adherence to quality requirements, and resolution of comments.

The reviewer then coordinates with the project manager, who is responsible for the final oversight, approval, and submittal. This final independent evaluation assesses the submittal's state of readiness, without diminishing the project manager's accountability for the quality of work being released.

A check-and-balance activity, this review pairing helps Nicklaus consistently deliver quality and value to our clients.

Step 4 – Deliver Value

Nicklaus will utilize all City of El Centro planning, design, and procedural standards to ensure continuity and consistency. Milestone reviews, quality control measures, strategy meetings, and goal setting enable our team to plan and design projects effectively, ensuring they are completed on time and within budget. By working closely with the City of El Centro staff, each project/task order team will maintain open lines of communication and continual collaboration to avoid any potential delays or surprises. The anatomy of every project comprises various key elements, as outlined below.

Project/Task Management. Nicklaus's Project Manager will drive the overall project and tasks, ensuring our task order teams complete them to meet the expectations of the City of El Centro. In the event of unforeseen circumstances, our project/task team will work with the City of El Centro to adjust or revise the plan to best meet the City of El Centro's needs. Project/task management is more than just making informed decisions on project solutions; it is about making decisions that consistently improve the operation or implementation of a project in the field. Nicklaus integrates planning, design, and construction expertise to continuously value engineer designs that can be built within budget and on schedule.

Cost Estimating. Cost estimates must be realistic so the City of El Centro can accurately forecast total project costs. Nicklaus will utilize our in-house construction teams, composed of seasoned cost estimators with experience in developing construction cost estimates for contractors. We create highly competitive estimates based on real-world experience with a risk-adjusted nominal estimate methodology, utilizing our team's in-house database, which includes local projects.

Transition/Knowledge Transfer. When we complete a task order and deliver the project to the City of El Centro staff, our involvement does not end. We value our partnership with the City of El Centro and are committed to collaborating with the City to create knowledge transfer and mentoring opportunities for your staff.

Emergency Requests. Our team's depth of resources is invaluable when our clients require emergency assistance. We have the depth of resources in San Diego and Yuma that can be mobilized within 24 hours, seven days a week, for emergency requests requiring an immediate response.

What Our Clients have to say…

"Nicklaus's technical performance, adherence to project budget and ability to meet the design / construction schedules has been extremely important to ensure the Airport Authority remains in compliance with our federal grant requirements. Nicklaus's project management and business relations are handled with supreme professionalism with a sincere focus on customer satisfaction. We extend our strong recommendation for Nicklaus's Engineering Services."

~Gladys Brown, Yuma Int'l Airport Director

"Excellent knowledge and use of DoD/federal and industry best practices for evaluating and managing roadway and infrastructure systems. The Lead PM (Antonio Alvarez) has excellent communication and management skills."

~Steve Pylypiak, PE, PMP, Program Mgr. – US CBP

"*Nicklaus is performing a great job safety-wise. This was their initial Safety Site Assist Visit, and I did not find any discrepancies. They are the kind of company we need for our projects*."

~Almario Erasquin, NAVFAC SW Safety Manager

Availability of the Team

Nicklaus has the availability and capacity to fulfill the contract requirements required by the City of El Centro, even under unusually high surges in the workflow. Our estimated combined labor utilization rate is 66%; therefore, we project an excess capacity of 34%. The inset matrix indicates an excess capacity in terms of available full-time equivalent (FTE) personnel to the contract of 7.14.

TEAM CAPACITY (FTEs)	Relevant FTEs	Remaining Capacity	Excess Capacity
NICKLAUS ENGINEERING, INC.	**21**	**34%**	**7.14**

For this type of contract, it is reasonable to assign a value of 75% to 80% to labor, and 20% to 25% to other direct costs (ODCs). On average, one FTE will generate, conservatively, $250,000 in revenue annually. In determining the FTE demand for this contract, we have assumed an annual revenue yield of $1,000,000, which, based on our historical understanding of the contract, is conservative. Using the more conservative assumption of 20% ODCs, we used the following formula to calculate the average annual FTE demand of the contract:

$$\frac{[\textbf{\textit{Annual Revenue}}] - [20\%\ \textbf{\textit{ODCs}}]}{[\textbf{\textit{FTE Yield}}]} = \textbf{\textit{Demand}}$$

or

$$\frac{[\$1,000,000] - [\$200,000]}{[\$250,000]} = 3.2\ \textbf{\textit{FTEs}}$$

Conservatively, the contract requires 3.2 FTEs. Nicklaus alone is currently staffed to handle 100% of the work under this scenario, having a capacity of 7.14 FTEs available to serve this contract. Excess capacity increases when considering the additional personnel available from our subconsultant's professional and technical experts.

	WORKLOAD/BACKLOG	Estimated Commitment	Estimated Completion Date
ANTONIO ALVAREZ, PE *Program Manager/Project Manager*	Tucson CTIMR	10%	8/2026
	El Paso – Big Bend CTIMR	10%	7/2026
ERIC GARDNER, PE, MBA *Project Manager*	Little Rock AFB PFAS	10%	10/2027
	IPL PFAS	10%	12/2027
	City of Imperial Aten Rd Sewer Line Installation	10%	1/2026
	County of Imperial Behavioral Health Rehabilitation	5%	9/2026
MOHAMMAD JOOLAZADEH, PE, GE *Geotectnical Engineer*	Siphon Residences II Apartments Project	10%	11/2025
	Ray Smucker Park - New 28,000 Gallon Tank	10%	11/2025
CRAIG CHASE, PG, CEG *Engineering Geologist*	Quechan Casino Resort - Parking Lot	10%	12/2025
	Ray Smucker Park - New 28,000 Gallon Tank	10%	11/2025
STACY GUTIERREZ, PE, CIH *Environmental Engineer*	City of Yuma Open End	5%	12/2025
	MCAS Yuma MTR	5%	3/2026
JIM HOGAN, PE *Civil Engineer*	AE IDIQ for Stormwater	45%	9/2026
STEVE MORAN *Cost Estimator*	City of Yuma Fire Department Equipment Warehouse	10%	1/2026
	Military Working Dogs OPS Facility	15%	3/2026
ROBERT CAMPBELL, SE *Structural Engineer Sub-consultant*	Price Elementary School	15%	12/2025
	UofA Cooperative Extension	8%	2/2026
JAMES ADLER *Electrical Engineer Sub-consultant*	Yuma County Cooperative Extension UofA	15%	4/2026
	Quechan Justice Center Project, Fort Yuma	15%	2/2026
GORDON OLSON, PE, PLS *Land Surveying Sub-consultant*	City of El Centro Pump Station Project	5%	6/2026
	City of Imperial Aten Road Sewer Line Replacement Phase 2 Road	5%	4/2026
ALEX ROJAS *Materials Testing Sub-consultant*	Calexico Intermodal Transportation Center	10%	Early 2026
	Niland Sanitary Sewer District WW Treatment Plant	10%	Early 2026

Nicklaus' team was formed to leverage the complementary, specialized talents, and unique capabilities of each team member to perform under this contract. Our team has demonstrated experience in supporting the efforts of multiple municipalities, helping to achieve their engineering design objectives under various On-Call contracts.

A **Women-Owned Small Business (WOSB)**, Nicklaus is an A/E design firm and construction company with a rich history of working in the southwest United States the past four decades.

Having built a solid reputation as a dependable company through years of dedicated development within the Imperial and Yuma counties offering **civil, geotechnical and environmental engineering, land surveying, construction and construction management, and architectural services and employs registered professional engineers, registered architects, licensed contractors, and certified field personnel, experienced and trained in their respective fields.**

Nicklaus has 129 employees listed by title and discipline:

Administrative	**16**
Architect	**2**
Biologist	**5**
CADD Designers/Technicians	**13**
Chemical Engineer	**1**
Chemist	**3**
Civil Engineer	**16**
Construction Inspector	**2**
Construction Manager	**5**
Cost Estimator	**1**
Environmental Engineer	**7**
Environmental Scientist	**20**
Geotechnical Engineer	**1**
GIS Specialist	**8**
Geologist	**8**
Industrial Hygienist	**1**
Mechanical Engineer	**1**
Technician/Analyst	**19**

Nicklaus offers the City of El Centro a skilled labor force needed to complete the work tasked under this contract.

The Nicklaus team and its members have extensive experience in similar projects. In fact, most of the projects completed by Nicklaus have been under the category of public project facilities and infrastructure improvement projects.

We have worked with numerous local municipalities, military, and federal government agencies over the past 40 years, allowing us to build up our knowledge base, experience, and reputation.

We have a long history of successful projects for the City of El Centro, Imperial County, City of Calexico, City of Yuma, NAF El Centro, Yuma Proving Ground, MCAS Yuma, U.S. Customs and Border Protection, Yuma International Airport Authority, and many others.

Each project has its own set of unique compliance items that need to be addressed. From local health department regulations to state policies and federal laws, local jurisdictional code and ordinance requirements, adherence to federal and state labor compliance regulations, as well as public/private utility requirements, our team understands the code language and can successfully interpret the plans, regulations, and requirements to review the project for full compliance.

ROB CAMPBELL STRUCTURAL ENGINEERS (RCSE) is committed to providing professional structural engineering services using state-of-the-art technology. RCSE has experience in a wide variety of engineering capabilities, including structural design, structural analysis, structural investigations, structural reports, computer-aided drafting, special inspections, and construction observation.

JOL ENTERPRISES (JOL) is a design team consisting of experienced and qualified personnel with expertise in diverse areas of electrical systems and the construction industry. Areas of specialization include electrical engineering and design of commercial, industrial, and

residential electrical distribution systems, lighting, fire detection, and security alarm systems.

DESERT SURVEYING & ENGINEERING (DS&E) was founded locally by Gordon Olson, a registered Civil Engineer. Desert Surveying works with clients and public agencies in coordinating and processing project development from conceptual design and tentative mapping through recordation of final maps for residential, commercial, and industrial projects. Mr. Olson has also served as Acting City Surveyor for several cities in Southern California.

SIERRA MATERIAL TESTING & INSPECTION (SIERRA) is a privately owned California corporation. Sierra is a highly qualified, local geotechnical engineering firm that provides geotechnical engineering and materials testing and inspection services in the Imperial Valley. Sierra is staffed by local engineers and technicians who have provided the requested services for over 15 years to clients.

Pending Litigation for Nicklaus and Sub-consultants

- ***Nicklaus Engineering, Inc.*** *presently has no pending litigations, nor has recently had any litigations filed.*
- ***Robert Campbell Structural Engineers*** *presently has no pending litigations, nor has recently had any litigations filed.*
- ***JOL Enterprises, Inc.*** *presently has no pending litigations, nor has recently had any litigations filed.*
- ***Desert Surveying & Engineering*** *presently has no pending litigations, nor has recently had any litigations filed.*
- ***Desert Surveying & Engineering*** *presently has no pending litigations, nor has recently had any litigations filed.*

FIRM REFERENCES

IMPERIAL COUNTY DEPARTMENT OF PUBLIC WORKS
John A. Gay, Director of Public Works
155 S. 11th Street, El Centro, CA 92243
(442) 265-1818
johngay@co.imperial.ca.us
Firm Role: Civil Design Services
Date of Services: 2025

CITY OF CALEXICO
Lilliana Falomir, Public Works Manager
608 Heber Avenue, Calexico, CA 92231
(760) 768-2160
falomir@calexico.ca.gov
Firm Role: Civil Design Services
Date of Services: 2025

WINTERHAVEN COUNTY WATER DISTRICT
Rick Miller, General Manager, WCWD
2nd Ave, Winterhaven, CA 92283
(928) 920-9056
whavenca@gmail.com
Firm Role: Civil Design Services
Date of Services: 2025

CITY OF EL CENTRO POLICE STATION

El Centro, CA

CLIENT
City of El Centro Police Department

CONTACT PERSON
Matt Gorman, Principal Architect, Arrington Watkins
(602) 279- 4373
mgorman@awarch.com

SCOPE ELEMENTS
- ✓ *Engineering Design Services*
- ✓ *Construction Plans*
- ✓ *Plans and Specifications*
- ✓ *Project Management Services*
- ✓ *Progress Meetings/Reports*
- ✓ *Field Work*
- ✓ *Surveying*
- ✓ *Utility Mapping*
- ✓ *Specifications*
- ✓ *Project Construction Estimate*
- ✓ *Design Review Meetings*
- ✓ *District Support*

COMPLETION DATE
2022

Nicklaus was part of a design team that provided engineering services for a new police station in the City of El Centro.





The two-story main police station is currently in construction in two phases and occupies a full city block including offsite improvements to roadways and utilities.

The project is currently under construction and was designed in two phases, occupying the full city block where the previous station was located. The phasing plan was developed to enable the police department to remain in portions of the building until the new police headquarters were completed.

Phase I included a two-story main police station and the realignment and narrowing of 11th Street to provide one-way traffic. **Phase II** involves the construction of a two-story police support building and a new two-story main police station, featuring a public lobby, a community meeting/multipurpose area, offices for administration, investigators, records, and patrol-related functions, including lockers, a fitness area, and report and writing areas. The program also included detainee processing and interview spaces, recruitment and training, emergency communication, and dispatch. The Police Support Building houses the fingerprint laboratory, evidence storage, K-9 facilities, and other support areas for the police.

The ground floor of the police support building will house vehicle evidence and examination bays, a service and loading bay, a K-9 unit, weapons and ammunition storage, and a SWAT-ready room. The upper floor includes a police firearms range and animal control administration offices.

Civil engineering and pre-development coordination services included reviewing existing documentation and attending pre-development and partnering meetings with the design team, building owner, and city officials. Nicklaus prepared the project's civil design plans, including site demolition, site plan, paving and grading, utility connection and relocation, stormwater management, erosion and pollution control, and offsite improvements. Additionally, Nicklaus is providing construction administration services, including responding to RFIs during construction, reviewing submittals, and reviewing as-built drawings prepared by the general contractor.

CALIFORNIA HIGHWAY PATROL FACILITY

El Centro, CA

CLIENT
State of California Dept. of General Services (DGS)

CONTACT PERSON
Matt Gorman, Principal Architect, Arrington Watkins
(602) 279- 4373
mgorman@awarch.com

SCOPE ELEMENTS
✓ *Engineering Design Services*
✓ *Construction Plans*
✓ *Plans and Specifications*
✓ *Progress Meetings/Reports*
✓ *Field Work*
✓ *Surveying*
✓ *Utility Mapping*
✓ *Specifications*
✓ *Project Construction Estimate*
✓ *Design Review Meetings*

COMPLETION DATE
2021 (Design)

Nicklaus was part of a team to provide the design for the construction of a new CHP substation with the main building totaling 44,534 SF. The site is located on approximately 7.2 acres. **Nicklaus performed the following services as part of the design:**



Arrington Watkins and Nicklaus performed the design for construction for a new CHP substation with the main building totaling 44,534 SF.

- **Prepared an updated topographic survey** using an Unmanned Aerial Vehicle (UAV), which included all surface features and buried utilities.
- **Calculated truck movements** using Vehicle Tracker through a citation lane located on the public side of the facility while also providing access for trucks through a secured side.
- **Set grades for the entire site** to reduce the need to import or export material. Site grades ensured conformance to all ADA paths of travel, including access from the public sidewalk in the street.
- **Designed Portland Cement Concrete pavement** according to ACI design standards for rigid pavement design in parking lots.
- **Hydrology and hydraulic design were completed** following the City of El Centro Standards and Caltrans Highway Design Manual. The site was graded to retain a 100-year storm event on-site.
- **Designed stormwater lift station**, with stormwater pumped into the City of El Centro storm drain system.
- **Designed new domestic and fire water service** connecting to existing PVC water main.
- **Designed sanitary sewer service** with new lift station and force main.
- **Designed a new traffic signal** at the intersection of State Hwy. 86 (4th Street) with Danenberg Road.
- **Designed a new right turn lane** on 4th Street.
- **Designed a new 18" RCP stormwater pipe** for offsite improvements.
- **Designed half-width improvements** for a new four-lane arterial street adjacent to the CHP Facility, extending Danenberg.

Nicklaus provided local support for the Architect, Contractor, and CHP during the project's design phase and construction support services, including responding to submittals, RFIs, and design directives.

EL CENTRO VALLEY CENTER POINT PLAZA DEMOLITION

El Centro, CA

CLIENT
City of El Centro

CONTACT PERSON
Abraham Campos,
City of El Centro Public Works
(760) 337-4505
ACampos@cityofelcentro.org

SCOPE ELEMENTS
- ✓ *Engineering Design Services*
- ✓ *Topographic Survey*
- ✓ *Site Design*
- ✓ *Construction Plans*
- ✓ *Plans and Specifications*
- ✓ *Surveying*
- ✓ *Utility Mapping*
- ✓ *Electrical Design*
- ✓ *Specifications*
- ✓ *Project Construction Estimate*
- ✓ *Design Review Meetings*

COMPLETION DATE
2025

Nicklaus performed the A/E Design Services for the City of El Centro through the City's On-Call Contract.

The Valley Center Point Plaza, an abandoned mall in the City of El Centro, was donated to the City for redevelopment and future community use.



Nicklaus performed the demolition Design Services for the Valley Center Point Plaza, an abandoned mall in the City of El Centro, for redevelopment and future community use.

The plaza originally consisted of four buildings—three abandoned structures and one that remained partially occupied by a charter school and the City's former library. With a new library facility already constructed elsewhere, the former library space was slated to be converted into a leasable tenant space.

A key challenge of the project was that the property line bisected the remaining building, dividing it between the charter school and the future tenant space. Nicklaus carefully navigated this condition to ensure full compliance with current code requirements while creating two independent occupancies.

The project scope included the complete demolition of the three abandoned buildings and the reconfiguration of utilities to support the retained tenant space. Nicklaus designed a system of independent utilities—including sewer, water, electrical, mechanical, fire suppression, and communications—so that the new tenant space could function fully on its own without reliance on the adjacent charter school's infrastructure.

Nicklaus provided comprehensive Architectural and Engineering services, including the preparation of construction documents. The Civil Design scope included topographic surveys, abandonment and capping of existing utilities, and design of new utility connections dedicated to the tenant space. To address budget constraints, Nicklaus developed cost estimates throughout the design process and organized the construction documents into multiple bid alternates, giving the City flexibility in managing project costs.

BUENA VISTA PARK AND MULTI-USE PATHWAY

El Centro, CA

CLIENT

City of El Centro
Economic Development Division

CONTACT PERSON

Adriana Nava, Community Services Director
(760) 337-4543
anava@cityofelcentro.org

SCOPE ELEMENTS

- ✓ *Project Management*
- ✓ *Topographic Survey*
- ✓ *Geotechnical Investigation*
- ✓ *Civil Site Plan and Cross Sections*
- ✓ *Civil Hardscape Details*
- ✓ *Structural Design Plans*
- ✓ *Electrical Design Plans*
- ✓ *Landscape Architecture*
- ✓ *Utility Coordination*
- ✓ *Cost Estimate*
- ✓ *Bid Support*
- ✓ *Construction Support Services*

COMPLETION DATE

3/2024

The City of El Centro received a grant to develop Buena Vista Park. The new park included 2.38 acres of park space within an existing 8-acre stormwater retention basin. The project included the following park amenities:





Buena Vista Park Multi-Use Pathway and playground structure adjacent to a subdivision.

- Approximately 2,900 LF of new 8-foot-wide concrete multi-use pathway
- Approximately 2,600 LF of new 5-foot-wide decomposed granite pathway
- New pedestrian-level lighting and poles along the pathway.
- A new surface-finished basketball court with LED sportlighting
- An approximately 1.67-acre low-mow turf area
- A new playground structure.
- Approximately 700 SF of stamped concrete
- New decorative benches, trash receptacles, and drinking fountains
- Drought-tolerant landscaping and irrigation system
- Reconstruction of the existing retention basin
- New storm drain connections and piping

Nicklaus provided pre-design, design, and post-design services to complete the Buena Vista Park project. Pre-design services included a full topographic survey of the existing park and the surrounding frontage streets within the Buena Vista subdivision. Nicklaus also performed the geotechnical investigation, including providing recommendations for post-tension slabs and light pole foundations. Design services included a complete package of civil, structural, electrical, and landscape architectural plans, accompanied by an Engineer's Opinion of Probable Cost, within 5% of the winning bid.

Nicklaus also provided bid and construction support services, helping ensure the Buena Vista Park project completion met the high standards the City of El Centro set to provide the community with a valuable asset.

CITY OF CALEXICO
VARIOUS PARKING LOTS PROJECT

Calexico, CA

CLIENT

City of Calexico

CONTACT PERSON

Lilliana Falomir, M.P.A., Public Works Manager
(760) 768-2160
falomirl@calexico.ca.gov

SCOPE ELEMENTS

- ✓ *Project Management*
- ✓ *Topographic Survey*
- ✓ *Geotechnical Investigation*
- ✓ *Civil Site Plan*
- ✓ *Cost Estimate*
- ✓ *Bid Support*
- ✓ *Construction Support Services*

COMPLETION DATE

6/2025

The City of Calexico Department of Public Works contracted Nicklaus to design and manage the rehabilitation of three parking lots serving the Enrique Camarena Memorial Library, Community Center, and Police Department in Calexico. The project was initiated in response to the need for improved pavement conditions, enhanced site functionality, and compliance with current standards.





Caption here.....

To address these needs, Nicklaus conducted a comprehensive pavement evaluation, which included asphalt coring and laboratory testing to determine the existing conditions and recommend appropriate rehabilitation strategies. A topographic survey was conducted to accurately map existing features and inform the design process.

The site design package included coordination with city staff and stakeholders, preparation of demolition and site plans, grading plans, civil details, and an erosion control plan. All design documents were prepared in accordance with city requirements and delivered in AutoCAD Civil 3D format. The project manual was developed by reviewing city standard documents and supplementing them with project-specific specifications.

Nicklaus Engineering also provided an engineer's takeoff, preparing an opinion of probable cost for the final permit and construction set. The scope excluded off-site improvements, utility design, stormwater retention systems, and traffic control plans, focusing solely on the rehabilitation of the designated parking lots.

Overall, the project provides a cost-effective, long-term solution that enhances parking lot safety, accessibility, and operational efficiency, thereby supporting the City of Calexico's commitment to maintaining high-quality public facilities.

IMPERIAL RUNWAY 14/32 EMERGENCY REPAIRS

Imperial, CA

CLIENT

County of Imperial

CONTACT PERSON

Mr. Gilbert Rebollar,
Deputy CEO of General Services for the County of Imperial
(760) 604-1135
gilbertrebollar@co.imperial.ca.us

SCOPE ELEMENTS

- ✓ *Project Management Services*
- ✓ *Engineering Consulting Services*
- ✓ *Pavement Evaluation*
- ✓ *Emergency Maintenance Plans*
- ✓ *Cost Estimate*
- ✓ *Resident Project Representative and Resident Engineer*
- ✓ *Construction Inspection*
- ✓ *RFI Support*
- ✓ *Submittal Support*
- ✓ *Change Order Support*
- ✓ *Progress Payment Support*
- ✓ *Labor Compliance Support*

COMPLETION DATE

9/2025

In response to a letter of investigation from the Federal Aviation Administration referencing apparent violations of 14 CFR Part 139, the Imperial County Airport contracted Nicklaus to assist in the emergency correction of unresolved discrepancies.



Nicklaus to assisted in the emergency correction of unresolved discrepancies for the Imperial County Airport.

The scope of work included the following:

- Pavement Evaluation of Runway 14-32, Taxiway A1 through A7, and Taxiway B7 following ASTM D5340, AC 150/5380, and AC 150/5320.
- Six cores to measure existing asphalt and ABC thicknesses.
- Topographic Survey
- Data collection and review of available records pertinent to areas subject to emergency maintenance.
- Design memo outlining the pavement condition index assessment findings.
- Emergency Maintenance Plans in accordance with AC 150/5380- 6C.
- Engineer's Opinion of Probable Cost
- Bid Assistance
- Resident Project Representative and On-Site Construction Inspection Services.

Maintenance improvements included:

- Approximately 61,000 LF of flexible pavement crack seal and approximately 14,000 LF of partial depth repair on Runway 14-32.
- Pavement marking improvements on Runway 14-32.
- Approximately 13,000 LF of flexible pavement crack seal and approximately 600 LF of partial depth repair on Taxiways A2 through A5.
- Surface treatment of Taxiways A2 through A5, Taxiway B1, and Taxiway B7.
- Pavement marking improvements on Taxiways A2 through A5, Taxiway B1, and Taxiway B7.

During construction, a V-22 Osprey operated within a designated closed and restricted area that was undergoing pavement work. The aircraft became immobilized with the front landing gear trapped in a pavement trench. Nicklaus provided support to the Airport, helping mitigate the impacts of the immobilized aircraft, navigating work around the impacted areas. Nicklaus also supported the Airport with a Contractor Significant Incident Report and developed a cost impact amendment for reimbursement by the government. This project is a clear example of Nicklaus's ability to rapidly mobilize and support a local agency in times of need.

WINTERHAVEN SEWER FORCE MAIN REPLACEMENT 4TH AVENUE BRIDGE

Winterhaven, CA

CLIENT
Town of Winterhaven

CONTACT PERSON
Rick Miller
(928) 920-9056
whavenca@gmail.com

SCOPE ELEMENTS
- ✓ *Engineering Design Services*
- ✓ *Construction Plans*
- ✓ *Plans and Specifications*
- ✓ *Project Management Services*
- ✓ *Progress Meetings/Reports*
- ✓ *Field Work*
- ✓ *Surveying*
- ✓ *Utility Mapping*
- ✓ *Electrical Design*
- ✓ *Specifications*
- ✓ *Project Construction Estimate*
- ✓ *Design Review Meetings*
- ✓ *District Support*
- ✓ *Engineering Design Report*

COMPLETION DATE
On-going

The force main project consisted of one mile of 8" ductile iron pipe connecting the Winterhaven Water District (WWD) Sewer Lift Station to the City of Yuma Sewer System. It included three bridge crossings: the California Waste Way Bridge, the I-8 Over-Crossing Bridge, and the Colorado River Bridge.





Nicklaus provided emergency design and repair services to expedite service recovery.

WWD contracted Nicklaus to provide design and construction services for a corrosion failure of a section of the sewer force main suspended from the Colorado River Crossing Bridge. The pipeline failure resulted in a release of raw sewage beneath the bridge onto the City of Yuma's pedestrian pathway.

Nicklaus replaced approximately 170 feet of failed ductile iron pipe with high-density polyethylene pipe with all necessary appurtenances. During the design and repair process, it was determined that the corrosion was more extensive than previously suspected. Nicklaus provided timely design-build assistance to eliminate the immediate concern and offer detailed recommendations for WWD's path forward.

As a long-term solution, Nicklaus provided design services for the three sections of force main noted above based on recommendations provided during the initial investigation. The design involved coordination and permitting with the WWD, Imperial County, Bureau of Reclamation, Caltrans, Arizona Department of Transportation, City of Yuma, and Yuma County.

CR&R ENVIRONMENTAL SERVICES TRANSFER STATION & MAINTENANCE FACILITY

El Centro, CA

CLIENT
CR&R Environmental Services

CONTACT PERSON
John McNamara, 714-372-8281,
jmcnamara@crrmail.com

SCOPE ELEMENTS
- ✓ *Engineering Design Services*
- ✓ *Construction Plans*
- ✓ *Plans and Specifications*
- ✓ *Geotechnical Investigations*
- ✓ *Project Construction Estimate*
- ✓ *Cost Estimates*
- ✓ *Topographic Survey*
- ✓ *Utilities Coordination*

COMPLETION DATE
6/2025

Nicklaus was hired to provide A/E consulting services for a new 66,675 SF Solid Waste Transfer Facility. The building is composed of a PEMB structure for the Maintenance Shop and Sorting area, while the Administration area is composed of conventional steel framing.



Nicklaus was hired to provide A/E consulting services for a new 66,675SF Solid Waste Transfer Facility.

The civil design included a new sewer system to accommodate the facility's waste flow from daily truck washing, which included a sediment and oil/water separator. Nicklaus collaborated with the City of El Centro to determine the appropriate size for the off-site sewer pipe, its extent to the stub, and its location. Elevation checks were conducted to ensure that the minimum slopes for the sewer pipe would allow for gravity flow without the need for a lift station.

Nicklaus verified that the minimum pipe cover and clearance around other utilities were met by reviewing as-built drawings from the City, IID, and other utility companies. Our crews conducted site visits to measure invert elevations of the sewer lines and irrigation beneath the manholes, standpipes, and drainpipes leading to the open channels.

For the stormwater, we designed stormwater basins to route the roof drains and parking lot through a series of underground pipes. The bioretention basins are a special type of basin where stormwater travels through filter layers to a perforated pipe that drains into the City stormwater collection system. A percolation test indicated how porous the soil was to drain in the basins. A drainage report was conducted in conjunction with a WQMP plan to aid in the sizing of stormwater pipes and bioretention basins.

Additional services included boundary surveys, topographic surveys, geotechnical investigations, and design. Additional design work included a drainage report. Phase 2 preliminary design of Arlington Road for a bond for future development. The project also included engineering cost estimates for the bond and development fees.

SAN LUIS COUNTY 12TH ST. AND 4TH AVE. INTERSECTION IMPROVEMENTS

San Luis, AZ

CLIENT

City of San Luis

CONTACT PERSON

Eulogio Vera, PE,
Public Works Director
(928) 341-8577
evera@cityofsanluis.org

SCOPE ELEMENTS

- ✓ *Engineering Design Services*
- ✓ *Pavement Evaluations*
- ✓ *Topographic Survey*
- ✓ *Site Design*
- ✓ *Construction Plans*
- ✓ *Plans and Specifications*
- ✓ *Project Management Services*
- ✓ *Progress Meetings/Reports*
- ✓ *Field Work*
- ✓ *Surveying*
- ✓ *Utility Mapping*
- ✓ *Specifications*
- ✓ *Project Construction Estimate*
- ✓ *Design Review Meetings*
- ✓ *Engineering Design Report*
- ✓ *Construction Administration*

COMPLETION DATE

3/2024 - Design
5/2025 – Present
Construction administration

The City of San Luis Department of Public Works contracted Nicklaus to design improvements at the three-way intersection of County 22nd Street and 4th Avenue in San Luis, Arizona.

Rapid population and traffic growth had caused significant backups during peak hours, with northbound vehicles on 4th Avenue frequently using the shoulder to turn right and merge onto County 22nd Street, creating safety and operational concerns.

To address these issues, the City implemented left-turn lanes on the northbound 4th Avenue approach and the eastbound County 22nd Street approach.



Left-turn lanes on the northbound 4th Avenue approach and the eastbound County 22nd Street approach

A traffic signal was designed and installed to improve traffic flow and intersection safety. In addition, dedicated bike lanes were installed along the entire length of the project, enhancing multimodal accessibility and providing a safer travel experience for cyclists.

Nicklaus conducted a turn lane analysis in accordance with ADOT's Traffic Engineering Guidelines, Section 430, to determine the appropriate lane lengths under signalized conditions. The recommended turn lane lengths were incorporated into the final design to ensure efficient operations with the installed signal and accommodate anticipated future traffic growth.

Overall, the project offers a long-term, cost-effective solution that enhances vehicle circulation, improves cyclist safety, and supports the City's ongoing efforts to manage traffic growth and address multimodal transportation needs.

ANTONIO ALVAREZ, PE

Program Manager/Project Manager

Mr. Alvarez is a former member of the United States Navy with 21 years of experience in civil and geotechnical engineering. His experience spans horizontal A/E design services, including pre-design assessments, feasibility and concept studies, investigations, soils engineering, site design, value engineering, cost estimating, construction inspections, record drawings, and post-design reviews. Specialized expertise in civil and geotechnical engineering for infrastructure projects, including new flexible and rigid pavement sections, rehabilitation of existing pavements, and wet utility systems.

As a Design Quality Control, he is responsible for assigning appropriate staff and resources to each task to ensure that the contract requirements and client expectations are met. As Design Quality Control, he monitors projects to ensure high-quality and safety levels, while accomplishing the scope of work on schedule and within budget.

Additionally, he manages the appropriate personnel from contract initiation to closeout, including geotechnical drilling operations and associated laboratory efforts to produce Geotechnical Soil Reports for various multidisciplinary civil engineering projects. He provides construction support and oversees all quality control and quality assurance materials testing services for Nicklaus' AMRL/CCRL/USACE-accredited laboratory.

RELEVANT EXPERIENCE

CITY OF EL CENTRO POLICE STATION | EL CENTRO, CA

Nicklaus provided the civil design for a new City of El Centro Police Station. Services included the design of demolition, site preparation, paving, and grading, as well as utility plans. Mr. Alvarez was the designer of record for the project, which included street-side improvements along 11th Street.

BUENA VISTA PARK | EL CENTRO, CA

The project included improving an existing retention basin located within the Buena Vista Subdivision. The park design included the development of a new 8-foot-wide multi-use pathway, pedestrian-level lighting, a new basketball court, a new tot lot, a low-mow turf area, and landscaping. Designer of record, coordinating both pre-design (topographic survey and geotechnical study) and design activities.

CALIFORNIA HIGHWAY PATROL FACILITY | EL CENTRO, CA

The project included an administration office and maintenance area with separate public, patrol, and staff access. The administrative portion of the building contains office space, evidence storage, a holding area, a briefing room, defense tactical training facilities, locker rooms, a regional 911 dispatch center, and a maintenance area. Civil Engineer of Record for the project, including offsite roadway improvements.

EDUCATION

B.S., Civil Engineering
San Diego State University

PROFESSIONAL REGISTRATIONS

Civil Engineering
CA #C79509
AZ #51919

RELEVANT TRAINING

CALTRANS Resident Engineer Academy

US Army Corps of Engineers-Construction Quality Management for Contractors (CQM)

Radiation Safety Officer Training

Nuclear Gauge Radiation Safety Training

ACI Field Technician Level 1

ACI Concrete Strength Testing Technician

PROFESSIONAL AFFILIATIONS

Society of American Military Engineers (SAME)

American Society of Civil Engineers (ASCE)

American Society of Professional Engineers (ASPE)

Arizona Airports Association (AZAA)

ERIC GARDNER, PE, MBA

Project Manager

Mr. Gardner has over 20 years of experience in both civil and environmental engineering, including in the fields of project management, water, wastewater, and transportation. His project management experience includes the oversight of numerous design professionals and sub-consultants on roadway, pathway, and wet utility projects. His water and wastewater experience includes the design and installation of a variety of systems used for drainage, distribution, and treatment of water, sewer lift stations, dump stations, and septic systems. His transportation experience includes traffic impact studies, signing and striping design, turn lane and signal warrant analyses, signal design, temporary traffic control plans, safety analyses and feasibility studies. Additionally, his environmental experience includes a variety of projects associated with aquifer protection, leaking underground storage tank (LUST) sites, Resource Conservation and Recovery Act (RCRA) sites, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) sites, emergency response, stormwater pollution prevention plans (SWPPP) and multi-media sampling. Mr. Gardner has also been involved in the management of multiple emergency response cleanups of crash sites associated with passenger vehicles, trucks, and aircraft.

EDUCATION

MBA, Business Administration; University of Phoenix

B.S., Civil Engineering, Arizona State University

PROFESSIONAL REGISTRATIONS

Civil Engineering

CA #85927
AZ #55066
NV #23906
SC # 39370
FL #95159
GA #049525
TX #142656

RELEVANT TRAINING

40 hour HAZWOPER

8 Hour HAZWOPER Supervisor and subsequent 8 hour refreshers

OSHA 30-Hour Construction Safety

EM 385-1-1 Certified

First Air/CPR Certified

OSHA Permit Required Confined Space

Environmental Sustainability Professional

California Stormwater QSD/QSP/QISP

Construction Quality Management for Contractors

Environmental Sustainability Professional ENV-SP

PROFESSIONAL AFFILIATIONS

Society of American Military Engineers (SAME)
Arizona Airports Association (AZAA)

RELEVANT EXPERIENCE

WATER AND WASTEWATER SYSTEM | WINTERHAVEN, CA

Responsible for providing the design of retrofits to an existing water distribution system that included the incorporation of variable frequency pumping, the replacement of the existing electrical controls, the replacement of the existing hydropneumatic tank, and the construction of a new shade structure. The design also included the design of two new sewer system manholes and a new electrical system for the existing pumping station. The project included the development of a water system model based on research obtained from a variety of incomplete plans and field investigation.

WINTERHAVEN SEWER FORCE MAIN REPLACEMENT | WINTERHAVEN, CA

Assisted with the Preliminary Engineering Report for the Winterhaven Sewer Force Main Project, sealing the Design Report, including the Engineer's Opinion of Probable Cost, and assisted in the development of the civil construction documentation for the project.

USACE CENTER LEFT TURN LANE; YUMA PROVING GROUND | YUMA, AZ

Served as Civil Engineer and supervised the construction of a new center left turn lane for the improvement of Imperial Dam Road at the Yuma Proving Ground Visitor Center, Wahner Brook Memorial Site. The project required compliance with the UFC 3-250-01FA (Unified Facilities Criteria for Pavement Design for Roads, Streets, Walks, and Open Storage Areas). Oversaw construction and quality control, developed a traffic control plan, environmental protection plan, and handled product submittals.

PHILLIP A RAMIREZ, PE

Civil Engineer

EDUCATION
B.S. Structural Engineering
University of California San Diego

PROFESSIONAL REGISTRATIONS
Civil Engineering QSD/QSP
CA #C91488

RELEVANT TRAINING
CALTRANS Resident Engineer Academy

PROFESSIONAL AFFILIATIONS
ASCE American Society of Civil Engineers

Mr. Ramirez has worked for various public agencies, spanning more than 10 years of combined experience working on both private and public-funded construction projects. Mr. Ramirez's primary function as a resident engineer is to oversee the day-to-day operations of the civil, geotechnical, and inspection staff. His responsibilities include coordinating between the contractor and the respective design disciplines and stakeholders from the Notice to Proceed through to the Notice of Completion. Mr. Ramirez's experience working on resident engineer projects includes RFI review, submittal review, change order review, quantity takeoff verification, progress payment review, labor compliance coordination, evaluation and documentation of as-builts, observation, weekly progress meetings; contract administration services as required to sufficiently warrant the construction has been accomplished in accordance with the plans, specifications, and codes; project records administration; and discipline(s) coordination. His efforts as Resident Engineer translate to design quality control, ensuring plans and specifications are construction-ready.

RELEVANT EXPERIENCE

COLE BLVD IMPROVEMENTS | CALEXICO, CA

The project consisted of rehabilitating roadway and pedestrian facilities along Cole Blvd from M.L King Ave. through Bowker Rd. The project included a cold mill grind and overlay of the AC layer, as well as the removal and replacement of curb and gutter, driveways, and pedestrian facilities. The project also required extensive potholing and coordination with utility companies. Served as Resident Engineer, which included site inspections and documentation during the construction phase to verify compliance with the contract documents.

EL CENTRO SOUTHERN PUMP STATION | EL CENTRO, CA

The project involves the installation of a new pump station, complete with approximately 4,700 linear feet of gravity mainline and 2,000 linear feet of force mainline. The project includes a concrete wet well, vault, two 25-horsepower pumps, and a control building equipped with SCADA and monitoring equipment. Served as Resident Engineer, which includes site inspections and documentation during the construction phase to verify compliance with the contract documents.

SEELEY PUBLIC SAFETY FACILITY | SEELEY, CA

The project involved constructing a 4,735-square-foot County Public Safety Facility, comprising an apparatus bay, fire station, and cooling center. The fire station was complete with offices, living quarters, restrooms, a server room, and space for two fire trucks. Served as Resident Engineer, which included site inspections and documentation during the construction phase to verify compliance with the contract documents.

MOHAMMAD JOOLAZADEH, PE, GE

Geotechnical Engineer

EDUCATION

MS, Geological Engineering, University of Idaho

B.S., Geology, Pahlavi University

PROFESSIONAL REGISTRATIONS

Civil Engineering Geotechnical Engineer:
CA #2199

Civil Engineer
CA #43474
AZ #30739
NV #12622
CO #33946
TX #153149

Mr. Joolazadeh has over 40 years of experience in geotechnical engineering. He has worked on and managed a wide range of projects, including residential and small commercial developments, heavy industrial facilities, ports and harbors, tank farms, educational institutions, health organizations, and correctional facilities. Additionally, he has managed and participated in numerous forensic evaluations throughout California, Nevada, and Arizona. His administrative responsibilities have included business planning, as well as technical, professional, and marketing duties. Specific responsibilities include contract preparation and administration, financial planning, and developing quality assurance programs. **Professional Organizations**: Advanced Certificate in Construction Management; American Society of Civil Engineers (ASCE); Earthquake Engineering Research Institute (EERI); Deep Foundations Institute (DFI); American Society for Testing & Materials (ASTM); Post-Tension Institute (PTI); California Geotechnical Engineers Association (CGEA).

RELEVANT EXPERIENCE

- **DESERT SHORES RESTORATION PROJECT | IMPERIAL, CA**
- **MCGEE PARK GEOTECHNICAL INVESTIGATION | EL CENTRO, CA**

CRAIG CHASE, PG, CEG

Engineering Geologist

EDUCATION

M.S., Environmental Science; California State University

B.S., Geology; California State University

PROFESSIONAL REGISTRATIONS

Professional Geologist
CA #7045
AZ #36526
OR #G1952
TX #15077

Certified Engineering Geologist
CA #2225

Mr. Chase has approximately 30 years of project management and field experience in geotechnical and civil engineering, focused on projects involving engineering geology, environmental geology, UST sites, geologic hazards, groundwater sampling, hydrogeology, construction defects, and solid waste management. He has been responsible for the management and execution of geologic, geotechnical, and environmental investigations and projects throughout the southwestern and western United States and direct project management and field support of geologic/geotechnical, and seismic hazard investigations for residential, commercial and retail development, municipal infrastructure/modernization/ rehabilitation projects, environmental site assessments and studies, due diligence geotechnical reviews, and report preparation for geotechnical and environmental projects. As an engineering geologist, Mr. Chase has extensive field and project management experience, including geologic and geotechnical investigations for geologic/seismic hazards, including landslides, slope failures, earthquake damage, and flooding. In addition, he has helped provide design and construction support for hillside dewatering/drainage devices for landslide stabilization, hydrology calculations, and groundwater/liquefaction evaluations. **Relevant Certifications:** ACI Soil Technician; Nuclear Density Gauge Radiation Safety Officer; OSHA 40 hr. HAZWOPER; OSHA 8 hr. HAZWOPER; OSHA 30 hr. Construction; Construction Quality Management (CQM) for Contractors; USACE EM 385-1-1; DHS Level I Antiterrorism Awareness; CPR/First Aid.

RELEVANT EXPERIENCE

- **SOUTHERN PUMP STATION, DEWATERING EVALUATION AND GEOTECHNICAL ENGINEERING SUPPORT | EL CENTRO, CA**
- **DEBBIE PITTMAN PARK GEOTECHNICAL INVESTIGATION | EL CENTRO, CA**

STACY GUTIERREZ, PE, CIH

Environmental Engineer

EDUCATION

M.S. Applied Science
Arizona State University

B.S. Environmental Engineering,
Cal Poly San Luis Obispo

PROFESSIONAL REGISTRATIONS

Environmental Engineering
AZ #36702
NV #22766
TX #133183
Certified Industrial Hygienist (CIH) *#9210*

Stacy Gutierrez has over 24 years of technical experience managing environmental and civil engineering projects to include remediation system design, environmental assessments, Stormwater Pollution Prevention Plans (SWPPP), erosion and sediment control design, water and wastewater design, environmental assessments, asbestos and lead-based paint management, and full-service industrial hygiene services. Ms. Gutierrez is a Certified Industrial Hygienist and is EM385 certified for safety compliance. She has a strong understanding of job site activities as an Environmental Engineer and also in health and safety. Ms. Gutierrez has performed environmental engineering services for many clients, including the City of Somerton, Quechan Indian Tribe, Yuma County, City of Yuma, ADOT, Bureau of Indian Affairs, Bureau of Land Management, and the Department of Defense. **Relevant Certifications:** Certified Professional in Stormwater Quality (CPSWQ); Qualified SWPPP Developer/Practitioner (QSD/QSP); EM385-1-1 Certified; OSHA - 30 Hour Construction Safety & Health; OSHA 40hr HAZWOPER; OSHA 8hr HAZWOPER Supervisor; AHERA Asbestos Inspector/Management Planner/Contractor/Supervisor/Project Designer; Certified Asbestos Consultant (CAC); EPA Certified Lead-Based Paint Inspector /Assessor; CPR/First Aid Certified.

JIM HOGAN, PE

Civil Engineer

EDUCATION

B.S., Civil Engineering;
San Diego State University

PROFESSIONAL REGISTRATIONS

Professional Geologist
CA #C56615

PROFESSIONAL CERTIFICATIONS

Envision Sustainability Professional ENV SP, 1415

Qualified Industrial Stormwater Practitioner (QISP) #56615

Qualified SWPPP Developer (QSD)/Qualified SWPPP Practitioner (QSP) # 23445

Certified SCUBA Diver, 031688

Certified Professional in Stormwater Quality (CPSWQ) #0723

Mr. Hogan has more than 30 years of experience as a full-time Program Manager for large environmental multi-media compliance IDIQs and water quality IDIQs with multiple concurrent TOs valued at more $315M throughout the Southwest and worldwide. Mr. Hogan has developed and recommended cost-effective BMP alternatives for implementation, coordinated and implemented sampling, wet and dry season observations, illicit connection surveys, facility inspections, BMP evaluations, and Phase II Compliance Programs. Mr. Hogan also has more than 25 years of progressively increasing storm water experience, including participating in the San Diego Storm Water Working Group (SWWG) chaired by the Commanding Officer of Naval Station San Diego. Mr. Hogan has provided the SWWG interpretation and guidance during permit negotiations with the Regional Water Board. He has also developed, managed and implemented the Industrial, Construction, and Phase II Compliance Storm Water Programs at more than 25 US Navy and Marine Corps installations. Mr. Hogan has developed Storm Water Pollution Prevention Plans, Monitoring Programs, Annual Reports, and Notices of Intent (NOIs) for maintenance and construction storm water programs. In addition, he has restructured the US NAVY sampling program reducing program cost and implemented sampling strategies to increase samples obtained. He has evaluated over 10,000 BMPs at over 1,000 maintenance and material storage facilities for regulatory reporting and compliance. Mr. Hogan expertise in best practices for stormwater compliance has resulted in him leading training sessions for numerous permitting topics including the Industrial, Construction, and Phase II Storm Water Permit. His experience includes industry awards for customer service in the development and implementation of SWPPPs and storm water monitoring programs, and the CELSOC Award for Outstanding Customer Service.

STEVE MORAN

Cost Estimator

RELEVANT TRAINING

USACE Construction Quality Management for Contractors (CQM);

EM 385-1-1 40-Hour;

40-hour HAZWOPER;

OSHA 30-Hour Construction Safety and Health;

CPR/AED and Basic First Aid;

OSHA – Confined Space Entry Program;

OSHA Fall Protection; Competent Person Certification;

Spill Prevention Hazardous Waste Management

Mr. Moran has been in construction for over 26 years, serving as a Project Manager, Estimator, Inspector, Site Superintendent, Health and Safety Manager, and Quality Control Manager. In his construction career as an Estimator, he has 24 years of experience as a commercial estimator preparing cost estimates using MII and PACES estimating programs such as Winest, Costworks, RSMeans databases, and other proprietary software for estimation of multi-discipline commercial and industrial construction projects, and 12 years of specialized experience with Federal and State Government Contracts, including Single-Award Cost Plus and Award Fee, Cost Plus Fixed Fee, IDIQ, and Firm Fixed Price. He is experienced with Bid/Build, Design/Build, and Design/Bid/Build construction contract methodologies, proposal development, construction cost estimation, and contract negotiation.

RELEVANT EXPERIENCE

WINTERHAVEN SEWER FORCE MAIN REPLACEMENT | WINTERHAVEN, CA

Developed a detailed engineering cost estimate utilizing RSMeans® with current cost data and equipment library for the project region. It was based on an on-site visit, initial findings, and recommendations included in the Basis of Design. This included repairs to the existing Lift Station wet well, installation of new pumps, controls with ultrasonic level controls, and a new 4-inch PVC force main with vacuum/air release valves and cleanouts.

EL CENTRO VALLEY CENTER POINT PLAZA DEMOLITION | EL CENTRO, CA

Developed a detailed engineering cost estimate using RSMeans® with the project region's current cost data and equipment library based on an on-site visit, initial findings, and recommendations included in the Basis of Design. This includes demolishing three existing buildings and reconnecting relocated utilities to the existing Valley Center Point Property Tenants.

ALEX ROJAS

Geotechnical Materials Testing

EDUCATION

B.S., Civil Engineering
Universidad Autonoma de Baja California

Mr. Rojas has extensive experience as a general contractor and owner's representative providing construction/project management, resident engineering, and field inspection services for land development water and wastewater projects, including pipelines, pump stations, treatment facilities, reservoirs, and roadway construction. Mr. Rojas has constructed projects in the United States and Mexico.

RELEVANT EXPERIENCE

HEBER TOWNSITE IMPROVEMENTS FOR VARIOUS ROADS | HEBER, CA

Developed a Funding for the project was $4.8M for construction-related activities. Improvements include new sidewalks, curb and gutter, ADA pedestrian ramps, cross gutters, adjustment of water valves, striping, signage, and street pavement structure. This is the largest street improvement project for Imperial County.

BOMBAY BEACH TOWNSITE IMPROVEMENTS | BOMBAY BEACH, CA

The project was to improve the Bombay Beach Road System, which consisted of 5.88 miles of asphalt cement paved roadways. As a consultant, Mr. Rojas coordinated the geotechnical and materials testing performed as per specifications.

ROBERT L. CAMPBELL, SE

Stuctural Engineer Consultant

EDUCATION
B.S., Civil Engineering; University of North Dakota

PROFESSIONAL CERTIFICATIONS
Structural Engineer
CA # S4008/C46535; AZ #22963

ORGANIZATIONS
Structural Engineers Association of Arizona; Structural Engineers Association of California; American Concrete Institute (ACI); American Institute of Steel Construction (AISC); American Welding Society (AWS); International Code Council (ICC)

Mr. Campbell has over 40 years' of structural engineering experience with specialized experience in seismic design and analysis of buildings. His experience includes the structural design and coordination of projects including federal, municipal, medical, and educational facilities; seismic retrofit projects; hospitals and fire stations; and office, shopping and multi-family complexes.

RELEVANT EXPERIENCE

COCOPAH MUSEUM EXPANSION | WINTERHAVEN, CA
Structural engineering firm of record for the 1,400 sq. ft. art gallery building consisting of concrete, structural steel and wood framing.

QUECHAN FOOD DISTRIBUTION WAREHOUSE RENOVAVTIONS | WINTERHAVEN, CA
Structural engineering firm of record for the modifications and structural strengthening to the existing pre-engineered metal building.

COCOPAH INDIAN TRIBE PUBLIC SAFETY FACILITY | WINTERHAVEN, CA
Structural engineering firm of record for the new 19,000 sq. ft. Public Safety Facility.

SAN LUIS POLICE DEPARTMENT NEW SUBSTATION | SAN LUIS, AZ
Structural engineering firm of record for the new 6,300 sq. ft. police substation for the City of San Luis.

JAMES R. ADLER, PE

Electrical Engineer Consultant

EDUCATION
Masters of Business Administration (MBA), Webster University

B.S. Electrical Engineering, Northern Arizona University

PROFESSIONAL CERTIFICATIONS
Electrical Engineer
CA #E16119
AZ #27839

ORGANIZATIONS
National Society of Professional Engineers (NSPE); Society of American Military Engineers (SAME); Institute of Electrical and Electronic Engineers; National Fire Protection Association; Building Industry Consulting Service Int'l (BICSI)

Mr. Adler has over 36 years' of experience in the design and construction industry. He began his career in the US Navy Civil Engineer Corps with significant experience in design and construction project management and was a warranted contracting officer. Mr. Adler also has experience in public works administration and military contingency construction with the US Navy Seabees. His electrical design experience includes secondary low voltage distribution systems, lighting, controls, solar energy systems, and fire and security alarm systems for an extensive range of commercial, industrial, municipal, educational, airport, and residential construction projects.

RELEVANT EXPERIENCE

CALEXICO POE GATEWAY OF THE AMERICAS WATER TREATMENT PLANT IMPROVEMENTS | CALEXICO, CA
Consulted as the principal electrical engineer for the Holt Group for the water treatment plant improvements. Project included replacement SES, new generator & ATS, phasing plan, and all electrical distribution and motor controls for upgrades.

EL CENTRO PS NO. 2 SEWER LIFT STATION | EL CENTRO, CA
Consulted as the principal electrical engineer. Project included new SES, generator, ATS, motor control center, controls, area lighting, and all electrical distribution.

COCOPAH PUBLIC SAFETY BUILDING | SOMERTON, AZ
Provided electrical power, lighting, emergency generator, & fire alarm design for the new public safety building. The facility included police department/administrative/courtroom spaces.

EDUCATION

B.S., CIVIL ENGINEERING, UNIVERSITY OF NORTH DAKOTA

PROFESSIONAL CERTIFICATIONS *CIVIL ENGINEERING*

CALIFORNIA #50377

PROFESSIONAL LAND SURVEYOR CA #7107

CIVIL ENGINEERING

ARIZONA #25985

REGISTERED LAND SURVEYOR

ARIZONA #27748

GORDON OLSON, PE, PLS

Land Surveyor

DESERT SURVEYING & ENGINEERING
DESERTSURVEYING.COM

Mr. Olson manages production of all survey mapping and engineering design of DSE's projects including residential, industrial, commercial developments as well as large scale solar projects. He is esponsible for the preparation of Tentative Maps, Tract Maps, Grading and Improvement Plans, Utility Plans, Record of Survey Plats and A.L.T.A. Surveys. Aditionally, Mr. Olson conducts research and evaluates land title documents and information required for field work; plans, schedules and analyzes work of survey crews; Interacts with other professionals including County, City and State officials, attorneys and title officers in tracking of projects through various entitlement, permitting, plan check and recordation processes. Mr. Olson prepares proposals for professional Engineering and Land Surveying services and has served as Acting City Land Surveyor for several cities including the City of Imperial and the City of Brawley.

RELEVANT EXPERIENCE

CITY OF IMPERIAL CLAYPOOL LIFT STATION PROJECT | IMPERIAL, CA

Provide engineering and surveying services as required to the City of Imperial for the dedication of the Claypool Lift Station site and associated road right of way to access same.

WINTERHAVEN COUNTY WATER DISTRICT | WINTERHAVEN, CA

Provide topographic surveys for civil design for improvements to Winterhaven's water delivery system.

EXHIBIT B
FEE SCHEDULE

NICKLAUS ENGINEERING, INC.

High Quality, Client-Focused Solutions

2025 STANDARD RATE SCHEDULE

MANAGEMENT		
Project Manager	$ 150.00	hr.
ARCHITECTURAL		
Principal Architect	$ 211.00	hr.
Senior Architect	$ 170.00	hr.
Project Architect	$ 128.00	hr.
Senior Architect Designer	$ 116.00	hr.
Architect Designer	$ 104.00	hr.
Architect Technician	$ 82.00	hr.
ENGINEERING		
Principal Engineer	$ 211.00	hr.
Senior Engineer	$ 170.00	hr.
Project Engineer	$ 128.00	hr.
Engineering Associate (EIT)	$ 116.00	hr.
Engineering Designer	$ 104.00	hr.
Senior Engineering Technician	$ 110.00	hr.
Engineering Technician	$ 82.00	hr.
Senior GIS Specialist	$ 155.00	hr.
GIS Specialist	$ 100.00	hr.
Senior Field Engineer/Architect	$ 99.00	hr.
Field Engineer/Architecdt	$ 85.00	hr.
ENVIRONMENTAL		
Certified Industrial Hygienist	$ 211.00	hr.
Principal Scientist	$ 188.00	hr.
Senior Scientist	$ 144.00	hr.
Project Scientist	$ 115.00	hr.
Staff Scientist	$ 100.00	hr.
Principal Geologist	$ 188.00	hr.
Senior Geologist	$ 148.00	hr.
Project Geologist	$ 118.00	hr.
Senior Environmental Professional	$ 126.00	hr.
Environmental Professional	$ 99.00	hr.
Senior Environmental Technician	$ 79.00	hr.
Environmental Technician	$ 65.00	hr.
GEOTECHNICAL		
Lab Manager	$ 127.00	hr.
Senior Technician	$ 72.00	hr.
Field Technician	$ 56.00	hr.

See separate unit rates for geotechnical services

CONSTRUCTION MANAGEMENT		
Senior Estimator	$ 133.00	hr.
Estimator	$ 100.00	hr.
Special Inspector	$ 95.00	hr.

See separate unit rates for construction services

FIELD SURVEY		
Senior Surveyor	$ 170.00	hr.
Project Surveyor	$ 128.00	hr.
2-Member Survey/Field Crew	$ 205.00	hr.
3-Member Survey/Field Crew	$ 285.00	hr.
SUPPORT		
Administrative	$ 57.00	hr.
Project Administrator	$ 75.00	hr.
Technical Writer	$ 85.00	hr.
Principal Contracts Manager	$ 176.00	hr.
REPROGRAPHICS		
8.5 x 11 (B&W)	$ 0.25	pg.
8.5 x 11 (Color)	$ 0.60	pg.
11 x 17 (B&W)	$ 0.45	pg.
11 x 17 (Color)	$ 0.80	pg.
22 x 34 (B&W)	$ 1.75	pg.
22 x 34 (Color)	$ 8.00	pg.
Electronic Media (CD, DVD)	$ 14.00	ea.
3-ring Binder 3"	$ 20.00	ea.

MISC.		
Travel Incentive (Per Day)	$ 80.00	Per/Day

Note: For prevailing wage labor categories, add $45.00/hr per person

Desert Surveying & Engineering

Arizona, California and New Mexico
Land Surveyors and Civil Engineers

670 East 32nd Street - Suite #2 - Yuma, Az 85364

DESERT SURVEYING & ENGINEERING - RATE SHEET AS OF APRIL 16, 2025

OFFICE SURVEYING SERVICES	IMPERIAL CO	SD & RIVERSIDE CO
CALIFORNIA PRINCIPAL LAND SURVEYOR	$185.00/HR	$185.00/HR
SURVEY MANAGER	$160.00/HR	$160.00/HR
ASSOCIATE LAND SURVEYOR	$ 120.00/HR	$ 120.00/HR
AUTO CAD TECHNICIAN	$ 120.00/HR	$ 140.00/HR
CALIFORNIA PRINCIPAL LAND SURVEYOR (Plan Check Fee)	$205.00/HR	$205.00/HR
FIELD SURVEY SERVICES		
SURVEY CREW NON-PREVAILING WAGE RATES		
(1) MAN SURVEY CREW	$160.00/HR	$200.00/HR
(2) MAN SURVEY CREW	$ 200.00/HR	$ 250.00/HR
(3) MAN SURVEY CREW	$ 260.00/HR	$ 260.00/HR
SURVEY CREW PREVAILING WAGE RATES		
(1) MAN SURVEY CREW	$300.00/HR	$300.00/HR
(2) MAN SURVEY CREW	$ 350.00/HR	$ 350.00/HR
(3) MAN SURVEY CREW	$ 450.00/HR	$ 550.00/HR
ENGINEERING & PLANNING SERVICES	**CALIFORNIA**	
PRINCIPAL CIVIL ENGINEER	$185.00/HR	$185.00/HR
SENIOR PLANNING MANAGER	$175.00/HR	$175.00/HR
ENGINEERING & PLANNING ASSISTANTS	$ 95.00/HR	$ 95.00/HR
CLERICAL / MESSENGER / DELIVERY	$ 60.00/HR	$ 60.00/HR
MISCELLANEOUS		
MATERIALS, PRINTS AND SHIPPING	COST + 20%	COST + 20%
MYLARS	$ 25.00 EA	$ 25.00 EA
PUBLIC AGENCY FEES (IF PAID BY DSE)	FEE + 20%	FEE + 20%
MILEAGE (FROM YUMA TO AREA OUTSIDE IMP/YUMA COUNTIES)	$ 0.75 / Mile	$ 0.75 / Mile
HOTEL/AIRFARE/CARS/MEALS (AS PROJECT REQUIRES ONLY)	COST + 20%	COST + 20%

- **FINANCE CHARGE:** A finance charge will be computed at a PERIODIC RATE of 1% per month, which is an ANNUAL PERCENTAGE RATE OF 12%, and at DSE's discretion may be applied to any unpaid balance 30 days past due.
- **BILLING:** All charges for services are billed in bi-weekly invoices and are due upon receipt. Applicable finance charges will be assessed on the invoice to any unpaid balance as noted above. Un-paid invoices past 90 days may result in work stoppage.

Email: DSE@desertsurveying.com
Yuma Phone: 928-318-2043

Campbell STRUCTURAL

Robert L. Campbell Structural Engineer, P.C.

200 E. 16th Street, Suite 100
Yuma, Arizona 85364
Phone: (928) 726-2646

Robert L. Campbell, P.E., S.E.
Consulting Structural Engineer
e-mail: rob@campbellstructural.com

PROFESSIONAL SERVICES (hourly Rates)

PRINCPLE ENGINEER	$160.00
PROJECT ENGINEER	$120.00
CAD	$100.00

JOL ENTERPRISES, INC.
Electrical Engineers
720 E. 39th Place, Suite 6
Yuma Arizona, 85365-4939
office: (928) 783-0922
fax: (928) 783-3854
jolenterprises@earthlink.net

JOL ENTERPRISES, INC., ELECTRICAL

ENGINEERS Current Rates (January 1, 2026)

➢ Project Manager/Electrical Engineer (PE)	$125.00
➢ Electrical Designer (EIT)	$ 55.00
➢ CAD Operator	$ 35.00

Attachment 1

SIERRA MATERIAL TESTING & INSPECTION, INC.
2025 FEE SCHEDULE

PROFESSIONAL SERVICES (per hour)

PROJECT ENGINEER	$130
STAFF ENGINEER	$115
TECHNICIAN	$105
TECHNICIAN (Prevailing Wage)	$115
REGISTER SPECIAL INSPECTOR	$115
TECHNICAL/ADMINISTRATIVE SUPPORT	$ 80

Technician and support personnel time for work over eight (8) hours per day will be charged at 1.50 times the regular rates. Holidays and weekends hours (all hours) will be charged 1.50 times the regular rates.

LABORATORY TESTING
(unit cost)

CLASSIFICATION AND INDEX TESTS:

Atterberg Limits (ASTM D4318)	$150
Moisture Content (ASTM D2216)	$ 25
Percent Passing #200 Sieve (ASTM D1140)	$ 95
pH (CALTRANS 643)	$ 35
Resistivity (CALTRANS 643)	$ 90
Sieve with Hydrometer Analysis (ASTM D422)	$180
Sieve Analysis without Hydrometer (ASTM D422)	$115
Soluble Sulfate (ASTM D516)	$ 95
Soluble Chloride	$ 60
Specific Gravity (ASTM D854)	$ 90
Unit Weight/Moisture Content, chunk sample	$ 60
Unit Weight/Moisture Content, sampler ring	$ 35

PERMEABILITY:

Permeability of Granular Soil (ASTM D2434)	$400
Permeability, Flexible Wall (ASTM D5084)	$500

COMPACTION:

Maximum Density and Optimum Moisture (ASTM D1557)	$190
Maximum Density/Optimum Moisture with Rock (ASTM D4718)	$250
Maximum Density Check Point	$ 55
California Impact Compaction, test only (CAL 216)	$150

AGGREGATE/SUBGRADE:

Abrasion Test (ASTM C131)	$200
California Bearing Ratio	$500
Clay Lumps/Friable Particles (ASTM C142)	$115
Durability Index (ASTM D3744),	$180
Lime Stabilized Subgrade Mix Design	$500
Organic Impurities (ASTM C40)	$ 60
Percent Fractured Aggregate (ASTM D5821)	$ 98
R-Value (CALTRANS 301)	$250
Sand Equivalent (ASTM D2419)	$ 95
Sieve Analysis, aggregate base (ASTM C136)	
coarse aggregate	$115
fine aggregate	$115
Specific Gravity and Absorption:	
fine aggregate (ASTM C128)	$120
coarse aggregate (ASTM C127)	$ 95
Sulfate Soundness (ASTM C88) per size	$165
Cleanness Value (CAL 227)	$130

ASPHALT CONCRETE:

Bulk Specific Gravity/Density, core (ASTM D1188)	$ 95
Hveem Unit Weight (CAL 304), 2 plug average	$205
Marshall Unit Weight (ASTM D1559), 3 plug average	$220
Theoretical Maximum Density (ASTM D2041)	$120
Percent Bitumen and Gradation of extracted Sample	$230
Ignition Oven Correction Factors	$700
Stabilometer Value (CAL 304)	$200
Unit Weight (ASTM D1188)	$ 55

REINFORCED CONCRETE TESTS:

Compressive Strength, 6x12 or 4x8, per cylinder fabricated	$ 30
Compressive Strength, per core prepared	$ 60
Flexural Strength, 6x6x18 beam	$ 70
Compressive Strength, Shotcrete, 3 core set, Coring of sample will be added at hourly rate	$210
Compressive Strength, Light Weight Concrete Fill	$ 30

LABORATORY TESTING

(unit cost)

Drying Shrinkage, 3 specimens, 28-day $210
Unit Weight, Light Weight Concrete Fill ..... $ 40

STRUCTURAL MASONRY

CMU Compressive Strength, per prism
- 8x16x8, under 400,000 lbs $120
- 8x16x16, under 400,000 lbs $160

CMU Compressive Strength, single block
- larger than 8x8x16 ..... $ 75
- less than/equal to 8x8x16 ..... $ 60

Compressive Strength, cores ..... $ 60
CMU Unit Weight and Absorption, 3 units $170

Mortar Compressive Strength
- 2x4, per cylinder fabricated ..... $ 25

Grout Compressive Strength
- 2x2x2, per cube fabricated ..... $ 25
- 3x3x6, per cube fabricated ..... $ 25

Brick Compressive Strength, 5 brick set $240

EXHIBIT C
INSURANCE REQUIREMENTS

Without limiting Consultant's indemnification of City, and prior to commencement of work and/or services under this Agreement, Consultant shall obtain, provide, and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to City.

General liability insurance. Consultant shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office (Form CG 00 01), in an amount not less than $1,000,000 per occurrence, $2,000,000 general aggregate, for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. Consultant shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned, or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Professional liability (errors & omissions) insurance. Consultant shall maintain professional liability insurance that covers the Services to be performed in connection with this Agreement, in the minimum amount of $1,000,000 per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this agreement and Consultant agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this agreement.

Workers' compensation insurance. Consultant shall maintain Workers' Compensation Insurance (statutory limits) and Employer's Liability insurance (with limits of at least $1,000,000).

Consultant shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of City, its officers, agents, employees, and volunteers.

Umbrella or excess liability insurance. [If required to meet higher limits.]. Consultant shall obtain and maintain an umbrella liability insurance policy with limits that will provide bodily injury, personal injury, and property damage liability coverage, including commercial general liability, automobile liability, and employer's liability. Such policy or policies shall include the following terms and conditions:

- A drop-down feature requiring the policy to respond if any primary insurance that would otherwise have applied proves to be uncollectible in whole or in part for any reason, other than bankruptcy or insolvency of said primary insurer;
- "Pay on behalf of" wording as opposed to "reimbursement";
- Concurrency of effective dates with primary policies.

Should Consultant obtain and maintain an excess liability policy, such policy shall be

excess over commercial general liability, automobile liability, and employer's liability policies. Such policy or policies shall include wording that the excess liability policy follows the terms and conditions of the underlying policies.

Other provisions or requirements

Proof of insurance. Consultant shall provide certificates of insurance and required endorsements to City as evidence of the insurance coverage required herein. Insurance certificates and endorsements must be approved by City's Risk Manager prior to commencement of performance. Current certification of insurance shall be kept on file with City for the contract period and any additional length of time required thereafter. City reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Consultant shall procure and maintain for the contract period, and any additional length of time required thereafter, insurance against claims for injuries to persons or damages to property, or financial loss which may arise from or in connection with the performance of the Work hereunder by Consultant, their agents, representatives, employees, or subconsultants.

Primary/noncontributing. Coverage provided by Consultant shall be primary and any insurance or self-insurance procured or maintained by City shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City before the City's own insurance or self- insurance shall be called upon to protect it as a named insured.

City's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary, and any premium paid by City will be promptly reimbursed by Consultant or City will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, City may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the City's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against City, its elected or appointed officers, agents, officials, employees, and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against City and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non-estoppel). Consultant acknowledges and agrees that any actual or alleged failure on the part of the City to inform Consultant of non-compliance with any requirement imposes no additional obligations on the City nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Consultant maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Notice of cancellation. Consultant agrees to oblige its insurance agent or broker and insurers to provide the City with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage. If any of the Consultant's insurers are unwilling to provide such notice, then Consultant shall have the responsibility of notifying the City immediately in the event of Consultant's failure to renew any of the required insurance coverages, or insurer's cancellation or non-renewal.

Additional insured status. General liability, automobile liability, and umbrella/excess liability insurance policies shall provide or be endorsed to provide that City and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to City and approved of in writing.

Separation of insureds. A severability of interests provision must apply for all additional insureds ensuring that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass through clause. Consultant agrees to ensure that its subconsultants, subcontractors, and any other party who is brought onto or involved in the project/service by Consultant (hereinafter collectively "Subcontractor"), provide the same minimum insurance coverage and endorsements required of Consultant under this Agreement. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. However, in the event Consultant's Subcontractor cannot comply with this requirement, which proof must be submitted to the City, Consultant may still be able to utilize the Subcontractor provided Consultant shall be required to ensure that its Subcontractor provide and maintain insurance coverage and endorsements sufficient to the specific risk of exposure involved with Subcontractor's scope of work and services, with limits less than required of the Consultant, but in all

other terms consistent with the Consultant's requirements under this Agreement. This provision does not relieve the Consultant of its contractual obligations under the Agreement and/or limit its liability to the amount of insurance coverage provided by its subcontractors. This provision is intended solely to provide Consultant with the ability to utilize a Subcontractor who may be otherwise qualified to perform the work or services but may not carry the same insurance limits as required of the Consultant under this Agreement given the limited scope of work or services provided by the subcontractor. Consultant agrees that upon request, all agreements with Subcontractors, and others engaged in the project and/or services, will be submitted to City for review.

City's right to revise specifications. The City reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Consultant ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Consultant, the City and Consultant may renegotiate Consultant's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by City. City reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible, or require proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention through confirmation from the underwriter.

Timely notice of claims. Consultant shall give City prompt and timely notice of claims made or suits instituted that arise out of or result from Consultant's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

Claims made: The following provisions shall apply if any of the required policies are written on a claims-made basis:

a. The Retroactive Date of the policy must be shown and must be before the date of the Agreement or the beginning of the contracted work.

b. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement or the work.

c. If coverage is canceled or not renewed and it is not replaced with another claims-made policy form with a Retroactive Date that precedes the date of this Agreement, Consultant must provide extended reporting coverage for a minimum of five (5) years after completion of the Agreement or the work. The City shall have the right to exercise, at the Consultant's sole cost and expense, any extended reporting provisions of the policy, if the Consultant cancels or does not renew the coverage.

d. A copy of the claim reporting requirements must be submitted to the City prior to the commencement of any work under this Agreement.

EXHIBIT D
CONSULTANT'S FINANCIAL DISCLOSURE STATEMENT [1]

Consultant will comply with all conflict-of-interest laws and regulations including, without limitations, City's Conflict of Interest Code (on file in the City Clerk's Office) as required by Section 4.10 of this Agreement. It is incumbent upon the Consultant to notify the City pursuant to Sections 7.1 and 7.5 of any staff changes relating to this Agreement. The City Manager has made the following determination and Consultant, by his/her signature, acknowledges said determination. [2]

A. In accomplishing the scope of services of this Agreement, all officers, employees and/or agents of Consultant will be performing a very limited and closely supervised function, and, therefore, unlikely to have a conflict of interest arise. No disclosures are required of any officers, employees, and/or agents of Consultant. Consultant duties are as follows:

VICE PRESIDENT

City Manager — Consultant Signature & Title

B. In accomplishing the scope of services of this Agreement, Consultant will be performing a specialized or general service for the City, and there is substantial likelihood that the Consultant may make or participate in making a governmental decision, which may have a foreseeable material effect on a financial interest. As a result, the Consultant shall be subject to the Disclosure Category "Consultant" of the City's Conflict of Interest Code.

VICE PRESIDENT

City Manager — Consultant Signature & Title

EXHIBIT E

1. Fair Political Practices Commission Section 18700.3 defines a consultant as follows:
(a) For purposes of Sections 82019 and 82048, "consultant" means an individual who, pursuant to a contract with a state or local government agency:
(1) Makes a governmental decision whether to:
(A) Approve a rate, rule, or regulation;
(B) Adopt or enforce a law;
(C) Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order, or similar authorization or entitlement;
(D) Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract that requires agency approval;
(E) Grant agency approval to a contract that requires agency approval and to which the agency is a party, or to the specifications for such a contract;
(F) Grant agency approval to a plan, design, report, study, or similar item;
(G) Adopt, or grant agency approval of, policies, standards, or guidelines for the agency, or for any subdivision thereof; or
(2) Serves in a staff capacity with the agency and in that capacity participates in making a governmental decision as defined in Regulation 18704(a) and (b) or performs the same or substantially all the same duties for the agency that would otherwise be performed by an individual holding a position specified in the agency's Conflict of Interest Code under Section 87302.
2. Disclosure by Consultants: Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the City's adopted Conflict of Interest Code, subject to the following limitations: The City Manager may determine in writing that a particular consultant, although a "designated position", is hired to perform a range of duties that is limited in scope and closely supervised, and, thus, is not required to comply with the disclosure requirements in the City's adopted Conflict of Interest Code. Such written determination shall include a description of the consultant's duties. The City Manager's determination is a public record and shall be retained for public inspection in the same manner and location as the City's adopted Conflict of Interest Code.

EXHIBIT E

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES __X____ NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES __X____ NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

10/3/2025
DATE

(SIGNATURE OF CONSULTANT)

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10-3-25
DATE

(SIGNATURE OF CONSULTANT)

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_____ YES ___X___ NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES ___X___ NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

10/2/2025 _____
DATE

Robert L Caughell
(SIGNATURE OF CONSULTANT)

EXHIBIT E

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES __X____ NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES __X____ NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

10/3/2025
DATE

_____
(SIGNATURE OF CONSULTANT)

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

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Michael Crankshaw

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_____ YES ___X___ NO
If yes, please identify the Council Member: _____

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If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

10/03/2025 _____
DATE (SIGNATURE OF CONSULTANT)

EXHIBIT F

REQUEST FOR PROPOSALS (RFP)

CITY OF EL CENTRO
PUBLIC WORKS
Serving our community by sustaining and improving life

City of El Centro
Incorporated 1908
Shining with Opportunity

REQUEST FOR PROPOSALS
FOR
ON-CALL SERVICES

1. ***CIVIL ENGINEERING – GENERAL***
2. ***CIVIL ENGINEERING - WATER AND WASTEWATER TREATMENT***

Requested By:

City of El Centro
Department of Public Works
307 W. Brighton Ave.
El Centro, CA 92243
Phone: (760) 336-3152
Abraham Campos, PE
Director of Public Works/ City Engineer
August 2025

I. TABLE OF CONTENTS

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EXHIBITS

A - Civil Engineering – General and Water and Wastewater Treatment. Expanded Scope

B – Sample Proposal Evaluation Form

C – Sample Design Professional Services Agreement

D- Levine Act. Statement

E- Sample Task Order

*****No changes shall be made to consultant agreement by consultant.

II. REQUEST FOR PROPOSAL ("RFP")

NOTICE IS HEREBY GIVEN THAT the City of El Centro (the "City") is requesting proposals from qualified consultants to provide Civil Engineering Design (Roads and Traffic, and Water and Wastewater facilities) (the "Consultant(s)").

DEADLINE

Consultants are requested to submit five hard copies of their proposal before **04:30 p.m.** on Friday, September 19, 2025. Refer to section IX for further information.

Note: late, emailed, or faxed proposals will not be considered.

OBTAINING DOCUMENTS

The Contract Documents are available through Planet Bids, by accessing our website (www.cityofelcentro.org) and selecting "GOVERNMENT > PUBLIC WORKS> BIDS & PROPOSALS> PROCEED TO SITE".

III. INTRODUCTION AND PURPOSE

INTRODUCTION.
The Department of Public Works - Engineering Division of the City of El Centro is seeking professional services from a consulting firm or team (Consultant) for On-Call services for the two (2) disciplines listed below. The City will contract with the primary firm under which subconsultants may operate. The City is requesting services for up the term of the agreement. The term of the agreement shall be for two (2) years, with up to three (3) one (1) year extensions, which extensions shall be at the City's sole option.

Disciplines:

1. Civil Engineering – General Civil Engineering
2. Civil Engineering – Water and Wastewater Treatment

Up to three consultants shall be selected for each discipline. The City reserves the right to increase or decrease the number of consultants awarded a contract under each discipline.

Consultant must submit a separate responsive proposal to each discipline that Consultant wishes to be considered. Each discipline will be judged independently. You are not required to submit a proposal for both disciplines.

PURPOSE. The purpose of this RFP is to:

1. Familiarize prospective consultants with the information necessary to understand the consultant selection process and the required documentation consultant must

submit.

2. Receive, review and consider proposals from prospective consultants, and select a consultant to provide the desired services for each discipline.
3. Execute a contract for on-call services in the form of a Professional Services Agreement (PSA) (see RFP Exhibit C – Sample Standard Agreement), which will include a negotiated rate schedule established at the time of its execution.
4. Advise prospective consultants that the City is not obligated to issue any contract(s) by issuing this proposal.

The Consultant shall provide the Public Works Department with the ability to obtain assistance quickly during peak workload periods, staffing absences and when expedited/fast track support is needed to satisfy City customers. The most important objective is to maintain a level of high-quality, Civil Engineering Design (Roads, Traffic, Water and Wastewater facilities).

Qualified entities are invited to submit written proposals for consideration in accordance with this request. These services will be conducted under a contract with the City.

The City reserves the right to reject any or all responses received as a result of this solicitation; to extend the submission due date for; to modify, amend, reissue or rewrite this document; and to procure any or all services by other means. Consultants that respond to this RFP shall comply with all applicable laws. There are no M/WBE and/or DBE requirements for this RFP.

The contract will be regulated according to the provisions of all Federal, State and local laws and ordinances that are applicable. This includes compliance with prevailing wage rates and their payment in accordance with the California Labor Code, as applicable.

Consultants are advised to consider whether services to be performed include classifications subject to state or federal prevailing wage requirements. Prevailing wages will apply if the services to be performed will involve land surveying (such as flag persons, survey party chief, rodman or chainman), materials sampling and testing (such as drilling rig operators, pile driving, crane operators), inspection work, soils or foundation investigations, environmental hazardous materials and so forth. California State prevailing wage information is available through the California Department of Industrial Relations website at https://www.dir.ca.gov/OPRL/dprewagedetermination.htm

Labor categories subject to prevailing wage requirements, when employed for any work on this project, are wholly the responsibility of the firm or individual named in any Professional Services Agreement approved by the City. City will not assume any responsibility for Consultant's failure to pay prevailing wages in accordance with State law.

IV. BACKGROUND

The City of El Cento incorporated in 1908 and later became a Charter city. El Centro is the center of one of Southern California's most promising new commercial and industrial regions. There are two international border crossings nearby for commercial and noncommercial vehicles. Covering 11.019 square miles, it is the largest city in Imperial County. El Centro is located 616 miles southwest of San Francisco, 117 miles east of San Diego and 245 miles west of Phoenix, Az. and just 15 minutes from the international industrial complexes in Mexicali, Baja California. El Centro is accessible via Interstate 8, State Highway 86 and State Highway 111. The City population is estimated to be over 45,000 residents; however, population increases during the day as the City is the County seat.

The consultant(s) will work under the direction of the Public Works Director or designee to handle engineering service tasks as they are required. The highest rated consultant(s) will be selected to be on contract for on-call services. Consultant(s) will enter into a master agreement which will specify the billing rates, personnel to be assigned, and other terms. No monthly retainer is anticipated.

Letter proposals will be requested from one or more on-call consultants when engineering service tasks are required. The letter proposals will set forth the scope, fee, personnel, and time of performance for the particular task. The letter proposals will be approved through a task order implementing and attached to the master agreement. Consultant selection for a particular task will be based on qualification as set forth in the Statement of Qualifications. Consultant selection will be at the sole discretion of the City. No consultant is guaranteed work.

V. SCOPE OF SERVICES

Consultants shall submit in their proposal in addition to the main scope the discipline(s) for which they wish to be qualified. The disciplines include, but are not necessarily limited to the following areas of experience and expertise.

Civil Engineering - General

The consultant shall design and prepare plan, specifications, and estimate (PS&E) for arterial and local streets; including traffic engineering/design, landscaping, water, sewer and storm drain design. Sample work activities include:

- Preparation of Phase I and II site investigation and soils reports, including field exploration, drill test borings, sample soils, compacting testing, and laboratory tests. Laboratory shall be Caltrans certified.
- Review and/or preparation of traffic plans (signing and striping plans, traffic detour and traffic staging plans, as well as signals), traffic studies/reports.
- Review and/or preparation of street improvement plans.
- Review and/or preparation of domestic or raw water improvement plans and studies.
- Review and/or preparation of sewer improvement plans and studies

- Review and/or preparation of storm drain improvement plans, hydrology and hydraulic reports.
- Review and/or preparation of tract and parcel map, lot line adjustments, certificates of compliance, map/easement or legal descriptions and supporting documentation.
- Review and/or preparation of structure calculations.
- Review and/or preparation of engineering quantity estimates and costs.

Designers shall have a minimum of 10 years' experience in civil design for public facilities. A detailed scope of work is available as Exhibit A of this RFP.

The consultant shall assist City staff to identify and prioritize pavement preservation projects; design and prepare plan, specifications, and estimate (PS&E) for pavement projects. Utilize the latest technologies to design and construct/rehabilitate pavements in the most cost-effective way. Consultant must be experienced with state and federal funded projects and pavement designers shall have a minimum of 10 years' experience in pavement design. A detailed scope of work is available as Exhibit A of this RFP.

Civil Engineering – Water and Wastewater Treatment Facilities

The objective of this discipline is to enable the City to improve the City potable water, sanitary sewer and storm water systems to meet the rules and regulations of the State and Federal mandates as well as public demand. Consultant shall provide all services and work required to complete studies, designs, plans, specifications and estimates for City projects as identified in the current city water, wastewater and storm water master plans or as may be requested by the City. City may request the consultant to update said master plans. The consultant shall have 10 years' experience in the design of potable and sanitary sewer treatment, collection and distribution systems in compliance with State and Federal requirements in the State of California. A detailed scope of work is available as Exhibit A of this RFP.

The above list is not intended to be exclusive; other services will likely be sought as the need arises. The statement of qualifications does not need to include a fee proposal for any of these specific tasks; fee proposals for individual tasks would be requested during the course of the on-call contract.

Periodically, the City has the need for assistance with special engineering studies or general staff augmentation. The consultant must be able to assist the City through this contract to provide the necessary services.

The consultant shall utilize its' in-house staff and/or sub-consultants to complete the assignments to meet the City standards. For specialized work for which the prime consultant will require a sub-consultant, the prime consultant will serve as an administrative liaison between the City and the sub-consultant. The prime consultant mark-up for sub-consultants shall not exceed 10%.

VI. PROJECT SCHEDULE

The following is a tentative schedule for the project:

Release of RFP	**08/22/2025**
Proposal Due	**09/19/2025**
Consultant Interview (if needed)	**Week of October 6th, 2025**
Contract Award	**10/21/2025**

VII. DELIVERABLE ITEMS

The Consultant will be required to verify that all information submitted as services rendered is accurate and current. Furthermore, the Consultant will be required to document the source(s) of all compiled information. All information generated as part of the Consultant's or sub-consultant's work shall become part of City of El Centro record of the project.

VIII. CORRECTIONS

Proposing Consultants are encouraged to amplify the scope of services, to identify any supplemental tasks necessary, and to recommend any alternatives that may enhance the project or reduce costs. Where applicable, consultant is encouraged to describe the anticipated level of effort for each task.

IX. DELIVERY OF PROPOSALS

Proposals must be submitted to 307 W. Brighton Ave., El Centro CA 92243 by at 4:30 pm on Friday, September 19, 2025 with subject reading as follows:

Response for City of El Centro On-Call Services RFP
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

On a separate envelope, submit a hard copy Fee Schedule to the same address and by the same date in a sealed envelope marked:

Fee Proposal for City of El Centro On-Call Services
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

Proposals and Fee Proposals received after the stated deadline will not be accepted. Advance submittals are permitted. The City will not be liable for any costs incurred by the Consultant

incidental to the preparation of proposals or for developing and carrying out interview presentations.

Submission of a proposal indicates acceptance by the Consultant of the conditions contained in this RFP unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of El Centro and the Consultant selected.

Questions concerning the RFP must be submitted via the Planet Bids portal. All questions must arrive at least ten (10) calendar days prior to the proposal due date to allow time for distributing answers and/or clarifications.
No questions or inquiries may be directed to any individual (s) at the location detailed in this document. All inquiries must be submitted in writing per the process described in this document. Attempts to contact any City employee other than the designated contact for this RFP may result in rejection of a submitted proposal. No questions will be answered after the ten-ten-day period.

X. SELECTION PROCESS

City staff will evaluate the proposals based on effectiveness and efficiency in supporting each of the following items.

1. Overall responsiveness to the RFP
2. Consultant (and project team) qualifications, experience and referenced projects
3. Qualifications, experience and commitment of the project manager and team members. The project manager shall preferably have successfully completed at least three (3) projects of similar nature, complexity, and size during the last 10 years
4. Project understanding, innovative approach and proposed scope of work
5. Ability to deliver the project scope of work within the stated estimated level of effort
6. Project management plan and schedule
7. Ability to sign the City's Standard Professional Services Agreement and provide the City's standard insurance coverages listed therein

Based on this evaluation, the City may choose to invite up to three (3) Consultants from each discipline to participate in an oral presentation/interview session or select the Consultant based on the results from the evaluation of the proposal.

In the event the City chooses to conduct interviews as part of the selection process, the selected Consultants will be asked to bring an interview panel including the project manager and up to three (3) (maximum) key staff members who will be directly involved in providing the services. The Consultants selected for the interview will be allowed thirty (30) minutes to present their Consultant experience and project approach. Following the presentation there will be a thirty (30) minute informal question and answer discussion.

At the conclusion of the evaluation, the City may enter into contract negotiations with the top three ranking Consultants. If negotiations with the top-ranking Consultants are unsuccessful, negotiations will terminate and the City may undertake negotiations with the

fourth-ranked Consultant. City staff then will make recommendations to the City Council, which reserves the right to reject any or all proposals. The selection process will be completed when a contract is executed.

Furthermore, the City reserves the right to reject any or all proposals, and to waive any and all irregularities to choose the Consultant which, in the City's opinion, best serves the City's interests. The City will not be liable for any costs incurred by the Consultant incidental to the preparation of proposals or for developing and carrying out interview presentations.

All Consultants issued this RFP were previously asked to certify that they would execute a contract with the City of El Centro with no exceptions or additions.

XI. SUBMITTAL REQUIREMENTS

Proposals shall be formatted for 8-1/2" x 11" portrait pages for written materials and 11" x 17" landscape pages for drawings, consisting only of the specified materials requested below. If interviews are required, presentation boards may be used. Presentation boards shall be 30" x 42", unframed with appropriate scale and identification.

It is imperative that all Proposers responding to the RFP comply exactly and completely with the instructions set forth herein. Proposals must be concise, but with sufficient detail to allow accurate evaluation and comparative analysis. Proposals should be straightforward and provide "layman" explanations of technical terms that are used. Emphasis should be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Do NOT include marketing brochures or other promotional material not connected with this RFP. **Responses must be limited to 30 pages maximum.**

To be responsive, each Proposal must include only the following information in the format indicated. Proposals not organized according to the following format may be rejected.

1. Cover with title and date
2. Cover Letter that documents the proposal offer, lists subconsultants and their roles, location of office where work will be done, is signed by an officer of the Consultant (or by another person with authority to act on behalf of and bind the Consultant), and indicates the contact person for the proposal
3. Table of Contents
4. Executive Summary
5. Approach to satisfying scope of work, which should highlight key issues as well as special processes, tools and lessons learned that will be applied
6. Scope of Work based on the respective discipline above
7. Availability to meet the expected schedule for this work, including current workload and backlog
8. History, general qualifications, employee count by title and discipline, and recent or pending litigation for Consultants and subconsultants

9. Proposer must provide three (3) references for which Proposer has provided similar services performed in California of the nature and scope as set forth in the RFP within the last five (5) years. Include name of business, name of contact person, telephone number of contact person, and description and date of services provided. References for public agency projects are preferred.

10. Qualifications of Project Manager and Key Staff of Consultant and subconsultants, including individual resumes listing required licenses, credentials and relevant experience addressing qualifications requirements specified herein, with relevant experience focused on similar projects completed within the last 10 years. City will place considerable emphasis on the commitment by the Proposer to provide qualified personnel for the services being considered. The Proposer shall furnish resumes in outline form for the key personnel committed to this account. Proposer shall also include the number and type of additional support personnel who will be providing services. The substitution or addition of individuals shall be allowed only with prior written approval of the City.

EXHIBIT A

CIVIL ENGINEERING – GENERAL AND WATER AND WASTEWATER TREATMENT. EXPANDED SCOPE

1.0 Scope of Work

The Scope of Work shall include, but not limited to the following tasks:

In general, the Consultant shall perform engineering design services resulting in contract documents (plans, specifications and cost estimates) for various projects on an as-needed basis. The Consultant shall provide a detailed schedule of the assigned project upon issuance of a Task Order of that particular project. The Consultant shall also provide all field survey works required to complete the designs. In addition to scope of work items necessary to complete the design of approved CIP projects, the selected consultant shall also provide specific Engineering Technician services. The services to be provided are enumerated below.

The Consultant's services shall include, but are not limited to, the following:

1. Research existing records of utility companies and agencies and coordinate the proposed improvements with existing field conditions.

2. Prepare all documentation required to obtain permits from any and all agencies having jurisdiction of the project.

3. Conduct an environmental assessment for each project and prepare all documentation required to comply with the California Environmental Quality Act (CEQA).

4. Provide all field survey and topographic work necessary to complete the design effort. Design level survey and base mapping of the project site shall be prepared in US Customary English units by a California licensed Land Surveyor in accordance with the City guidelines and in AutoCAD Computer Aided Design and Drafting (CADD) format. The horizontal datum shall be NAD 83 and the vertical datum shall be NAVD 88. All survey field notes shall be on forms provided by the City, shall be neatly completed in pencil, and shall become property of the City upon completion of the project. Informal field investigations including marking of removal areas may be required for some of the sidewalk, curb and gutter, and pavement replacement projects.

5. Complete the design of projects including plans, specifications, and engineer's construction cost estimate. The Consultant shall contact manufacturers and/or contractors to verify the engineer's estimate prior to submitting to the City. Specifications shall be prepared in Microsoft Word and an electronic copy of the final version shall be furnished to the City. The City will provide the specification boiler plate to the Consultant.

6. All preliminary and bid sets of plans shall be plotted on bond or velum using the AutoCAD program. All drawings shall be completed per the City of El Centro CADD Standards

7. All original plan sheets, the title sheet of the specifications, calculations, and reports shall be signed and stamped by the Consultant's licensed professional engineer in responsible-charge of the project. These signed originals will then become the property of the City.

8. The Consultant shall provide support services as needed during the bidding and construction phases of the project, including:

   A. The Consultant shall respond to bidder inquiries during the bidding process, including preparation of any addenda. Upon award of the construction contract, the Consultant shall attend the pre- construction meeting.
   B. The Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. The Consultant shall complete shop drawings reviews within one (1) week of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.

   C. The Consultant shall respond to written Requests for Information (RFI) to provide clarification or resolve discrepancies in the contract documents. Responses shall be completed within three (3) working days.
   D. The Consultant shall provide periodic field reviews and bring to the attention of the City of El Centro any defects or deficiencies in the work by the construction contractor which the Consultant may observe. The Consultant shall have no authority to issue instruction on behalf of the City of El Centro, or to deputize another to do so.

9. Upon the completion of construction, as-builts shall be submitted to the City. The Consultant shall incorporate all changes to the plans electronically with all necessary revision notations. Once plans have been updated, a signed set of as-built mylars shall be submitted to the City with an electronic copy (in AutoCAD and pdf formats) of the final as-built drawings via CD or e-mail.

10. The Consultant shall monitor the project progress, maintain project files, and control the quality of the work performed by in-house staff and/or sub-consultants. Incomplete (not meeting targeted completion) or poor-quality work will not be accepted. The Consultant will need to revise the documents within a revised schedule set by the City, which may require overtime. No additional regular or overtime hours shall be approved for the required revisions.

11. Attend meetings with the City staff as required.

12. Coordinate plan check, design topics, permits and any other issues with the City, other Agencies, and all utility companies as required. The Consultant shall be the liaison with affected agencies.

13. The Consultant shall be responsible for to reviewing and approving addenda and clarifications to plans and specifications.

1.1 Preliminary Design

Review available record plans, existing/proposed conditions and requirements. Attend the Field

Review Meeting; prepare Field Review Report

Conduct a field survey in order to confirm the accuracy of any existing drawings, surveys, streets, and utility locations data obtained. Consultant is expected to conduct additional surveys based on the project requirements.

Consultant shall prepare a preliminary Design Report (PDR) of alternatives, preliminary cost estimate and preferred alternative.

1.2 Development of Detail Plans, Specifications and Estimate (PS&E):

All reports, plans, specifications and quantity calculations shall conform to criteria, policies, procedures and standards of Caltrans, APWA and the City, and shall be made available to the City at stages specified in the milestone schedule and upon request.

Construction plans shall adhere to City of El Centro Standard Construction Drawing standards. The Consultant shall produce, at the Consultant's sole cost and expense, blank reproducible sample plan sheets and any needed standard drawings. Standard drawings and standard plans shall be incorporated into the Contract Plans where applicable.

Each plan sheet shall bear the State of California Registered Professional Engineer registration seal within signatures, license number and registration certificate expiration date of the Engineer who is in responsible charge for developing the plan. Each plan sheet shall be signed by the engineer who performed the independent plan check.

Consultant shall prepare complete contract specifications based on the Manuals/Standards section 2.4.

A list of contract pay items with the descriptions, item codes and estimated quantities shall be included in the front of the special provisions.

The Consultant shall prepare quantity calculations for items that are applicable to this project, and prepare cost estimates.

Quantities for all contract pay items shall be substantiated by calculations. Quantity calculations shall be neat and orderly and shall show all sketches, diagrams, and dimensions necessary to allow them to be independently used by field inspectors during construction.

Electronic files for all structural details and calculations shall be submitted at the end of the contract or when requested by the City.

All electronic software developed, databases generated, spreadsheets and intellectual properties developed during the life of the Agreement shall become the property of the City.

1.3 Environmental Documents and Permit Compliance

Specific environmental documentation work as may be required by the funding agency and the City including, but not be limited to the following: prepare Preliminary Environmental Study (PES), CEQA compliance documentation, technical studies, , NPDES permit, Regional Board Section 401 certification, any coordination as required completing the environmental NEPA and

CEQA work, and any encroachment permits required for the project from agencies such as Caltrans, County of Imperial, the City and any other having jurisdiction.

1.4 Utility Research and Coordination

(1) Research and obtain file copy of utility maps within the project limits for existing and/or proposed facilities.
(2) Prepare preliminary plans with utility notices/questionnaires to be sent to utility companies.
(3) Plot existing and proposed utilities in plan (and profile when applicable)
(4) Monitor response of utility notices received by the City and then make recommendations for mitigating conflicts.
(5) Attend coordination meetings when required regarding adjustments and relocations.
(6) Pothole information, where required, shall be coordinated by the Consultant.

1.5 Construction Bidding Phase

Bidding procedures will be the responsibility of the City. While the PS&E construction package is being advertised for bids, all questions concerning the intent shall be referred to the City for resolution. In the event that any items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the Consultant for decision by the City, or by a covering change order after the award of the construction contract.

1.6 Construction Support Phase (As Needed)

(1) All construction support work shall be coordinated with the City.
(2) Consultant shall furnish, at the consultant's sole cost and expense, all necessary drawings for corrections and change orders required by errors and omissions of the Consultant. The original tracing(s) of the drawings and contract wording for the change orders shall be submitted to the city for duplication and distribution.
(3) Consultant will receive written notification of the award of a construction contract. Upon such notification, Consultant will proceed with the services required by the Agreement.
(4) Consultant is required to attend the pre-construction meeting with the successful construction contractor upon notification by the City.
(5) Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. Consultant shall complete shop drawings reviews within two (2) weeks of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.
(6) Consultant shall be available as requested by the City to resolve discrepancies in the contract documents. Consultant shall bring to the attention of the City any defects or deficiencies in the work by the construction contractor which the Consultant may observe. Consultant shall have no authority to issue instruction on behalf of the City, or to deputize another to do so.
(7) The Consultant shall prepare and deliver to the City the final as-built plans incorporating field marked prints supplied by the City. Upon completion of construction, the City will submit field-marked prints to Consultant. Consultant shall incorporate all changes to the plans electronically with all necessary revision notations and submit to the City.

1.7 Description of Required Services

All work shall be performed in conformance with the State of California and/or City of El Centro policies, procedures and standards.

Consultant shall carry out the instructions received from the City and shall cooperate with the City and other involved agencies.

The Consultant has total responsibility for the accuracy and completeness of the plans and related designs, specifications and estimates prepared and shall check all such materials accordingly. The plans will be reviewed by the City for conformity with the requirements of the Agreement. Reviews by the city do NOT include detailed review or checking of design or the accuracy with which such designs are depicted on the plans. The responsibility for accuracy and completeness of such items remains solely that of Consultant.

Consultant or its sub consultants shall not incorporate in the design any materials or equipment of single or sole source origin without written approval of the City.

The plans, specifications, estimates, calculations, and other documents furnished under the Agreement shall be of a quality acceptable to the City and State. The criteria for acceptance shall be a product of neat appearance, well organized, technically and grammatically correct, checked, and dated and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that of similar types produced by the State and set forth in related Caltrans manuals. The Consultant shall modify its work as necessary to meet the level of acceptability defined by the criteria above.

The Consultant shall have a quality control plan in effect during the entire time work is being performed under the Agreement. The Quality control plan shall establish a process whereby plans are independently checked, corrected and back checked, and all job-related correspondence and memoranda dated and received by affected persons and then bound in appropriate job files.

2.0 Construction Plans

2.1 60% PS&E (Unchecked Details)

Unchecked plan details shall consist of 60% design and detailed plans ready for the independent design check.

Three sets (3) full size (24”x36”) of design plans. The following submittals may be submitted electronically: draft SSP, preliminary quantities and estimates, pay item list, and design calculations.

2.2 100% PS&E

The Consultant shall submit the following documents for review and approval: Four sets (4) full

size (24”x36”) signed and sealed prints of checked design Electronic copies of Special Provisions

Electronic copies of cost estimate and check quantity calculations

Electronic copies of design calculations

Electronic copies of design check calculations
Other reports as needed by the City of El Centro

The City will review and comment on the PS&E package as soon as possible. The turnaround goal is within four (4) weeks of receipt of the complete PS&E package. One (1) copy of those documents with comments will be returned to the Consultant.

2.3 Final PS&E

The Consultant shall submit the following documents for review and approval:

Electronic sets of signed final design plans

Electronic copies of signed final specifications

Electronic copies of final cost estimate and final quantity calculations

Electronic copies of final design calculations

Electronic files in its original format and in PDF of all plans, specifications, and estimates

2.4 Manuals/Standards

Where applicable, engineering design of all PROJECT improvements shall be compatible and in accordance with the following as applicable:

Caltrans Highway Design Manual

Caltrans Standard Plans

Caltrans Standard Specifications

Imperial County Hydrology Manual

American Public Works Association Standard Specifications for Public Works Construction

American Public Works Association Standard Plans

American Water Works Association

City of El Centro Standard Plans

San Diego Regional Standard Drawings

It will be the responsibility of the Consultant to verify that it has received the latest version or update of these documents.

Plans for the improvements on the State Highway shall be prepared in accordance with Caltrans recommended practice for detailing and scope of work. Caltrans Standard plans shall be utilized where applicable and may be called out on the plans as reference.

Local street improvement plans shall adhere to City of El Centro Standard Plans and the Standard Specifications for Public Works Construction. Plans shall be computer drafted in AutoCAD compatible format and shall adhere to the current City of El Centro Public Works Department CAD standards.

The Consultant's work will be subject to inspections by representatives of the City, County, State and FHWA

2.5 ***Coordination***

Coordination with the City, other consultants and other involved agencies will be required to

achieve compatible designs, phasing of construction with existing or designed conditions, and timely delivery of the contract PS&E. Coordination may include, but not be limited to, coordination with Caltrans, FHWA, Regional Water Quality Control Board and other agencies.

The City will decide the manner in which the coordination of individual matters is undertaken. At the City's option, coordination efforts may be performed by the Consultant's direct contact, by the Consultant acting though the City or by the City only. When coordination efforts require Agreement, such Agreement shall be coordinated through the City.

EXHIBIT B

SAMPLE PROPOSAL EVALUATION FORM

CONSULTANT/FIRM NAME:		
Criteria	Max Points	Rating
Understanding of the work to be done	25	
Experience with similar kinds of work	25	
Quality of staff for work to be done	15	
Capability of developing innovative or advanced techniques	10	
Familiarity with state and federal procedures	10	
Financial responsibility	10	
Familiarity with local and regional approving agencies	5	
Total	100	

Evaluator

Print Name: _____

Signature: _____

Date: _____

Contract Manager

Initials: _____

Date: _____

EXHIBIT C

SAMPLE DESIGN PROFESSIONAL SERVICES AGREEMENT

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES _____NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES _____NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

_____ _____
DATE (SIGNATURE OF CONSULTANT)

EXIBIT E

SAMPLE TASK ORDER

SAMPLE CONSULTANT TASK ORDER #
FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

EXHIBIT G

SAMPLE CONSULTANT TASK ORDER #
FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

RESOLUTION NO. 26-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A DESIGN PROFESSIONAL SERVICES AGREEMENT WITH NICKLAUS ENGINEERING, INC. FOR ON-CALL ENGINEERING – GENERAL SERVICES

WHEREAS, on-call professional Civil Engineering-General services agreements are an effective way to retain consultants to ensure that public works projects and programs are delivered in a timely and cost-effective manner; and

WHEREAS, pursuant to City Code Section 2-174, the City of El Centro ("City") identified a need for on-call, specialized Civil Engineering-General consulting services and released a Request for Proposal for such services through the City's Public Works Department; and

WHEREAS, on October 3, 2025, the City received proposals which were evaluated and ranked to determine the most qualified consultants; and

WHEREAS, Nicklaus Engineering, Inc. ("Consultant") was amongst those consultants chosen to enter into an on-call agreement with the City; and

WHEREAS, such services will be awarded on a Task Order basis as the budget allows; and

WHEREAS, it is necessary for the City Council of the City of El Centro, California (the "City Council") to approve a Design Professional Services Agreement with Consultant for On-Call Civil Engineering – General Services ("Agreement"); and

WHEREAS, the City Council finds that its approval of the Agreement is in the best interest of the City.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. That the foregoing is true, correct and adopted.

2. That the City Council authorizes the Agreement in a not-to-exceed amount of one million dollars ($1,000,000) for the total term of the Agreement (for two years, with the possibility of up to three (3) one-year extensions), with the understanding that services will be provided on an as-needed basis and Task Order basis as further set out in the Agreement, with no guarantee of any level of effort from Consultant.

3. That the City Manager is hereby authorized to sign the Agreement on behalf of the City, a copy of which is on file in the Office of the City Clerk.

4. That the Public Works Director is hereby authorized to execute Task Orders up to fifty thousand dollars ($50,000) each for budgeted projects.

5. That the City Manager is hereby authorized to execute Task Orders for budgeted projects above fifty thousand dollars ($50,000) and under two-hundred thousand dollars ($200,000); task orders above that amount shall be approved by the City Council.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026.

CITY OF EL CENTRO

By_____
Michael Crankshaw, Mayor

ATTEST:

By_____
Norma Wyles, City Clerk

APPROVED AS TO FORM:
Office of the City Attorney

By_____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CITY OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California, do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at the regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By_____
Norma Wyles, City Clerk

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH PSOMAS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

CITY MANAGER'S RECOMMENDATION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH PSOMAS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

FISCAL IMPACT:

Contract is not to exceed one million dollars ($1,000,000.00) through out the term of the agreement. This will be through the approval of various task orders through out the life of the contract.

Award of the contract will not obligate the City to purchase any specific level of effort from any firm as task orders will be issued by the City Manager or Public Works Director to assign work on an as-needed, project-by-project basis. Funding for each project will be budgeted in the Citywide Capital Improvement Program (CIP) budget which is adopted through the annual budget process. If a non-budgeted project arises, staff will return to Council to request funding as needed. Funding sources may include the general fund, enterprise funds as well as other sources such as Measure D, Gas Tax, SB1 and other grants.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

Financial & Governance Stability & Sustainability

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

The consultant went through a request for proposals and an evaluation process. Any missing documentation, such as a business license, will be obtained before issuance of Notice to Proceed ("NTP").

BACKGROUND:

In late 2020, the City Council awarded a series of contracts to on-call consultants. These contracts in essence, pre-approve consultants for design work, construction management work, special studies, etc. This expedites the award of work and eliminates the need to do RFP's, interviews, etc., for contract which may be small in value, which may discourage firms from submitting due to the cost of preparing for a RFP and interview process.

Generally, these contracts are not utilized for certain grant funds, as grant funds have added language that may not be included in the on-call contracts and that does not apply for all projects. As such, grant funded projects generally go through contracts outside of

the on-call approved contract list.

On-call contracts have been used in the past to do design work funded by park impact fees, general fund, water enterprise, wastewater enterprise, Measure D and SB1 funds. Individual Task Orders are issued for projects that fit within the scope of the on-call contract.

Projects in the past have included the Imperial Avenue Extension design, studies and portions of the Southern Pump Station project, various construction management contracts for Measure D projects and some water and wastewater projects to name a few. Task Orders are funded from approved budget funds.

DISCUSSION:
The current list of On-Call contracts began to expire at the beginning of August 2025. To replace the contracts, Public Works' staff divided the on-call disciplines into two groups. One Request for Proposals (RFP) was prepared for Civil Engineering- General and Civil Engineering- Water and Wastewater Treatment, while another was prepared for the On-Call Architectural Design and Construction Management and Inspection Services.

On August 19, 2025, the City Council, during its regular meeting, approved the Request for Proposals(RFP) for four on-call disciplines. Each RFP was advertised and released as follows:

1. Request for Proposals (RFP) for On-Call Civil Engineering - General and On-Call Civil Engineering- Water and Wastewater Treatment was published in the Imperial Valley Press on August 22, 2025, with an initial deadline of September 19, 2025, and then revised via addendum to October 3, 2025.

2. Request for Proposals (RFP) for On-Call Architectural Design, and Construction Management and Inspection Services was published in the Imperial Valley Press on August 26, 2025, with an initial deadline of September 26, 2025, and then revised to October 10th, 2025.

These are the disciplines where we expect to have the need for these contracts. Each applicant was required to specify the discipline for which they were submitting a proposal.

Under this Council approval request, we are focusing on consultants who submitted for the On-Call Civil Engineering-General Services portion of the RFP. For this discipline, the City received six proposals. The proposals were evaluated by a panel of three city staff members. Based on the scores, six firms were selected and will be recommended for contract award, which includes the following in no particular order:

- Dynamic Consulting Engineers
- CR Associates
- Nicklaus Engineering, Inc.
- Psomas
- TYPSA, Inc.
- The Holt Group, Inc.

A separate Council agenda report, agreement and resolution is being prepared for each firm. Each agreement would be limited to $250,000 per fiscal year for each fiscal year the

agreement is active. However, as each agreement will be for on-call, as-needed services, there is no guarantee on any level of services from any firm. Each contract has an initial Two (2) year life with the option to provide for three (3) individual one (1) year extensions for a possible total five (5) year contract.

In this report, staff seeks approval of an on-call contract for Civil Engineering- General Services with Psomas.

CONCLUSION:

Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH PSOMAS FOR ON-CALL CIVIL ENGINEERING- GENERAL SERVICES.

ATTACHMENTS:

1. Design Professional Services Agreement- Psomas
2. Resolution 26-

DESIGN PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement"), is made and effective as of the last signature date in this agreement, between the City of El Centro ("City"), a municipal corporation, and Psomas ("Consultant"), a stock corporation. In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

I. TERM

This Agreement shall commence upon the issuance of the Notice to Proceed ("NTP") and shall remain and continue in effect until the professional services described herein are completed, but in no event later than two (2) years from the date of approval and may be extended for up to three (3) one (1) year extensions by mutual agreement unless sooner terminated pursuant to the provisions of this Agreement. All days set out in this Agreement are calendar days unless otherwise provided.

II. SERVICES

Consultant shall perform the tasks described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full (the Tasks to be Performed or Tasks). Consultant shall complete the Tasks according to the schedule of performance which also is set forth in Exhibit A. To the extent that Exhibit A is a proposal from Consultant, such proposal is incorporated only for the description of the scope of services and no other terms and conditions from any such proposal shall apply to this Agreement unless specifically agreed to in writing. A sample Task Order is attached as Exhibit G.

III. PERFORMANCE BY CONSULTANT

A. Consultant shall at all times faithfully, competently, and to the best of their ability, experience, and talent, perform all Tasks. Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing similar services as are required of Consultant hereunder in meeting its obligations under this Agreement.

B. Consultant immediately shall notify the City Representative in writing of any delay in completion of the services. Such notice shall include the reason for such delay and a reasonable estimate of the length of the delay. If the delay materially effects performance of the Services, the City may terminate this Agreement under Section VI (Termination) or VII (Default).

C. Force Majeure. If delays in performance of the services are caused by the following unforeseen events or conditions beyond the reasonable control of City or Consultant, the time for performance may be extended by City only for the period of such events: war, changes in law or government regulation, labor disputes or strikes; fires, floods, adverse weather or other natural conditions preventing work; or inability to obtains materials, equipment or labor when the Consultant provides the City with timely evidence of its inability to obtain personnel.

D. Consultant may terminate this Agreement without cause upon providing at least 60 days prior written notice to the City of such termination. Within such time period, the Consultant shall complete any work necessary for the orderly termination of its consulting services

IV. CITY REPRESENTATIVE

City's Public Works Director shall represent City in all matters pertaining to the administration of this Agreement, review and approve all products submitted by Consultant, but not including the authority to change the compensation due to Consultant except as provided in this Agreement (the "City Representative")

V. PAYMENT

A. The City agrees to pay Consultant in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B, attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. This amount shall not exceed One million dollars ($1,000,000.00) for the total term of the Agreement unless additional payment is approved as provided in this Agreement.

B. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City. Consultant shall be compensated for any such authorized additional services in the amounts and in the manner as agreed to by the City and Consultant at the time City's written authorization is given to Consultant for the performance of such services and/or as set for in Exhibit B.

C. Consultant shall submit invoices monthly for actual services performed. Invoices shall be submitted on or about the first business day of each month, or as soon thereafter as practical, for services provided in the previous month. City shall use reasonable efforts to pay within forty-five (45) days of receipt of each invoice as to all non-disputed fees. If the City disputes any of Consultant's fees, it shall use its best efforts to give written notice to Consultant within forty-five (45) days of receipt of an invoice of any disputed fees set forth on the invoice.

D. It is understood and agreed that the City's obligation to proceed under this Agreement is conditioned upon the appropriation of funds. If anticipated funds for payment under this Agreement are not forthcoming or are insufficient, the City shall have the right to terminate this Agreement without penalty upon ten (10) days prior written notice to Consultant. Notwithstanding, the City also may determine a source of additional funds.

VI. CITY'S SUSPENSION OR TERMINATION OF AGREEMENT

A. Except as otherwise provided herein below, the City may suspend or terminate this Agreement, or any portion hereof, without cause and for convenience by serving written notice of termination upon the other party at least ten (10) calendar days prior to the date of termination. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City terminates a portion of this Agreement, such termination shall not make void or invalidate the remainder of this Agreement.

B. In the event this Agreement is terminated pursuant to this section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, less any disputed amounts. Upon termination of the Agreement pursuant to this section, the Consultant will submit an invoice to the City as provided above.

VII. DEFAULT

A. Either Party's failure to comply with the provisions of this Agreement shall constitute a default. In the event that either party is in default for cause under the terms of this Agreement, the affected party shall promptly notify the deficient party of such default and following such notice shall have no obligation or duty to continue compensating or providing any work after the date of default and terminate this Agreement immediately by written notice to the other party. If such failure hereunder arises out of causes beyond either party's control under Section III C above (force majeure), the provisions of that sub-section shall apply.

B. If the City Representative determines the Consultant is in default in the performance of any of the terms or conditions of this Agreement, City shall cause to be served upon the Consultant a written notice of the default. The Consultant shall have ten (10) days after service of default to cure the default as directed by the City in the notice of default. In the event the Consultant fails to cure its default within such period of time, the City shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

VIII. OWNERSHIP OF DOCUMENTS

A. Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the City at reasonable times to such books and records; shall give City the right to examine and audit said

books and records; shall permit City to make transcripts or copies therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

B. Upon completion of, or in the event of termination of this Agreement, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the City and may be used, reused, or otherwise disposed of by the City without the permission of the Consultant. With respect to computer files, Consultant shall make available to the City, at the Consultant's office and upon reasonable written request by the City, the necessary computer software and hardware for purposes of accessing, compiling, transferring, copying and/or printing computer files. Consultant hereby grants to City all right, title, and interest, including any copyright, in and to the documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared by Consultant in the course of providing the services under this Agreement.

IX. INDEMNIFICATION AND DEFENSE

To the fullest extent permitted by law, Consultant shall indemnify, defend, and hold harmless City and any and all of its officials, employees, agents, and volunteers ("Indemnified Parties") from and against any and all claims, losses, liabilities, damages, costs, and expenses, including attorney's fees and costs, to the extent they arise out of, pertain to or relate to the negligence, recklessness, or willful misconduct of the Consultant.

Consultant's duty to defend shall consist of reimbursement of defense costs incurred by Agency in direct proportion to the Consultant's proportionate percentage of fault.

Consultant's percentage of fault, for both indemnity and defense, shall be determined, as applicable, by a court of law, jury, or arbitrator. In the event any loss, liability, or damage is incurred by way of settlement or resolution without a court, jury or arbitrator having made a determination of the Consultant's percentage of fault, and the parties cannot mutually agree on Consultant's percentage of fault, the parties agree to mediation with a neutral third-party to determine the Consultant's proportionate percentage of fault for purposes of determining the amount of indemnity and defense cost reimbursement owed to the Agency.

X. INDEPENDENT CONTRACTOR

A. Consultant is and shall at all times remain as to the City a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, or agents shall have

control over the conduct of Consultant or any of Consultant's officers, employees, or agents, except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation, or liability whatever against City, or bind City in any manner.

B. No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

XI. INSURANCE

Consultant shall maintain prior to the beginning of and for the duration of this Agreement insurance coverage as specified in Exhibit C attached hereto and incorporated herein by this reference as though set forth in full.

XII. LEGAL RESPONSIBILITIES

A. The Consultant shall keep itself informed of local, state, and federal laws and regulations which in any manner affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. The Consultant shall at all times observe and comply with all such laws and regulations. The City, its officers, agents and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this section.

B. Licenses. At all times during the term of this Agreement, Consultant shall have in effect all licenses required for the performance of the services described in this Agreement.

C. City Business License: At all time during the term of this Agreement, Consultant shall have in effect a City business license.

D. Non-discrimination. Consultant shall not discriminate on the basis of any protected state or federal class or association with such class in its solicitation, selection, hiring or treatment of its employees, vendors or suppliers. Consultant understands that violation of this requirement shall be a material breach of this Agreement and may result in its termination, debarment or other sanctions. This requirement shall be placed in all agreements between the Consultant and its employees, vendors and suppliers.

E. Drug-free Workplace. Consultant agrees to insure a drug free workplace. The Consultant shall certify to the City that it will provide a drug-free workplace by submitting a Consultant Certification for a Drug-Free Workplace form as provided

by the City. The Consultant shall publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the workplace, and specifying the actions that will be taken against employees for violations of the prohibition. The Consultant also shall establish a drug-free awareness program to inform employees about all of the following: the dangers of drug abuse in the workplace; the policy of maintaining a drug free workplace; available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug abuse violations. In addition, the Consultant shall post the drug free policy in a prominent place.

F. No Use of City logo or Product Endorsement. The Consultant agrees that any advertisement or notification identifying or referring to the City as a client of the Consultant requires the prior written approval of the City. No City logo or other identifying mark may be used without the prior written approval of the City.

XIII. CONFLICTS OF INTEREST

A. Undue Influence. Consultant declares and warrants that no undue influence or pressure was used against or in concert with any officer or employee of the City in connection with the award, terms, or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of the City has or will receive compensation, directly or indirectly, from Consultant, or from any officer, employee, or agent of Consultant, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this section shall be a material breach of this Agreement entitling the City to any and all remedies at law or in equity.

B. No Benefit to City Employees. During their tenure and for one year thereafter, no officer or employee of City, or their designees or agents, and no public official who exercises authority over or responsibilities with respect to the services under this Agreement shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the services performed under this Agreement.

C. Consultant covenants that neither Consultant nor any officer or principal of their firm have any interest in, or shall acquire any interest, directly or indirectly, which will conflict in any manner or degree with the performance of their services hereunder. Consultant further covenants that in the performance of this Agreement, no person having such interest shall be employed by them as an officer, employee, agent, or subconsultant. To the extent applicable, Consultant further covenants that Consultant has not contracted with nor is performing any services, directly or indirectly, with any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area and further covenants and agrees that Consultant and/or its subconsultants shall provide no service or enter into any agreement or agreements with a/any developer(s) and/or property owner(s) and/or firm(s) and/or partnership(s) owning property in the City or the study area prior to the completion of the work

under this Agreement.

D. Form 700. Consultant is subject to all applicable federal, state and local conflict of interest laws, regulations and policies applicable to its contract with the City and procurement practices related to such contract, including but not limited to the those under the Political Reform Act and its regulations or California Government Code Section 1090 et seq. Consultant may be required to complete Form 700's or similar forms as determined under Exhibit D, attached and incorporated.

E. Levine Act Compliance. The Consultant shall complete and comply with the provisions of Exhibit E, attached and incorporated, regarding compliance with the Levine Act.

XIV. RELEASE OF INFORMATION

A. All information gained by Consultant in the performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents, or subconsultants, shall not without prior written authorization from the City Attorney or designee, or unless requested by the City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena.

B. Consultant promptly shall notify City should Consultant, its officers, employees, agents, or subconsultants be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request ("Discovery"), court order, or subpoena from any person or party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the City, unless the City is a party to any lawsuit, arbitration, or administrative proceeding connected to such Discovery, or unless Consultant is prohibited by law from informing the City of such Discovery. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding as allowed by law. Unless City is a party to the lawsuit, arbitration, or administrative proceeding and is adverse to Consultant in such proceeding, Consultant agrees to cooperate fully with City and to provide the opportunity to review any response to Discovery requests provided by Consultant. However, City's right to review any such response does not imply or mean the right by City to control, direct, or rewrite said response.

XV. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by: (i) personal service; (ii) delivery by a reputable document delivery service (e.g., Federal Express), which provides a receipt showing date and time of delivery; or (iii) United States mail,

certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To CITY: City of El Centro
1275 Main St.
El Centro, CA 92243
Attention: City Clerk

TO CONSULTANT: Psomas
401 B. Street, Suite 1600
San Diego, CA 92101
Attention: Sara K. Curran, P.E., Vice President

XVI. ASSIGNMENT

A. Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the City. Due to the personal nature of the services to be rendered pursuant to this Agreement, only Consultant shall perform the services described in this Agreement.

B. Before retaining or contracting with any subconsultant for any services under this Agreement, Consultant shall provide City with the identity of the proposed subconsultant, a copy of the proposed written contract between Consultant and such subconsultant which shall include an indemnity provision identical to the one provided herein identifying City as an indemnified party, or an incorporation of the indemnity provision provided herein, and proof that such proposed subconsultant carries insurance at least equal to that required by this Agreement or obtain a written waiver from City for such insurance.

C. Psomas may use assistants, under their direct supervision, to perform some of the services under this Agreement. Consultant shall provide City fourteen (14) days' notice prior to the departure of Sara K. Curran, P.E. from Consultant's employ. Should Sarah K. Curran, P.E. leave Consultant's employ, the City shall have the option to immediately terminate this Agreement. Upon termination of this Agreement, Consultant's sole compensation shall be payment for actual services performed up to, and including, the date of termination or as may be otherwise agreed to in writing between the Governing Board and the Consultant.

XVII. GOVERNING LAW

The City and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court with jurisdiction over the City.

XVIII. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, negotiations, understandings, representations, and statements, oral or written and pertaining to the subject of this Agreement or with respect to the terms and conditions of this Agreement, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

A. No waiver or failure of either Party to insist upon the strict performance by the other shall be a continuing waiver of any breach of this Agreement, nor shall such waiver affect or alter this Agreement, and each provision hereof shall continue in full force and effect. No change to any term or condition of this Agreement, nor any verbal understanding of the Parties shall be valid unless in writing as set forth in this Agreement.

B. Nothing contained this Agreement shall be considered a limit upon the charter city powers of the City.

C. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in its drafting.

D. In any conflict between the body of this Agreement and the Exhibits, the body of this Agreement shall control. If a conflict exists between any applicable law, rule, or regulation, that law, rule or regulation shall control. The most stringent requirements shall control. Each Party shall notify the other immediately upon identification of any apparently conflict or inconsistency.

XIX. SEVERABILITY

Any part, provision, or representation of this Agreement or any of its exhibits, including, which is held to be invalid, void or unenforceable by a court of competent jurisdiction, shall be limited to that part, provision or representation and all other parts, provisions, or representations herein shall remain in full force and effect.

XX. CONTENTS OF REQUEST FOR PROPOSAL AND PROPOSAL

Consultant is bound by the contents of the proposal submitted by the Consultant, attached and incorporated as Exhibit A In the event of conflict, the requirements of City's Request for Proposal and this Agreement shall take precedence over those contained in the Consultant's proposal. The incorporation of the Consultant's proposal shall be for the scope of services to be provided only, and any other terms and conditions included in such proposal shall have no force and effect on this Agreement or the relationship between Consultant and/or City, unless expressly agreed to in writing.

XXI. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant warrants and represents that they have the authority to execute this Agreement on behalf of the Consultant and have the authority to bind Consultant to the performance of its obligations hereunder.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

Psomas By:
(Signature) _____

Sarah Curran
(Typed Name)

Vice President
(Title)

City of El Centro
A Municipal Corporation

_____
Robert Sawyer, City Manager

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:
City Attorney

By: _____

Attachments:	Exhibit A	Consultant's Proposal
	Exhibit B	Fee Schedule
	Exhibit C	Insurance Requirements
	Exhibit D	Conflict Financial Disclosure
	Exhibit E	Levine Act Certification
	Exhibit F	City RFP
	Exhibit G	Sample Task Order

EXHIBIT A

CONSULTANT'S PROPOSAL

2025 On-Call Civil Engineering - General

CITY OF EL CENTRO



Proposal | 10.03.25

PSOMAS

PSOMAS

Balancing the Natural and Built Environment

79 YEARS EXPERIENCE

PRIME CONSULTANT

Psomas
401 B Street
Suite 1600
San Diego, CA 92101

SUBCONSULTANTS

aark engineering, inc.
Structural Engineering
1870 Cordell Court
Suite 202
El Cajon, CA 92020

Enterprise Engineering, Inc.
Electrical/Mechanical
12975 Brookprinter Place
Suite 160
Poway, CA 92064

LandMark Consultants, Inc.
Geotechnical Engineering
780 North 4th Street
El Centro, CA 92243

Ninyo & Moore
Phase I and II Hazmat
5710 Ruffin Road
San Diego, CA 92123

Spurlock Landscape Architects
Landscape Architecture
2122 Hancock Street
San Diego, CA 92110

October 3, 2025

Abraham Campos, PE
Director of Public Works/City Engineer
City of El Centro
307 W. Brighton Avenue
El Centro, CA 92243

Subject: Proposal for 2025 On-Call Civil Engineering – General

Dear Mr. Campos:

Psomas is pleased to propose our services for the City of El Centro's **On-Call Civil Engineering Services - General** needs. Our experience supporting your infrastructure initiatives has given us valuable insight into your priorities and processes, positioning us to provide responsive support when you need it most.

Key advantages of our team include:

- Quick response capability for task orders, even during peak workloads or staff absences
- Proven track record of delivering accurate, complete, and timely deliverables
- Thorough knowledge of City standards and regulatory requirements
- Robust quality control procedures and detailed documentation practices

We can execute the City's Standard Professional Services Agreement with the standard insurance coverages, though we respectfully request consideration for removing the liquidated damages provision in Section XIX, as this is more typical for construction contracts.

As Project Manager, I will oversee our team, monitor deliverable quality, and confirm adherence to schedules. I am authorized to act on behalf of Psomas and bind the firm contractually. Work will be performed from our San Diego office at 401 B Street, Suite 1600. I can be reached at 619.961.2815 or sarah.curran@psomas.com.

We look forward to continuing our partnership with the City of El Centro.

Sincerely,

PSOMAS

Sarah K. Curran, PE, QSD
Vice President/Project Manager

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3 Executive Summary

150+ Engineers
143 LICENSED PROFESSIONAL Civil Engineers (PE)



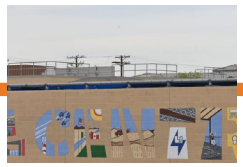
The Psomas Team

Psomas has a considerable amount of recent and relevant experience with as-needed contracts, including those with the City of El Centro. Our current as-needed experience with public agencies includes the cities of San Diego, Coronado, El Cajon, La Mesa, and Del Mar, as well as the Port of San Diego, the County of Riverside Transportation Department, San Diego MTS, and SANDAG.

Our team understands that an as-needed professional services agreement is unique among other forms of professional services contracts and requires a close working relationship and good knowledge of City processes. As an as-needed engineering consultant, Psomas has established and refined a successful process for managing and providing the necessary resources for different types of projects under as-needed contracts.











A Trusted Professional Partner

Seasoned professionals with the required experience for providing as-needed civil engineering services comprise the Psomas team, including subconsultants, as proven by the successful completion of multiple projects delivered to various public agencies and municipalities within Imperial County. **We have relevant City project experience, knowledge of the local environment, and a successful track record of working with the City's project management staff.** Our Project Manager, **Sarah Curran, PE, QSD**, brings more than 23 years of experience managing a variety of award-winning projects working collaboratively with public agency project managers and subconsultants.

Proven Approach to As-Needed Contracts

Psomas understands the success of a project depends heavily on staff capabilities, effective project management, and communication. We will provide the City with a team of experienced professionals who have the skillset necessary to meet project requirements, complexity, and the required scope of services for each individual task order.

Sarah will be responsible for promptly assigning the required resources, expediting fast-track support when needed, overseeing the efficient completion of tasks, and maintaining a high level of civil engineering design services.

Psomas continues to refine its processes to enhance its service and overall results. We provide staff training and conduct regular project management meetings focused on budget and schedule control. Through continued efforts to streamline and enhance our service, we implement new technologies, stay current with evolving rules and regulations, and deliver the level of service and responsiveness that our clients expect.

Relevant Civil Engineering Experience

Psomas has extensive experience delivering engineering design services that align with the scope outlined in the City of El Centro's RFP for On-Call Civil Engineering – General. Our team has prepared plans, specifications, and estimates (PS&E) for arterial and local streets, traffic engineering and design, water, sewer, and storm drain systems. We are well-versed in local, state, and federal requirements, including prevailing wage compliance and coordination with Caltrans and other regulatory agencies. Psomas has supported the City of El Centro for over 10 years through on-call contracts and task orders, completing more than 20 civil engineering projects that reflect the scope and standards outlined in this RFP.

4 Approach

Proven Approach to As-Needed Contracts

Psomas successfully delivers task orders for as-needed contracts based on years of experience servicing municipalities across Southern California and beyond. We have performed extensive as-needed civil engineering services to complete tasks that include a wide range of public improvements. As a result, Psomas has developed an approach to deliver a variety of tasks with varying complexity. At the start, we dedicate our time to thoroughly scoping task orders to identify project goals and critical constraints prior to commencing the design process. We meet with the City, along with critical stakeholders, to develop an approach that aligns with the City's goals, budget and schedule.

Our approach allows us to work on multiple task orders of varying complexity simultaneously. This is achieved by identifying resources that are commensurate to a given task's technical components, complexity, budget and schedule. Throughout the design process, Psomas will work collaboratively as an extension of the City's team to seamlessly complete CIP tasks that will help improve the community.

We are committed to providing a high level of quality engineering design services the City expects to receive. Despite our success in delivering quality projects, we continue to refine our approach to enhance our services and deliverables. We implement lessons learned following task assignments, provide staff training, and conduct regularly scheduled meetings with management and field staff that focus on client satisfaction, enhanced service, and safety.

Managing Various Funding Sources

Psomas understands the City's total adopted Capital Improvement Program (CIP) for FY 2025-2026 is about $52 million.

Some funding sources are flexible and can be used for a variety of projects, while others are restricted to certain types of projects or may specify a community area and purpose. Psomas has experience in administering and designing projects with various types of funding, as identified in the City's CIP and scope of work. More importantly, we can develop designs with consideration for the available funding. Psomas develops design strategies through in-house value engineering, or in some cases, we use project phasing or built-in additive bid items, making the project more flexible with a better chance of withstanding budgetary challenges. In addition, our ability to manage and design projects efficiently results in more CIP funding for infrastructure which benefits the City and the community it serves.

Psomas has assembled its team based on the scope of work provided, our prior working history with the City, and our understanding of the City's CIP. Our multi-disciplined team has the experience to support the planning and design of miscellaneous street improvements, traffic signals, sewer main replacement, lining, pump stations and beyond to support the City's Capital Improvement Program for the duration of the contract.

Technical and Management Approach

With decades of hands-on experience, Psomas has refined a set of proven management and technical strategies tailored to meet the demands of multiple assignments ranging in scale, complexity and scope. Whether facing tight deadlines or juggling multiple tasks, our team thrives in fast-paced environments that require agility, collaboration, and a results-driven mindset.

Our work on numerous as-needed contracts has equipped us with robust project management tools and responsive technical support systems, enabling us to consistently deliver



on the City's desired outcomes. Drawing from this deep well of experience, we've identified key steps that are essential to successful task execution—beginning with the initial request and continuing through to final delivery.

Project Initiation

As-needed contracts demand a structured approach from initiation to completion, especially for projects with tight schedules.

The process begins with scoping discussions between Psomas' Project Manager, Sarah, and the City's project implementation team, who assign tasks and provide a scope of work along with relevant documentation (e.g., as-builts, environmental assessments). Sarah will then meet with the City's project manager to review the scope in detail and identify the necessary resources and disciplines.

Next, Sarah will share the scope with selected team members—chosen for their relevant experience and familiarity with local conditions and project requirements. A scoping meeting will be scheduled to align the team, supported by a roster with contact details to support clear communication from the outset. Psomas and the City will collaborate on the meeting agenda to address all scoping and scheduling considerations.

During the meeting, the team will discuss project goals, timelines, and deliverables in depth. Psomas will document the discussion in meeting minutes, for distribution to all stakeholders to have a shared understanding and alignment with the City's expectations.

1.0 INITIAL TASK REQUEST

1.1 PRELIMINARY DESIGN

Scoping & Document Review

Psomas will begin by reviewing all relevant reports, studies, and technical documents to identify specific requirements not addressed during the initial scoping meeting. A field survey will be conducted to verify existing conditions—such as drawings, streets, and utility locations—and additional surveys will be performed as needed based on project scope.

Preliminary Design Report (PDR)

For applicable task orders, Psomas will prepare a PDR or schematic design to define the project's purpose, challenges, and goals. This report will outline potential alternatives, provide a preliminary cost estimate, and recommend a preferred solution. An operational needs analysis will be coordinated with City staff to support early decision-making.

Site Visit & Constraints Assessment

A preliminary site visit will be scheduled to identify potential constraints, including surface features, utility conflicts, traffic flow, ADA compliance, and other factors that may influence the scope and required disciplines. Psomas will meet with the City's project manager on-site if needed to assess these elements directly.



Design Guidelines

Design standards will be determined by the project type. Street projects will follow the City's circulation element, standard plans, and drawings. Drainage design will comply with the City's Drainage Master Plan, the Imperial County Hydrology Manual, and applicable Caltrans guidelines. Grading will adhere to the City's ordinance, and public works construction will reference both City and Caltrans standards as applicable.

Field Survey

Survey Manager **Dan Rahe, PLS**, will oversee all field and topographic survey work. A licensed California Land Surveyor will prepare design-level surveys and base mapping in AutoCAD (CADD) format, in accordance with City standards. The horizontal datum will be NAD 83 and the vertical datum NAVD 88. Survey notes will be completed on City-provided forms, neatly in pencil, and will become City property upon project completion. Informal field investigations, such as marking removal areas, will be conducted for sidewalk, curb, gutter, and pavement replacement projects as needed.

Prepare Final Scope and Fee

Once the scope of work has been determined and all required disciplines established, Psomas will distribute this information to appropriate team members, including subconsultants. Psomas will prepare a scope and fee for review and approval by the City's project manager.

Project Set-Up and Work Plan

Psomas' Project Manager, **Sarah Curran, PE, QSD**, will prepare a work plan containing specific information about the project,

including stakeholders, affected council districts, project location, impacted agencies, design guidelines, contact information, and required documentation.

Budget and Staffing Reports

Sarah will also monitor and coordinate team activities to support delivery within the defined project scope and help prevent scope or schedule creep. Psomas' file-sharing portal, Project Web, will be set up to simplify the exchange of information and data. Psomas' project management software will be used to monitor budgets and schedules on a monthly basis, at a minimum. Monthly status reports will also be prepared, summarizing the month's activities and providing a look-ahead for upcoming tasks. Email will be used to communicate promptly and keep team members apprised. We have found that regularly scheduled phone calls and/or meetings help keep everyone informed of project progress. Calls and/or meetings can be scheduled at the City's request.

All work products/deliverables scheduled for submittal will receive an independent review by our QA/QC Managers, **Maira Salcedo, PE**, and **Jim Bliss, PE**. Our QA/QC review will contribute to delivering projects that align with the City's standards. We will manage the project schedule to allow time for QA/QC reviews.



1.2 DEVELOPMENT OF DETAIL PLANS, SPECIFICATIONS, AND ESTIMATE (PS&E)

Psomas understands that general standards require the use of engineering judgment, and each project requires details, specifications, and materials that are appropriate and acceptable for each project and application. Psomas will provide detailed plans, reports, specifications, and quantity calculations in compliance with the policies, procedures, and standards required by Caltrans, APWA, and the City. All PS&Es will be made available to the City at the stages specified in the milestone schedule and as requested.

All construction plans will adhere to the City of El Centro Standard Construction Drawing standards and will bear the seal of a California Registered Professional Engineer in responsible charge. Contract specifications will be prepared using the manuals/standards, where applicable, for engineering design in accordance with the Caltrans Highway Design Manual, Caltrans Standard Plans, Caltrans Standard Specifications, Imperial County Hydrology Manual, Imperial Irrigation Standards, the APWA Standard Specifications for Public Works Construction, APWA Standard Plans, AWWA, the City of El Centro Standard Plans, and San Diego Regional Standard Drawings.

The team will follow and adhere to all other requirements outlined in the City's Scope of Services, Exhibit A for a given task order.

1.3 ENVIRONMENTAL ASSESSMENT, DOCUMENTATION, AND PERMIT COMPLIANCE

Psomas will conduct an environmental assessment for each project and prepare all necessary documentation required to comply with the California Environmental Quality Act (CEQA).



If the funding agency or City requires environmental documentation work, Psomas will prepare and provide the following as applicable:

- Preliminary Environmental Study (PES)
- CEQA compliance documentation
- Technical studies
- NPDES permit
- Regional Board Section 401 certification
- Coordination as required to complete environmental NEPA and CEQA work
- Encroachment permits (Caltrans, County of Imperial, the City, Jurisdictional agencies), as required

1.4 UTILITY RESEARCH AND COORDINATION

Psomas will conduct the necessary research and obtain file copies of utility maps within the project limits for existing and/or proposed facilities.

Preliminary plans will be prepared and coordinated with applicable utility companies, including the Imperial Irrigation District. In addition, Psomas will monitor utility notices received by the City and make recommendations for mitigating conflicts, attend coordination meetings when required, and coordinate pothole information as required.

Sewer main replacement or rehabilitation will consider sewer design criteria and the average and peak flows identified

for build-out in the City's Sewer Master Plan. Pipeline improvements will consider both condition and capacity deficiencies. Prior to open trench replacement, Psomas will evaluate the potential for trenchless technology, which may result in considerable cost savings to the City and reduce community impacts. Rehabilitation assessment includes main cleaning and video inspection. Our experienced team is NASSCO (National Association of Sewer Service Companies) certified to evaluate and rehabilitate sewer facilities. Alternative analysis will include trenchless techniques such as cured-in-place lining, spiral wound PVC, and pipe bursting. We will provide an alternative cost analysis that includes rehabilitation versus replacement in place.

Water facilities repair and replacement will meet the design standards and demands identified in the City's Water System Master Plan. Design will consider fire flow, storage requirements, age and condition, pressure, and velocity criteria. Water system modeling will be performed using the City's H20Map model to evaluate system, flow, pressures, and velocities and provide alternative improvements.



Miscellaneous Investigations

Depending on the project, a wide range of investigations could be necessary, including geotechnical investigations, flow metering, pavement coring, pavement recommendations, pump testing, condition assessments, traffic counts, potholing, and pilot studies.

Schedule Long Lead Items/Permitting

Permitting is often one of the most time-consuming aspects of any project, and coordination must start as early as possible. Psomas will prepare all necessary documentation required to obtain permits from any and all agencies having jurisdiction over the project.

Site Visits

Psomas will perform site visits to confirm existing surface features, obtain photo documentation, and identify site constraints, conflicts, and other challenges. These site visits are more thorough than the initial site visits required during the development of the scope and fee.

1.5 CONSTRUCTION BID PHASE

Bidding procedures will be the responsibility of the City. Should any items requiring interpretation in the drawings or specifications be discovered during the bidding period, said items will be reviewed by Psomas and decided on by the City, or through a covering change order after the award of the construction contract.

1.6 CONSTRUCTION SUPPORT PHASE

The team will provide construction phase assistance as needed and will coordinate with the City.

Psomas recognizes the importance of keeping projects on schedule, and one key element is the prompt submittal/shop drawing review. Psomas will review and return submittals/shop drawings within one week of receipt.

Psomas will follow the requirements outlined in the City's Scope of Services, Exhibit A, Section 1.6 Construction Support Phase services.

1.7 DESCRIPTION OF REQUIRED SERVICES

Psomas will perform all services in accordance with the State of California and/or City of El Centro policies, procedures, and standards. We will work with the City of El Centro as directed and in collaboration with other stakeholders and agencies, as needed.

All deliverables will be reviewed in-house for accuracy and completeness and will be in compliance with contractual requirements. Psomas will adhere to the requirements and quality of services outlined in the Scope of Work, Section 1.7 of Exhibit A. Our Quality Assurance and Quality Control Plan is outlined on page 8.

2.0 CONSTRUCTION PLANS

2.1 60% PS&E (UNCHECKED DETAILS)

Unchecked plan details will consist of 60% design, and detailed plans will be ready for an independent design review.

Psomas will provide PDF copies of the design plans. Design calculations, preliminary quantities and estimates, pay list items, and design calculations will be provided electronically.

2.2 100% PS&E

Psomas will submit PDF copies of the following documents for review and approval.

- Electronic copies of special provisions
- Electronic copies of the cost estimate and check quantity calculations
- Electronic copies of design calculations
- Electronic copies of design check calculations
- Other reports as needed by the City of El Centro



The turnaround goal for review by the City is four weeks from the date of receipt of the complete PS&E package.

2.3 FINAL PS&E

Psomas will submit the following documents for review and approval:

- Electronic sets of signed final design plans
- Electronic copies of signed final specifications
- Electronic copies of the final cost estimate and final quantity calculations
- Electronic copies of final design calculations
- Electronic files in the original format and in PDF of all plans, specifications, and estimates

CADD Standards

Psomas will adhere to the current City of El Centro Public Works Department CADD standards.

Responsiveness

As Project Manager, Sarah Curran is committed to quality of service and responsiveness from her in-house team of professionals and subconsultants. She will assign the appropriate engineering and support personnel, along with pertinent subconsultants, for each issued task order.

Effective Scheduling

There are three main elements to every successful project:

- Quality
- Maintaining the budget
- Meeting the schedule

Psomas proposes to supplement all task authorizations with a preliminary schedule for planning and design, with a monthly update to the schedule for each task. We will track critical path items monthly and manage completion dates, as well as track the actual schedule versus the scheduled work. This process facilitates the City's project managers' reporting and helps identify problems that may result from delays. Our proactive schedule management will allow us to implement a recovery plan or afford the opportunity to modify the schedule, if necessary. **As a result, the City will complete its projects on schedule.**

Flexibility/Staffing

Psomas employs about 800 personnel company-wide, which provides an adequate pool of multi-disciplined resources to support the City's CIP. We understand the importance of meeting deadlines and are committed to providing quality service, seasoned professionals, and timely deliverables for each task. **Psomas will remain flexible and responsive in supporting the City with all task requests. While we are confident in our ability to manage most as-needed assignments using local resources, we will also have the option to draw from our broader network of offices to supplement staffing and specific skillsets needed. Sarah will collaborate closely with the City to communicate and confirm our staffing approach for each task order.**

Cost Control

Psomas will implement proactive cost control measures, including:

- **Early Coordination:** We will initiate discussions with City staff at the start of each task to clearly define objectives, schedules, and budget expectations.
- **Ongoing Budget Monitoring:** Project expenditures will be reviewed weekly against the task order budget using a Planned, Earned, and Spent analysis to maintain financial alignment.

- **Value Engineering:** Our team will apply internal value engineering practices during the design phase—reviewing concepts before construction drawings are developed—to support efficient, cost-effective design decisions.
- **Project at a Glance:** Psomas uses a customized accounting system (PAAG) that links to our Intranet for information sharing and up-to-date project information. The program provides daily financial updates and a detailed account of each project and task as it relates to budget, hours worked, individual staff hours, and cost.

Quality Assurance/Quality Control

Psomas' Quality Assurance program begins with a system-based plan designed to confirm that the scope of each task is addressed.

Each task is initiated with a kickoff meeting with the City and other stakeholders to define and communicate task-specific objectives. Project Manager, Sarah Curran, will develop a quality control plan based upon the City's input, scope, schedule, and budget. The quality control plan will identify specific deliverables and establish a set of relevant measures, checklists, and standards of quality for each of those deliverables. Once the team completes the work plan, our QA/QC Managers, Maira Salcedo, PE, and Jim Bliss, PE, review and approve it.

The Quality Control phase begins at the start of the project. Psomas will track the execution of the work plan, review design and work product, and communicate interactively with the City and our in-house team. We apply our QC standards to all deliverables, including reports, schedules, and plans. Psomas provides project information through our Intranet, allowing all team members to monitor the progress of the work. During this stage, QA/QC Managers, Maira Salcedo and Jim Bliss, perform detailed technical reviews of the design to confirm that the scope and standards outlined in the Quality Assurance Plan for each task order are addressed.

All work products scheduled for submittal will receive an independent review using the quality control plan and checklist for each task. This will make certain that deliverables are independently reviewed and of high quality. We will manage the project schedule to allow time for review at every phase in the design.

Psomas strictly adheres to its Quality Control Procedures, as depicted in the graphic to the right. This six-step process correlates with Psomas' belief that quality is achieved through teamwork, adherence to firm-wide procedures, and the setting of high standards.

Finally, during the Quality Evaluation stage, Psomas will solicit feedback from the City and our team members to assess our overall performance and identify opportunities for improvement. The combination of these elements will contribute to the success of our efforts as well as the final work product.

Project Web

Project Web is a custom project extranet that provides clients with an easy-to-use, quick, and secure method for sharing data. Project Web allows for the easy transfer of data from one person to another and provides a record of transactions, which has greatly improved efficiency on our projects. As a result, the City will know the status of each project task, eliminating the surprises that often occur with as-needed contracts.



Psomas' Quality Control procedures include:

1. **Review of Kick-off Meeting Minutes:** This provides the reviewer an overview of the City's goals and objectives, so during the review process, these objectives can be evaluated to assure the City is getting the product they want.
2. **Checking Design Calculations:** This ensures the calculations are orderly, includes background information, assumptions, and purpose, shows appropriate units of measurement, source of formulas and standards used and results are clearly and technically identified.
3. **Checking and Reviewing Drawings:** A uniform and efficient method of checking drawings will be implemented before they are released. Procedures will be utilized for on-going reviews (day-today) as well as formal reviews (Deliverables or Milestones).
4. **Checking of Specifications and/or Special Provisions:** These reviews will be performed to ensure conformance to City or other standards as appropriate, details are compatible with the drawings, and form and content meets City quality standards.
5. **Review Reports:** These reviews verify assumptions, level of analysis, justification of results or recommendations, and compliance with site specific criteria or constraints, including environmental documentation and regulatory compliance.
6. **Subconsultant Reviews:** Procedures are in place for subconsultant QA/QC, review of information provided by others, and constructability reviews, by a qualified independent reviewer.

5 Scope of Work

Civil Engineering - General Scope

Psomas has reviewed the City of El Centro's Scope of Work, Exhibit A, for general engineering services. The scope provides a comprehensive outline with a good framework for a typical project. Psomas has the resources and experience to perform the Scope of Services stated in Exhibit A. The following are additional service considerations for inclusion in Exhibit A and added value highlights that Psomas brings to the City.

Field Surveys



A full field topographic survey is not required for every project. A good example would be a street rehabilitation where field surveys are needed only with the replacement or new installation of curb, gutter, cross-gutters, etc., where grade control is necessary, while resurfacing may not need detailed survey information. For larger, more complex projects, Psomas is one of the largest survey firms with the most sophisticated survey capabilities in the Western United States. The firm utilizes technologies such as mobile and static laser scanning, drone applications, and GIS when a project calls for this level of technical capability.

Coordination with Other Agencies



Psomas has worked with a number of agencies in the Imperial Valley beyond the City of El Centro, including Imperial Irrigation District, Caltrans, Bureau of Land Management, US Navy, and GSA, to name a few. Our familiarity and experience with these agencies could be an added benefit should a project require coordination with these and other local agencies.

Engineering Services



Psomas delivers engineering design services for public and private projects. With respect to public agencies, these projects include a variety of transportation, active transportation, wastewater, water, drainage, site development, traffic, planning, and institutional projects. Psomas' range of project types encompasses many of the services the City may require on an as-needed basis.

Use of Innovative/Advanced Technologies



Psomas is a leader in the use of innovative design in the public right-of-way, including trenchless technologies and pipeline rehabilitation, stormwater quality systems, and new pavement rehabilitation technologies.

Environmental



Psomas is capable of providing full environmental services in-house, which is an added benefit for projects that may require CEQA or NEPA clearance.

Constructability Reviews/Bid and Construction Services



Psomas' construction management division is capable of providing constructability reviews, bid, and construction services. Our CM division often supports engineering design projects by performing constructability reviews, resulting in better designs.

CADD Capabilities



Our team demonstrates proficiency across multiple CADD platforms. Among our staff is a licensed civil engineer who previously served as an Autodesk-certified instructor for AutoCAD and Civil 3D. This combination of technical skills and instructional experience supports the accuracy of our deliverables and their alignment with industry quality practices.

Water and Sewer Planning



Psomas provides engineering planning services, including sewer and water system master planning. Additional planning work for public agencies has included on-call water and sewer system modeling for evaluation, sizing, and prioritization of system improvements; planning for future development; fire flow analysis; operational controls/settings; pressure zone evaluation; and sizing pump stations, sewer lift stations, and storage. Psomas has worked with several public agencies in preparing mandatory State water resources reporting data and documents, including Urban Water Management Plans, Annual Water Supply and Demand Assessments, and Urban Water Use Objective reporting.

6 Availability

Our team actively manages multiple on-call contracts and uses internal systems to mobilize quickly and maintain continuity of service.

We maintain a flexible staffing plan with named personnel available for immediate deployment. Project Manager **Sarah Curran, PE, QSD**, will oversee task assignments and coordinate resources to meet project schedules. Our technical leads are familiar with the City's standards and are available to begin work upon notice.

Psomas has successfully delivered under tight timelines for past on-call contracts with the City of El Centro, the City of Coronado, and the City of San Diego, among others. Our ability to respond quickly and maintain consistent communication has contributed to our continued selection for these contracts.

We track availability, workload, and backlog across disciplines to prevent delays and maintain schedule commitments. This proactive approach allows us to anticipate resource needs and adjust staffing accordingly. A pool of nearly 800 professionals supports our team company-wide, giving us the flexibility to scale resources as needed to meet the City's expectations.

TEAM AVAILABILITY

Our team can quickly mobilize during peak workloads, staff absences, or urgent project needs.

We maintain flexible availability and can respond promptly to shifting priorities, helping clients stay on track without delay.



50%

Sarah Curran, PE, QSD
Project Manager



15%

Maira Salcedo, PE, ENV SP
QA/QC Manager, Utilities



40%

Michael Bandich, PE
Road/Site



25%

Darlene Yellowhair, PE, PTOE, RSP2I, ENV SP
Traffic



35%

Benjamin Halbach, PE
Pipeline Rehab



30%

Daniel Rahe, PLS
Survey/Plan Check



35%

Sean Noonan
Environmental



25%

Kimberly Alexander, PE
Water/Wastewater Planning



10%

Mark Van Bibber, SE | aark engineering, inc.
Structural Engineering



50%

Gerry Sanner | EEI
Electrical/Mechanical



50%

Travis W. Meier, QISP | Ninyo & Moore
Phase I and II Hazmat



15%

Alejandro Angel, PhD, PE, PTOE, RSP2I
Principal-in-Charge



20%

Jim Bliss, PE
QA/QC Manager, Transportation



35%

Arief Naftali, PE, TE, EE, RSP1, ENV SP
Traffic



35%

Marc Weinberger, PE, BCEE
Water/Sewer & Pump Station Facilities



40%

Michael Dour
Active Transportation



30%

John Oliver, PE, LEED® AP
Drainage



40%

Dennis Kim, Esq., PMP
Right-of-Way



30%

Chase Lawson, PE, ENV SP
Stormwater Quality



50%

Erson Bolos, PE, LEED® AP BD+C | EEI
Electrical/Mechanical



30%

Steven K. Williams, PG, CEG | LandMark
Geotechnical Engineering



25%

Brad Lents, RLA, AICP, LEED® AP | Spurlock
Landscape Architecture

7 Firm History

History & Firm Qualifications

Dedicated to balancing the natural and built environment, Psomas provides sustainably engineered solutions to public and private sector clients. As a full-service consulting firm, we help our clients create value by planning, designing, and delivering complex projects.



Markets served include transportation, water, land development, and energy, with the following services offered:

- Civil engineering
- Water and wastewater engineering
- Survey and geospatial services, including the use of drones, 3D laser scanning, and subsurface utility locating
- Site development engineering
- Transportation and traffic engineering
- Structural engineering
- Environmental planning and resource management
- Land planning and urban design
- Land use entitlements
- Construction management
- GIS consulting
- Right-of-Way

Psomas is a recognized leader and long-term proponent of environmental, social, and economic sustainability and brings a truly holistic approach to its practice and projects. Psomas, a founding member of the Institute for Sustainable Infrastructure (ISI), is committed to promoting a progressive standard of sustainability in both design and implementation. We currently have over 100 staff who are ENV SPs (Envision™ Sustainability Professionals through ISI) and/or LEED® APs.

The cornerstone of our business approach is to first focus on our clients' long-term needs and then direct our strategic growth accordingly. Our core strength is our multidisciplinary teams of professionals—highly capable staff who deliver award-winning projects through innovation, creativity, and advanced technical proficiency.

Founded in 1946, Psomas provides services from offices throughout California, Arizona, Utah, and Washington.

Subconsultants

aark engineering inc.

Structural Engineering

aark engineering inc., founded in 2007 by Principal Engineers Aaron Steele, SE, and Mark Van Bibber, SE, is a San Diego County-based structural engineering firm known for technically sound, innovative design and responsive, on-time service. With hands-on involvement from their principals in every project phase, they provide consistent quality from project concept through construction. Their firm has extensive experience delivering structural designs for infrastructure, parks, and recreation facilities for jurisdictions such as the City of El Centro and the City and County of San Diego, to name a few. Notable projects include the award-winning Bonita Cove West Improvements project, the El Centro Aquatics Center project, and the Imperial Beach Sports Park Restroom project. With a focused team of 12 employees, aark offers high-value, fiscally disciplined engineering solutions tailored to the needs of public agencies and communities across the Southern California region.

Enterprise Engineering, Inc.

Electrical/Mechanical

With over 50 years of industry experience, EEI is a full-service, multidisciplinary engineering firm that provides design, inspection, and planning services for government, commercial, and industrial facilities. The firm's team includes 27 licensed professional engineers, supported by engineers-in-training (EITs), CAD technicians, and administrative staff. This group consistently delivers technically sound, client-focused engineering services across sectors, with an emphasis on technical excellence, attention to detail, and client satisfaction.

EEI's electrical engineering team brings more than 50 years of combined experience in similar electrical services, including work with multiple municipalities such as the City of San Diego, City of Coronado, Helix Water District, and other agencies throughout Southern California. The firm has supported a wide range of projects, including parks and recreation facilities, water and wastewater infrastructure, and public safety buildings such as fire and police stations. EEI has a strong understanding of the unique requirements of municipalities and cities, including local regulations, permitting processes, and environmental standards, which supports its role as a reliable and experienced partner.

The firm's capabilities include power distribution systems, electrical service upgrades, water and wastewater systems, classified (hazardous) area design, motor control center (MCC) upgrades, electrical code compliance, arc flash analysis, short circuit and coordination studies, project phasing, emergency power systems, and energy consulting. EEI also demonstrates

experience in Title 24 compliance, Leadership in Energy and Environmental Design (LEED®) principles, and custom automation solutions that align with municipal sustainability goals. Additional services include EV charging infrastructure design and construction support, which are increasingly important in modern infrastructure planning.

LandMark Consultants, Inc.

Geotechnical Engineering

LandMark Consultants, Inc. offers a broad range of consulting services on diverse projects in both the public and private sectors. The firm specializes in geotechnical engineering, engineering geology, soils and construction materials testing, and inspection services. Typical clients include water agencies, municipalities, industrial plants, power generation companies, commercial and subdivision developers, architects, engineers, the military, and construction companies.

The firm provides professional and technical consulting services to project planners, designers, owners, and builders from the initial planning phase through the design and construction of projects. These services include fatal flaw/geologic reconnaissance studies, geotechnical investigations, and construction consulting, testing, and inspection services. The firm's involvement throughout all phases of design and construction supports continuity and helps build a strong understanding of client goals and project requirements. The technical experience and commitment of the staff result in innovative, cost-effective geotechnical consulting services for small and large projects with challenging site conditions and issues. The staff works with clients and other involved parties to develop strong working relationships based on integrity, mutual respect, and the shared commitment to designing and constructing noteworthy projects.

LandMark's El Centro laboratory is Caltrans certified and accredited by AASHTO. The lab participates in CCRL and AMRL inspection programs administered by the National Institute of Standards and Technology, with biannual reviews confirming compliance with current ASTM standards. LandMark also engages in Caltrans proficiency sampling and maintains certifications with CCRL, AMRL, AASHTO, and Caltrans.

Ninyo & Moore

Phase I and II Hazmat

Ninyo & Moore established itself in San Diego in 1986 to provide geotechnical, engineering, geologic, hydrogeologic, soil testing, materials testing and special inspection, and environmental consulting services to public and private sector clients. For the past 39 years, they have provided these services for the design and construction of municipal and commercial developments, industrial developments, highways and roadways, airports, bridges, dams, educational facilities, harbor and offshore structures, hospitals, landfills, light rail transit lines, pipelines, power stations, railroads, residential developments, reservoirs and tanks, transmission lines, tunnels, water and wastewater treatment plants, and other public and private development. Ninyo & Moore employs a staff of 700 across 17 locations throughout the western United States, including San Diego.

Ninyo & Moore has performed geotechnical engineering, environmental, and materials testing and inspection services for over 250 projects in Imperial County. Ninyo & Moore is experienced in providing Phase I and Phase II Environmental Site Assessments in various locations throughout Imperial County. Specific projects have included Heber 1 & 2 Facilities Phase I ESA Updates in Heber; Wilkinson and W Lindsey Road, Phase I ESA in Calipatria; Bureau of Land Management, Harvey's Fishing Hole and Sportman's Paradise, Phase I ESA in Imperial County; U.S. Agriculture, Rancho Dos Hombres Phase I ESA in Brawley; Imperial County Office of Education, 344 W. McCabe Road, Phase I ESA in El Centro; Salton Sea Project, Phase in Imperial County; Judicial Council of California, Wake Avenue between Merrill Center and Thomas Drive, Phase II ESA in El Centro; CalReycle, Phase II ESA Ross Road and SPRR Disposal Site in El Centro; Viking Solar and Battery Storage Project EIR, Phase I ESA in Holtville; City of Calexico, Eastside Reservoir and Water Line, Phase I ESA in Calexico; El Centro Police Station Project, Phase II ESA in El Centro; and Calexico Border Patrol Station, Phase II ESA in Calexico.

Spurlock Landscape Architects

Landscape Architecture

Spurlock is a landscape architecture, planning, and urban design firm with prior experience partnering with the City of El Centro on projects such as the El Centro Library and the El Centro General Plan Update. The firm's work centers on creating vibrant public spaces—parks, cultural facilities, and civic landscapes—that support community connection and environmental stewardship. Spurlock contributes to both large and small-scale spatial planning, design, and implementation, supporting projects that balance budget, vision, and long-term value. Through a collaborative process and stakeholder engagement, the team is committed to enhancing the city's public realm and addressing its evolving community needs.

Established in 1988, Spurlock includes 20 team members who share a commitment to connecting people to place. Over time, the firm has cultivated a dynamic approach to a broad range of projects, earning national, state, and local recognition from the American Society of Landscape Architects, the American Institute of Architects, and the American Planning Association. Spurlock is a California-certified Small Business Enterprise (SBE), Small Local Business Enterprise (SLBE), and a certified Woman-Owned Small Business (WOSB). The office is located in Old Town, San Diego.

Employee Count By Title and Discipline

Across our offices throughout California, Arizona, Utah, and Washington, we have numerous staff titles and disciplines. A broader view of our firm's organization is provided in the table below.

Group	Number of Employees
Construction Management	143
Engineering	165
Environmental	50
Overhead	108
Pacific Northwest	113
Survey & Geospatial Services	207
Total	**786**

Subconsultants

aark engineering inc. — **12 employees**
Structural Engineering

aark engineering inc. employs a small, specialized team that includes principal structural engineers, project engineers, assistant engineers, senior project managers, and administrative staff.

Enterprise Engineering, Inc. — **27 employees**
Electrical/Mechanical

The firm's team includes 27 licensed professional engineers, supported by engineers-in-training (EITs), CAD technicians, and administrative staff.

LandMark Consultants, Inc. — **21 employees**
Geotechnical Engineering

The firm has a combined total staff of 21 employees and is a combination of professional, technical, and administrative personnel.

Ninyo & Moore — **700 employees**
Phase I and II Hazmat

Ninyo & Moore employs professionals across a range of disciplines, including registered engineers, professional geologists, certified hydrogeologists, hazardous materials managers, environmental managers, and industrial hygienists. The firm also includes construction inspectors, materials testing technicians, environmental scientists, field technicians, project managers, and technical specialists.

Spurlock Landscape Architects — **20 employees**
Landscape Architecture

Spurlock's team comprises principals, project managers, project landscape designers, and an office manager.

Recent or Pending Litigation

As is common with leaders in our industry, Psomas has been involved in litigation over our 79-year history, none of which has affected, or will affect, our ability to provide quality services for a project. Regardless, Psomas can confirm that it is not currently a party to any litigation or arbitration.

Subconsultants

aark engineering inc.
Structural Engineering

No recent or pending litigation that will affect the performance or completion of this contract.

Enterprise Engineering, Inc.
Electrical/Mechanical

No recent or pending litigation that will affect the performance or completion of this contract.

LandMark Consultants, Inc.
Geotechnical Engineering

No recent or pending litigation that will affect the performance or completion of this contract.

Ninyo & Moore
Phase I and II Hazmat

No recent or pending litigation that will affect the performance or completion of this contract.

Spurlock Landscape Architects
Landscape Architecture

No recent or pending litigation that will affect the performance or completion of this contract.

100% EMPLOYEE OWNED



8 References



City of Coronado, As-Needed Engineering and Construction Management

City of Coronado / Coronado, CA

The City of Coronado selected Psomas to provide professional engineering services as an on-call consultant in 2013, which included professional engineering, design, survey, and construction management services. Since 2013, Psomas has continued to provide professional consulting services to the City and was recently awarded their on-call contract for engineering services in November of 2022, which extends through 2025.

The majority of projects completed under the City's as-needed contract have come directly from their Capital Improvements Program and include street improvements, Caltrans oversight projects, pump stations/force mains, wastewater, stormwater, and erosion control projects.

Projects have included:

- Acacia Way Storm Drain
- Cays Park Maintenance and Life Cycle Cost Analysis
- Coronado Downtown Beautification
- Country Club Infiltration Project
- Country Club/Parker Basin Area Storm Drain Infiltration Project
- First Street Storm Drain Pump Station Project
- FY 2014/15 Streets, Curbs, and Gutters
- FY 2016-17 Streets, Curbs, and Gutters project, Phase 2
- GIS Data Inventory
- Gravity Main/Manhole Support Services
- Manhole Cover Repairs
- Misc Surveying/Map Review
- Parker Pump Station
- Pavement Management Plan
- Public Services Yard Rinse Pad
- Pump Station Support Services
- Seventh/Pomona and Adella Roundabout Intersection Improvements
- SR-75 Median Improvements
- Star Park League of Wives Sculpture Pad & Lighting Design
- Temporary Traffic Control Exhibits
- Transbay Pump Station Evaluation and Repairs, Phase 2



REFERENCE

James Newton
Assistant Director
City of Coronado, Public Services and Engineering
619.522.7313
jnewton@coronado.ca.us

PROJECT DATES

01/2013–ongoing



On-Call Architecture & Engineering Services

San Diego Metropolitan Transit System / San Diego, CA

Psomas is providing architectural and engineering (A&E) services on an "on-call, as needed" basis for the development and design of various projects for the Metropolitan Transit System (MTS) for a five-year contract. The majority of our work focuses on the engineering design of San Diego MTS light rail and bus services for transportation projects such as light rail, heavy rail, bus rapid transit, transit facility modifications, bridge and retaining wall repairs, bus stops and sidewalk improvements, and related facilities. The services Psomas provides include preliminary engineering, alternatives analysis, project renderings, feasibility studies, project management, value engineering, risk analysis, cost estimating, specifications writing, schedule development, constructability reviews, plan checking, permit support services, and design. Completed and ongoing tasks include:

- Phase 1 Site Assessment for Auto Auction Site
- C Street and Broadway Wye – Sicas S7 and wheel counter replacement
- Right of Entry Review Services
- Copley Park Division Modular Building Replacement and Lighting – Study and Design Build Criteria
- Beyer Blvd Pathway Beautification
- Variable Message Sign replacement for Orange/Blue/Green Trolley Lines
- Variable Message Sign replacement for Bus Rapid Transit
- As Needed Real Estate and Right of Way Services

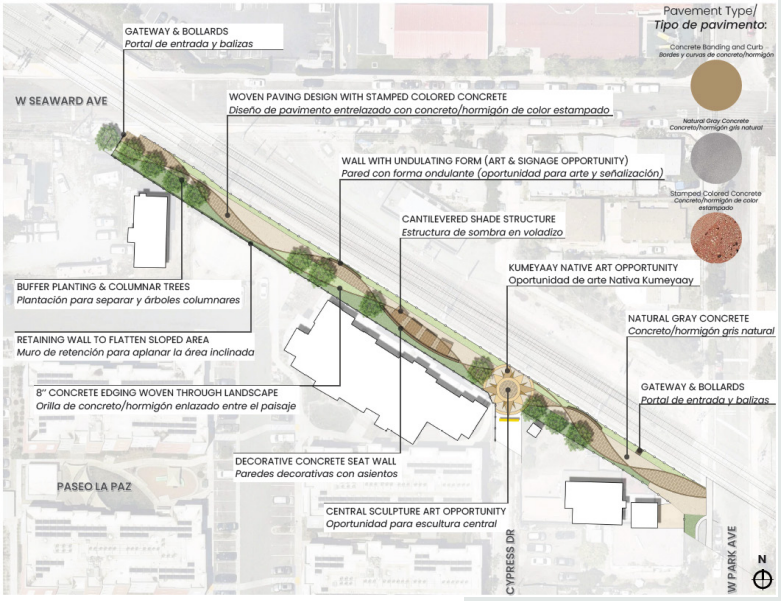
REFERENCE

Heather Furey
Director of Capital Projects
San Diego Metropolitan Transit System
619.557.4588
heather.furey@sdmts.com

PROJECT DATES

12/2022–ongoing





Beyer Boulevard Pathway project concepts from a community workshop



City of San Diego, As-Needed Civil Engineering Services (H176830)

City of San Diego / San Diego, CA

Psomas provided as-needed civil engineering services for this five-year contract. Services include the preparation of construction documents for water, sewer, and storm drain rehabilitation/replacement projects; water/sewer facility improvement projects; street, sidewalk, and bike lane improvement projects; various structural improvement projects; preparation of environmental documents; assistance in the acquisition of various permits; performing hydrology/hydraulic analysis, and providing bid and construction support services.

An example of a completed and complex as-needed design project is Water Group Job 952. This project entailed the preparation of plans and specifications for the replacement of potable water pipelines at various locations throughout San Diego. The City retained Psomas to provide construction documents comprising the following project components:

- Three MTS tunneling crossings
- Installation of steel water pipelines in two existing Caltrans bridge sections
- New pressure-reducing station at 17th and L Streets
- Permitting for MTS and Caltrans
- Bid and construction period services
- New pipeline replacements ranging in size from 8 to 16 inches in diameter

The following is a list of project tasks:

- AC Water and Sewer Group 1048
- Carmel Del Mar Park
- College Area Sewer and Water Main Replacement
- Design Services for Water Group Job 952
- Lower Otay Outlet Tower Repairs (Water)
- Mira Mesa Drainage Study, Stormwater/ Drainage
- Navajo Storm Drain Additional Services, Design Revisions at Energy Dispatcher
- Sewer and AC Water Group 794 (S), Sewer Manholes
- Sewer Group 836
- Sewer Pump Station 23T
- Sewer Pump Station 23T Emergency Repairs
- Sewer Pump Stations 13, 14, 16, 25A, and 85 Dual Forcemains
- Soledad Pump Station Upgrades
- Stormwater Pump Station "D"
- Tyrian Street/Soledad Avenue and AC Water Main



REFERENCE

Jericho Gallardo
Project Manager
City of San Diego
619.533.7523
JGallardo@sandiego.gov

PROJECT DATES

09/2017–ongoing

Subconsultant References

aark engineering inc.
Structural Engineering

New River Improvement Project – Calexico Reach
City of Calexico
Liliana Falomir, Public Works Department Manager
760.768.2160 | falomirl@calexico.ca.gov

Parker Pump Station Replacement
City of Coronado
Katherine Odiorne, Senior Engineer
619.522.2424 | kodiorne@coronado.ca.us

North City Pure Water Pump Station and Pipeline Access Shaft
City of San Diego
Grant Bowers, Resident Engineer
619.384.1029 | GBowers@sandiego.gov

Enterprise Engineering, Inc.
Electrical/Mechanical

Helix 2 Pump Station Motor Control Center Replacement
Helix Water District
David Reagan, Lead Electrician and I&C
619.944.1035 | david.reagan@helixwater.org

Parker Pump Station Replacement
City of Coronado
Katherine Odiorne, Senior Engineer
619.522.2424 | kodiorne@coronado.ca.us

T2E Electrical Modernization
San Diego International Airport (SDIA)
Chris Rose, Lead Electrician (SDIA)
619.520.5382 | crose@san.org

LandMark Consultants, Inc.
Geotechnical Engineering

12th Street Improvements Project (El Centro)
Dynamic Consulting Engineers, Inc.
Carlos Beltran, Principal Engineer
760.545.0162 | cbeltran@dceinc.pro

Imperial WWTP Headworks
Albert A. Webb Associates
Brian Knoll, COO/Principal Engineer
951.248.4279 | brian.knoll@webbassociates.com

Cordova Park Upgrades
Kimley-Horn and Associates
Kaylan Burke, Principal Engineer
619.744.0174 | kaylan.burke@kimley-horn.com

Ninyo & Moore
Phase I and II Hazmat

Heber 1 & 2 Facilities
Ormat Technologies
Alissa Sanchez, Senior Manager, Environmental Permitting
775.356.9029 | asanchez@ormat.com

Controlled Thermal Resources Mitigation Plan
GREAT ECOLOGY
Ashley Davenport, Director of Design
858.750.3201 | adavenport@greatecology.com

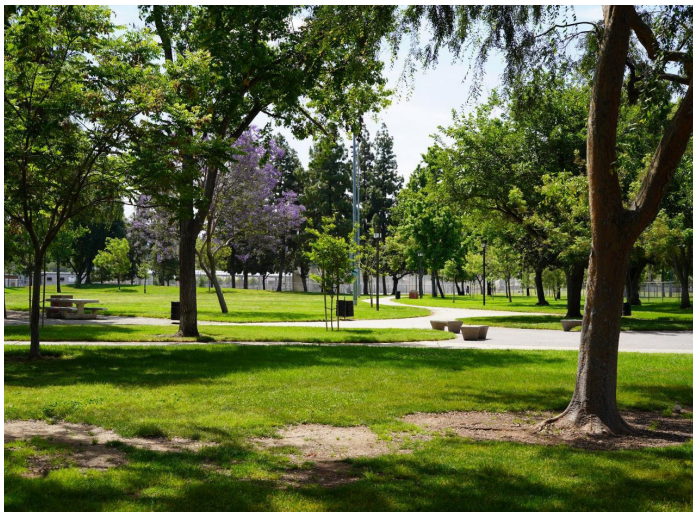
Calexico West Land Port of Entry
U.S. General Services Administration
Wesley Lau, Contracting Officer
415.522.3163 | wesley.lau@gsa.gov

Spurlock Landscape Architects
Landscape Architecture

Parks On-Call
City of El Cajon
Senan Kachi, Associate Engineer
619.441.6209 | SKachi@elcajon.gov

Development and Housing On-Call
City of Chula Vista
Patricia Ferman, Principal Landscape Architect
619.409.3890 | PFerman@chulavistaca.gov

Several Community Plan Updates and the City of San Diego Parks Master Plan
City of San Diego
Scott Sandel, Landscape Architect & Park Planner
619.235.5204 | ssandel@sandiego.gov



9 Qualifications



Sarah Curran, PE, QSD
Project Manager

Psomas is pleased to propose **Sarah Curran, PE, QSD**, as the Project Manager for this on-call contract. Sarah brings 23 years of civil engineering experience, with a background that spans a wide range of both public and private improvement projects. Her ability to guide projects from concept through implementation results in practical, sustainable solutions that align with agency goals and regulatory requirements. Sarah is committed to providing consistent leadership and technical oversight throughout the duration of this contract, and her recent experience directly supports the scope of services outlined in the RFP.

In addition to Sarah, Psomas will assign a team of support personnel tailored to the needs of each task order. This includes engineers specializing in transportation, utilities and stormwater; water/wastewater planners and environmental specialists. The number and type of personnel will vary depending on the scope and complexity of each assignment. All staff assigned to this contract will meet the experience requirements outlined in the RFP and will be committed to maintaining continuity and responsiveness throughout the contract term. Any substitutions or additions will be made only with prior written approval from the City.

CITY OF EL CENTRO PUBLICWORKS
Serving our community by sustaining and improving life

PRINCIPAL-IN-CHARGE
Alejandro Angel, PhD, PE, PTOE, RSP2I
PSOMAS

PROJECT MANAGER
Sarah Curran, PE, QSD
PSOMAS

QA/QC MANAGERS
UTILITIES
Maira Salcedo, PE, ENV SP
TRANSPORTATION
Jim Bliss, PE
PSOMAS

ROAD/SITE
Michael Bandich, PE
PSOMAS

TRAFFIC
Arief Naftali, PE, TE, EE, RSP1, ENV SP
Darlene Yellowhair, PE, PTOE, RSP2I, ENV SP
PSOMAS

WATER/SEWER FACILITIES
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PIPELINE REHAB
Benjamin Halbach, PE
PSOMAS

ACTIVE TRANSPORTATION
Michael Dour
PSOMAS

SURVEY/PLAN CHECK
Daniel Rahe, PLS
PSOMAS

PUMP STATION FACILITIES
Marc Weinberger, PE, BCEE
PSOMAS

DRAINAGE
John Oliver, PE, LEED® AP
PSOMAS

ENVIRONMENTAL
Sean Noonan
PSOMAS

RIGHT-OF-WAY
Dennis Kim, Esq., PMP
PSOMAS

WATER/WASTEWATER PLANNING
Kimberly Alexander, PE
PSOMAS

STORMWATER QUALITY
Chase Lawson, PE, ENV SP
PSOMAS

GEOTECHNICAL ENGINEERING
Steven Williams, PG, CEG
LANDMARK CONSULTANTS, INC.

STRUCTURAL ENGINEERING
Mark Van Bibber, SE
AARK ENGINEERING, INC.

LANDSCAPE ARCHITECTURE
Brad Lents, RLA, AICP, LEED® AP
SPURLOCK

ELECTRICAL/MECHANICAL
Erson Bolos, PE, LEED® AP
Gerry Sanner
ENGINEERING ENTERPRISES, INC.

PHASE I AND II HAZMAT
Travis W. Meier, QISP
NINYO & MOORE

SARAH CURRAN, PE, QSD

Project Manager – Psomas



Sarah Curran brings 23 years of civil engineering experience, including extensive leadership of multi-disciplinary teams on as-needed contracts. As Project Manager, she excels at listening attentively, communicating effectively, and mobilizing the right resources for each task order. Her proactive and responsive approach supports timely execution and positive outcomes. Sarah's proven ability to navigate complex, fast-paced contract environments makes her a valuable asset to any project team.

REGISTRATION

2006/CA/Professional Engineer/Civil/69620

2023/AZ/Professional Engineer/Civil/78564

EDUCATION

2002/BS/Civil Engineering/University of Vermont, Cum Laude

CERTIFICATIONS

Qualified SWPPP Developer/California Stormwater Quality Association/69620

PROFESSIONAL AFFILIATIONS

California's Coalition for Adequate School Housing (CASH)

ACE Mentor Program

Design-Build Institute of America

EXPERIENCE

With Psomas for 10 years; with other firms for 13 years

Experience

San Diego Metropolitan Transit System, On Call Architecture and Engineering Services – San Diego, CA: Contract Manager for on-call services with San Diego MTS. Representative work orders include variable message signage replacement for trolley stations and bus rapid transit stops; Right of Entry permit reviews; Beyer Boulevard pathway beautification; Copley Park Division modular building replacement, programming, and design-build criteria.

City of Coronado, On Call Civil Engineering Services – Coronado, CA: Contract Manager for on-call civil engineering services. Representative task orders include downtown beautification improvements; 6th Street alley drainage improvements; pavement management plan development; Acacia Way storm drain improvements; manhole cover repairs; temporary traffic control exhibits; pump station support services; gravity main and manhole support services; Star Park League of Wives sculpture pad.

San Diego Unified Port District, As Needed Civil Engineering Services – San Diego, CA: Contract manager for as-needed civil engineering services. Representative task orders include Chula Vista Bayfront Master Plan temporary pad grading; Cesar Chavez Park turf replacement.

Imperial County Transportation Commission, Calexico Intermodal Transit Center – Calexico, CA: Team Leader for civil engineering design and construction support of an 8-bay bus and ticketing facility in Downtown Calexico. Design included site redevelopment, bus mobility analysis, inter-modal transportation needs, and management of a diverse technical consulting team. Design also included right-of-way improvements, including traffic calming measures and pedestrian bulb-outs at adjacent intersections.

City of San Diego, 5th Avenue Pedestrian Promenade Feasibility Study – San Diego, CA: Principal-in-Charge for a Technical Feasibility Study analyzing several alternatives designed to prioritize the pedestrian experience along an 8-block span of 5th Avenue in the Gaslamp Quarter. The study identified infrastructure upgrades needed to support stormwater, accessibility, traffic, and landscape improvements. Psomas provided existing condition base mapping, engineering, cost estimating, and project management services for the overall study, and led a team of subconsultants to support landscape design, placemaking, and project outreach. The project included several stakeholder interest group meetings, facilitated by Psomas, which allowed for the feedback from various agencies and community groups to be incorporated into the final report.

City of Laguna Beach, Forest Avenue Promenade – Laguna Beach, CA: Project Manager for the Forest Avenue Promenade project in Laguna Beach, including the transformation of a downtown street into a vibrant pedestrian plaza. Overseeing the final design and preparation of plans, specifications, and estimates for the permanent closure of Forest Avenue to vehicles, creating a single-level promenade with enhanced lighting, landscaping, outdoor dining, and public art. Includes coordination with stakeholders, including Caltrans, to strive for a seamless implementation that supports local businesses and fosters a welcoming community space, while meeting all regulatory and environmental requirements

ALEJANDRO ANGEL, PHD, PE, PTOE, RSP2I

Principal-in-Charge



Alejandro Angel is the Director of Engineering for Psomas, and he holds a PhD degree in traffic engineering from the University of Arizona and is a Registered Professional Engineer in Arizona, California, New Mexico and Utah. Alejandro is a certified Professional Traffic Operations Engineer (PTOE), and one of few consultants nationwide to be certified as a Level 2 Road Safety Professional (RSP2i).

Alejandro's experience includes numerous traffic engineering studies for public and private projects, safety evaluations, the development of engineering standards and policies, and the planning and design of roadway and active transportation projects, roundabouts, traffic signal systems, and Intelligent Transportation Systems. Alejandro and his team have completed projects in Arizona, Utah, California, Washington, the Middle East, and South America; and his research has been presented by ASCE, ITE, TRB, and IEEE.

Experience

Groundwork San Diego, Chollas Creek Corridor Feasibility Study and Bike Trail – San Diego, CA

City of Coronado, Coronado Cays Entrance Improvements and Bayshore Bikeway Traffic Study – Coronado, CA

City of Coronado, Seventh, Pomona and Adella Roundabout Intersection Improvements – Coronado, CA

City of Los Angeles, Glendale Boulevard/Hyperion Avenue Complex of Bridges Traffic Study – Los Angeles, CA

City of Los Angeles, Eastern Avenue Multi-Modal Transportation Improvement Project – Los Angeles, CA

REGISTRATION

2008/CA/Professional Engineer/Civil/72792

2003/AZ/Professional Engineer/Civil/40203

2025/NM/Professional Engineer/30548

2016/UT/Professional Engineer/9731937

EDUCATION

2008/PhD/Civil Engineering (Transportation)/University of Arizona

2002/MS/Civil Engineering (Transportation)/University of Arizona

1999/BS/Civil Engineering/Universidad EAFIT, Colombia

CERTIFICATIONS

Road Safety Professional Level 2/Transportation Professional Certification Board Inc./35

Professional Traffic Operations Engineer/Transportation Professional Certification Board Inc./1324

MARC WEINBERGER, PE, BCEE

Water/Sewer & Pump Station Facilities



Marc Weinberger is a skilled project manager with the ability to lead teams, mentor staff, and manage multiple projects, both large and small. He has 42 years of engineering experience in the planning and design of water and wastewater facilities, working for public agency clients. He has extensive knowledge in the design of pipelines, pumping facilities, lift stations, pressure-reducing stations, and rehabilitation projects for water mains and recycled water mains.

Experience

City of Coronado, Parker Pump Station Rehabilitation Project – Coronado, CA

City of Coronado, Kettner Boulevard Sewer Point Repair – Coronado, CA

City of Del Mar, Water, Sewer, and Paving Improvements – Del Mar, CA

US General Services Administration, Otay Mesa Land Port of Entry Expansion and Modernization – Otay Mesa, CA

Helix Water District, R.M. Levy Water Treatment Plant Sewer Improvements – Lakeside, CA

Olivehurst (OPUD) Feasibility Study and Preliminary Environmental Memo – Yuba County, CA

Brookside Mobile Home Park - DWSRF Project – Redlands, CA

City of San Diego, Mid City Pipeline, Phase II – San Diego, CA

City of San Diego, Tecolote Canyon Trunk Sewer Improvements – San Diego, CA

REGISTRATION

1976/CA/Professional Engineer/Civil/26441

EDUCATION

1974/BS/Civil Engineering/California State Polytechnic University, Pomona

CERTIFICATIONS

Board Certified Environmental Engineer/American Academy of Environmental Engineers and Scientists/09-20022

MAIRA SALCEDO, PE, ENV SP

QA/QC Manager, Utilities



Maira Salcedo has 21 years of experience designing water and sewer systems and preparing reports for public works projects and private clients throughout southern California. She has extensive recent experience with water facilities, such as pump stations, potable water wells and pipelines, sewer pipelines, and replacement and rehabilitation projects. Her computer experience includes ArcView, MS Project, and various spreadsheet and word-processing software packages.

Experience

Install Dedicated Fire Suppression Water Distribution System and Replace Potable Water Lines for Veterans Affairs Greater Los Angeles North Campus – Los Angeles, CA

City of Palmdale, 45th Street East Extension Trunk Sewer Project (Agreement #A-6797) – Palmdale, CA

Cerritos Avenue from Euclid Street to Alley East of 9th Street Sewer Siphon Removal – Anaheim, CA

Rehabilitation/Replacement of Pressure Regulating Stations 30, 31, 32 & 43 and Construction of New Pressure Regulating Station 73 – Anaheim, CA

Rosecrans Booster Pump Station Replacement – Buena Park, CA

Peak Park Well Construction and Equipping – Buena Park, CA

Well 28D Equipping Design – Bellflower, CA

Flower Well Feasibility Study – Santa Ana, CA

Bristol Street Water Main Replacement – Santa Ana, CA

REGISTRATION

2011/CA/Professional Engineer/ Civil/77370

2022/WA/Professional Engineer/ Civil/22015476

EDUCATION

2006/BS/Civil Engineering/ California State University, Fullerton

CERTIFICATIONS

Envision™ Sustainability Professional/Institute for Sustainable Infrastructure/

Pipeline Assessment Certification Program/ NASSCO/U-508-7002

Manhole Assessment Certification Program/ NASSCO/U-508-7002

KIMBERLY ALEXANDER, PE

Water/Wastewater Planning



Kimberly Alexander's 31 years of experience include water resources management, facilities master plans, groundwater modeling, contaminant transport modeling, and hydrologic and hydraulic modeling and analysis. She has developed methods for comparing various management alternatives by combining mathematical modeling and optimization programming, and considering financial incentive programs and political constraints.

Experience

City of Lomita, 2024 Sanitary Sewer System Master Plan – Lomita, CA

City of Palos Verdes Estates, 2025 Citywide Sewer Master Plan Update & Sewer System Condition Assessment – Palos Verdes Estates, CA

City of El Monte, On-Call Water System Modeling – El Monte, CA

City of Martinez, On-Call Water System Modeling – Martinez, CA

City of Beverly Hills, SWRCB and Urban Water Use Objective (UWUO) Reporting – Beverly Hills, CA

City of Martinez, SWRCB and Urban Water Use Objective (UWUO) Reporting – Martinez, CA

City of El Centro, 2020 Urban Water Management Plan – El Centro, CA

City of Anaheim, 2020 Urban Water Management Plan – Anaheim, CA

City of Beverly Hills, 2020 Urban Water Management Plan – Beverly Hills, CA

City of Martinez, 2020 Urban Water Management Plan – Martinez, CA

REGISTRATION

1997/CA/Professional Engineer/ Civil/57087

EDUCATION

1994/MS/Water Resources & Environmental Engineering/ University of California, Irvine

1992/BS/Civil Engineering/ University of California, Irvine

BENJAMIN HALBACH, PE

Pipeline Rehab



Benjamin Halbach has 10 years of experience in design of water and sewer systems and facilities, including design of new pipelines, pipeline and manhole assessment and rehabilitation, transmission valve replacements, pump stations, and groundwater production wells. His experience includes involvement in all phases of client deliverable creation, including comprehensive plan development in AutoCAD Civil 3D, specification writing, and detailed cost estimates. Ben's design experience also includes site layout plans and rough grading. Benjamin has worked on projects for a variety of clients throughout southern California, including Liberty Utilities, UC Irvine, Irvine Ranch Water District, Elsinore Valley Municipal Water District, Long Beach Water Department, and the cities of Anaheim, Hermosa Beach, and Newport Beach.

Experience

YLWD, Fire Flow Improvements at PYLUSD Schools – Placentia, CA and Yorba Linda, CA

California Department of General Services (DGS), Blythe Border Protection Station – Blythe, CA

City of Palmdale, 45th Street East Extension Trunk Sewer Project – Palmdale, CA

Port of Long Beach, Pier D Street Realignment Project – Long Beach, CA

City of Buena Park, Peak Park Well Construction and Equipping – Buena Park, CA

EVMWD, Peck and Chestnut Street Sanitary Sewer Replacement – Lake Elsinore, CA

City of El Monte, Water Main Replacement Project – El Monte, CA

City of Hermosa Beach, CIP-421 Annual Sewer Improvements – Hermosa Beach, CA

REGISTRATION

2017/CA/Professional Engineer/ Civil/87555

EDUCATION

2014/BS/Civil Engineering/ University of California, Irvine

CERTIFICATIONS

Pipeline Assessment Certification Program/#U-1115-07002009/ NASSCO/U-1115-07002009

Manhole Assessment Certification Program/#U-1115-07002009/ NASSCO/U-1115-07002009

MICHAEL BANDICH, PE

Road/Site



Michael Bandich is an experienced technical manager and project engineer with more than 29 years of experience working on both public and private projects. He is adept in the construction and design of civil engineering projects including roadway design; reconstruction and rehabilitation; bridge design analysis; design analysis of concrete foundations, steel structures, earth/water retaining structures; and site grading. Michael is recognized for his excellence in the civil technology field and has served as a guest speaker at several high-profile industry events.

Experience

General Services Administration, ICTC Multi–Modal Transit Center – Calexico, CA

California Department of General Services, Blythe Border Protection Station – Blythe, CA

California Department of General Services, Needles Border Protection Station – Needles, CA

Tuolumne County, Jamestown Community Connectivity Project – Jamestown, CA

California Department of General Services, CHP Replacement Facility – Santa Fe Springs, CA

California Department of General Services, CHP Replacement Facility – Baldwin Park/Pomona, CA

City of Laguna Beach, Promenade on Forest Ave – Laguna Beach, CA

City of Coronado, Acacia Way Storm & Sewer Drain – Coronado, CA

Olivehurst Public Utility District, Olivehurst Sewer Design – Olivehurst, CA

City of San Diego, Tecolote Canyon Trunk Sewer Improvement & Golf Course Water Connection – San Diego, CA

REGISTRATION

2002/CA/Professional Engineer/ Civil/62575

EDUCATION

1996/BS/Civil Engineering/ California State Polytechnic University, Pomona

JIM BLISS, PE

QA/QC Manager, Transportation



Jim Bliss has 42 years of design experience that includes bus stops, transit stations, parks, parking lots, bicycle lanes, roadway widening, realignment, and rehabilitation, Caltrans highway design, alignment studies, and storm drainage facilities. Nearly all of these projects have involved an evaluation of the existing rights-of-way and preparation of right-of-way acquisition documents.

Experience

City of El Centro, El Centro Regional Bus Transfer Terminal – El Centro, CA

City of El Centro, 8th Avenue Active Transportation Program Improvements – El Centro, CA

City of El Centro, Danenberg Dr. Roadway Alignment Study and Pavement Replacement – El Centro, CA

City of El Centro, Widening of Euclid Avenue and Buena Vista Avenue – El Centro, CA

Calexico West Land Port of Entry (US General Services Administration) – Calexico, CA

Imperial County Transportation Commission, Calexico Intermodal Transportation Center – Calexico, CA

City of Brawley, Brawley Transit Transfer Station – Brawley, CA

City of Imperial, Imperial Transit Park – Imperial, CA

City of Del Mar, Camino Del Mar Streetscape Improvements – Del Mar, CA

City of San Diego, Clairemont Mesa Blvd. Emergency Storm Drain and Slope Repair – San Diego, CA

REGISTRATION

1987/CA/Professional Engineer/Civil/41795

EDUCATION

1983/BS/Civil Engineering/California Polytechnic State University, San Luis Obispo

ARIEF NAFTALI, PE

TE, EE, RSP1, ENV SP

Traffic



Arief Naftali is a licensed civil, traffic, and electrical engineer in California with 25 years of hands-on professional experience in the design and management of various road, traffic, civil, site, highway, and engineering projects serving multiple local and regional agencies in Southern California, including Caltrans. Arief is adept in roadway infrastructure, site development, active transportation, traffic engineering, outdoor electrical, and transportation planning projects, delivering improvement needs to local and regional communities alike. Arief's project portfolio encompasses a full range of projects starting from planning and design, through construction.

Experience

City of Palmdale, Pearblossom Highway Reconstruction – Palmdale, CA

City of El Cajon,Madison Avenue Safety Improvements – El Cajon, CA

City of Torrance, Crenshaw Boulevard Rehabilitation –Torrance, CA

City of Torrance, Torrance Anza Avenue Roadway Rehabilitation – Torrance, CA

City of Laguna Beach,Catalina Street Permanent Roundabout – Laguna Beach, CA

City of Paramount,West Santa Ana Branch Multi-Use Trail Phase II – Paramount, CA

City of Moreno Valley,Juan Bautista De Anza Segment 1 – Moreno Valley, CA

City of Pasadena, Cordova Street Multi-Modal Improvements – Pasadena, CA

REGISTRATION

2016/CA/Electrical Engineer/21570

2005/CA/Traffic Engineer/2296

2003/CA/Professional Engineer/Civil/64286

CA/Road Safety Professional/552

EDUCATION

2004/MS/Civil Engineering (Transportation Engineering)/California State University, Long Beach

2001/MA/Organizational Management/Azusa Pacific University

1999/BS/Civil Engineering/California State Polytechnic University, Pomona

CERTIFICATIONS

Envision™ Sustainability Professional/Institute for Sustainable Infrastructure/

DARLENE YELLOWHAIR, PE, PTOE, RSP2I, ENV SP

Traffic



Darlene Yellowhair has extensive experience with a variety of traffic engineering projects, including traffic impact studies, traffic reports, safety studies, signal warrant studies, corridor studies, signal timing and coordination, signing and striping design, and traffic signal design. She also has experience with design and studies for alternate modes of travel, Road Safety Assessments, transportation planning, and roadway design. Darlene is well-versed in Synchro, SimTraffic, HCS, SIDRA, and InRoads.

Experience

City of Los Angeles, Glendale Boulevard/Hyperion Avenue Complex of Bridges Traffic Study – Los Angeles, CA

City of Beverly Hills, Traffic Engineering Services for the Implementation of the LACMTA Purple Line Extension – Beverly Hills, CA

Port of Long Beach, West Anaheim Street Rehabilitation and Reconstruction – Long Beach, CA

City of Coronado, Coronado Cays Entrance Improvements and Bayshore Bikeway Traffic Study – Coronado, CA

City of Palmdale, State Route 138 Southbound Off-Ramp at Palmdale Boulevard and Interchange Improvements – Palmdale, CA

City of Dana Point, Dana Point Town Center at Pacific Coast Highway and Del Prado – Dana Point, CA

City of Moorpark, Moorpark Civic Center Master Plan – Moorpark, CA

REGISTRATION

2017/CA/Traffic Engineer/2827

2009/AZ/Professional Engineer/Civil/50215

2023/NV/Professional Engineer/Civil/031150

EDUCATION

2006/MS/Civil Engineering/Cornell University

2004/BS/Civil Engineering/University of Arizona

CERTIFICATIONS

Professional Traffic Operations Engineer/Transportation Professional Certification Board Inc./3123

LEED® Accredited Professional/U.S. Green Building Council/

Road Safety Professional, Level 2 Infrastructure/Transportation Professional Certification Board Inc./123

Envision™ Sustainability Professional/Institute for Sustainable Infrastructure

MICHAEL DOUR

Active Transportation



Mike Dour is an Active Transportation and Transit professional with 18 years of public-sector transportation planning experience. His experience includes managing Active Transportation and Transit programs for local agencies, including bicycle and pedestrian improvement projects and transit projects, and developing bicycle and pedestrian master plans. Mike is intimately familiar with various funding opportunities for public infrastructure projects and has direct experience in preparing successful grant funding applications. Mike has specific capabilities in engaging with communities to develop projects that encourage active transportation and the use of alternative transportation modes. Prior to joining Psomas, Mike managed the Alternative Transportation Division at the City of Roseville, supervising a portfolio of over $50 million of active transportation and transit focused projects.

Experience

San Joaquin County, Harrison Elementary Active Transportation Project – Stockton, CA

San Joaquin Council of Governments, Multimodal Connectivity Plan and Mobility Hub Demonstration Project – San Joaquin County, CA

Santa Barbara County Association of Governments, State Route 166 Multimodal Corridor Study – Santa Maria and Guadalupe, CA

City of Santa Maria, Bus Rapid Transit Feasibility Study – Santa Maria, CA

City of Roseville, Dry Creek Greenway East Phase II Trail – Roseville, CA

City of Roseville, Active Transportation Plan – Roseville, CA

City of Davis, G Street Activation – Davis, CA

Stanislaus Council of Governments, Church Street Multimodal Enhancement Project Grant Writing – Empire, CA

Tuolumne County, Jamestown Community Connectivity Project – Jamestown, CA

University of California, San Diego, Expedition Way Traffic Calming and Bike Lanes – La Jolla, CA

EDUCATION

1990/BS/Environmental Policy Analysis & Planning/University of California, Davis

CHASE LAWSON, PE, ENV SP

Stormwater Quality



Chase Lawson has eight years of experience in the private sector, practicing land development, including both private and public projects. This includes large residential subdivisions, multi-family and commercial developments, K-12 and higher education facilities, parks, and transit-oriented development. Chase is passionate about applying sustainable practices within infrastructure and strives to create positive community impacts and enhance the quality of life through his work.

Experience

City of San Diego, 5th Avenue Promenade Feasibility Study – San Diego, CA

City of San Diego, Tecolote Canyon Trunk Sewer Improvements – San Diego, CA

City of Coronado, Parker Pump Station Rehabilitation – Coronado, CA

City of Coronado, Downtown Beautification – Coronado, CA

City of Santee, Santee Community Center – Santee, CA

City of La Mesa, Sewer and Water Improvements – La Mesa, CA

True Life Company, East Vista Townhomes Tentative Map – Vista, CA

Imperial County Transportation Commission, Calexico Intermodal Transit Center – Calexico,

US General Services Administration, Calexico Land Port of Entry – Calexico, CA

US General Services Administration, San Luis Land Port of Entry – San Luis, AZ

REGISTRATION

2020/CA/Professional Engineer/Civil/91694

EDUCATION

2026/ME/(expected) Master of Engineering/San Diego State University, San Diego

2017/BS/Civil Engineering/San Diego State University, San Diego

CERTIFICATIONS

Envision™ Sustainability Professional/Institute for Sustainable Infrastructure

DANIEL RAHE, PLS

Survey/Plan Check



Daniel Rahe has 24 years of professional land surveying experience, leading construction, cadastral, subdivision, and right-of-way projects in multiple localities and jurisdictions. In his current role as Team Leader, Dan is responsible for the management of a large team of licensees and support staff, providing clients with a diverse range of geospatial services.

Experience

California Department of General Services (DGS), Fairview Developmental Center Record of Survey – Costa Mesa, CA

Cumulus Media, Cumulus Media Tower Development Tract Map – Los Angeles, CA

Private Developer, Paseo Colorado Tract Map – Pasadena, CA

Lightstone, Hotel Towers - Pico & Figueroa Tract Map – Los Angeles, CA

City of Los Angeles, Sepulveda Basin Vision Plan Boundary and Lease Survey – Los Angeles, CA

Toyota, Toyota Motor Sales Campus Lot Line Adjustment – Torrance, CA

City of Coronado Island, Mapchecking and Document Review – Coronado Island, CA

City of El Cajon, Mapchecking and Document Review – El Cajon, CA

City of Glendale, Mapchecking and Document Review – Glendale, CA

Private Developer, Puente Hills Mall Boundary, Title, and Easement Survey – Puente Hills, CA

REGISTRATION

2017/CA/Professional Land Surveyor/9425

2010/WA/Professional Land Surveyor/46897

EDUCATION

2001/Coursework/Political Science/University of Northern Colorado

JOHN OLIVER, PE, LEED® AP

Drainage



John Oliver has 19 years of experience in the field of water resources, specializing in stormwater and flood control analyses and design. He currently serves as the Project Manager on the water resources team and provides stormwater technical guidance for flood control, transportation, and development projects. He has worked on and served as the lead drainage engineer for projects of all sizes through all stages of development, from project identification to feasibility and alternatives studies, through final design, cost estimation, and construction. His experience includes analyses and design of cross-drainage structures, erosion protection, storm drain systems, detention, retention, and stormwater quality basins, channels, bank stabilization, and the preparation of watershed and floodplain studies. He is proficient in the use of numerous hydrologic and hydraulic analysis software programs, including WWHM, WMS, HEC-HMS, XPSWMM, HY-8, Culvertmaster©, Flowmaster©, HEC-RAS, and Flo-2D. He has prepared calculations and reports for a wide variety of roadway and development projects within the western United States and has encountered numerous unique challenges requiring unique solutions. Extensive stormwater and water quality analysis and design experience allow John to work quickly and efficiently, identifying potential issues and recommending solutions early to keep the project on schedule and within budget.

Experience

County of Riverside, Pauba Road Reconstruction Project – Rancho California, CA

County of Riverside, Temescal Canyon Road Widening – El Cerrito, CA

Caltrans, US 101/Prunedale Preventative Maintenance Project – Monterey County, CA

Caltrans, SR178/Morning Drive Interchange – Bakersfield, CA

City of Roseville, Pleasant Grove Boulevard Widening – Roseville, CA

City of Los Angeles, Lincoln Bridge Multi-Modal Improvements Project – Los Angeles, CA

REGISTRATION

2011/AZ/Professional Engineer/ Civil/52015

2022/WA/Professional Engineer/ Civil/22017922

EDUCATION

2006/BS/Civil Engineering/ University of Arizona

CERTIFICATIONS

LEED® Accredited Professional/ U.S. Green Building Council

SEAN NOONAN

Environmental



Sean Noonan is an Environmental Planner and Project Manager with 14 years of experience working on various types of public and private projects across Southern California. In his current role, Sean prepares and manages the preparation of CEQA/NEPA environmental documents and supporting environmental technical studies. He is also experienced in providing his clients with support related to regulatory permitting, environmental compliance during final design and construction, and environmental constraints during due diligence. Sean works on various project types, but is particularly experienced in providing environmental consulting services for transportation and other infrastructure projects.

Experience

City of Los Angeles, Glendale-Hyperion Viaduct – Los Angeles, CA

City of Los Angeles, Eastern Avenue Multi-Modal Transportation Improvement Project – Los Angeles, CA

City of Carlsbad, Carlsbad Veterans Park, Master Planning and Environmental Permitting Phase – Carlsbad, CA

City of Santa Clarita, David March Park Phase II Improvements – Santa Clarita, CA

City of Los Angeles, Lincoln Bridge Multi-Modal Improvements (LA TOS 27) – Los Angeles, CA

City of Anaheim, Hills Preserve Environmental Impact Report – Anaheim, CA

Removal and Decommissioning of the Kanaka Powerhouse for the Kanaka Hydroelectric Project IS/ MND – Butte County, CA

City of Pasadena, Explorer Well Project Initial Study/ Mitigated Negative Declaration – Pasadena, CA

Imperial County Transportation Commission, Modal Transit Center, CEQA/NEPA Compliance – Calexaco, CA

EDUCATION

2014/MS/Urban and Regional Planning/California State Polytechnic University, Pomona

2011/MA/Geography/California State University, Fullerton

2006/BA/History/University of California, Santa Barbara

DENNIS KIM, ESQ., PMP

Right-of-Way



Dennis Kim is a distinguished leader in right-of-way, real property acquisition, and mega transportation projects, with a proven history of delivering high-profile projects for the State of California. Governor Gavin Newsom appointed Dennis as Chief Advising Officer and Director of Real Property for the California High-Speed Rail Authority, where he delivered 99% of properties and relocated 83% of utilities for 119 miles of construction.

With experience in managing a multi-billion-dollar real estate portfolio, Dennis has overseen more than 2,200 property acquisitions, 1,500+ land conveyances, and 800+ parcels for property management, facilitating seamless procurement and compliance with regulatory frameworks.

A licensed attorney, real estate broker, and Project Management Professional (PMP), Dennis blends legal acumen with project execution skills to navigate complex right-of-way challenges, delivering projects efficiently, cost-effectively, and in full compliance with state and federal requirements.

Experience

Caltrans District 7, On-Call Land Surveying and Right-of-Way Engineering Services – Los Angeles, CA

Riverside County Transportation Commission, On-Call Right-of-Way Engineering and Surveying Services – Riverside County, CA

City of Palmdale. Right-of-Way Consulting Services – Palmdale, CA

California High-Speed Rail Authority – Sacramento, CA

REGISTRATION

2021/CA/Attorney-at-Law/332639

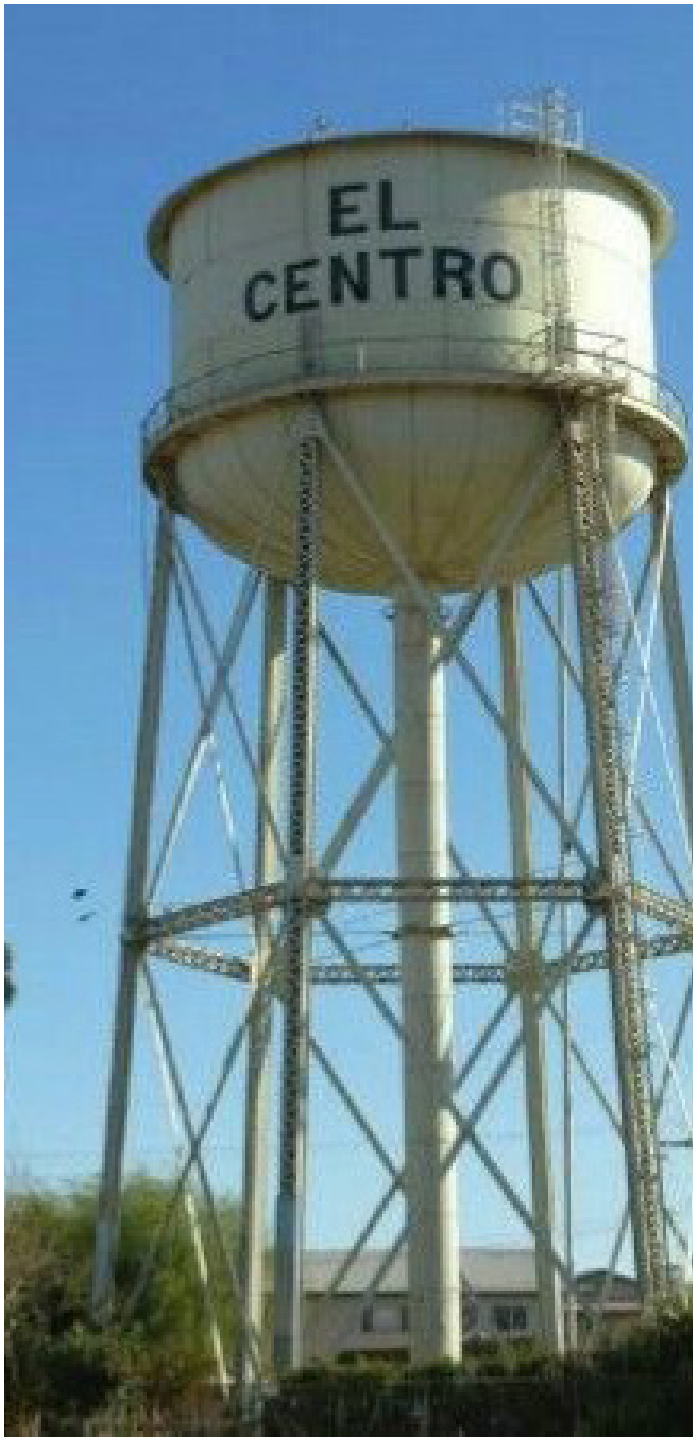
EDUCATION

2012/JD/Law/Syracuse University, Syracuse

2005/BA/Economics/Knox College, Galesburg

CERTIFICATIONS

Project Management Professional/Project Management Institute, Inc.



Subconsultant Resumes

The management and coordination of our consultant team is a hallmark of Psomas. Our ability to select a quality team of subconsultants is one of the keys to our continued success in designing award-winning projects throughout California. We have highly qualified subconsultants whom we have worked with for years, who have a clear understanding of our goals and methods for producing quality deliverables.

Resumes for our subconsultants may be found on the following pages.

MARK VAN BIBBER, SE

Structural Engineering

aark engineering, inc.



Mark Van Bibber has more than 25 years of experience in the fields of civil and structural engineering using various structural systems and materials on a vast range of projects utilizing concrete, masonry, steel, timber, aluminum, and fiber-reinforced plastics. His diverse experience includes work on public works, stormwater, water treatment, wastewater treatment, park, recreation, educational, commercial, and residential facilities.

Experience

Parker Pump Station Replacement – Coronado, CA

Oakdale Alameda Gateway Improvements – El Cajon, CA

Mohawk Pump Station – San Diego, CA

Morena Pipeline Diversion Structures – San Diego, CA

College Area and AC Water Group Manholes – San Diego, CA

Soledad Pump Station Upgrades – San Diego, CA

Tierrasanta Pump Station – San Diego, CA

North City Pure Water Pump Station and Pipeline Access Shaft– San Diego, CA

Tyrian St. and Soledad Avenue AC Water Main Repairs – San Diego, CA

SPS23T Emergency Repairs and Upgrades – San Diego, CA

San Pasqual Undergrounding Project – Escondido, CA

Material Maintenance Yard Storage Bins – El Cajon, CA

New River Improvement Project – Calexico, CA

REGISTRATION

2009/CA/Professional Engineer/Structural/5314

2004/CA/Professional Engineer/Civil /66993

EDUCATION

2001/BS/Civil Engineering/San Diego State University

ERSON BOLOS, PE

LEED® AP BD+C

Electrical/Mechanical

Enterprise Engineering, Inc.



Erson Bolos brings 19 years of electrical engineering design and support during construction experience, which includes engineering electrical systems, pump controls, ladder diagrams, process instrumentation, and motor control centers. He has also provided detailed engineering drawings and specifications for water and wastewater pump stations, treatment plants, building renovations, and new construction projects. Erson's experience also includes interior and exterior lighting, lighting controls, and Title 24 compliance.

Experience

Parker Pump Station Replacement Project – Coronado, CA

Lakeside Valve Station Replacement – San Diego, CA

Lake Arrowhead Community Services District, North Bay Pump Station Replacement – Lake Arrowhead, CA

City of San Diego, 54-20 Large Valve Replacement – San Diego, CA

City of San Diego, Soledad Pump Station Upgrade – San Diego, CA

City of San Diego, Forcemain Projects SPS 13, 14, 16, 25A and 85 – San Diego, CA

City of San Diego, Sewer Pump Station 23T Improvements – San Diego, CA

Helix Water District, Helix 2 Pump Station Motor Control Center Replacement – La Mesa, CA

Helix Water District, Treatment Plant Raw Water Large Valve Installation Project – La Mesa, CA

REGISTRATION

2010/CA/Professional Engineer/Electrical /19306

2022/AK/Professional Engineer/Electrical /190464

2024/SD/Professional Engineer/Electrical/17079

EDUCATION

2005/BSEE/Electrical Engineering/San Diego State University

CERTIFICATIONS

2013/LEED® AP+C/US Green Building Council/10686894

GERRY SANNER

Electrical/Mechanical

Enterprise Engineering, Inc.



Gerry Sanner brings 37 years of electrical engineering design and support during construction to the team. His experience includes the design of electrical distribution systems and building wiring for industrial, commercial, fuel, water/wastewater facilities, and EVSE installations. He has also provided detailed engineering drawings and specifications for complex control systems, pump controls, and motor control centers. Gerry has provided detailed engineering design, project management, and electrical construction knowledge on hundreds of projects, including over 50 water/wastewater projects.

Experience

Helix 2 Pump Station Motor Control Center Replacement, Helix Water District – La Mesa, CA

T2E Electrical Modernization, San Diego International Airport – San Diego, CA

Vista Pump Station Motor Control Center Replacement, Helix Water District – La Mesa, CA

Western Pump Station Electrical and Mechanical System Improvements Project, City of Glendale Water and Power – Glendale, CA

Grandview Pump Station No.2 Unit Replacement, City of Glendale Water and Power – Glendale, CA

Leahy Avenue Water Well, Bellflower Somerset Mutual Water Company – Bellflower, CA

R.E. Badger WTP Dewatering & Filter Washwater Improvements, Santa Fe Irrigation District – Rancho Santa Fe, CA

EDUCATION

1986/BSEE/Electrical Engineering/DeVry Institute of Technology, Phoenix, Arizona

STEVE WILLIAMS

PG, CEG

Geotechnical Engineering

LandMark Consultants, Inc.



Steven Williams is an engineering geologist with over 30 years of experience in engineering geology, geotechnical, and environmental site assessment in southwestern Arizona and southern California. In addition, his experience includes two years in the mining exploration industry in Utah and Nevada. He has served as a project geologist on transmission lines, substations, bridges, pipelines, canals, reservoirs, residential subdivisions, schools, geothermal power plants, public works facilities, and water and wastewater treatment facilities. Steven is a Registered/Professional Geologist in the states of Arizona and California and a Certified Engineering Geologist in California.

Experience

Calexico Water and Wastewater Treatment Plants Upgrades – Calexico, CA

Imperial Wastewater Treatment Plant Upgrades – Imperial, CA

Holtville Wastewater Treatment Plant and Sewer Force Main – Holtville, CA

Calipatria Water Treatment Plant Upgrades – Calipatria, CA

Niland Water Treatment Plant Upgrades – Niland, CA

Coachella Canal Lining – Imperial and Riverside Counties, CA

Brandt Road Bridge Reconstruction – Imperial, CA

El Centro Outfall Force Sewer Main – El Centro, CA

So Cal Gas Co., 14-Mile Natural Gas Line – Southern CA

REGISTRATION

2002/CA/Certified Engineering Geologist/2261

1999/CA/Professional Geologist/6975

1999/AZ/Registered Geologist/33759

EDUCATION

1989/BS/Geology/University of Utah

1993/MS/Geology/University of Utah

TRAVIS W. MEIER, QISP



Phase I and II Hazmat

Ninyo & Moore

Travis Meier has over 22 years of environmental experience, including environmental site assessments; investigation, assessment, and evaluation of hazardous materials; soil and groundwater contamination evaluations; and regulatory compliance. Travis has provided these services for a variety of public works clients, educational entities, and others.

Experience

Heber 1 & 2 Facilities, Phase I ESA – Heber, Imperial County, CA

Salton Sea Project, Phase I ESA – Niland, Imperial County, CA

City of Chula Vista, 3151 Main Street, Phase I ESA – Chula Vista, CA

Lake Elsinore Properties, Grand Avenue, Phase I ESA – Lake Elsinore, CA

City of Colton, Habitat Conservation Park with Eco-Friendly Community Sports Fields, Phase I ESA – Colton, CA

Tapestry Project, Phase I ESA – Hesperia, San Bernardino County, CA

EDUCATION

2008/MS/Environmental & Earth Science/California State University, San Bernardino

2002/BS/Environmental & Earth Science/University of Redlands

CERTIFICATIONS

Qualified Industrial Storm Water Practitioner (QISP)/00213

OSHA 40-Hour

BRAD LENTS, RLA, AICP, LEED® AP



Landscape Architecture

Spurlock Landscape Architects

Brad Lents holds degrees in landscape architecture and urban planning, a unique skill set for problem-solving in site planning and design. He is a skilled designer with experience across a range of public and private sector projects of varying scale. Brad plays a pivotal role in directing Spurlock's involvement in numerous civic and institutional projects.

Experience

BLM Doyle Fire Station – Doyle. CA

BLM Elko HQ Building – Elko, CA

Camino del Mar Streetscape Update*/Downtown Streetscape Implementation – Del Mar, CA

Children's Park Improvement Plans – San Diego, CA

City of El Cajon Streetscape – El Cajon. CA

Del Mar Civic Center – Del Mar, CA

El Centro General Plan Implementation – El Centro, CA

National City 19th Street Greenway – National City, CA

North Embarcadero Visionary Plan Phase 1– San Diego, CA

Oakdale Alameda Streetscape – El Cajon, CA

Paradise Creek Apartments/TOD – National City, CA

Police Headquarters and Welcome Resource Center – San Bernardino, CA

San Diego Federal Courthouse – San Diego, CA

Santa Monica City Yards – Santa Monica, CA

Santa Monica Fire Training Facility – Santa Monica, CA

Santa Monica Fire Station No. 1 – Santa Monica, CA

Sepulveda Transit Corridor – Los Angeles, CA

Santa Monica Fire Station No. 1 – Santa Monica, CA

REGISTRATION

2010/CA/Professional Engineer/Electrical /19306

2022/AK/Professional Engineer/Electrical /190464

2024/SD/Professional Engineer/Electrical/17079

EDUCATION

2005/BSEE/Electrical Engineering/San Diego State University

CERTIFICATIONS

2013/LEED® AP+C/US Green Building Council/10686894

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES ___X___ NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES ___X___ NO
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Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

10/03/2025
DATE

_____
(SIGNATURE OF CONSULTANT)

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9/3/2025 _____ Mark S Van Bibber _____
DATE (SIGNATURE OF CONSULTANT)

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09-08-2025 _____
DATE (SIGNATURE OF CONSULTANT)

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8/27/25
DATE

(SIGNATURE OF CONSULTANT)

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9/9/2025 _____

DATE (SIGNATURE OF CONSULTANT)

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9/8/2025 _____
DATE (SIGNATURE OF CONSULTANT)

PSOMAS

401 B St #1600
Wells Fargo Plaza
San Diego, CA 92101

619.961.2800

www.Psomas.com

EXHIBIT B
FEE SCHEDULE

Exhibit B- Fee Schedule

2025/2026 FEE SCHEDULE

Engineering, Surveying, and Geospatial Services

Rates for City of El Centro On-Call Services

ENGINEERING HOURLY RATES

Effective from October 21, 2025 - December 31, 2026

3.5% annual escalation applies for subsequent contract years, after 12/31/2026

Project Assistant/Intern	$105 - $125
CAD Designer/Civil Engineering Designer	$125 - $155
Lead CAD Designer/Professional Engineer	$155 - $170
Project Engineer/Assistant Project Manager	$170 - $200
Senior Project Engineer	$190 - $235
Project Manager	$200 - $240
Senior Project Manager/Principal	$240 - $280

SURVEY HOURLY RATES - IN-OFFICE SERVICES

Effective from October 21, 2025 - December 31, 2026

3.5% annual escalation applies for subsequent contract years, after 12/31/2026

Administrative/Project Assistant	$105 - $125
Photo-Compiler	$115 - $145
CADD Technician/GIS Technician	$120 - $150
Staff Surveyor	$140 - $170
Project Surveyor/GIS Specialist/Photogrammetrist	$170 - $185
Sr. Project Surveyor/Sr. GIS Specialist	$185 - $200
Project Manager/Technical Manager	$200 - $270
Principal	$270 - $290

SURVEY HOURLY RATES - FIELD SERVICES

Effective from October 1, 2025 - September 30, 2026

8% annual escalation applies for subsequent contract years, after September 30, 2026.

One-Person Survey Party	$265
Two-Person Survey Party	$410
Three-Person Survey Party	$525
Field Supervisor	$225

Hourly rates for field survey parties include normal usage of field equipment and are fully equipped rates.

Special Equipment and Other Costs

Standard computer and technology costs are incorporated into the hourly rates shown above.

REIMBURSABLES

Mileage at the current IRS allowable rate and parking expenses incurred by office employees are charged at cost. Per Diem rates $175 per day, per employee. Prints, messenger service, subsistence, air travel, and other direct expenses will be charged at cost plus ten percent. The services of outside consultants will be charged at cost plus fifteen percent.

The above rate schedule is for straight time. Overtime will be charged at 135 percent of the standard hourly rates. Work performed on Sundays and holidays will be charged at 170 percent of the standard hourly rates.

SUBCONSULTANTS

Psomas' markup for subconsultants will not exceed 10%.

FEE SCHEDULE

for Professional Engineering Services

Hourly Rates

Personnel Classification	Hourly Rate
Principal Structural Engineer	$ 237
Senior Managing Engineer	$ 196
Senior Project Manager	$ 181
Project Manager	$ 176
Senior Project Engineer	$ 165
Project Engineer	$ 160
Assistant Engineer (EIT)	$ 129
Senior Designer	$ 124
Designer	$ 109
Administrative/Clerical	$ 78
Registered Structural Engineer Expert Witness Testimony	$ 392

Fee Schedule Notes:

1. Hourly rates shown are current rates and are subject to change annually.
2. Personnel classifications may be amended based on technological and staff changes. Any new classification shall be subject to prior approval by the Client.
3. All Other Direct Costs (ODC), including subcontractor costs, will be billed at actual cost with a 10% markup, unless otherwise indicated in the Fee Proposal. Mileage will be billed at approved IRS rate, unless otherwise indicated in the Fee Proposal.

1870 Cordell Court Suite 202 El Cajon, CA 92020 tel 619 312 6336 fax 619 383 6560 aarkengineering.com

ENTERPRISE
ENGINEERING, INC.

ENGINEERING FEE SCHEDULE – 2026

ENGINEERING SERVICES (Designs, studies, evaluations, inspections)

Position Category	Hourly Billing Rate
Principal in Charge	$275
Program Manager	$255
Project Manager	$220
Senior Engineer (PE) - Civil, Structural, Mechanical, Electrical, API	$210
Engineer III (PE)	$195
Engineer II (PE)	$175
Engineer I	$150
Senior Engineering Technician III	$180
Senior Designer	$145
Designer	$135
Engineering Technician II	$135
Junior Engineering Technician I	$125
Drafter II	$125
Drafter I	$115
Technical Writer	$130
Administrative Assistant	$110

All labor supplied at straight hourly billing rate shown. No premium charges for overtime work. Special services, such as expert witness, will be as negotiated. Additional equipment and expense charges will be as noted in individual proposals. 3.5% annual escalation applies for subsequent contract years, after 12/31/2026.

Subcontracted services, all other directly related project expenses, air travel, per diem, and equipment rentals will be billed at cost plus ten percent (10%).

Automobile travel will be billed at the maximum allowable IRS rate.

Unless specified otherwise in the project-specific general conditions, invoices will be submitted monthly, with payment due within 30 days of the invoice date. Balances remaining unpaid after 30 days will incur a monthly service charge of 1% (equivalent to 12% annually).

Effective: January 1, 2026 Fee Schedule 552

FALMOUTH, ME 04105
400 US ROUTE 1
NORTH SUITE B
207.869.8006

ANCHORAGE, AK 99503
3601 C STREET
SUITE 650
907.563.3835

HONOLULU, HI 96819
3375 KOAPAKA ST.
SUITE B-232
808.260.1481

POWAY, CA 92064
12975 BROOKPRINTER PL.
SUITE 160
858.229.4954

LANDMARK
Geo-Engineers and Geologists

PROFESSIONAL FEE SCHEDULE

Landmark Consultants, Inc. is a consulting firm which provides services in Soils and Materials Engineering, Fault and Seismic Studies, and Construction Materials Testing. The firm's objective has been providing engineering services for public utilities, public works infrastructure, residential, commercial, and industrial projects in the Southern California areas.

OFFICES AND LABORATORIES

	Phone	Email
El Centro, California	(760) 370-3000	rlyon@landmark-ca.com
Palm Desert, California	(760) 360-0665	gchandra@landmark-ca.com

BASIS OF CHARGES

Listed herein are typical fees for services most frequently performed by Landmark Consultants, Inc. Fees for other services not listed will be given upon request, as well as special quotations for projects involving volume or special provisions.

Invoices will be issued on a bi-monthly basis, or upon completion of a project, whichever is sooner. Invoices are payable when received unless otherwise agreed. A late payment service charge will be computed at the periodic rate of 1.5% per month, which is an annual percentage rate of 18 % and will be applied to any unpaid balance commencing 30 days after date of the original invoice.

A four (4) hour minimum will be charged for all field testing and thereafter in 2 hour increments. An overtime premium of 1.5 times the standard rate will be charged for all personnel service or laboratory test periods in excess of eight hours per day or Saturday, and 2 times the standard rate for work in excess of 12 hours per week day, in excess of 8 hours on Saturdays and all day on Sundays or holidays. A four (4) hour minimum will be charged for all special inspection services (if 4 hours or less) and a minimum eight (8) hours (if more than 4 hours and less than 8 hours). Short notice cancellations will be charged four (4) hours if after 4pm the day prior to the scheduled inspection time or upon or after arrival to the jobsite. Outside services will be charged at cost +15% unless otherwise noted.

All samples of soil or rock will be destroyed 30 days after submission of final report unless prior arrangements are made.

Our liability to Client for injury or damage to persons or property arising our work performed for Client and for which legal liability may be found to rest upon us rather than for professional errors and omissions, will be limited to our general liability insurance coverage, which we maintain in limits of $2,000,000. For any damage on account of any error, omission, or other negligence, our liability will be limited to a sum of not to exceed $50,000 or our fee less direct third-party costs, whichever is greater, unless specifically negotiated otherwise.

Landmark Consultants, Inc.
2026-2029 Standard Fee Schedule
Rates will increase by 5% January 1st of each year, rounded up to the nearest dollar, for the duration of the work

PROFESSIONAL RATES (HOURLY)	2026	2027	2028	2029
Principal Engineer	$273	$287	$301	$316
Geotechnical Engineer	$268	$281	$295	$310
Senior Engineer	$247	$259	$272	$286
Project Engineer	$231	$243	$255	$267
Staff Engineer	$200	$209	$220	$231
Operations Manager	$179	$187	$197	$207
Senior Geologist	$247	$259	$272	$286
Project Geologist	$231	$243	$255	$267
Staff Geologist	$200	$209	$220	$231
Legal Cases-Principal Engineer (investigative work)	$446	$469	$492	$517
Legal Cases-Principal Engineer (depositions and trial)	$551	$579	$608	$638

Minimum Field Services Fee per call-out, 4 hours (if 4 hours or less), 8 hours (if more than 4 hours and less than 8 hours)
Short-Notice Cancellation, 4 hours (if after 4 pm of the day prior to the scheduled inspection time)
Short-Notice Cancellation, 4 hours (upon or after arrival at jobsite)

TECHNICAL RATES				
Testing Technician-(Concrete/Masonry/Soils/Asphalt)	$116	$121	$127	$134
Prevailing Wage Technician-(Concrete/Masonry/Soils/Asphalt)	$126	$132	$139	$146
Special Inspector-(Masonry, Steel, Concrete, Welding & Bolt)	$126	$132	$139	$146
PW Special Inspector-(Masonry, Steel, Concrete, Welding & Bolt)	$131	$138	$145	$152
DSA Project Technician/Inspector	$131	$138	$145	$152
Laboratory Personnel	$116	$121	$127	$134
Admin. Support Staff	$100	$105	$110	$115
Drafting	$126	$132	$139	$146
Copies of Reports (Min)	$63	$66	$69	$73
Blueprints	$19	$20	$21	$22

EQUIPMENT/MATERIAL CHARGES				
2 & 4 WD Vehicle (per mile)	$1.05	$1.10	$1.16	$1.22
Tow-Behind Auger (per day)	$158	$165	$174	$182
Truck Mounted Drilling (Flight Auger per hr.)	$578	$606	$637	$669
Truck Mounted Drilling-(Prevailing Wage and Env. per hr.)	$683	$717	$752	$790
Per Diem Drillers (per day)	$630	$662	$695	$729
Cone Penetrometer Mob	$3,990	$4,190	$4,399	$4,619
Piezocone and Stratigraphic Plots	quote	quote	quote	quote
Resistivity, Piezocone Testing	quote	quote	quote	quote
Seismic Piezocone Testing	$47	$50	$52	$55
Per Diem (CPT)	$630	$662	$695	$729
Grouting (per ft.)	$21	$22	$23	$24
Outside services	Cost+15%	Cost+15%	Cost+15%	Cost+15%
2" diameter slotted PVC Piezometer (w/filter sock & gravel pack per ft.)	quote	quote	quote	quote
8" diameter cast-iron Piezometer cover	$137	$143	$150	$158

SHEAR STRENGTH & CONSOLIDATION TEST				
Unconfined Compression	$179	$187	$197	$207
Direct Shear (3pt. Staged Test)	$446	$469	$492	$517
Consolidation, Per load Increment w/ Time Rate	$168	$176	$185	$194
Consolidation Test w/ Time Rate	$551	$579	$608	$638

AGGREGATE QUALITY				
Organic Impurities (CAL 213)	$147	$154	$162	$170
Specific Gravity and Absorption, Coarse Aggregate (CAL 206)	$126	$132	$139	$146
Specific Gravity and Absorption, Fine Aggregate (CAL 207/208)	$158	$165	$174	$182
Unit Weight (Average of 3) (CAL 212)	$116	$121	$127	$134
Los Angeles Rattler Test-500 Revs (CAL 211)	$341	$358	$376	$395
Los Angeles Rattler Test-1000 Revs (CAL 211)	$499	$524	$550	$577
Sulfate Soundness 5 cycle test per primary size (C88)	$194	$204	$214	$225
Mortar Making Properties of Sand (CAL 515)	$630	$662	$695	$729
Potential Reactivity Test (ASTM C289)	$1,470	$1,544	$1,621	$1,702
Cleanness Value Test (CAL 227)	$221	$232	$243	$255
% Crushed Particles (CAL 205)	$168	$176	$185	$194
Flat & Elongated Particles per screen size (D4791)	$116	$121	$127	$134
Clay Lumps and Friable Particles (C142)	$210	$221	$232	$243
Lightweight Pieces in Aggregate (C123)	$410	$430	$451	$474
Durability Index-Coarse or Fine (CAL 229)	$252	$265	$278	$292

MASONRY				
Compression Test, Grout Prisms	$58	$61	$64	$67
Compression Test, Mortar Cube/Cylinder	$58	$61	$64	$67
Compression Test, Masonry Unit	$116	$121	$127	$134
Compression Test, Masonry Prism (Grouted)	$168	$176	$185	$194
Absorption and Received Moisture, Masonry Unit (Unit weight, 3 required)	$142	$149	$156	$164
Grout or Mortar Specimen, Handled & Cured But Not Tested	$47	$50	$52	$55
Bond Test (Shear) for grout/masonry interface (DSA)	$168	$176	$185	$194

CONCRETE				
Concrete Mix Design or Review (Not Including Lab Test)	$840	$882	$926	$972
Laboratory Trial Batch, Incl. Compression Testing of 6 Specimens	quote	quote	quote	quote
Compression Test, Concrete Cylinder (CAL 521)	$53	$55	$58	$61
Unit Weight of Concrete Cylinders (CAL 518)	$74	$77	$81	$85
Flexural Strength, Concrete Beam (CAL 523)	$147	$154	$162	$170
Compression Test, Gunite	$100	$105	$110	$115
Compression Test on Cored Specimens	$100	$105	$110	$115
Cylinder Molds (if not tested by Landmark)	$26	$28	$29	$30
Drying Shrinkage Test, Set of 3 (CAL 537)	$630	$662	$695	$729
Modulus of Elasticity of 6"x12" Concrete Cylinder	$394	$413	$434	$456
Splitting Tensile Strength	$142	$149	$156	$164
Chloride Ion Determination (Water Soluble)	$446	$469	$492	$517

MATERIALS TESTING EQUIPMENT-FIELD (DAILY RATES)	2026	2027	2028	2029
Swiss Hammer (Concrete)	$100	$105	$110	$115
Masonry Mortar Penetrometer	$100	$105	$110	$115
Vibrating Probe (Concrete)	$116	$121	$127	$134
Generator	$184	$193	$203	$213
Coring Machine	$184	$193	$203	$213
2" Diamond Bit/Core	$37	$39	$41	$43
3" Diamond Bit/Core	$79	$83	$87	$91
4" Diamond Bit/Core	$89	$94	$98	$103
6" Diamond Bit/Core	$110	$116	$122	$128
8" Diamond Bit/Core	$131	$138	$145	$152
Rebar Locator (R-Meter)	$105	$110	$116	$122

COMPACTION CURVES				
Relative Compaction (CAL 216)	$315	$331	$347	$365
Standard 4" Mold, D698 Method A	$315	$331	$347	$365
Standard 6" Mold, D698 Method B,C,D	$315	$331	$347	$365
Modified 4" Mold, D1557 Method A	$315	$331	$347	$365
Modified 6" Mold, D1557 Method B,C,D	$315	$331	$347	$365
Relative Density	$315	$331	$347	$365
Relative Compaction	$315	$331	$347	$365

SOIL & AGGREGATE STABILITY				
R-Value (CAL 301)	$394	$413	$434	$456
CBR 100% Compaction	$788	$827	$868	$912
Soil Cement, CTB, Mix Design	$6,825	$7,166	$7,525	$7,901
CTB Compression Test	$137	$143	$150	$158
Soil-Lime Compression Test (Includes Prep)	$945	$992	$1,042	$1,094

BASIC SOIL & AGGREGATE PROPERTIES				
Sieve Analysis, Coarse & Fine Including Wash	$200	$209	$220	$231
Sieve Analysis, Coarse (CAL 202)	$168	$176	$185	$194
Sieve Analysis, Fine Including Wash	$168	$176	$185	$194
#200 Wash (CAL 202)	$142	$149	$156	$164
Sand Equivalent-Average of 3 (CAL 217)	$194	$204	$214	$225
Plasticity Index (CAL 204)	$247	$259	$272	$286
Expansion Index (UBC 29-2)	$194	$204	$214	$225
Moisture Determination and Unit Weight	$84	$88	$93	$97
Moisture Determination Only	$58	$61	$64	$67
Permeability Test (Undisturbed Samples) (D5084)	$578	$606	$637	$669
Permeability Test (Remolded Samples) (D5084)	$683	$717	$752	$790
Resistivity of Soil (CAL 643)	$210	$221	$232	$243
PH Test (Lab Measurement)	$89	$94	$98	$103
Hydrometer (Without Specific Gravity)	$394	$413	$434	$456
Sulfates (CAL 417)	$89	$94	$98	$103
Chlorides (CAL 422)	$89	$94	$98	$103
Corrosivity Series (Resistivity, Ph, Sulfates, Chlorides)	$446	$469	$492	$517

ASPHALT				
Agg. Corr. Factor Ignition (Lab Mix)	$650	$683	$717	$752
Extraction % Bitumen (Reflux Method)-Inc. Shipping	quote	quote	quote	quote
%Bitumen (Ignition Oven /Gradation of Extracted Sample)	$425	$446	$469	$492
Stabilometer Test on Premixed Sample (CAL 366)	$525	$551	$579	$608
Inc. Hveem Max. Density %Bitumen (Ignition Oven) (CAL 382)	$200	$210	$221	$232
Complete Design of Wearing Surface for a Given Asphalt/Aggregate, Hveem (CAL 367)	quote	quote	quote	quote
Stability & Flow on Premixed Sample (Set of 3) Inc. Marshall Max. Density	$525	$551	$579	$608
Marshall Stability & Flow (Set of 4) Lab Mix Inc. Marshall Max. Density	$575	$604	$634	$666
Unit Weight of Asphalt Core (CAL 308)	$90	$95	$99	$104
Max Density of Mix by Marshall/Hveem Method (Without Mixing)	$295	$310	$325	$341
Maximum Theoretical Specific Gravity (CAL 309)	$265	$278	$292	$307
Maximum Theoretical Specific Gravity (ASTM D2041)	$265	$278	$292	$307
Index of Retained Strength	$1,575	$1,654	$1,736	$1,823
Tensile Strength Ratio (CAL 371)	$1,900	$1,995	$2,095	$2,199
Tensile Stress Ratio	$1,000	$1,050	$1,103	$1,158
Stripping (CAL 302)	$275	$289	$303	$318

METALS				
Tensile, Up to ¾" (Not Including Machining Cost)	$160	$168	$176	$185
Greater than ¾"	$210	$221	$232	$243
Bend	$160	$168	$176	$185

WELDING QUALIFICATIONS - STRUCTURAL STEEL (PHYSICAL TEST METHOD - ASTM, AWS, API, AISC)				
* Visual Inspection	$130	$137	$143	$150
* Magnetic Particle/Ultrasonic Testing	$370	$389	$408	$428
Operator Performance & Procedure Tests	$130	$137	$143	$150
Machining & Material Costs	$110	$116	$121	$127
Qualification Tests on Machined Coupons	$550	$578	$606	$637

Schedule of Fees

Hourly Charges for Personnel

Professional Staff

Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist	$ 220
Senior Engineer/Geologist/Environmental Scientist	$ 210
Senior Project Engineer/Geologist/Environmental Scientist	$ 200
Project Engineer/Geologist/Environmental Scientist	$ 195
Senior Staff Engineer/Geologist/Environmental Scientist	$ 180
Staff Engineer/Geologist/Environmental Scientist	$ 165
GIS Analyst	$ 145
Technical Illustrator/CAD Operator	$ 120

Field Staff

Certified Asbestos/Lead Technician	$ 200
Field Operations Manager	$ 130
Nondestructive Examination Technician (UT, MT, LP)	$ 125
Supervisory Technician	$ 120
Special Inspector (Concrete, Masonry, Structural Steel, Welding, and Fireproofing)	$ 115
Senior Technician	$ 115
Technician	$ 110

Administrative Staff

Information Specialist	$ 100
Geotechnical/Environmental/Laboratory Assistant	$ 100
Data Processor	$ 80

Other Charges

Concrete Coring Equipment (includes technician)	$ 190/hr
Anchor Load Test Equipment (includes technician)	$ 190/hr
GPR Equipment	$ 180/hr
Inclinometer	$ 100/hr
Hand Auger Equipment	$ 80/hr
Rebar Locator (Pachometer)	$ 25/hr
Vapor Emission Kit	$ 65/kit
Nuclear Density Gauge	$ 15/hr
X-Ray Fluorescence	$ 70/hr
PID/FID	$ 25/hr
Air Sampling Pump	$ 10/hr
Field Vehicle	$ 15/hr
Equipment	$ 15/hr
Expert Witness Testimony	$ 450/hr
Direct Expenses	Cost plus 15 %

Special equipment charges will be provided upon request.

Notes

Technicians and special inspectors, are charged at a 4-hour minimum, and 8-hour minimum for hours exceeding 4 hours. Overtime rates at 1.5 times the regular rates will be charged for work performed in excess of 8 hours in one day Monday through Friday and all day on Saturday. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day, all day Sunday and on holidays.

Our rates will be adjusted in conjunction with the increase in the Prevailing Wage Determination during the life of the project, as applicable.

The terms and conditions are included in Ninyo & Moore's Work Authorization and Agreement form.

Non-Prevailing Wage rates are subject to a 3% annual escalation

Schedule of Fees for Laboratory Testing

SOILS

Atterberg Limits, D 4318, CT 204	$ 170
California Bearing Ratio (CBR), D 1883	$ 550
Chloride and Sulfate Content, CT 417 & CT 422	$ 175
Consolidation, D 2435, CT 219	$ 300
Consolidation, Hydro-Collapse only, D 2435	$ 150
Consolidation – Time Rate, D 2435, CT 219	$ 200
Direct Shear – Remolded, D 3080	$ 350
Direct Shear – Undisturbed, D 3080	$ 300
Durability Index, CT 229	$ 175
Expansion Index, D 4829, IBC 18-3	$ 190
Expansion Potential (Method A), D 4546	$ 170
Geofabric Tensile and Elongation Test, D 4632	$ 200
Hydraulic Conductivity, D 5084	$ 350
Hydrometer Analysis, D 6913, CT 203	$ 220
Moisture, Ash, & Organic Matter of Peat/Organic Soils	$ 120
Moisture Only, D 2216, CT 226	$ 35
Moisture and Density, D 2937	$ 45
Permeability, CH, D 2434, CT 220	$ 300
pH and Resistivity, CT 643	$ 175
Proctor Density D1557, D 698, CT 216, AASHTO T-180	$ 220
Proctor Density with Rock Correction D 1557	$ 340
R-value, D 2844, CT 301	$ 375
Sand Equivalent, D 2419, CT 217	$ 125
Sieve Analysis, D 6913, CT 202	$ 145
Sieve Analysis, 200 Wash, D 1140, CT 202	$ 100
Specific Gravity, D 854	$ 125
Thermal Resistivity (ASTM 5334, IEEE 442)	$ 925
Triaxial Shear, C.D, D 4767, T 297	$ 550
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt	$ 450
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt	$ 350
Triaxial Shear, U.U., D 2850	$ 250
Unconfined Compression, D 2166, T 208	$ 180

MASONRY

Brick Absorption, 24-hour submersion, 5-hr boiling, 7-day, C 67	$ 70
Brick Compression Test, C 67	$ 55
Brick Efflorescence, C 67	$ 55
Brick Modulus of Rupture, C 67	$ 50
Brick Moisture as received, C 67	$ 45
Brick Saturation Coefficient, C 67	$ 60
Concrete Block Compression Test, 8x8x16, C 140	$ 70
Concrete Block Conformance Package, C 90	$ 500
Concrete Block Linear Shrinkage, C 426	$ 200
Concrete Block Unit Weight and Absorption, C 140	$ 70
Cores, Compression or Shear Bond, CA Code	$ 70
Masonry Grout, 3x3x6 prism compression, C 39	$ 45
Masonry Mortar, 2x2 cube compression, C 109	$ 35
Masonry Prism, half size, compression, C 1019	$ 120
Masonry Prism, Full size, compression, C 1019	$ 200

REINFORCING AND STRUCTURAL STEEL

Chemical Analysis, A 36, A 615	$ 135
Fireproofing Density Test, UBC 7-6	$ 90
Hardness Test, Rockwell, A 370	$ 80
High Strength Bolt, Nut & Washer Conformance, per assembly, A 325	$ 150
Mechanically Spliced Reinforcing Tensile Test, ACI	$ 175
Pre-Stress Strand (7 wire), A 416	$ 170
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	$ 75
Structural Steel Tensile Test: Up to 200,000 lbs., A 370	$ 90
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	$ 80

CONCRETE

Compression Tests, 6x12 Cylinder, C 39	$ 35
Concrete Mix Design Review, Job Spec	$ 300
Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	$ 850
Concrete Cores, Compression (excludes sampling), C 42	$ 120
Drying Shrinkage, C 157	$ 400
Flexural Test, C 78	$ 85
Flexural Test, C 293	$ 85
Flexural Test, CT 523	$ 95
Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI	$ 275
Lightweight Concrete Fill, Compression, C 495	$ 80
Petrographic Analysis, C 856	$ 2,000
Restrained Expansion of Shrinkage Compensation	$ 450
Splitting Tensile Strength, C 496	$ 100
3x6 Grout, (CLSM), C 39	$ 55
2x2x2 Non-Shrink Grout, C 109	$ 55

ASPHALT

Air Voids, T 269	$ 85
Asphalt Mix Design, Caltrans (incl. Aggregate Quality)	$ 4,500
Asphalt Mix Design Review, Job Spec	$ 180
Dust Proportioning, CT LP-4	$ 85
Extraction, % Asphalt, including Gradation, D 2172, CT 382	$ 250
Extraction, % Asphalt without Gradation, D 2172, CT 382	$ 150
Film Stripping, CT 302	$ 120
Hveem Stability and Unit Weight D 1560, T 246, CT 366	$ 225
Marshall Stability, Flow and Unit Weight, T 245	$ 240
Maximum Theoretical Unit Weight, D 2041, CT 309	$ 150
Moisture Content, CT 370	$ 95
Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371	$ 1,000
Slurry Wet Track Abrasion, D 3910	$ 150
Superpave, Asphalt Mix Verification (incl. Aggregate Quality)	$ 4,900
Superpave, Gyratory Unit Wt., T 312	$ 100
Superpave, Hamburg Wheel, 20,000 passes, T 324	$ 1,000
Unit Weight sample or core, D 2726, CT 308	$ 100
Voids in Mineral Aggregate, (VMA) CT LP-2	$ 90
Voids filled with Asphalt, (VFA) CT LP-3	$ 90
Wax Density, D 1188	$ 140

AGGREGATES

Clay Lumps and Friable Particles, C 142	$ 180
Cleanness Value, CT 227	$ 180
Crushed Particles, CT 205	$ 175
Durability, Coarse or Fine, CT 229	$ 205
Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234	$ 180
Flat and Elongated Particle, D 4791	$ 220
Lightweight Particles, C 123	$ 180
Los Angeles Abrasion, C 131 or C 535	$ 200
Material Finer than No. 200 Sieve by Washing, C 117	$ 90
Organic Impurities, C 40	$ 90
Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260	$ 1,250
Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260	$ 950
Potential Reactivity of Aggregate (Chemical Method), C 289	$ 475
Sand Equivalent, T 176, CT 217	$ 125
Sieve Analysis, Coarse Aggregate, T 27, C 136	$ 120
Sieve Analysis, Fine Aggregate (including wash), T 27, C 136	$ 145
Sodium Sulfate Soundness, C 88	$ 450
Specific Gravity and Absorption, Coarse, C 127, CT 206	$ 115
Specific Gravity and Absorption, Fine, C 128, CT 207	$ 175

ROOFING

Roofing Tile Absorption, (set of 5), C 67	$ 250
Roofing Tile Strength Test, (set of 5), C 67	$ 250

Special preparation of standard test specimens will be charged at the technician's hourly rate.
Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.

SPURLOCK

STANDARD HOURLY RATES

Spurlock Landscape Architects will provide professional services at the following hourly rates:

Principal	225.00 / hour
Project Manager	175.00 / hour
Job Captain	150.00 / hour
Landscape Designer	125.00 / hour
Administrator	90.00 / hour
Intern	75.00 / hour

Annual increase of 3%

rates current as of March 2025

2122 Hancock Street
San Diego, California 92110

619.681.0090
spurlock-land.com

EXHIBIT C
INSURANCE REQUIREMENTS

Without limiting Consultant's indemnification of City, and prior to commencement of work and/or services under this Agreement, Consultant shall obtain, provide, and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and, in a form, satisfactory to City.

General liability insurance. Consultant shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office (Form CG 00 01), in an amount not less than $1,000,000 per occurrence, $2,000,000 general aggregate, for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. Consultant shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned, or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Professional liability (errors & omissions) insurance. Consultant shall maintain professional liability insurance that covers the Services to be performed in connection with this Agreement, in the minimum amount of $1,000,000 per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this agreement and Consultant agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this agreement.

Workers' compensation insurance. Consultant shall maintain Workers' Compensation Insurance (statutory limits) and Employer's Liability insurance (with limits of at least $1,000,000).

Consultant shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of City, its officers, agents, employees, and volunteers.

Umbrella or excess liability insurance. [If required to meet higher limits.]. Consultant shall obtain and maintain an umbrella liability insurance policy with limits that will provide bodily injury, personal injury, and property damage liability coverage, including commercial general liability, automobile liability, and employer's liability. Such policy or policies shall include the following terms and conditions:

- A drop-down feature requiring the policy to respond if any primary insurance that would otherwise have applied proves to be uncollectible in whole or in part for any reason, other than bankruptcy or insolvency of said primary insurer;
- "Pay on behalf of" wording as opposed to "reimbursement";
- Concurrency of effective dates with primary policies.

Should Consultant obtain and maintain an excess liability policy, such policy shall be

excess over commercial general liability, automobile liability, and employer's liability policies. Such policy or policies shall include wording that the excess liability policy follows the terms and conditions of the underlying policies.

Other provisions or requirements

Proof of insurance. Consultant shall provide certificates of insurance and required endorsements to City as evidence of the insurance coverage required herein. Insurance certificates and endorsements must be approved by City's Risk Manager prior to commencement of performance. Current certification of insurance shall be kept on file with City for the contract period and any additional length of time required thereafter. City reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Consultant shall procure and maintain for the contract period, and any additional length of time required thereafter, insurance against claims for injuries to persons or damages to property, or financial loss which may arise from or in connection with the performance of the Work hereunder by Consultant, their agents, representatives, employees, or subconsultants.

Primary/noncontributing. Coverage provided by Consultant shall be primary and any insurance or self-insurance procured or maintained by City shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City before the City's own insurance or self- insurance shall be called upon to protect it as a named insured.

City's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary, and any premium paid by City will be promptly reimbursed by Consultant or City will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, City may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the City's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against City, its elected or appointed officers, agents, officials, employees, and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against City and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non-estoppel). Consultant acknowledges and agrees that any actual or alleged failure on the part of the City to inform Consultant of non-compliance with any requirement imposes no additional obligations on the City nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Consultant maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Notice of cancellation. Consultant agrees to oblige its insurance agent or broker and insurers to provide the City with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage. If any of the Consultant's insurers are unwilling to provide such notice, then Consultant shall have the responsibility of notifying the City immediately in the event of Consultant's failure to renew any of the required insurance coverages, or insurer's cancellation or non-renewal.

Additional insured status. General liability, automobile liability, and umbrella/excess liability insurance policies shall provide or be endorsed to provide that City and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to City and approved of in writing.

Separation of insureds. A severability of interests provision must apply for all additional insureds ensuring that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass through clause. Consultant agrees to ensure that its subconsultants, subcontractors, and any other party who is brought onto or involved in the project/service by Consultant (hereinafter collectively "Subcontractor"), provide the same minimum insurance coverage and endorsements required of Consultant under this Agreement. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. However, in the event Consultant's Subcontractor cannot comply with this requirement, which proof must be submitted to the City, Consultant may still be able to utilize the Subcontractor provided Consultant shall be required to ensure that its Subcontractor provide and maintain insurance coverage and endorsements sufficient to the specific risk of exposure involved with Subcontractor's scope of work and services, with limits less than required of the Consultant, but in all

other terms consistent with the Consultant's requirements under this Agreement. This provision does not relieve the Consultant of its contractual obligations under the Agreement and/or limit its liability to the amount of insurance coverage provided by its subcontractors. This provision is intended solely to provide Consultant with the ability to utilize a Subcontractor who may be otherwise qualified to perform the work or services but may not carry the same insurance limits as required of the Consultant under this Agreement given the limited scope of work or services provided by the subcontractor. Consultant agrees that upon request, all agreements with Subcontractors, and others engaged in the project and/or services, will be submitted to City for review.

City's right to revise specifications. The City reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Consultant ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Consultant, the City and Consultant may renegotiate Consultant's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by City. City reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible, or require proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention through confirmation from the underwriter.

Timely notice of claims. Consultant shall give City prompt and timely notice of claims made or suits instituted that arise out of or result from Consultant's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

Claims made: The following provisions shall apply if any of the required policies are written on a claims-made basis:

a. The Retroactive Date of the policy must be shown and must be before the date of the Agreement or the beginning of the contracted work.

b. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement or the work.

c. If coverage is canceled or not renewed and it is not replaced with another claims-made policy form with a Retroactive Date that precedes the date of this Agreement, Consultant must provide extended reporting coverage for a minimum of five (5) years after completion of the Agreement or the work. The City shall have the right to exercise, at the Consultant's sole cost and expense, any extended reporting provisions of the policy, if the Consultant cancels or does not renew the coverage.

d. A copy of the claim reporting requirements must be submitted to the City prior to the commencement of any work under this Agreement.

EXHIBIT D
CONSULTANT'S FINANCIAL DISCLOSURE STATEMENT [1]

Consultant will comply with all conflict-of-interest laws and regulations including, without limitations, City's Conflict of Interest Code (on file in the City Clerk's Office) as required by Section 4.10 of this Agreement. It is incumbent upon the Consultant to notify the City pursuant to Sections 7.1 and 7.5 of any staff changes relating to this Agreement. The City Manager has made the following determination and Consultant, by his/her signature, acknowledges said determination. [2]

A. In accomplishing the scope of services of this Agreement, all officers, employees and/or agents of Consultant will be performing a very limited and closely supervised function, and, therefore, unlikely to have a conflict of interest arise. No disclosures are required of any officers, employees, and/or agents of Consultant. Consultant duties are as follows:

_____ Sarah Curran, Vice President
City Manager Consultant Signature & Title

B. In accomplishing the scope of services of this Agreement, Consultant will be performing a specialized or general service for the City, and there is substantial likelihood that the Consultant may make or participate in making a governmental decision, which may have a foreseeable material effect on a financial interest. As a result, the Consultant shall be subject to the Disclosure Category "Consultant" of the City's Conflict of Interest Code.

_____ Sarah Curran, Vice President
City Manager Consultant Signature & Title

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1. Fair Political Practices Commission Section 18700.3 defines a consultant as follows:
(a) For purposes of Sections 82019 and 82048, "consultant" means an individual who, pursuant to a contract with a state or local government agency:
(1) Makes a governmental decision whether to:
(A) Approve a rate, rule, or regulation;
(B) Adopt or enforce a law;
(C) Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order, or similar authorization or entitlement;
(D) Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract that requires agency approval;
(E) Grant agency approval to a contract that requires agency approval and to which the agency is a party, or to the specifications for such a contract;
(F) Grant agency approval to a plan, design, report, study, or similar item;
(G) Adopt, or grant agency approval of, policies, standards, or guidelines for the agency, or for any subdivision thereof; or
(2) Serves in a staff capacity with the agency and in that capacity participates in making a governmental decision as defined in Regulation 18704(a) and (b) or performs the same or substantially all the same duties for the agency that would otherwise be performed by an individual holding a position specified in the agency's Conflict of Interest Code under Section 87302.
2. Disclosure by Consultants: Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the City's adopted Conflict of Interest Code, subject to the following limitations: The City Manager may determine in writing that a particular consultant, although a "designated position", is hired to perform a range of duties that is limited in scope and closely supervised, and, thus, is not required to comply with the disclosure requirements in the City's adopted Conflict of Interest Code. Such written determination shall include a description of the consultant's duties. The City Manager's determination is a public record and shall be retained for public inspection in the same manner and location as the City's adopted Conflict of Interest Code.

EXHIBIT E

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES ___X___ NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES ___X___ NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

10/03/2025 _____
DATE (SIGNATURE OF CONSULTANT)

EXHIBIT E

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

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9/3/2025 _____ Mark S Van Bibber _____
DATE (SIGNATURE OF CONSULTANT)

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09-08-2025 _____
DATE (SIGNATURE OF CONSULTANT)

EXHIBIT D

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8/27/25
DATE

(SIGNATURE OF CONSULTANT)

EXHIBIT E

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9/9/2025 _____

DATE (SIGNATURE OF CONSULTANT)

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9/8/2025 _____
DATE (SIGNATURE OF CONSULTANT)

EXHIBIT F

REQUEST FOR PROPOSALS (RFP)

CITY OF EL CENTRO
PUBLIC WORKS
Serving our community by sustaining and improving life

City of El Centro
Incorporated 1908
Shining with Opportunity

REQUEST FOR PROPOSALS
FOR
ON-CALL SERVICES

1. ***CIVIL ENGINEERING – GENERAL***
2. ***CIVIL ENGINEERING - WATER AND WASTEWATER TREATMENT***

Requested By:

City of El Centro
Department of Public Works
307 W. Brighton Ave.
El Centro, CA 92243
Phone: (760) 336-3152
Abraham Campos, PE
Director of Public Works/ City Engineer
August 2025

I. TABLE OF CONTENTS

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EXHIBITS

A - Civil Engineering – General and Water and Wastewater Treatment. Expanded Scope

B – Sample Proposal Evaluation Form

C – Sample Design Professional Services Agreement

D- Levine Act. Statement

E- Sample Task Order

*****No changes shall be made to consultant agreement by consultant.

II. REQUEST FOR PROPOSAL ("RFP")

NOTICE IS HEREBY GIVEN THAT the City of El Centro (the "City") is requesting proposals from qualified consultants to provide Civil Engineering Design (Roads and Traffic, and Water and Wastewater facilities) (the "Consultant(s)").

DEADLINE

Consultants are requested to submit five hard copies of their proposal before **04:30 p.m.** on Friday, September 19, 2025. Refer to section IX for further information.

Note: late, emailed, or faxed proposals will not be considered.

OBTAINING DOCUMENTS

The Contract Documents are available through Planet Bids, by accessing our website (www.cityofelcentro.org) and selecting "GOVERNMENT > PUBLIC WORKS> BIDS & PROPOSALS> PROCEED TO SITE".

III. INTRODUCTION AND PURPOSE

INTRODUCTION.
The Department of Public Works - Engineering Division of the City of El Centro is seeking professional services from a consulting firm or team (Consultant) for On-Call services for the two (2) disciplines listed below. The City will contract with the primary firm under which subconsultants may operate. The City is requesting services for up the term of the agreement. The term of the agreement shall be for two (2) years, with up to three (3) one (1) year extensions, which extensions shall be at the City's sole option.

Disciplines:

1. Civil Engineering – General Civil Engineering
2. Civil Engineering – Water and Wastewater Treatment

Up to three consultants shall be selected for each discipline. The City reserves the right to increase or decrease the number of consultants awarded a contract under each discipline.

Consultant must submit a separate responsive proposal to each discipline that Consultant wishes to be considered. Each discipline will be judged independently. You are not required to submit a proposal for both disciplines.

PURPOSE. The purpose of this RFP is to:

1. Familiarize prospective consultants with the information necessary to understand the consultant selection process and the required documentation consultant must

submit.

2. Receive, review and consider proposals from prospective consultants, and select a consultant to provide the desired services for each discipline.
3. Execute a contract for on-call services in the form of a Professional Services Agreement (PSA) (see RFP Exhibit C – Sample Standard Agreement), which will include a negotiated rate schedule established at the time of its execution.
4. Advise prospective consultants that the City is not obligated to issue any contract(s) by issuing this proposal.

The Consultant shall provide the Public Works Department with the ability to obtain assistance quickly during peak workload periods, staffing absences and when expedited/fast track support is needed to satisfy City customers. The most important objective is to maintain a level of high-quality, Civil Engineering Design (Roads, Traffic, Water and Wastewater facilities).

Qualified entities are invited to submit written proposals for consideration in accordance with this request. These services will be conducted under a contract with the City.

The City reserves the right to reject any or all responses received as a result of this solicitation; to extend the submission due date for; to modify, amend, reissue or rewrite this document; and to procure any or all services by other means. Consultants that respond to this RFP shall comply with all applicable laws. There are no M/WBE and/or DBE requirements for this RFP.

The contract will be regulated according to the provisions of all Federal, State and local laws and ordinances that are applicable. This includes compliance with prevailing wage rates and their payment in accordance with the California Labor Code, as applicable.

Consultants are advised to consider whether services to be performed include classifications subject to state or federal prevailing wage requirements. Prevailing wages will apply if the services to be performed will involve land surveying (such as flag persons, survey party chief, rodman or chainman), materials sampling and testing (such as drilling rig operators, pile driving, crane operators), inspection work, soils or foundation investigations, environmental hazardous materials and so forth. California State prevailing wage information is available through the California Department of Industrial Relations website at https://www.dir.ca.gov/OPRL/dprewagedetermination.htm

Labor categories subject to prevailing wage requirements, when employed for any work on this project, are wholly the responsibility of the firm or individual named in any Professional Services Agreement approved by the City. City will not assume any responsibility for Consultant's failure to pay prevailing wages in accordance with State law.

IV. BACKGROUND

The City of El Cento incorporated in 1908 and later became a Charter city. El Centro is the center of one of Southern California's most promising new commercial and industrial regions. There are two international border crossings nearby for commercial and noncommercial vehicles. Covering 11.019 square miles, it is the largest city in Imperial County. El Centro is located 616 miles southwest of San Francisco, 117 miles east of San Diego and 245 miles west of Phoenix, Az. and just 15 minutes from the international industrial complexes in Mexicali, Baja California. El Centro is accessible via Interstate 8, State Highway 86 and State Highway 111. The City population is estimated to be over 45,000 residents; however, population increases during the day as the City is the County seat.

The consultant(s) will work under the direction of the Public Works Director or designee to handle engineering service tasks as they are required. The highest rated consultant(s) will be selected to be on contract for on-call services. Consultant(s) will enter into a master agreement which will specify the billing rates, personnel to be assigned, and other terms. No monthly retainer is anticipated.

Letter proposals will be requested from one or more on-call consultants when engineering service tasks are required. The letter proposals will set forth the scope, fee, personnel, and time of performance for the particular task. The letter proposals will be approved through a task order implementing and attached to the master agreement. Consultant selection for a particular task will be based on qualification as set forth in the Statement of Qualifications. Consultant selection will be at the sole discretion of the City. No consultant is guaranteed work.

V. SCOPE OF SERVICES

Consultants shall submit in their proposal in addition to the main scope the discipline(s) for which they wish to be qualified. The disciplines include, but are not necessarily limited to the following areas of experience and expertise.

Civil Engineering - General

The consultant shall design and prepare plan, specifications, and estimate (PS&E) for arterial and local streets; including traffic engineering/design, landscaping, water, sewer and storm drain design. Sample work activities include:

- Preparation of Phase I and II site investigation and soils reports, including field exploration, drill test borings, sample soils, compacting testing, and laboratory tests. Laboratory shall be Caltrans certified.
- Review and/or preparation of traffic plans (signing and striping plans, traffic detour and traffic staging plans, as well as signals), traffic studies/reports.
- Review and/or preparation of street improvement plans.
- Review and/or preparation of domestic or raw water improvement plans and studies.
- Review and/or preparation of sewer improvement plans and studies

- Review and/or preparation of storm drain improvement plans, hydrology and hydraulic reports.
- Review and/or preparation of tract and parcel map, lot line adjustments, certificates of compliance, map/easement or legal descriptions and supporting documentation.
- Review and/or preparation of structure calculations.
- Review and/or preparation of engineering quantity estimates and costs.

Designers shall have a minimum of 10 years' experience in civil design for public facilities. A detailed scope of work is available as Exhibit A of this RFP.

The consultant shall assist City staff to identify and prioritize pavement preservation projects; design and prepare plan, specifications, and estimate (PS&E) for pavement projects. Utilize the latest technologies to design and construct/rehabilitate pavements in the most cost-effective way. Consultant must be experienced with state and federal funded projects and pavement designers shall have a minimum of 10 years' experience in pavement design. A detailed scope of work is available as Exhibit A of this RFP.

Civil Engineering – Water and Wastewater Treatment Facilities

The objective of this discipline is to enable the City to improve the City potable water, sanitary sewer and storm water systems to meet the rules and regulations of the State and Federal mandates as well as public demand. Consultant shall provide all services and work required to complete studies, designs, plans, specifications and estimates for City projects as identified in the current city water, wastewater and storm water master plans or as may be requested by the City. City may request the consultant to update said master plans. The consultant shall have 10 years' experience in the design of potable and sanitary sewer treatment, collection and distribution systems in compliance with State and Federal requirements in the State of California. A detailed scope of work is available as Exhibit A of this RFP.

The above list is not intended to be exclusive; other services will likely be sought as the need arises. The statement of qualifications does not need to include a fee proposal for any of these specific tasks; fee proposals for individual tasks would be requested during the course of the on-call contract.

Periodically, the City has the need for assistance with special engineering studies or general staff augmentation. The consultant must be able to assist the City through this contract to provide the necessary services.

The consultant shall utilize its' in-house staff and/or sub-consultants to complete the assignments to meet the City standards. For specialized work for which the prime consultant will require a sub-consultant, the prime consultant will serve as an administrative liaison between the City and the sub-consultant. The prime consultant mark-up for sub-consultants shall not exceed 10%.

VI. PROJECT SCHEDULE

The following is a tentative schedule for the project:

Release of RFP	**08/22/2025**
Proposal Due	**09/19/2025**
Consultant Interview (if needed)	**Week of October 6th, 2025**
Contract Award	**10/21/2025**

VII. DELIVERABLE ITEMS

The Consultant will be required to verify that all information submitted as services rendered is accurate and current. Furthermore, the Consultant will be required to document the source(s) of all compiled information. All information generated as part of the Consultant's or sub-consultant's work shall become part of City of El Centro record of the project.

VIII. CORRECTIONS

Proposing Consultants are encouraged to amplify the scope of services, to identify any supplemental tasks necessary, and to recommend any alternatives that may enhance the project or reduce costs. Where applicable, consultant is encouraged to describe the anticipated level of effort for each task.

IX. DELIVERY OF PROPOSALS

Proposals must be submitted to 307 W. Brighton Ave., El Centro CA 92243 by at 4:30 pm on Friday, September 19, 2025 with subject reading as follows:

Response for City of El Centro On-Call Services RFP
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

On a separate envelope, submit a hard copy Fee Schedule to the same address and by the same date in a sealed envelope marked:

Fee Proposal for City of El Centro On-Call Services
Discipline: (*Enter Discipline to be considered here*)
Attn: Abraham Campos, PE
Public Works Director/City Engineer

Proposals and Fee Proposals received after the stated deadline will not be accepted. Advance submittals are permitted. The City will not be liable for any costs incurred by the Consultant

incidental to the preparation of proposals or for developing and carrying out interview presentations.

Submission of a proposal indicates acceptance by the Consultant of the conditions contained in this RFP unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of El Centro and the Consultant selected.

Questions concerning the RFP must be submitted via the Planet Bids portal. All questions must arrive at least ten (10) calendar days prior to the proposal due date to allow time for distributing answers and/or clarifications.
No questions or inquiries may be directed to any individual (s) at the location detailed in this document. All inquiries must be submitted in writing per the process described in this document. Attempts to contact any City employee other than the designated contact for this RFP may result in rejection of a submitted proposal. No questions will be answered after the ten-ten-day period.

X. SELECTION PROCESS

City staff will evaluate the proposals based on effectiveness and efficiency in supporting each of the following items.

1. Overall responsiveness to the RFP
2. Consultant (and project team) qualifications, experience and referenced projects
3. Qualifications, experience and commitment of the project manager and team members. The project manager shall preferably have successfully completed at least three (3) projects of similar nature, complexity, and size during the last 10 years
4. Project understanding, innovative approach and proposed scope of work
5. Ability to deliver the project scope of work within the stated estimated level of effort
6. Project management plan and schedule
7. Ability to sign the City's Standard Professional Services Agreement and provide the City's standard insurance coverages listed therein

Based on this evaluation, the City may choose to invite up to three (3) Consultants from each discipline to participate in an oral presentation/interview session or select the Consultant based on the results from the evaluation of the proposal.

In the event the City chooses to conduct interviews as part of the selection process, the selected Consultants will be asked to bring an interview panel including the project manager and up to three (3) (maximum) key staff members who will be directly involved in providing the services. The Consultants selected for the interview will be allowed thirty (30) minutes to present their Consultant experience and project approach. Following the presentation there will be a thirty (30) minute informal question and answer discussion.

At the conclusion of the evaluation, the City may enter into contract negotiations with the top three ranking Consultants. If negotiations with the top-ranking Consultants are unsuccessful, negotiations will terminate and the City may undertake negotiations with the

fourth-ranked Consultant. City staff then will make recommendations to the City Council, which reserves the right to reject any or all proposals. The selection process will be completed when a contract is executed.

Furthermore, the City reserves the right to reject any or all proposals, and to waive any and all irregularities to choose the Consultant which, in the City's opinion, best serves the City's interests. The City will not be liable for any costs incurred by the Consultant incidental to the preparation of proposals or for developing and carrying out interview presentations.

All Consultants issued this RFP were previously asked to certify that they would execute a contract with the City of El Centro with no exceptions or additions.

XI. SUBMITTAL REQUIREMENTS

Proposals shall be formatted for 8-1/2" x 11" portrait pages for written materials and 11" x 17" landscape pages for drawings, consisting only of the specified materials requested below. If interviews are required, presentation boards may be used. Presentation boards shall be 30" x 42", unframed with appropriate scale and identification.

It is imperative that all Proposers responding to the RFP comply exactly and completely with the instructions set forth herein. Proposals must be concise, but with sufficient detail to allow accurate evaluation and comparative analysis. Proposals should be straightforward and provide "layman" explanations of technical terms that are used. Emphasis should be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Do NOT include marketing brochures or other promotional material not connected with this RFP. **Responses must be limited to 30 pages maximum.**

To be responsive, each Proposal must include only the following information in the format indicated. Proposals not organized according to the following format may be rejected.

1. Cover with title and date
2. Cover Letter that documents the proposal offer, lists subconsultants and their roles, location of office where work will be done, is signed by an officer of the Consultant (or by another person with authority to act on behalf of and bind the Consultant), and indicates the contact person for the proposal
3. Table of Contents
4. Executive Summary
5. Approach to satisfying scope of work, which should highlight key issues as well as special processes, tools and lessons learned that will be applied
6. Scope of Work based on the respective discipline above
7. Availability to meet the expected schedule for this work, including current workload and backlog
8. History, general qualifications, employee count by title and discipline, and recent or pending litigation for Consultants and subconsultants

9. Proposer must provide three (3) references for which Proposer has provided similar services performed in California of the nature and scope as set forth in the RFP within the last five (5) years. Include name of business, name of contact person, telephone number of contact person, and description and date of services provided. References for public agency projects are preferred.

10. Qualifications of Project Manager and Key Staff of Consultant and subconsultants, including individual resumes listing required licenses, credentials and relevant experience addressing qualifications requirements specified herein, with relevant experience focused on similar projects completed within the last 10 years. City will place considerable emphasis on the commitment by the Proposer to provide qualified personnel for the services being considered. The Proposer shall furnish resumes in outline form for the key personnel committed to this account. Proposer shall also include the number and type of additional support personnel who will be providing services. The substitution or addition of individuals shall be allowed only with prior written approval of the City.

EXHIBIT A

CIVIL ENGINEERING – GENERAL AND WATER AND WASTEWATER TREATMENT. EXPANDED SCOPE

1.0 Scope of Work

The Scope of Work shall include, but not limited to the following tasks:

In general, the Consultant shall perform engineering design services resulting in contract documents (plans, specifications and cost estimates) for various projects on an as-needed basis. The Consultant shall provide a detailed schedule of the assigned project upon issuance of a Task Order of that particular project. The Consultant shall also provide all field survey works required to complete the designs. In addition to scope of work items necessary to complete the design of approved CIP projects, the selected consultant shall also provide specific Engineering Technician services. The services to be provided are enumerated below.

The Consultant's services shall include, but are not limited to, the following:

1. Research existing records of utility companies and agencies and coordinate the proposed improvements with existing field conditions.

2. Prepare all documentation required to obtain permits from any and all agencies having jurisdiction of the project.

3. Conduct an environmental assessment for each project and prepare all documentation required to comply with the California Environmental Quality Act (CEQA).

4. Provide all field survey and topographic work necessary to complete the design effort. Design level survey and base mapping of the project site shall be prepared in US Customary English units by a California licensed Land Surveyor in accordance with the City guidelines and in AutoCAD Computer Aided Design and Drafting (CADD) format. The horizontal datum shall be NAD 83 and the vertical datum shall be NAVD 88. All survey field notes shall be on forms provided by the City, shall be neatly completed in pencil, and shall become property of the City upon completion of the project. Informal field investigations including marking of removal areas may be required for some of the sidewalk, curb and gutter, and pavement replacement projects.

5. Complete the design of projects including plans, specifications, and engineer's construction cost estimate. The Consultant shall contact manufacturers and/or contractors to verify the engineer's estimate prior to submitting to the City. Specifications shall be prepared in Microsoft Word and an electronic copy of the final version shall be furnished to the City. The City will provide the specification boiler plate to the Consultant.

6. All preliminary and bid sets of plans shall be plotted on bond or velum using the AutoCAD program. All drawings shall be completed per the City of El Centro CADD Standards

7. All original plan sheets, the title sheet of the specifications, calculations, and reports shall be signed and stamped by the Consultant's licensed professional engineer in responsible-charge of the project. These signed originals will then become the property of the City.

8. The Consultant shall provide support services as needed during the bidding and construction phases of the project, including:

   A. The Consultant shall respond to bidder inquiries during the bidding process, including preparation of any addenda. Upon award of the construction contract, the Consultant shall attend the pre- construction meeting.
   B. The Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. The Consultant shall complete shop drawings reviews within one (1) week of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.

   C. The Consultant shall respond to written Requests for Information (RFI) to provide clarification or resolve discrepancies in the contract documents. Responses shall be completed within three (3) working days.
   D. The Consultant shall provide periodic field reviews and bring to the attention of the City of El Centro any defects or deficiencies in the work by the construction contractor which the Consultant may observe. The Consultant shall have no authority to issue instruction on behalf of the City of El Centro, or to deputize another to do so.

9. Upon the completion of construction, as-builts shall be submitted to the City. The Consultant shall incorporate all changes to the plans electronically with all necessary revision notations. Once plans have been updated, a signed set of as-built mylars shall be submitted to the City with an electronic copy (in AutoCAD and pdf formats) of the final as-built drawings via CD or e-mail.

10. The Consultant shall monitor the project progress, maintain project files, and control the quality of the work performed by in-house staff and/or sub-consultants. Incomplete (not meeting targeted completion) or poor-quality work will not be accepted. The Consultant will need to revise the documents within a revised schedule set by the City, which may require overtime. No additional regular or overtime hours shall be approved for the required revisions.

11. Attend meetings with the City staff as required.

12. Coordinate plan check, design topics, permits and any other issues with the City, other Agencies, and all utility companies as required. The Consultant shall be the liaison with affected agencies.

13. The Consultant shall be responsible for to reviewing and approving addenda and clarifications to plans and specifications.

1.1 Preliminary Design

Review available record plans, existing/proposed conditions and requirements. Attend the Field

Review Meeting; prepare Field Review Report

Conduct a field survey in order to confirm the accuracy of any existing drawings, surveys, streets, and utility locations data obtained. Consultant is expected to conduct additional surveys based on the project requirements.

Consultant shall prepare a preliminary Design Report (PDR) of alternatives, preliminary cost estimate and preferred alternative.

1.2 Development of Detail Plans, Specifications and Estimate (PS&E):

All reports, plans, specifications and quantity calculations shall conform to criteria, policies, procedures and standards of Caltrans, APWA and the City, and shall be made available to the City at stages specified in the milestone schedule and upon request.

Construction plans shall adhere to City of El Centro Standard Construction Drawing standards. The Consultant shall produce, at the Consultant's sole cost and expense, blank reproducible sample plan sheets and any needed standard drawings. Standard drawings and standard plans shall be incorporated into the Contract Plans where applicable.

Each plan sheet shall bear the State of California Registered Professional Engineer registration seal within signatures, license number and registration certificate expiration date of the Engineer who is in responsible charge for developing the plan. Each plan sheet shall be signed by the engineer who performed the independent plan check.

Consultant shall prepare complete contract specifications based on the Manuals/Standards section 2.4.

A list of contract pay items with the descriptions, item codes and estimated quantities shall be included in the front of the special provisions.

The Consultant shall prepare quantity calculations for items that are applicable to this project, and prepare cost estimates.

Quantities for all contract pay items shall be substantiated by calculations. Quantity calculations shall be neat and orderly and shall show all sketches, diagrams, and dimensions necessary to allow them to be independently used by field inspectors during construction.

Electronic files for all structural details and calculations shall be submitted at the end of the contract or when requested by the City.

All electronic software developed, databases generated, spreadsheets and intellectual properties developed during the life of the Agreement shall become the property of the City.

1.3 Environmental Documents and Permit Compliance

Specific environmental documentation work as may be required by the funding agency and the City including, but not be limited to the following: prepare Preliminary Environmental Study (PES), CEQA compliance documentation, technical studies, , NPDES permit, Regional Board Section 401 certification, any coordination as required completing the environmental NEPA and

CEQA work, and any encroachment permits required for the project from agencies such as Caltrans, County of Imperial, the City and any other having jurisdiction.

1.4 Utility Research and Coordination

(1) Research and obtain file copy of utility maps within the project limits for existing and/or proposed facilities.
(2) Prepare preliminary plans with utility notices/questionnaires to be sent to utility companies.
(3) Plot existing and proposed utilities in plan (and profile when applicable)
(4) Monitor response of utility notices received by the City and then make recommendations for mitigating conflicts.
(5) Attend coordination meetings when required regarding adjustments and relocations.
(6) Pothole information, where required, shall be coordinated by the Consultant.

1.5 Construction Bidding Phase

Bidding procedures will be the responsibility of the City. While the PS&E construction package is being advertised for bids, all questions concerning the intent shall be referred to the City for resolution. In the event that any items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the Consultant for decision by the City, or by a covering change order after the award of the construction contract.

1.6 Construction Support Phase (As Needed)

(1) All construction support work shall be coordinated with the City.
(2) Consultant shall furnish, at the consultant's sole cost and expense, all necessary drawings for corrections and change orders required by errors and omissions of the Consultant. The original tracing(s) of the drawings and contract wording for the change orders shall be submitted to the city for duplication and distribution.
(3) Consultant will receive written notification of the award of a construction contract. Upon such notification, Consultant will proceed with the services required by the Agreement.
(4) Consultant is required to attend the pre-construction meeting with the successful construction contractor upon notification by the City.
(5) Consultant shall review and approve all submittals and shop plan drawings required supporting the construction contract. Consultant shall complete shop drawings reviews within two (2) weeks of receipt. Contract Change Order reviews shall be completed within two (2) working days of receipt.
(6) Consultant shall be available as requested by the City to resolve discrepancies in the contract documents. Consultant shall bring to the attention of the City any defects or deficiencies in the work by the construction contractor which the Consultant may observe. Consultant shall have no authority to issue instruction on behalf of the City, or to deputize another to do so.
(7) The Consultant shall prepare and deliver to the City the final as-built plans incorporating field marked prints supplied by the City. Upon completion of construction, the City will submit field-marked prints to Consultant. Consultant shall incorporate all changes to the plans electronically with all necessary revision notations and submit to the City.

1.7 Description of Required Services

All work shall be performed in conformance with the State of California and/or City of El Centro policies, procedures and standards.

Consultant shall carry out the instructions received from the City and shall cooperate with the City and other involved agencies.

The Consultant has total responsibility for the accuracy and completeness of the plans and related designs, specifications and estimates prepared and shall check all such materials accordingly. The plans will be reviewed by the City for conformity with the requirements of the Agreement. Reviews by the city do NOT include detailed review or checking of design or the accuracy with which such designs are depicted on the plans. The responsibility for accuracy and completeness of such items remains solely that of Consultant.

Consultant or its sub consultants shall not incorporate in the design any materials or equipment of single or sole source origin without written approval of the City.

The plans, specifications, estimates, calculations, and other documents furnished under the Agreement shall be of a quality acceptable to the City and State. The criteria for acceptance shall be a product of neat appearance, well organized, technically and grammatically correct, checked, and dated and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that of similar types produced by the State and set forth in related Caltrans manuals. The Consultant shall modify its work as necessary to meet the level of acceptability defined by the criteria above.

The Consultant shall have a quality control plan in effect during the entire time work is being performed under the Agreement. The Quality control plan shall establish a process whereby plans are independently checked, corrected and back checked, and all job-related correspondence and memoranda dated and received by affected persons and then bound in appropriate job files.

2.0 Construction Plans

2.1 60% PS&E (Unchecked Details)

Unchecked plan details shall consist of 60% design and detailed plans ready for the independent design check.

Three sets (3) full size (24”x36”) of design plans. The following submittals may be submitted electronically: draft SSP, preliminary quantities and estimates, pay item list, and design calculations.

2.2 100% PS&E

The Consultant shall submit the following documents for review and approval: Four sets (4) full

size (24”x36”) signed and sealed prints of checked design Electronic copies of Special Provisions

Electronic copies of cost estimate and check quantity calculations

Electronic copies of design calculations

Electronic copies of design check calculations
Other reports as needed by the City of El Centro

The City will review and comment on the PS&E package as soon as possible. The turnaround goal is within four (4) weeks of receipt of the complete PS&E package. One (1) copy of those documents with comments will be returned to the Consultant.

2.3 Final PS&E

The Consultant shall submit the following documents for review and approval:

Electronic sets of signed final design plans

Electronic copies of signed final specifications

Electronic copies of final cost estimate and final quantity calculations

Electronic copies of final design calculations

Electronic files in its original format and in PDF of all plans, specifications, and estimates

2.4 Manuals/Standards

Where applicable, engineering design of all PROJECT improvements shall be compatible and in accordance with the following as applicable:

Caltrans Highway Design Manual

Caltrans Standard Plans

Caltrans Standard Specifications

Imperial County Hydrology Manual

American Public Works Association Standard Specifications for Public Works Construction

American Public Works Association Standard Plans

American Water Works Association

City of El Centro Standard Plans

San Diego Regional Standard Drawings

It will be the responsibility of the Consultant to verify that it has received the latest version or update of these documents.

Plans for the improvements on the State Highway shall be prepared in accordance with Caltrans recommended practice for detailing and scope of work. Caltrans Standard plans shall be utilized where applicable and may be called out on the plans as reference.

Local street improvement plans shall adhere to City of El Centro Standard Plans and the Standard Specifications for Public Works Construction. Plans shall be computer drafted in AutoCAD compatible format and shall adhere to the current City of El Centro Public Works Department CAD standards.

The Consultant's work will be subject to inspections by representatives of the City, County, State and FHWA

2.5 ***Coordination***

Coordination with the City, other consultants and other involved agencies will be required to

achieve compatible designs, phasing of construction with existing or designed conditions, and timely delivery of the contract PS&E. Coordination may include, but not be limited to, coordination with Caltrans, FHWA, Regional Water Quality Control Board and other agencies.

The City will decide the manner in which the coordination of individual matters is undertaken. At the City's option, coordination efforts may be performed by the Consultant's direct contact, by the Consultant acting though the City or by the City only. When coordination efforts require Agreement, such Agreement shall be coordinated through the City.

EXHIBIT B

SAMPLE PROPOSAL EVALUATION FORM

CONSULTANT/FIRM NAME:		
Criteria	Max Points	Rating
Understanding of the work to be done	25	
Experience with similar kinds of work	25	
Quality of staff for work to be done	15	
Capability of developing innovative or advanced techniques	10	
Familiarity with state and federal procedures	10	
Financial responsibility	10	
Familiarity with local and regional approving agencies	5	
Total	100	

Evaluator

Print Name: _____

Signature: _____

Date: _____

Contract Manager

Initials: _____

Date: _____

EXHIBIT C

SAMPLE DESIGN PROFESSIONAL SERVICES AGREEMENT

EXHIBIT D

LEVINE ACT STATEMENT

Levine Act Statement
PRIME PROPOSER AND SUBCONSULTANTS MUST SUBMIT A SIGNED LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $500 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

This statement must be provided for the company and for each consultant who will work with the City.

City of El Centro Council Members as of the date of this RFP are as follows:

Mayor Sonia Carter
Mayor Pro-Tem Marty Ellett
Sylvia Marroquin
Claudia Camarena
Michael Crankshaw

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $500 to any City of El Centro Council Member in the 12 months preceding the date of the issuance of this RFP?
_____ YES _____NO
If yes, please identify the Council Member: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $500 to any City of El Centro Council Member in the three months following the award of the contract? _____ YES _____NO
If yes, please identify the Council Member:_____

Answering yes to either of the two questions above does not preclude City of El Centro from awarding a contract to your firm. It does, however, preclude the identified Council Member from participating in the contract award process for this contract.

_____ _____
DATE (SIGNATURE OF CONSULTANT)

EXIBIT E

SAMPLE TASK ORDER

SAMPLE CONSULTANT TASK ORDER #
FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

EXHIBIT G

SAMPLE CONSULTANT TASK ORDER #
FOR CITY OF EL CENTRO ON-CALL CONTRACT

PROJECT NAME:	On-Call Services	CONSULTANT: Engineering Firm
LOCATION:	Various in City of El Centro	ADDRESS: Somewhere, CA

This task order scope is made by and between the CITY OF EL CENTRO, acting through the Public Works Director, "CITY", and Engineering Firm, Somewhere, CA "CONSULTANT."

WHEREAS, CITY and CONSULTANT have entered into a contract, known as "AGREEMENT FOR ON-CALL CONSULTING SERVICES BETWEEN THE CITY OF EL CENTRO AND _____SERVICES"; which was fully executed on _____ by Resolution No. _____

WHEREAS,

1. CITY has solicited proposals for specific scope of work (Sub-Tasks) to be performed through this Task Order, herein attached as Exhibit A in accordance with section 1.2 of the On-Call agreement.
2. CITY has received a cost proposal for said Task Order herein attached as Exhibit B in compliance with Article III of the On-Call agreement.

NOW THEREFORE, it is mutually agreed to supplement the agreement as follows:

1. The original agreement is extended by a period of 0 yrs as it relates to the scope of this Task Order from today's date in order to complete the work independent of any other extension to the original agreement.
2. CITY and CONSULTANT may mutually elect to further extend this Task Order's time in order to complete its scope of work.
3. In accordance with section 1.4 of the On-Call Agreement, CITY directs CONSULTANT to proceed with said Task Order at the rate established in the cost proposal.
4. Said scope and cost shall be tracked solely under this Task Order and shall be independent of other Task Orders executed under the original on-call contract.

Except as amended herein, the terms and conditions of the Original Contract and all previous amendments remain in full force and effect.

IN WITNESS WHEREOF, this Task Order is executed by the City of El Centro, acting by and through the Director of Public Works, pursuant to section 1.2 of the On-Call agreement, authorizing such execution, and by the Consultant.

Dated this _____ day of _____, 20__.

THE CITY OF EL CENTRO

By:

_____

Abraham Campos P.E., Public Works
Director, City Engineer

Date: _____

I HEREBY CERTIFY I can legally bind _____ and that I have read all of this Task Order, this _____ day of _____, 20__.

By: _____

Authorized Representative

Title:

Print Name: _____

Date: _____

RESOLUTION NO. 26-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO APPROVING A DESIGN PROFESSIONAL SERVICES AGREEMENT WITH PSOMAS FOR ON-CALL CIVIL ENGINEERING – GENERAL SERVICES

WHEREAS, on-call professional Civil Engineering-General services agreements are an effective way to retain consultants to ensure that public works projects and programs are delivered in a timely and cost-effective manner; and

WHEREAS, pursuant to City Code Section 2-174, the City of El Centro ("City") identified a need for on-call, specialized Civil Engineering-General consulting services and released a Request for Proposal for such services through the City's Public Works Department; and

WHEREAS, on October 3, 2025, the City received proposals which were evaluated and ranked to determine the most qualified consultants; and

WHEREAS, Psomas ("Consultant") was amongst those consultants chosen to enter into an on-call agreement with the City; and

WHEREAS, such services will be awarded on a Task Order basis as the budget allows; and

WHEREAS, it is necessary for the City Council of the City of El Centro, California (the "City Council") to approve a Design Professional Services Agreement with Consultant for On-Call Civil Engineering – General Services ("Agreement"); and

WHEREAS, the City Council finds that its approval of the Agreement is in the best interest of the City.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. That the foregoing is true, correct and adopted.

2. That the City Council authorizes the Agreement in a not-to-exceed amount of one million dollars ($1,000,000) for the total term of the Agreement (for two years, with the possibility of up to three (3) one-year extensions), with the understanding that services will be provided on an as-needed basis and Task Order basis as further set out in the Agreement, with no guarantee of any level of effort from Consultant.

3. That the City Manager is hereby authorized to sign the Agreement on behalf of the City, a copy of which is on file in the Office of the City Clerk.

4. That the Public Works Director is hereby authorized to execute Task Orders up to fifty thousand dollars ($50,000) each for budgeted projects.

5. That the City Manager is hereby authorized to execute Task Orders for budgeted projects above fifty thousand dollars ($50,000) and under two-hundred thousand dollars ($200,000); task orders above that amount shall be approved by the City Council.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026.

CITY OF EL CENTRO

By_____
Michael Crankshaw, Mayor

ATTEST:

By_____
Norma Wyles, City Clerk

APPROVED AS TO FORM:
Office of the City Attorney

By_____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CITY OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California, do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at the regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By_____
Norma Wyles, City Clerk

2026 Streets Overlay Project - Approval of Plans and Specifications.

CITY MANAGER'S RECOMMENDATION:
Approve the Plans and Specifications for the 2026 Street Overlay Project and authorize the soliciting of bids.

FISCAL IMPACT:
No Impact to the General Fund. The Engineer's Estimate of probable cost is $4,039,236.50 proposed to be funded as follows:

LTA Measure D Bond	$ 850,000.00	(Fund 212)
SB1 RMRA	$1,200,000.00	(Fund 202)
LTA Measure D	$1,989,236.50	(Fund 205)
Total	$4,039,236.50	(Includes 10% contingency)

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:
City Beautification, Engagement & Civic Pride
Environmental Sustainability & Infrastructure

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:
NA

BACKGROUND:

The Public Works Administration Division, working in partnership with the Engineering Division, developed the 2026 Streets Overlay Project using City staff and resources. By completing the design work in-house, the City was able to achieve meaningful cost savings compared to hiring outside consultants, allowing more funding to be directed toward actual street improvements.

To identify streets most in need of repair, staff used the City’s pavement management system software, StreetSaver, which analyzes pavement conditions and provides data-driven recommendations for maintenance and rehabilitation. These recommendations were then verified through on-site field investigations conducted by City staff to confirm existing conditions and ensure that the most critical streets were selected.

Based on the results of this analysis and field review, staff prioritized the recommended streets and developed a project scope that aligns with the available construction budget. This careful planning process helps ensure that public funds are used efficiently while addressing the City’s greatest infrastructure needs.

The 2026 Streets Overlay Project continues the City of El Centro’s long-term commitment

to maintaining and improving local streets. Through ongoing investment in pavement preservation, the City aims to enhance roadway safety, improve driving conditions, and extend the lifespan of its street network.

DISCUSSION:

The 2026 Streets Overlay Project includes roadway improvements at various locations throughout the City.

The project is a continuation of the City's street overlay program, with an emphasis on completing street segments that were not addressed during prior overlay projects and preserving recent overlays as recommended by the City's Pavement Management Program. The work primarily consists of slurry seal applications using a 1/4-inch asphalt emulsion and sand mix, which will reseal streets that were rehabilitated in previous years and help extend the service life of the pavement.

In addition, for streets exhibiting more significant pavement distress, staff recommends rehabilitation through the installation of a conventional asphalt concrete leveling course, placement of hot mix asphalt (HMA), and application of asphalt rubber aggregate membrane (ARAM) to restore pavement integrity and improve long-term performance.

Below is a tentative schedule for this project:

Schedule:

Approval of Plans and Specs	January 20, 2026
Advertise Project	January 24, 2026
Pre-Bid Meeting	February 10, 2026
Bid Opening	February 26,2026
Construction Award	March 24, 2026
Construction Commence	April 28, 2026
Construction Completed	July 28, 2026

CONCLUSION:

Approve the Plans and Specifications for the 2026 Streets Overlay Project and authorize staff to release for public bidding.

ATTACHMENTS:

1. 2026 Streets Overlay Specifications
2. 2026 Streets Overlay Plans

City of El Centro, California

Bid Proposal, Contract Documents and Specifications

for

2026 STREETS OVERLAY PROJECT

For use in conjunction with "Standard Specification for Public Works Construction," 2024 Edition, together with subsequent annual supplements as published by Building News, Inc.

APPROVED:

Abraham Campos, P.E.
Director of Public Works/City Engineer

-STREET OVERLAY FUNDED BY:
- MEASURE D SALES TAX -
-SB1 GAS TAX-

2026 STREETS OVERLAY PROJECT

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NOTICE INVITING BIDS

RECEIPT OF BIDS: Sealed Bids will be received at the office of the City Clerk, City of El Centro, OWNER of the WORK, located at 1275 Main Street, El Centro, CA 92243, until February 26, 2026, at 2:00 p.m. for the construction of the "**2026 STREETS OVERLAY PROJECT**."

DESCRIPTION OF WORK: The WORK includes but is not limited to:

The work shall include grinding of existing asphalt concrete pavement, installation of conventional-asphalt concrete leveling course, installation of HMA, installation of ARAM, slurry seal, crack cleaning and filling, traffic striping, utility adjustments, curb/gutter, ADA ramps and sidewalks replacement, minor aggregate base, monument preservation, material testing, erosion control and traffic control as described in Chapter 5 of the Caltrans Traffic Manual and the latest edition of Manual of Uniform Traffic Control Devices ("California MUTCD").

The scope of work is more specifically described on the construction plans and in these Specifications.

SITE OF WORK: The site of the WORK is located at various streets as described in the contract document.

COMPLETION OF WORK: The WORK must be completed within (90) Calendar Days after the commencement date stated in the Notice to Proceed.

OPENING OF BIDS: The Bids will be publicly opened and read at 2:00 PM on February 26, 2026 at the above-mentioned office of the City Clerk's.

OBTAINING CONTRACT DOCUMENTS: The Contract Documents are entitled "**2026 STREETS OVERLAY PROJECT.**"

The Contract Documents are available through Planet Bids, by accessing our website (www.cityofelcentro.org) and selecting "GOVERNMENT> PUBLIC WORKS> BIDS & PROPOSALS> PROCEED TO SITE" from the drop down menu or by visiting https://pbsystem.planetbids.com/portal/41180/portal-home

MANDATORY PRE-BID CONFERENCE: Bidders are required to attend a pre-bid meeting, which will be conducted by the City of El Centro CONSTRUCTION MANAGER at 10:00 A.M. on , 2026. The meeting will be held at the City of El Centro, Conference Room located at , El Centro CA 92243. The object of the meeting is to acquaint Bidders with the site conditions and mandatory bidding requirements and subcontractors of subcontracting and material supply opportunities. At that meeting, the City of El Centro's Equal Opportunity Program goals and reporting procedures will be discussed.

QUESTIONS: Technical questions should be directed to the OWNER through the Planet Bids portal. Responses to questions that may be asked will be provided by Addendum. No oral comments shall be of any force or effect with respect to this solicitation. As used herein, all days are calendar days unless otherwise specified.

Questions must arrive at least ten (10) calendar days prior to the bid opening to allow time for distributing answers and/or clarifications to plan holders. Responses to questions that may be asked will be provided by Addendum through Planet Bids. Only responses by Addenda will be binding.

CITY'S RESPONSES: Responses to questions that may be asked will be provided by written Addenda. No oral comments shall be of any force or effect with respect to this solicitation.

REQUIRED DOCUMENTS AT BID TIME:

The bid shall be considered incomplete and be disqualified if any of the required BIDDING DOCUMENTS in pages BD8 to BD22 of this solicitation are not provided as instructed.

BID SECURITY: Each Bid shall be accompanied by a certified or cashier's check or bid bond in the amount of ten (10) percent of the total Bid price payable to the City of El Centro as a guarantee that the Bidder, if its bid is accepted, will promptly execute the Agreement. A bid shall not be considered unless one of the forms of bid security is enclosed with it.

BIDS TO REMAIN OPEN: The Bidder shall guarantee the total Bid price for a period of one hundred twenty (120) calendar Days from the date of Bid opening.

CONTRACTOR'S LICENSE CLASSIFICATION: In accordance with the provisions of California Law, OWNER has determined that CONTRACTOR shall possess a valid Class A California contractor's license at the time that the Bid is submitted. Failure to possess the specified license shall render the Bid non-responsive and shall act as a bar to award of the Agreement to any Bidder not possessing said license at the time of Bid.

CALIFORNIA WAGE RATE REQUIREMENTS: In accordance with the provisions of California Labor Code sections 1770 *et seq*. as amended, the Director of the Department of Industrial Relations has determined the general prevailing rate of per diem wages in accordance with the standards set forth in such sections for the locality in which the WORK is to be performed. A copy of said wage rates is on file at the office of OWNER. It shall be mandatory for CONTRACTOR to whom the WORK is awarded, and upon any Subcontractor under CONTRACTOR, to pay not less than said specified rates to all workers employed by them in the execution of the WORK.

CONTRACTOR AND SUBCONTRACTOR REGISTRATION WITH DEPARTMENT OF INDUSTRIAL RELATIONS:

Labor Code section 1771.1 provides that a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Public Contract Code section 4104, or engage in the performance of any contract for public work, as that term is defined in Chapter 1, Part 7, Division 2 of the Labor Code, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. Labor Code section 1771.1 also provides that it is not a violation of that section for an unregistered contractor to submit a bid that is authorized by Business and Professions Code section 7029.1 or by Public Contract Code section 10164, provided the contractor is registered to perform public work pursuant to Labor Code section 1725.5 at the time the contract is awarded.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

RETAINAGE FROM PAYMENTS: CONTRACTOR may elect to receive one hundred (100%) percent of payments due under the Contract Documents from time to time, without retention of any portion of the payment by OWNER, by depositing securities of equivalent value with OWNER in accordance with the provisions of section 22300 of the Public Contract Code, attached and incorporated as pages CD19 to CD23, as if fully set forth herein. Such securities, if deposited by CONTRACTOR, shall be valued by OWNER, whose decision on valuation of the securities shall be final. Securities eligible for investment under this provision shall be limited to those listed in section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by CONTRACTOR and OWNER.

FILING OF BID PROTESTS: By submitting a Bid, each Bidder hereby agrees and understands that the Bidder must comply with these protest procedures and exhaust all administrative remedies set forth herein prior to the initiation of any type of related legal action. With the express written Contract of the City and Bidder, and subject to the requirements of applicable law, this protest procedure can also be used to resolve issues surrounding the City's determination of a Bidder as not responsible. The following terms as used in this Section shall have the following meanings:

"Protest" shall mean a written objection by an interested party or affected party to (i) the requirements or specifications contained in the Notice to Bidders or any portion of documents accompanying that notice; or (ii) a proposed award recommendation protest.

A. Solicitation Phase Protest. The purpose of the solicitation is to obtain competitive Bids from Bidders. Any Bidder who has submitted a bid and who believes that a free and open competition has not taken place or that a particular specification or requirement is impractical, unduly restrictive, or ambiguous may advise the AGENCY of its concerns by submitting a detailed Solicitation Protest Statement in accordance with the requirements

set forth below in this Section A. The Protest does not replace the requirement to report irregularities in the bid documents.

(1) Contents and Requirements

A solicitation protest must be submitted to the contact named in the bid documents by personal delivery or email by close of business at least fifteen (15) calendar days prior to the Bid due date, and must contain all of the following to be considered:

a. The name, address, and telephone number of the protester; and
b. The Project Name and Project Number; and
c. A detailed statement setting forth the grounds for protest, which shall include all the factual and legal documentation in support of the protest in sufficient detail to establish merits of the protest; and
d. The desired resolution of the protest.

If the submitted protest does not comply with the requirements set forth herein, then it will not be considered for evaluation and will be returned to the protestor. Any grounds for protest not raised are waived. The protest may not be amended after filing. The protest is a public document.

(2) Evaluation and Determination

No hearing will be held on the protest. City's Public Works Director will review the protest and any supporting material and conduct an investigation of the facts. He/she may, but need not, requires other Bidders to submit statements or arguments regarding the protest and may discuss the protest with the protestor.

The Public Works Director shall issue a final written decision regarding any solicitation protest to each Bidder prior to Bid opening. The written decision will cite any actions that will or will not be taken in response to the protest. That decision shall be final, and there shall be no further administrative recourse.

B. Protest of Award

(1) Contents and Requirements

Following the opening of the Bids, any unsuccessful Bidder may protest City's proposed award of the Contract by submitting a protest to the Public Works Director no later than close of business on the fifth business day. That protest must be submitted in a timely manner, signed by the protesting Bidder, must contain all of the following to be considered:

a. The name, address, and telephone number of the protestor; and

b. The Project Name and Project Number; and
c. The City action or recommendation that is being protested;
d. A detailed statement setting forth every ground, reason, legal authority and facts in support of the protest, including all documents and evidence including specific references to parts of the bid documents; and
e. A clear statement of the relief request

A protest that does not comply with the requirements set forth herein will be returned to the protestor. The protest shall not be amended after filing. Any grounds for protest not raised are waived. The protest is a public document.

Award Protest Statements are public documents. City will notify the affected parties when a protest has been submitted, and will provide copies of the protest to the affected parties as soon as is reasonably practical.

(2) Evaluation and Determination

The affected parties may file responsive statements in support of or in opposition to the protest within three (3) business days after the receipt of the protest from the City. The Public Works Director shall review the facts and all submittals relative to the protest and shall issue a written decision setting forth the basis for such decision. The written decision will be issued to the protestor and to all affected parties.

Unless otherwise required by law, no hearing shall be provided. In the event a hearing is conducted, the Public Works Director, shall issue written notice to the protestor and affected parties identifying the date and time for the hearing, along with rules concerning the hearing.

C. Delay in Award

Execution of any proposed contract shall be delayed pending the resolution of the protest unless one or more of the following conditions is present:

1. The items or services being procured are urgently required;
2. Delivery or performance will be unduly delayed by failure to make award promptly; or
3. Failure to make prompt award will otherwise cause undue harm to the City.

D. No Limitations on Remedies

Nothing contained herein shall be construed to act as a limitation of the City's choice of remedies or confer any right upon any interested party or affected party to a remedy.

E. Basis for Choice Remedy

In determining the appropriate remedy, the City shall consider all of the circumstances surrounding the notice of bids and/or award, including, but not limited to:

1. The seriousness of any deficiency found to exist in the contracting process;
2. The effect of the action on the competitive process;
3. Any urgency surrounding the requirement to enter into a contract; and
4. The effect that implementing the remedy will have on the AGENCY.

F. Remedies

If the City determines that the award or proposed award was not made in accordance with applicable statutes, regulations, policies and/or procedures, the City, in its sole discretion, may grant any of the following remedies or any other remedy it deems appropriate:

1. Prior to award, City may issue a new solicitation, make a new selection/award recommendation, or award the contract consistent with applicable statutes, regulations, policies and procedures;
2. In its sole discretion, take no further action; or
3. Take any other action that is permitted by law to promote compliance.

OWNER'S RIGHTS RESERVED: OWNER reserves the right to reject any or all Bids, to waive any informality in a Bid, and to make awards to the lowest responsive Bidder as it may best serve the interest of OWNER.

Date:_____ OWNER: City of El Centro

_____
Norma Wyles, City Clerk

- END OF NOTICE INVITING BIDS -

BIDDING DOCUMENTS

INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS. Terms used in these Instructions to Bidders and the Notice Inviting Bids which are defined in the General Conditions have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a Bid directly to OWNER, as distinct from a sub-bidder, who submits a Bid to a Bidder.

2. INTERPRETATIONS AND ADDENDA

2.1 All questions about the meaning or intent of the Contract Documents are to be directed to OWNER. Interpretations or clarifications considered necessary by OWNER in response to such questions will be issued by Addenda. Questions received less than ten (10) Days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

2.2 Addenda may also be issued to modify the Contract Documents as deemed advisable by OWNER or DESIGN CONSULTANT.

3. COMPETENCY OF BIDDERS. In selecting the lowest responsive Bidder, consideration will be given not only to the financial standing but also to the general competency of the Bidder for the performance of the WORK covered by the Bid. Bidders must possess a valid California contractor's license applicable to the type of work bid upon at the time of opening Bids.

4. EL CENTRO LICENSE. All Bidders and their Subcontractors not already having a license from the City of El Centro for the WORK will be required to secure the appropriate license from the City of El Centro before the Agreement can be executed.

5. DISQUALIFICATION OF BIDDERS. More than one (1) Bid from an individual, firm, partnership, corporation or association under the same or different names will not be considered. If OWNER believes that any Bidder is interested in more than one (1) Bid for the WORK contemplated, all Bids in which such Bidder is interested will be rejected. If OWNER believes that collusion exists among the Bidders, all Bids will be rejected. A party who has quoted prices to a Bidder is not hereby disqualified from quoting prices to other Bidders, or from submitting a Bid directly for the WORK.

6. BIDDER'S EXAMINATION OF CONTRACT DOCUMENTS AND SITE

6.1 It is the responsibility of each Bidder before submitting a Bid:

(a) To examine thoroughly the Contract Documents and other related data identified in the Bidding Documents (including "technical data" referred to below);

(b) To visit the site to become familiar with and satisfy Bidder as to the general and local conditions that may affect cost, progress or performance of the WORK;

(c) To consider Federal, State and local Laws and Regulations that may affect cost, progress or performance of the WORK;

(d) To study and carefully correlate the Bidder's knowledge and observations with the Contract Documents and other related data; and

(e) To notify CONSTRUCTION MANAGER of all conflicts, errors, ambiguities or discrepancies in or between the Contract Documents and such other related data.

6.2 Reference is made to the Supplementary General Conditions for identification of:

(a) Those reports of explorations and tests of subsurface conditions at or contiguous to the site which have been utilized by DESIGN CONSULTANT in the preparation of the Contract Documents. The Bidder may rely upon the accuracy of the technical data contained in such reports; however, the interpretation of such technical data, including any interpolation or extrapolation thereof, together with non-technical data, interpretations and opinions contained therein or the completeness thereof is the responsibility of the Bidder.

(b) Those drawings of physical conditions in or relating to existing surface and subsurface conditions (except Underground Utilities) which are at or contiguous to the site that have been utilized by DESIGN CONSULTANT in the preparation of the Contract Documents. The Bidder may rely upon the accuracy of the technical data contained in such drawings; however, the interpretation of such technical data, including any interpolation or extrapolation thereof, together with nontechnical data, interpretations and opinions contained in such drawings or the completeness thereof is the responsibility of the Bidder. Subsurface conditions, including but not limited to groundwater, may have changed significantly between the completion of the soils investigation by the geotechnical engineer and start of construction. Subsurface conditions, including but not limited to groundwater, may change significantly during construction.

6.3 Copies of such reports and drawings will be made available by OWNER to any Bidder on request if said reports and drawings are not bound herein. Those reports and drawings are not part of the Contract Documents, but the technical data contained therein upon which the Bidder is entitled to rely, in Paragraph SGC-4.2 of the Supplementary General Conditions has been identified and established.

6.4 Information and data reflected in the Contract Documents with respect to Underground Utilities at or contiguous to the site is based upon information and data furnished to OWNER and DESIGN CONSULTANT by the owners of such Underground Utilities or others, and OWNER does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary General Conditions or the section entitled "Protection and Restoration of Existing Facilities" of the General Requirements.

6.5 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, Underground Utilities and other physical conditions, and possible changes in the Contract Documents due to differing conditions appear in Paragraphs 4.2, 4.3, and 4.4 of the General Conditions.

6.6 Before submitting a Bid, each Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface and Underground Utilities) at or contiguous to the site or otherwise which may affect cost, progress or performance of the WORK or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Bidder and Safety precautions and programs incident thereto which the Bidder deems necessary to determine its Bid for performing the WORK in accordance with the time, price and other terms and conditions of the Contract Documents. Interference with existing facility operations will not be permitted.

6.7 On request in advance, OWNER will provide each Bidder access to the site to conduct such examinations, investigations, explorations, tests and studies as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and shall clean up and restore the site to its former condition upon completion of such examinations, investigations, explorations, tests and studies.

6.8 The lands upon which the WORK is to be performed, rights-of-way and easements for access thereto and other lands designated for use by CONTRACTOR in performing the WORK are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by CONTRACTOR. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by OWNER unless otherwise provided in the Contract Documents.

6.9 The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of this Paragraph 6, "Bidder's Examination of Contract Documents and Site" herein, that without exception the Bid is premised upon performing the WORK required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction (if any) as may be

indicated in or required by the Contract Documents, that Bidder has given CONSTRUCTION MANAGER written notice of all conflicts, errors, ambiguities and discrepancies in the Contract Documents and the written resolution thereof by CONSTRUCTION MANAGER is acceptable to Bidder and the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the WORK.

7. BID FORM.

7.1 The Bid shall be made on the Bid schedule bound herein and the pages may be removed from the bound volume. The envelope enclosing the sealed Bids shall be plainly marked in the upper left-hand corner with the name and address of the Bidder and shall bear the words "BID FOR" followed by "2026 STREETS OVERLAY PROJECT.," El Centro, CA, 92243, and the date and hour of opening of Bids. The Bid security shall be enclosed in the same envelope with the Bid.

7.2 All blanks on the Bid form must be completed in ink.

7.3 Bids by corporations must be executed in the corporate name by the president and a vice-president. Bids signed by other corporate officer or the project manager shall be accompanied by the enclosed certificate of authority to sign, attested by the secretary or assistant secretary, and with the corporate seal affixed. The corporate address and state of incorporation must appear below the signature.

7.4 Bids by partnerships must be executed in the partnership name and be signed by a managing partner, accompanied by evidence of authority to sign and his/her title must appear under the signature and the official address of the partnership must appear below the signature.

7.5 All names must be printed below the signature.

7.6 The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Bid form. Failure to acknowledge Addenda shall render the Bid non-responsive and shall be cause for its rejection.

7.7 The address to which communications regarding the Bid are to be directed must be shown.

7.8 All Bidders must provide evidence of authority to conduct business in California to the extent required by law.

8. QUANTITIES OF WORK. The quantities of work or material stated in unit price items of the Schedule of Values are supplied only to give an indication of the general scope of

the WORK; OWNER does not expressly or by implication agree that the actual amount of work or material will correspond therewith, and reserves the right after award to increase or decrease the amount of any unit price item of the WORK in accordance with Article 10 of the General Conditions, to delete any Bid item in its entirety, or to add additional Bid items up to and including an aggregate total amount not to exceed twenty-five (25) percent of the Contract Price.

9. **SUBSTITUTE OR "OR EQUAL" ITEMS**. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier and the name is followed by the words "or equal," the Bidder may write the name of a substitute supplier (which the Bidder considers as an "or equal") in the Proposed Substitute Equipment/Material Supplier List in the Bid form. These substitute suppliers will only be considered after award of the Agreement. The procedure for the submittal of substitute or "or equal" products is specified in section 6.7 of the General Conditions.

10. **SUBMISSION OF BIDS.** The Bid shall be delivered by the time and to the place set forth in the Notice Inviting Bids. It is the Bidder's sole responsibility to see that its Bid is received in proper time.

11. **BID SECURITY, BONDS AND INSURANCE**. Each Bid shall be accompanied by a certified or cashiers' check or approved Bid bond in the amount stated in the Notice Inviting Bids. Said check or bond shall be made payable to the City of El Centro and shall be given as a guarantee that the Bidder, if awarded the Agreement, will enter into an Agreement with OWNER, and will furnish the necessary insurance certificates, payment bond and performance bond; each of said Bonds to be in the amount stated in the Supplementary General Conditions. In case of refusal or failure to enter into said Agreement, the check or Bid bond, as the case may be, shall be forfeited to OWNER. If the Bidder elects to furnish a Bid bond as its Bid security, the Bidder shall use the Bid bond form bound herein, or one conforming substantially to it in form.

12. **DISCREPANCIES IN BIDS**. In the event of a discrepancy between words and numbers in the Bid, the words shall govern. In the event there are unit price Bid items in the Schedule of Values and the amount indicated for a unit price Bid item does not equal the product of the unit price and quantity, the unit price shall govern and the amount will be corrected accordingly, and the Bidder shall be bound by said correction. In the event there is more than one (1) Bid item in the Schedule of Values and the total indicated for the schedule does not agree with the sum of the prices bid on the individual items, the prices bid on the individual items shall govern and the total for the schedule will be corrected accordingly, and the Bidder shall be bound by said correction.

13. **MODIFICATIONS AND UNAUTHORIZED ALTERNATIVE BIDS.** Unauthorized conditions, limitations or provisos attached to the Bid will render it informal and may cause its rejection as being non-responsive. The completed Bid forms shall be without interlineations, alterations or erasures in the printed text. Alternative Bids will not be considered unless called for. Oral, telegraphic or telephonic Bids or modifications will not be considered.

14. **WITHDRAWAL OF BID.** The Bid may be withdrawn by the Bidder by means of a written request, signed by the Bidder or its properly authorized representative. Such written request must be delivered to the place stipulated in the Notice Inviting Bids for receipt of Bids prior to the scheduled closing time for receipt of Bids.

15. **BID RESULTS.** To obtain bid results, provide a self-addressed, stamped envelope, referencing "2026 STREETS OVERLAY PROJECT." Bid tabulation will be mailed to you after verification of extensions. Bid results will not be given out over the telephone. Bid results may be posted on City's website.

16. **AWARD OF CONTRACT.** Award of a contract, if it be awarded, will be on the basis of the Bid proposal estimated quantities and will be made to the lowest responsive Bidder whose Bid complies with all the requirements prescribed. Unless otherwise specified, any such award will be made within the period stated in the Notice Inviting Bids that the Bids are to remain open. Unless otherwise indicated, a single award will be made for all the Bid items in an individual Bid schedule. The lowest Bid shall be the lowest price on the Total BID.

17. **RETURN OF BID SECURITY.** Within fourteen (14) working Days after award of the Agreement, OWNER will return the Bid securities accompanying such of the Bids as are not considered in making the award. All other Bid securities will be held until the Agreement has been finally executed. They will then be returned to the respective Bidders whose Bids they accompany.

18. **EXECUTION OF AGREEMENT.** The apparent low Bidder will be required to execute a written Agreement with OWNER on the form of agreement provided, shall secure all insurance and shall furnish all certificates and Bonds required by the Contract Documents within fourteen (14) calendar Days after receipt of notification that the Bidder is the apparent low Bidder. Failure or refusal to enter into an Agreement as herein provided or to conform to any of the stipulated requirements in connection therewith shall be considered non-responsive and result in the forfeiture of the Bid security. If the lowest responsive Bidder refuses or fails to execute the Agreement, OWNER may proceed to the second lowest responsive Bidder. If the second lowest responsive Bidder refuses or fails to execute the Agreement, OWNER may proceed to the third lowest responsive Bidder. On the failure or refusal of such second or third lowest Bidder to execute the Agreement, each such Bidder's Bid securities shall be likewise forfeited to OWNER.

19. LIQUIDATED DAMAGES. Provisions for liquidated damages in the amount of $1,500 per day are set forth in the Agreement Section XVIII.

20. WORKERS' COMPENSATION REQUIREMENT. The Bidder should be aware that in accordance with section 3700 of the California Labor Code it will, if awarded the Agreement, be required to secure the payment of compensation to its employees and execute the Workers' Compensation Certification in the form contained in these Contract Documents.

- END OF INSTRUCTIONS TO BIDDERS -

SECTION 00300A

BID FORMS

BID TO: CITY OF EL CENTRO

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Contract Documents (as defined in Article 6 of the Agreement) to perform the WORK as specified or indicated in said Contract Documents entitled "2026 STREETS OVERLAY PROJECT"

2. Bidder accepts all of the terms and conditions of the Contract Documents, including without limitation those in the Notice Inviting Bids and Instructions to Bidders, dealing with the disposition of the Bid security.

3. This Bid will remain open for the period stated in the Notice Inviting Bids unless otherwise required by law. Bidder will enter into an Agreement within the time and in the manner required in the "Notice Inviting Bids" and the "Instructions to Bidders," and will furnish the insurance certificates, Payment Bond and Performance Bond required by the Contract Documents.

4. Bidder has examined copies of all the Contract Documents including the following Addenda (receipt of all of which is hereby acknowledged):

Number	_____	_____	_____	_____	_____	_____
Date	_____	_____	_____	_____	_____	_____

5. Bidder has familiarized itself with the nature and extent of the Contract Documents, WORK, site, locality where WORK is to be performed, the legal requirements (Federal, State and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the WORK and has made such independent investigations as Bidder deems necessary.

To all the foregoing, and including all Bid schedule(s) and information required of Bidder contained in this Bid form, said Bidder further agrees to complete the WORK required under the Contract Documents within the Contract Time set forth in said Contract Documents, and to accept in full payment therefore the Contract Price based on the total Bid price(s) named in the aforementioned Bid schedule(s).

Dated: _____ Bidder: _____

By: _____
(Signature)

Title: _____

BID SCHEDULE - PRICES

Pursuant to and in compliance with the Invitation for Bids and other Contract Documents relating to the proposal for the construction of

2026 STREETS OVERLAY PROJECT

All in accordance with the Drawings and Project Specifications the undersigned Bidder, having familiarized himself with the terms of the Agreement, the local conditions affecting the performance of the Agreement and the cost of the WORK at the place the WORK is to be done; and with the Drawings, Project Specifications and other Contract Documents, hereby stipulated; CONTRACTOR agrees to complete the Agreement, including all of its component parts and everything required to be performed, and to provide and furnish any and all labor, materials, equipment, tools, expendable supplies, and all utility and transportation services necessary to perform the Agreement, and complete in a workmanlike manner all of the WORK required in connection with the Agreement, all in strict conformance with the Drawings and Specifications for the following prices and sum.

The following Bid Schedule of estimated quantities is included for convenience of bidding and a basis for comparison of Bids only, and CITY does not, expressly, or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the WORK, or to delete portions of the WORK, as may be deemed necessary or advisable by CITY.

All Bidders are REQUIRED to use unit prices where indicated and to complete this schedule.

All items shall be complete and in place per Plans and these Bid and Contract Documents.

Note: Payment for all work (labor, material, equipment, etc.) required for the construction and installation of the improvement as shown on the plans which is not specifically identified below in the Bid Schedule shall be considered as included in the CONTRACTOR's price, as itemized below, for the various items of work for which the work is required, and no additional compensation shall be made therefor.

PROPOSAL BID FORM

TO THE DIRECTOR OF PUBLIC WORKS OF THE CITY OF EL CENTRO:

The undersigned hereby declares that he has carefully examined the location of the proposed work, that he has examined the plans and specifications and read the accompanying instructions to bidders and hereby proposes to furnish all material except owner furnished materials, and do all work required to complete the said work in accordance with said plans and specifications and special provisions for the unit prices set forth in the following schedule. The bidder shall furnish prices for all items shown in the proposal.

BASE BID
Schedule of Values

Item	Description	Unit	Amount	Unit Price	Total Price
A1	MOBILIZATION / DEMOBILIZATION	LS	1		
A2	TRAFFIC CONTROL	LS	1		
A3	TYPE II SLURRY W/POLYMER AND RUBBER TIRE ROLLING (NON-SYSTEM AREAS)	SY	93,267		
A4	CRACK CLEANING AND FILLING WITH RUBBERIZED ASPHALT MATERIAL	LS	1		
A5	STREET STRIPING AND PAVEMENT MARKINGS	LS	1		
A6	DIGOUTS: INCLUDING REMOVAL AND DISPOSAL, COMPACTION & INSTALLATION OF ¾” TYPE A HMA PG70-10	SF	17,500		
A7	3/4" CONVENTIONAL ASPHALT IN 2" LIFTS AT DIGOUT AREAS	TON	325		
A8	MONUMENT PRESERVATION CERTIFICATE & RE-ESTABLISHMENT OF MONUMENTS NOT FOUND IN THE WORK AREA & PROTECTION OF THOSE THAT ARE	LS	1		
A9	SYSTEM 1 AND SYSTEM 2: TYPE II SLURRY INCLUDING POLYMER AND RUBBER TIRE ROLLING	SY	60,964		
A10	SYSTEM 2: ¾” OF LEVELING COURSE ½” HMA TYPE-A PG70-10 INCLUDING CRACK CLEANING	SY	59,516		
A11	SYSTEM 2: 3/8” ARAM	SY	59,516		
A12	SYSTEM 2: INTERSECTION TREATMENT INCLUDING 1” COLD MILL AND 2” OF ¾” HMA TYPE-A PG70-10	SY	1,340		
A13	DOUBLE ADJUST MANHOLE	EA	1		

A14	DOUBLE ADJUST WATER VALVES, GAS VALVES AND MONUMENT WELLS	EA	7		
A15	SYSTEM 1 ARAM	SY	1,448		
A16	SINGLE ADJUST MANHOLES	EA	49		
A17	SINGLE ADJUST WATER VALVES, GAS VALVES AND MONUMENT WELLS	EA	83		
A18	REMOVE AND REPLACE ADA RAMPS PER CITY STANDARDS	EA	30		
A19	REMOVE AND REPLACE SIDEWALK "CHASERS" FOR ADA RAMPS	SF	3,200		
A20	NEW 20’ WIDE CONCRETE DRIVEWAY INCLUDING THE REMOVAL AND DISPOSAL OF EXISTING CONCRETE SIDEWALK AND CURB/GUTTER	EA	1		
A21	REMOVE AND REPLACE CURB AND GUTTER TO BE INSTALLED IN 10 LF INCREMENTS	LF	500		
A22	RE-STRIPING AND SIGNAGE OF 8TH STREET BETWEEN VALLEYVIEW AVE TO WAKE AVE.	LS	1		
A23	EROSION CONTROL	LS	1		
A24	MATERIAL TESTING	LS	1		

TOTAL BASE BID $_____

ADDITIVE BIDS

Additive 1

Schedule of Values

Item	Description	Unit	Amount	Unit Price	Total Price
B1	MOBILIZATION / DEMOBILIZATION	LS	1		
B2	TRAFFIC CONTROL	LS	1		
B3	TYPE II SLURRY W/POLYMER AND RUBBER TIRE ROLLING (NON-SYSTEM AREAS)	SY	7,118		
B4	CRACK CLEANING AND FILLING WITH RUBBERIZED ASPHALT MATERIAL	LS	1		
B5	STREET STRIPING AND PAVEMENT MARKINGS	LS	1		

B6	MONUMENT PRESERVATION CERTIFICATE & RE-ESTABLISHMENT OF MONUMENTS NOT FOUND IN THE WORK AREA & PROTECTION OF THOSE THAT ARE	LS	1		
B7	SYSTEM 1 AND SYSTEM 2: TYPE II SLURRY INCLUDING POLYMER AND RUBBER TIRE ROLLING	SY	15,618		
B8	SYSTEM 2: ¾" OF LEVELING COURSE ½" HMA TYPE-A PG70-10 INCLUDING CRACK CLEANING	SY	12,542		
B9	SYSTEM 2: 3/8" ARAM	SY	12,542		
B10	SYSTEM 1 ARAM	SY	3,076		
B11	SINGLE ADJUST MANHOLES	EA	14		
B12	SINGLE ADJUST WATER VALVES, GAS VALVES AND MONUMENT WELLS	EA	13		
B13	REMOVE AND REPLACE ADA RAMPS PER CITY STANDARDS	EA	10		
B14	REMOVE AND REPLACE SIDEWALK "CHASERS" FOR ADA RAMPS	SF	1,000		
B15	EROSION CONTROL	LS	1		
B16	MATERIAL TESTING	LS	1		

Total Additive 1 is: $_____

Additive 2

Schedule of Values

Item	Description	Unit	Amount	Unit Price	Total Price
C1	MOBILIZATION / DEMOBILIZATION	LS	1		
C2	TRAFFIC CONTROL	LS	1		
C3	SYSTEM 2: TYPE II SLURRY INCLUDING POLYMER AND RUBBER TIRE ROLLING	SY	9,314		
C4	SYSTEM 2: ¾" OF LEVELING COURSE ½" HMA TYPE-A PG70-10 INCLUDING CRACK CLEANING	SY	9,314		
C5	SYSTEM 2: 3/8" ARAM	SY	9,314		

C6	STREET STRIPING AND PAVEMENT MARKINGS	LS	1		
C7	REMOVE AND REPLACE ADA RAMPS PER CITY STANDARDS	EA	1		
C8	REMOVE AND REPLACE SIDEWALK "CHASERS" FOR ADA RAMPS	SF	100		
C9	MONUMENT PRESERVATION CERTIFICATE & RE-ESTABLISHMENT OF MONUMENTS NOT FOUND IN THE WORK AREA & PROTECTION OF THOSE THAT ARE	LS	1		
C10	6TH AND MAIN CROSSWALK RELOCATION	LS	1		
C11	EROSION CONTROL	LS	1		
C12	MATERIAL TESTING	LS	1		

Total Additive 2 is: $_____

Total Base Bid is:

$_____ (Amount of Total Base Bid written numerically as dollars and cents, in US dollars)

$ _____
(Amount of Total Base Bid written in words as dollars and cents, in US dollars)

Total Bid (consisting of the sum of Base Bid, Additive 1 and Additive 2) is:

$_____ (Amount of Total Bid written numerically as dollars and cents, in US dollars)

$
_____
(Amount of Total Bid written in words as dollars and cents, in US dollars)

NOTE: <u>TOTAL BID</u> WILL BE USED TO DETERMINE LOW BIDDER

-END OF PROPOSAL BID FORM-

LIST OF SUBCONTRACTORS

The Bidder shall list below the name and the location of the place of business of each Subcontractor who will perform work or labor or render service to CONTRACTOR in or about the construction of the WORK, or a Subcontractor licensed by the State who, under subcontract to CONTRACTOR, specially fabricates and installs a portion of the WORK according to detailed Drawings contained in the plans and specifications, in an amount in excess of one-half (0.5) of one (1.0) percent of CONTRACTOR's total Bid. The Bidder shall also list below the portion of the WORK which will be done by each Subcontractor under this contract. CONTRACTOR shall list only one (1) Subcontractor for each portion of the WORK. **If Bidder does NOT intend to use ANY subcontractors, state "NONE" in the first block.**

Substitutions of subcontractors listed will not be permitted unless approved by the City of El Centro**.**

The Bidder's attention is directed to Paragraph 6.5.3 entitled "Subcontract Limitations" of the General Conditions which sets forth the percent of the WORK to be performed with the Bidders' own forces. **Failure to comply with this requirement will render the Bid non-responsive and may cause its rejection.**

PORTION OF WORK	NAME OF SUBCONTRACTOR	DIR REGISTRATION NUMBER	PLACE OF BUSINESS ADDRESS/TELEPHONE No.

USE ADDITIONAL FORMS AS NECESSARY

GENERAL INFORMATION

BIDDER'S GENERAL INFORMATION:

The Bidder shall furnish the information requested below. Additional sheets shall be attached as required. Failure to complete Item Nos. 1 through 3 will cause the Bid to be non-responsive and shall cause its rejection. In any event, no award will be made until all of the Bidder's general information (i.e., items 1 through 3, inclusive) is delivered to OWNER.

INFORMATION TO BE PROVIDED BY ALL BIDDERS WITH BID SUBMITTAL:

(1) CONTRACTOR's name and address:_____

_____

_____

(2) CONTRACTOR's telephone number: _____ FAX number:_____

(3) CONTRACTOR's license: Primary classification _____

California State License No. and Expiration Date _____

Supplemental classifications held, if any: _____

Name of Licensee, if different from (1) above: _____

_____

To be considered for award, CONTRACTOR shall have met all requirements established by OWNER of the Project.

- END GENERAL INFORMATION –

NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

- END NONCOLLUSION DECLARATION –

BID BOND

KNOW ALL MEN BY THESE PRESENTS,

That _____ as Principal, and _____as Surety, are held and firmly bound unto the City of El Centro, hereinafter called "OWNER," in the sum of _____ dollars, (_____) (not less than ten (10) percent of the total amount of the Bid) for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has submitted a Bid to said OWNER to perform the WORK required under the Bid schedule(s) of OWNER's Contract Documents entitled:

_____

_____

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time and in the manner required in the Notice Inviting Bids and the Instructions to Bidders enters into a written Agreement on the form of agreement bound with said Contract Documents, furnishes the required certificates of insurance and furnishes the required Performance Bond and Payment Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect. In the event suit is brought upon this Bond by said OWNER and OWNER prevails, said Surety shall pay all costs incurred by said OWNER in such suit, including reasonable attorneys' fee to be fixed by the court and actual costs.

SIGNED AND SEALED, this _____ day of _____, 20___

_____ (SEAL) _____(SEAL)
(Principal) (Surety)

By: _____ By: _____
(Signature) (Signature)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

- END BID BOND –

CORPORATE CERTIFICATION
OR
PARTNERSHIP INFORMATION

Name of Corporation or Partnership_____

State of Incorporation_____

List names and addresses of each partner, or titles, names and business addresses of President, Secretary and Treasurer.

_____

_____

_____

Date_____ Contractor_____

Signature_____ Title_____

ATTEST:

_____
Signature by

_____
Title

END OF CORPORATE CERTIFICATION OR PARTNERSHIP INFORMATION

DRUG/ALCOHOL TESTING REQUIREMENTS

CONTRACTOR shall execute the following form as required by the Federal Drug and Alcohol, Section 49 CFR Part 382.

I agree to comply with the provisions of Federal Omnibus Transportation Employee Testing Act of 1991, and that I will administer a program of alcohol and drug testing of all commercial vehicle operators, as required by Federal Regulations.

CONTRACTOR certifies compliance with the City of El Centro's Drug and Alcohol Free Workplace Policy as a condition of the State Drug-Free Workplace Act of 1990 (Government Code sections 8350 *et seq*.) and the Federal Drug Free Workplace Act of 1988 (41 U.S.C.A. Sections 701 *et seq*.) In addition, CONTRACTOR agrees to submit a copy of its own drug free workplace policy.

Dated_____

_____
CONTRACTOR's Name

_____
CONTRACTOR's Signature

_____
Title

- END DRUG/ALCOHOL TESTING REQUIREMENTS –

WORKERS' COMPENSATION CERTIFICATE

(AS REQUIRED BY SECTION 1861
OF THE CALIFORNIA LABOR CODE)

I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the WORK of this Agreement.

CONTRACTOR:_____

By: _____

Title: _____

- **END OF WORKERS' COMPENSATION CERTIFICATE –**

SITE VISIT CERTIFICATE

THIS IS TO CERTIFY that:

I, _____(*name of bidder or his representative*) of the _____ (*name of construction firm*) visited the site in connection with the Bid for the _____ (*name of the Project.*)

Having examined the bid documents, I certify that I have acquainted with the nature, geographical and exact location of the works; the general conditions of execution; the neighboring buildings and other constraints that might affect the construction methods; the obligation not to obstruct the traffic where requested, or the flow of any water; the physical conditions specific to the construction sites; the climatic conditions; local conditions; means of communication and transport; the possibility of supplying water, electricity and fuel; the availability of labor sufficient in number and quantity; all constraints and obligations resulting from social, tax and customs legislation; and all conditions and circumstances which might influence the execution or price of the works.

I further certify that I am satisfied with the description of the works and the Project Engineer's explanations and that I understand perfectly the works to be undertaken as specified and implied in the execution of the Contract.

_____
(Name and Signature of Bidder or his Representative)

Date : _____

Note 1: This form shall be completed at the time of the visit to the site where the works are to be carried out.

- END OF SITE VISIT CERTIFICATE –

CONTRACTOR'S CERTIFICATION OF QUALIFICATION FOR LICENSE CLASSIFICATION

1. If an individual, I hereby certify that I am, or my responsible managing employee _____ (insert name) is, qualified for the license classification called for in these contract documents.

2. If a co-partnership or limited partnership, the general partner hereby certifies that the general partner _____ (insert name), or responsible managing employee _____ (insert name), is qualified for the license classification called for in these contract documents.

3. If a corporation, or any other combination or organization, the responsible managing officer _____ (insert name), or a responsible managing employee _____ (insert name), is qualified for the license classification called for in these contract documents.

If the individual who qualifies the Contractor for the license classification called for in these contract documents changes during the progress of the work, then Contractor shall, within seven (7) days of any such change, notify the Director of Public Works in writing of such change, including the name, license number and status of the individual.

For the purpose of this Certification, a responsible managing employee shall mean an individual who is a bona fide employee of the Contractor and is actively engaged in the classification of work for which that individual is the qualifying person on behalf of the Contractor under California law.

DATED:_____ CONTRACTOR:_____

SIGNATURE:_____ TITLE:_____

ATTEST:

SIGNATURE BY:_____

TITLE:_____

- END OF CONTRACTOR'S CERTIFICATION OF QUALIFICATION –

- END OF BIDDING DOCUMENTS –

CONTRACT DOCUMENTS

CITY OF EL CENTRO
2026 STREETS OVERLAY PROJECT.
CONSTRUCTION SERVICES AGREEMENT

This CONSTRUCTION SERVICES AGREEMENT ("Agreement"), is made and effective as of the last signature date set forth below "Effective Date" , by and between the City of El Centro, a municipal corporation ("CITY"), and , a *[sole proprietorship, partnership, limited liability partnership, corporation]* ("CONTRACTOR"). In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

I. SCOPE OF WORK

The CONTRACTOR shall perform within the time set forth in Article 2 of this Agreement and shall furnish all labor, materials, equipment, tools, utility services, and transportation and perform and complete all work required in connection with the following:

The work shall include grinding of existing asphalt concrete pavement, installation of conventional-asphalt concrete leveling course, installation of HMA, installation of ARAM, slurry seal, crack cleaning and filling, traffic striping, utility adjustments, curb/gutter, ADA ramps and sidewalks replacement, minor aggregate base, monument preservation, material testing, erosion control and traffic control as described in Chapter 5 of the Caltrans Traffic Manual and the latest edition of Manual of Uniform Traffic Control Devices ("California MUTCD").

The scope of work is more specifically described on the construction plans and in these Specifications.

By entering into this Agreement, CONTRACTOR acknowledges that there may be other contractors on the site whose work will be coordinated with that of its own. CONTRACTOR expressly warrants and agrees that it will cooperate with other contractors and will do nothing to delay, hinder, or interfere with the work of other separate contractors, the CITY, the Construction Manager, the Architect, or utilities. CONTRACTOR also expressly agrees that, in the event its work is hindered, delayed, interfered with, or otherwise affected by a separate contractor, its sole remedy will be a direct action against the separate contractor. To the extent allowed by law, the CONTRACTOR will have no remedy, and hereby expressly waives any remedy against the CITY, the Construction Manager, or the Architect on account of delay, hindrance, interference or other events caused by a separate contractor.

II. TIME FOR PROJECT COMPLETION

All of CONTRACTOR's work on the Project shall be completed within durations established for the individual activities as set forth in the Project Construction Schedule. All work shall commence within ten (10) calendar days after receiving a written Notice to Proceed from the CITY or Construction Manager, if a Construction Manager is employed by CITY on the Project. CONTRACTOR shall refer to the invitations for bids, and Project Plans and Specifications, all of which, as set forth below, are incorporated herein by

reference, for contractual obligations regarding individual activity durations. The aggregate sum total work of all individual Prime Contractors to the CITY comprises the entire "Project" and shall be commenced and completed in conformance with the Project Construction Schedule. The entire Project shall be completed within 90 "Calendar" days as defined by the Caltrans 7-day Workday calendar 2026.

III. THE CONTRACT SUM

The CITY shall pay to the CONTRACTOR for the performance of this Agreement, subject to any additions and deductions provided in the Project documents, the sum of dollars ($).

IV. PROGRESS PAYMENTS

Based upon Applications for Payment submitted to the Architect by the CONTRACTOR and Certificates for Payment issued by the Architect, the CITY shall make progress payments on account of the Contract Sum to the CONTRACTOR as provided in the General Conditions.

This Agreement is subject to the provisions of Article 1.7 (commencing at Section 20104.50) of Division 2, Part 3 of the Public Contract Code regarding prompt payment of contractors by local governments. Article 1.7 mandates certain procedures for the payment of undisputed and properly submitted payment requests within 30 days after receipt, for the review of payment requests, for notice to Contractor of improper payment requests, and provides for the payment of interest on progress payment requests that are not timely made in accordance with that Article. This AGREEMENT hereby incorporates the provisions of Article 1.7 as though fully set forth herein.

V. RETENTION OF SECURITIES

Public Contract Code Section 22300 permits the substitution of securities for any monies withheld by a public agency to ensure performance under a contract, at the request and expense of the CONTRACTOR. A copy of Public Contract Code Section 22300 is attached and incorporated as pages CD19 to CD23, as if fully set forth herein.

VI. INDEMNITY, DEFENSE AND HOLD HARMLESS AGREEMENT

CONTRACTOR shall indemnify, defend with legal counsel approved by CITY, and hold harmless CITY, its officers, officials, employees and volunteers from and against all liability, loss, damage, expense, cost (including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with CONTRACTOR's negligence, recklessness or willful misconduct in the performance of work hereunder or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which is caused by the sole or active negligence or willful misconduct of the CITY. Should conflict of interest principles preclude a single legal counsel from representing both CITY and CONTRACTOR, or should CITY otherwise find CONTRACTOR's legal counsel unacceptable, then

CONTRACTOR shall reimburse the CITY its costs of defense, including without limitation reasonable legal counsels fees, expert fees and all other costs and fees of litigation. The CONTRACTOR shall promptly pay any final judgment rendered against the CITY (and its officers, officials, employees and volunteers) with respect to claims determined by a trier of fact to have been the result of the CONTRACTOR's negligent, reckless or wrongful performance. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this Agreement.

CONTRACTOR obligations under this section apply regardless of whether or not such claim, charge, damage, demand, action, proceeding, loss, stop notice, cost, expense, judgment, civil fine or penalty, or liability was caused in part or contributed to by an Indemnitee. However, without affecting the rights of CITY under any provision of this agreement, CONTRACTOR shall not be required to indemnify and hold harmless CITY for liability attributable to the active negligence of CITY, provided such active negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction. In instances where CITY is shown to have been actively negligent and where CITY active negligence accounts for only a percentage of the liability involved, the obligation of CONTRACTOR will be for that entire portion or percentage of liability not attributable to the active negligence of CITY.

VII. PREVAILING WAGES

A. Wage rates for this Project shall be in accordance with the "General Wage Determination Made by the Director of Industrial Relations Pursuant To California Labor Code, Part 7, Chapter 1, Article 2, Sections 1770, 1771, 1773, 1773.1, 1774 and 1815", for Imperial County. Wage rates shall conform with those available at www.dir.ca.gov/OPRL/Pwd and on the Project site.

B. The following Labor Code sections are hereby referenced and made a part of this Agreement:

1. Section 1775 - Penalty for Failure to Comply with Prevailing Wage Rates.
2. Section 1777.4 - Apprenticeship Requirements.
3. Section 1777.5 - Apprenticeship Requirements.
4. Section 1813 - Penalty for Failure to Pay Overtime.
5. Sections 1810 and 1811 - Working Hour Restrictions.
6. Section 1775 - Payroll Records.
7. Section 1773.8 - Travel and Subsistence Pay.

VIII. RECORD AUDIT

In accordance with Government Code, Section 8546.7, records of both the CITY and the CONTRACTOR shall be subject to examination and audit by the Auditor General for a period of three (3) years after final payment.

IX. CLAIM PROCEDURES UNDER PUBLIC CONTRACT CODE SECTION 9204

CONTRACTOR shall comply with the procedure set forth in Public Contracts Code section 9204 for any claim, as that term is defined therein, for one or more of the following: 1) a time extension, including, without limitation, for relief from damages or penalties for delay, 2) payment of money or damages arising from work done pursuant to this Agreement, and/or 3) payment of an amount disputed by the AGENCY under this Agreement. A copy of Public Contracts Code Section 9204 is attached and incorporated as pages CD24 to CD27, as if fully set forth herein.

X. CERTIFICATIONS

A. Contractor shall have a Class A License from the Contractors State License Board of the State of California.

XI. FINAL PAYMENT

Final payment, constituting the entire unpaid balance of the Agreement Sum, shall be paid by the CITY to the CONTRACTOR no sooner than thirty-five (35) days after a Notice of Completion has been recorded, unless otherwise stipulated in the Notice of Completion, provided the work has then been completed, the Agreement fully performed, and a final Certificate for Payment has been issued by the Architect.

XII. CONTRACTOR'S FAILURE TO PROCURE COMPLETION OF PROJECT

In the event CONTRACTOR fails to furnish tools, equipment, or labor in the necessary quantity or quality, or fails to prosecute the work or any part thereof contemplated by this Agreement in a diligent and workmanlike manner, and if the CONTRACTOR for a period of three (3) calendar days after receipt of written demand from CITY or its designated representative to do so, fails to furnish tools, equipment, or labor in the necessary quantity or quality, and to prosecute its work and all parts thereof in a diligent and workmanlike manner, or after commencing to do so within said three (3) calendar days, fails to continue to do so; then the CITY may exclude the CONTRACTOR from the premises, or any portion thereof, and take possession of said premises or any portion thereof, together with all material and equipment thereon, and may complete the work contemplated by this Agreement or any portion of said work, either by furnishing the tools, equipment, labor or material necessary, or by letting the unfinished portion of said work, or the portion taken over by the CITY to another contractor or by a combination of such methods. In any event, the procuring of the completion of said work, or the portion thereof taken over by the CITY, shall be a charge against the CONTRACTOR, and may be deducted from any money due or becoming due to CONTRACTOR from the CITY, or the CONTRACTOR shall pay the CITY the amount of said charge, or the portion thereof unsatisfied. The sureties provided for under this Agreement shall become liable for payment should CONTRACTOR fail to pay in full any said cost incurred by the CITY.

XIII. INSURANCE

Prior to the beginning of and throughout the duration of the Work, CONTRACTOR and its subcontractors shall maintain insurance in conformance with the requirements set forth below. CONTRACTOR will use existing coverage to comply with these requirements. If that existing coverage does not meet the requirements set forth herein, CONTRACTOR agrees to amend, supplement or endorse the existing coverage to do so.

CONTRACTOR acknowledges that the insurance coverage and policy limits set forth in this section constitute the minimum amount of coverage required. Any insurance proceeds available to CONTRACTOR or its subcontractors in excess of the limits and coverage identified in this Agreement and which is applicable to a given loss, claim or demand, will be equally available to CITY.

A. CONTRACTOR shall provide the following types and amounts of insurance:

Without limiting CONTRACTOR's indemnification of CITY, and prior to commencement of Work, CONTRACTOR shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to CITY.

General liability insurance. CONTRACTOR shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office form CG 00 01, in an amount not less than $1,000,000 per occurrence, $2,000,000 general aggregate, for bodily injury, personal injury, and property damage, and a $2,000,000 completed operations aggregate. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. CONTRACTOR shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the CONTRACTOR arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Umbrella or excess liability insurance. CONTRACTOR shall obtain and maintain an umbrella or excess liability insurance that will provide bodily injury, personal injury and property damage liability coverage at least as broad as the primary coverages set forth above, including commercial general liability and employer's liability. Such policy or policies shall include the following terms and conditions:

- A drop down feature requiring the policy to respond in the event that any primary insurance that would otherwise have applied proves to be uncollectable in whole or in part for any reason;
- Pay on behalf of wording as opposed to reimbursement;
- Concurrency of effective dates with primary policies;

- Policies shall "follow form" to the underlying primary policies; and
- Insureds under primary policies shall also be insureds under the umbrella or excess policies.

Workers' compensation insurance. CONTRACTOR shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least $1,000,000) for CONTRACTOR's employees in accordance with the laws of the State of California, Section 3700 of the Labor Code. In addition, CONTRACTOR shall require each subcontractor to similarly maintain Workers' Compensation Insurance and Employer's Liability Insurance in accordance with the laws of the State of California, Section 3700 for all of the subcontractor's employees.

CONTRACTOR shall submit to CITY, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of CITY, its officers, agents, employees and volunteers.

Pollution liability insurance. Environmental Impairment Liability Insurance shall be written on a CONTRACTOR's Pollution Liability form or other form acceptable to CITY providing coverage for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than $1,000,000 dollars per claim and in the aggregate. All activities contemplated in this Agreement shall be specifically scheduled on the policy as "covered operations." The policy shall provide coverage for the hauling of waste from the project site to the final disposal location, including non-owned disposal sites.

Products/completed operations coverage shall extend a minimum of three (3) years after project completion. Coverage shall be included on behalf of the insured for covered claims arising out of the actions of independent contractors. If the insured is using subcontractors, the Policy must include work performed "by or on behalf" of the insured. Policy shall contain no language that would invalidate or remove the insurer's duty to defend or indemnify for claims or suits expressly excluded from coverage. Policy shall specifically provide for a duty to defend on the part of the insurer. The CITY, its officials, officers, agents, and employees, shall be included as insureds under the policy.

Builder's risk insurance. Upon commencement of construction and with approval of CITY, CONTRACTOR shall obtain and maintain builder's risk insurance for the entire duration of the Project until only the CITY has an insurable interest. The Builder's Risk coverage shall include the coverages as specified below.

The named insureds shall be CONTRACTOR and CITY, including its officers, officials, employees, and agents. All Subcontractors (excluding those solely responsible for design Work) of any tier and suppliers shall be included as additional insureds as their interests may appear. CONTRACTOR shall not be required to maintain property insurance for any portion of the Project following transfer of control thereof to CITY. The policy shall contain a provision that all proceeds from the builder's risk policy shall be made payable to the CITY. The CITY will act as a fiduciary for all other interests in the Project.

Policy shall be provided for replacement value on an "all risk" basis for the completed

value of the project. There shall be no coinsurance penalty or provisional limit provision in any such policy. Policy must include: (1) coverage for any ensuing loss from faulty workmanship, Nonconforming Work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the Project; (4) Ordinance or law coverage for contingent rebuilding, demolition, and increased costs of construction; (5) transit coverage (unless insured by the supplier or receiving contractor), with sub-limits sufficient to insure the full replacement value of any key equipment item; (6) Ocean marine cargo coverage insuring any Project materials or supplies, if applicable; (7) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the Site or any staging area. Such insurance shall be on a form acceptable to CITY to ensure adequacy of terms and sub limits and shall be submitted to the CITY prior to commencement of construction.

Other provisions or requirements

Proof of insurance. CONTRACTOR shall provide certificates of insurance to CITY as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsements must be approved by CITY's risk manager prior to commencement of performance. Current certification of insurance shall be kept on file with CITY at all times during the term of this contract. CITY reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. CONTRACTOR shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Work hereunder by CONTRACTOR, his agents, representatives, employees or subcontractors. CONTRACTOR must maintain general liability and umbrella or excess liability insurance for as long as there is a statutory exposure to completed operations claims. CITY and its officers, officials, employees, and agents shall continue as additional insureds under such policies.

Primary/noncontributing. Coverage provided by CONTRACTOR shall be primary and any insurance or self-insurance procured or maintained by CITY shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of CITY before the CITY's own insurance or self-insurance shall be called upon to protect it as a named insured.

City's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these requirements or is canceled and not replaced, CITY has the right but not the duty to obtain the insurance it deems necessary and any premium paid by CITY will be promptly reimbursed by CONTRACTOR or CITY will withhold

amounts sufficient to pay premium from CONTRACTOR payments. In the alternative, CITY may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the CITY's risk manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against CITY, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow CONTRACTOR or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. CONTRACTOR hereby waives its own right of recovery against CITY, and shall require similar written express waivers and insurance clauses from each of its sub consultants.

Enforcement of contract provisions (non estoppel). CONTRACTOR acknowledges and agrees that any actual or alleged failure on the part of the CITY to inform CONTRACTOR of non-compliance with any requirement imposes no additional obligations on the CITY nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the CONTRACTOR maintains higher limits than the minimums shown above, the CITY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the CITY.

Notice of cancellation. CONTRACTOR agrees to oblige its insurance agent or broker and insurers to provide to CITY with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

Additional insured status. General liability policies shall provide or be endorsed to provide that CITY and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies. This provision shall also apply to any excess/umbrella liability policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to CITY and approved of in writing.

Separation of insureds. A severability of interests provision must apply for all additional insureds ensuring that CONTRACTOR's insurance shall apply separately to each insured against who claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass through clause. CONTRACTOR agrees to ensure that its sub-consultants, subcontractors, and any other party involved with the project that is brought onto or involved in the project by CONTRACTOR, provide the same minimum insurance coverage and endorsements required of CONTRACTOR. CONTRACTOR agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. CONTRACTOR agrees that upon request, all agreements with consultants, subcontractors, and others engaged in the project will be submitted to CITY for review.

City's right to revise requirements. The CITY reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the CONTRACTOR a ninety (90) day advance written notice of such change. If such change results in substantial additional cost to the CONTRACTOR, the CITY and CONTRACTOR may renegotiate CONTRACTOR's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by CITY. CITY reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by CITY.

Timely notice of claims. CONTRACTOR shall give CITY prompt and timely notice of claims made or suits instituted that arise out of or result from CONTRACTOR's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. CONTRACTOR shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the Work.

XIV. CONTRACTOR'S LICENSE; CITY BUSINESS LICENSE

CONTRACTOR must possess at the time of commencing work and throughout the Project duration, a Contractor's License, issued by the State of California, which is current and in good standing. CONTRACTOR shall ensure that any subcontractor working on the Project possesses at the time of commencing work and throughout the Project duration, a Contractor's License, issued by the State of California, which is current and in good standing.
CONTRACTOR shall have a current City business license at the time of commencement of work on the project.

XV. REGISTRATION REQUIREMENTS [applicable to public works projects]

Pursuant to Section 1771.1(a) of the Labor Code:

"A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded."

CONTRACTOR must be registered with the Department of Industrial Relations (DIR) of the State of California in order to be eligible to work on public works projects. CONTRACTOR must ensure registration with the DIR that is active and in good standing.

No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The CONTRACTOR is not subject to public works requirements (including registration with the DIR) if the public works project is under $1,000, unless the CITY knows that the same CONTRACTOR will be awarded total project costs in excess of $1,000 for a given year.

XVI. CORPORATION IN GOOD STANDING

If CONTRACTOR is a corporation, the undersigned hereby represents and warrants that the corporation is duly incorporated and in good standing in the State of California, and that , whose title is , is authorized to act for and bind the corporation.

XVII. PROVISIONS REQUIRED BY LAW

Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to be inserted herein and the Agreement shall be read and enforced as

though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not currently inserted, then upon application of either party the Agreement shall forthwith be physically amended to make such insertion or correction.

XVIII. SUBSURFACE HAZARDOUS MATERIALS

A. In the event trenches or other excavations extend deeper than four (4) feet below the surface, the CONTRACTOR shall promptly, and before the following conditions are disturbed, notify the CITY in writing of any:

1. Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code that is required to be removed to a Class I, Class II or Class III disposal site in accordance with the provisions of existing law.
2. Subsurface or latent physical conditions at the site differing from those indicated.
3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the Work or the character provided for in the CONTRACT.

B. Upon receipt of said notification the CITY will investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the CONTRACTOR's cost of or the time required for performance of any part of the work, the CITY will issue a change order under the procedures described in the General Conditions.

C. In the event that a dispute arises between the CITY and the CONTRACTOR whether the conditions materially differ, or involve hazardous waste or cause a decrease or increase in the CONTRACTOR's cost of or time required for performance of any part of the work, the CONTRACTOR shall not be excused from any scheduled completion date provided for by the Agreement, but shall proceed with all work to be performed under the Agreement. The CONTRACTOR shall retain any and all rights provided either by Agreement or by law which pertain to the resolution of disputes and protests between the contracting parties.

XIX. LIQUIDATED DAMAGES

Pursuant to Government Code Section 53069.85, if work is not completed within the contract time or in strict accordance with the Project Schedule, it is understood, acknowledged and agreed that the CITY will suffer damage. It is therefore agreed that the CONTRACTOR shall pay to the CITY the sum of one thousand and five hundred dollars ($1,500) for each and every calendar day of delay beyond the Contract Time, or beyond any completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule, or beyond the time indicated in the Project Schedule for any individual Contract activity.

CONTRACTOR expressly understands, acknowledges and agrees that such liquidated

damages can and shall be imposed if the CONTRACTOR does not meet each and every aspect of any activity schedule, completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule. If the CITY accepts work or makes any payment under this Agreement after a default by reason of delays, the acceptance of such work and/or payment(s) shall in no respect constitute a waiver or modification of any provisions regarding Contract Time, a completion schedule, the Project Schedule or the accrual of liquidated damages. In the event the same is not paid, the CONTRACTOR further agrees that the CITY may deduct the amount thereof from any money due or that may become due the CONTRACTOR under the Agreement. This Article does not exclude recovery of damages under provisions of the Contract Documents, and is expressly in addition to the CITY's ability to seek other damages.

CONTRACTOR is to refer to Project Construction Schedule for duration of individual activities. Liquidated damages may be assessed if any individual activity duration exceeds the time indicated for that activity on the Project Construction Schedule.

XX. COMPONENT PARTS OF THE CONTRACT

This Agreement entered into consists of the following CONTRACT DOCUMENTS, all of which are component parts of the Agreement as if herein set out in full or attached hereto:

Notice Inviting Bids
Scope of Work
Instructions to Bidders
Bid Form
Non-Collusion Declaration
Site Visit Certification
Faithful Performance Bond
Labor and Materials Payment Bond
General Conditions
Supplementary General Conditions
Corporate Certification or Partnership -Information
Project Construction Schedule
Project FF&E Specifications
Project Specifications
Contractor's Certification of Qualification -For License Classification
List of Subcontractors
Bid Bond
Bidder's General Information
Contract
Workers' Compensation Certificate
Drug/Alcohol Testing Requirements
Construction Plans
Addenda
Drawings
Change Orders
Shop Drawings Transmittals
Contractor's Certificate Regarding Non -Asbestos Containing Materials
Public Contract Code Section 9204
Public Contract Code Section 22300

All of the above named CONTRACT DOCUMENTS are intended to be complementary. Work required by one of the above named CONTRACT DOCUMENTS and not by others shall be done as if required by all.

XXI. ENTIRE CONTRACT

This Agreement constitutes the entire contract of the parties. No other agreements or contracts, whether oral or written, pertaining to the work to be performed, exist between

the parties. This Agreement can be modified only by an amendment in writing, signed by both parties.

CONTRACTOR	**CITY**
[Name of Contractor]	City of El Centro
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

ATTACHMENTS:

1. Faithful Performance Bond
2. Labor and Materials Bond
3. Public Contract Code Section 22300
4. Public Contract Code Section 9204

PERFORMANCE BOND

Whereas, The City Council of the City of El Centro, State of California, and _____ (hereinafter designated as "principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, 20__, and identified as project _____, is hereby referred to and made a part hereof; and

Whereas, Said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement.

Now, therefore, we, the principal and _____, as surety, are held and firmly bound unto the City of El Centro (hereinafter designated as "El Centro") in the penal sum of _____ dollars ($_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above-bounded principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in the said agreement and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless El Centro, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by El Centro in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or to the work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the work or to the specifications.

In Witness Whereof, this instrument has been duly executed by the principal and surety above named, on _____, 20__.

(SEAL)	(SEAL)
_____	_____
(CONTRACTOR)	(Surety)
By: _____	By: _____
(Signature)	(Signature)

- **END OF PERFORMANCE BOND –**

PAYMENT BOND

PAYMENT BOND

Whereas, the City Council of the City of El Centro, State of California, and _____ (hereinafter designated as "the Principal") have entered into an Agreement dated _____ and described as

_____

_____

whereby the Principal agrees to install and complete certain designated public improvements identified as _____which are part of City project _____, and which Agreement is hereby referred to and made a part hereof; and

Whereas, under the terms of the Agreement, the Principal is required before entering upon the performance of the work to file a good and sufficient payment bond with the City of El Centro to secure the claims referenced in Civil Code Sections 9550 et seq.; and

Now, therefore, the Principal and the undersigned as corporate surety, are held firmly bound unto the City of El Centro and all contractors, subcontractors, laborers, materialmen, and other persons employed in the performance of the Agreement and referenced in Sections 9550 et seq of the Civil Code in the sum of _____dollars ($_____), for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to this work or labor, that the surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by the City of El Centro in successfully enforcing this obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under Section 9550 et seq of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

The surety hereby stipulates and agrees that no change, extension of time, alteration. or addition to the terms of the Agreement or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

In witness whereof, this instrument has been duly executed by the principal and surety above named, on_____, 20

_____	_____
(CONTRACTOR)	(Surety)
By:	
_____	By:_____
(Signature)	(Signature)

-END OF PAYMENT BOND-

Public Contract Code Section 22300

(a) For purposes of this section, “contractor” includes, but is not limited to, a contractor performing a public works contract, as defined in Section 1101, and any person or entity that would qualify as a contractor under Section 6106.5.

(b) Provisions shall be included in any invitation for bid and in any contract documents to permit the substitution of securities for any moneys withheld by a public agency to ensure performance under a contract; however, substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmers Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 U.S.C. Sec. 1921 et seq.), and where federal regulations or policies, or both, do not allow the substitution of securities. At the request and expense of the contractor, securities equivalent to the amount withheld shall be deposited with the public agency, or with a state or federally chartered bank in this state as the escrow agent, who shall then pay those moneys to the contractor. Upon satisfactory completion of the contract, the securities shall be returned to the contractor.

(c) Alternatively, the contractor may request and the owner shall make payment of retentions earned directly to the escrow agent at the expense of the contractor. At the expense of the contractor, the contractor may direct the investment of the payments into securities and the contractor shall receive the interest earned on the investments upon the same terms provided for in this section for securities deposited by the contractor. Upon satisfactory completion of the contract, the contractor shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from the owner, pursuant to the terms of this section.

(d) Securities eligible for investment under this section shall include those listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the contractor and the public agency.

The contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

Failure to include these provisions in bid and contract documents shall void any provisions for performance retentions in a public agency contract.

For purposes of this section, the term “public agency” shall include, but shall not be limited to, chartered cities.

(e) (1) Any contractor who elects to receive interest on moneys withheld in retention by a public agency shall, at the request of any subcontractor, make that option available to the subcontractor regarding any moneys withheld in retention by the contractor from the subcontractor. If the

contractor elects to receive interest on any moneys withheld in retention by a public agency, then the subcontractor shall receive the identical rate of interest received by the contractor on any retention moneys withheld from the subcontractor by the contractor, less any actual pro rata costs associated with administering and calculating that interest. In the event that the interest rate is a fluctuating rate, the rate for the subcontractor shall be determined by calculating the interest rate paid during the time that retentions were withheld from the subcontractor. If the contractor elects to substitute securities in lieu of retention, then, by mutual consent of the contractor and subcontractor, the subcontractor may substitute securities in exchange for the release of moneys held in retention by the contractor.

(2) This subdivision shall apply only to those subcontractors performing more than five percent of the contractor's total bid.

(3) No contractor shall require any subcontractor to waive any provision of this section.

(f) The Legislature hereby declares that the provisions of this section are of statewide concern and are necessary to encourage full participation by contractors and subcontractors in public contract procedures.

(g) The escrow agreement used hereunder shall be null, void, and unenforceable unless it is substantially similar to the following form:

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION	
This Escrow Agreement is made and entered into by and between	
	whose address is
	hereinafter called "Owner,"
	whose address is
	hereinafter called "Contractor" and
	whose address is
	hereinafter called "Escrow Agent."

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for ____ in the amount of ____ dated ____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of ____, and shall designate the Contractor as the beneficial owner.

(2) The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

(3) When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

(7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the owner of the

default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

(8) Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:	On behalf of Contractor:
Title	Title
Name	Name
Signature	Signature
Address	Address
On behalf of Escrow Agent:	
Title	

Name	
Signature	
Address	

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

Owner	Contractor
Title	Title
Name	Name
Signature	Signature

Public Contract Code Section 9204

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3) (A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, CITY, special CITY, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(iv) The Military Department as to any project under the jurisdiction of that

department.

(v) The Department of General Services as to all other projects.

(vi) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(B) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation,

with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(2) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(3) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(4) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications

for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2020, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2020, deletes or extends that date.

- END OF CONTRACT DOCUMENTS -

GENERAL CONDITIONS

GENERAL CONDITIONS

ARTICLE 1 -- DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof. Where an entire word is capitalized in the definitions and is found un-capitalized in the Contract Documents it has the ordinary dictionary definition.

Addenda - Written or graphic instruments issued prior to the opening of Bids which make additions, deletions or revisions to the Contract Documents.

Agent - CONSTRUCTION MANAGER is the Agent of OWNER.

Agreement - The written contract between OWNER and CONTRACTOR covering the WORK to be performed; other documents are attached to the Agreement and made a part thereof as provided therein.

Allowance - A Bid item that adds a specified quantity of WORK to the Agreement work scope which OWNER may unilaterally direct CONTRACTOR to perform, or elect not to have performed.

Application for Payment - The form furnished by CONSTRUCTION MANAGER which is to be used by CONTRACTOR to request progress or Final Payment and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

Asbestos - Any material that contains more than one (1) percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration ("OSHA").

Beneficial Occupancy - Use by OWNER of the WORK prior to final acceptance.

Bidder - Any individual, firm, partnership, corporation or combination thereof, submitting a Bid for the WORK, acting directly or through a duly authorized representative.

Bid - The offer or proposal of the Bidder submitted on the prescribed form setting forth the price or prices for the WORK.

Bidding Documents - The advertisement or Invitation to Bid, Instructions to Bidders, the Bid form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

Bonds - Bid, Performance and Payment Bonds and other instruments which protect against loss due to inability or refusal of CONTRACTOR to perform its contract.

Change Order - A document recommended by CONSTRUCTION MANAGER which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the WORK, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

CITY - OWNER (See OWNER's definition in this section).

City of El Centro - OWNER (See OWNER's definition in this section).

Claim - A dispute becomes a Claim only after CONTRACTOR receives and refuses to accept CONSTRUCTION MANAGER's initial determination, and is certified as required by Article 16.3.

Codes - The terms Government Code, Labor Code, etc. refer to codes of the State of California.

CONSTRUCTION MANAGER - The individual, partnership, corporation, joint venture or other legal entity named as such by written notice from OWNER.

Construction Manager Order - A written order issued by CONSTRUCTION MANAGER which clarifies or interprets the Procurement Documents or orders minor changes or alterations in the scope of WORK to be furnished but which does not involve a change in the Contract Price or the Contract Time.

Contract Documents - The Notice Inviting Bids, Instructions to Bidders, Bid forms (including the Bid, Bid schedule(s), information required of Bidder, Bid bond, and all required certificates and affidavits), Agreement, Performance Bond, Payment Bond, General Conditions, Supplementary General Conditions, SPECIAL PROVISIONS, Drawings and all Addenda, and Change Orders executed pursuant to the provisions of the Contract Documents.

Contract Milestone - A principal event specified in the Contract Documents relating to an intermediate completion date of a portion of the WORK, or a period of time within which the portion of the WORK should be performed prior to Substantial Completion of all the WORK.

Contract Price - The total monies payable by OWNER to CONTRACTOR under the terms and conditions of the Contract Documents.

Contract Time - The number of successive calendar Days stated in the Contract Documents for the completion of the WORK.

CONTRACTOR - The individual, partnership, corporation, joint venture or other legal entity with whom OWNER has executed the Agreement.

Day - A calendar day of twenty-four (24) hours measured from midnight to the next midnight. WORKING DAY MEANS -

Defective Work - Work that is unsatisfactory, faulty or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents; or work that has been damaged by anyone other than OWNER prior to CONSTRUCTION MANAGER's recommendation of final payment.

DESIGN CONSULTANT - The individual, partnership, corporation, joint venture or other legal entity named as such in the Contract Documents or succeeding entity. In the lack thereof, DESIGN CONSULTANT shall have the same meaning as OWNER.

Demobilization - The complete dismantling and removal by CONTRACTOR of all of CONTRACTOR's temporary facilities, equipment and personnel at the site.

Drawings - The drawings, plans, maps, profiles, diagrams and other graphic representations which indicate the character, location, nature, extent and scope of the WORK and which have been prepared by DESIGN CONSULTANT and are referred to in the Contract Documents. Shop Drawings are not Drawings as so defined.

Disputed Work - A dispute exists from the time CONTRACTOR disagrees with a decision or determination made by CONSTRUCTION MANAGER until CONSTRUCTION MANAGER renders an initial determination. If the issue is unresolved, it becomes a Claim.

Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

Engineer - Wherever the word Engineer is found in these Contract Documents or in any referenced document, it shall mean CONSTRUCTION MANAGER.

Field Order - A written order issued by OWNER which changes the Agreement WORK scope and involves a change in the Contract Price or Contract Time or the intent of the Agreement.

Final Payment - is defined as the last progress payment made to CONTRACTOR for earned funds, less retainage as applicable, less deductions listed in Article 14. CONTRACTOR is entitled to this payment when the Notice of Completion is issued.

General Conditions - Section General Conditions of the Contract Specification.

Hazardous Waste - The term Hazardous Waste shall have the meaning provided in Section 104 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time or, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a class I, class II or class III disposal site in accordance with provisions of existing law, whichever is more restrictive.

Holidays - Legal Holidays observed by OWNER occur on:

New Year's Day - January 1
Martin Luther King's Birthday - Third (3rd) Monday in January
President's Day - Third (3rd) Monday in February
Good Friday – The afternoon of the Friday before Easter
Memorial Day - Last Monday in May
Juneteenth – June 19
Independence Day - July 4
Labor Day - First (1st) Monday in September
Veteran's Day - November 11
Thanksgiving Day - Fourth (4th) Thursday in November
The Day after Thanksgiving – The Friday after the fourth (4th) Thursday in November
Christmas Eve – The afternoon of December 24
Christmas Day - December 25
New Year's Eve – The afternoon of December 31

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both legal Holidays. If the Holiday should fall on a Sunday, Sunday and the following Monday are both legal Holidays.

Interfacing Work - Work which connects to, abuts or meets with work of another contractor.

Laws and Regulations - Any and all applicable laws, rules, regulations, ordinances, codes and/or orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

Lump Sum Work - Work to be paid on the basis of lump sum prices.

Mechanic's Lien - A form of security, an interest in real property, which is held to secure the payment of an obligation. When referred to in these Contract Documents, Mechanic's Lien or lien means Stop Notice.

Milestone - See Contract Milestone.

Mobilization - The establishment by CONTRACTOR of the temporary facilities, equipment and personnel at the site thereby enabling the WORK to commence.

Notice of Award - The written notice by OWNER to the apparent low Bidder stating that upon compliance by the apparent low Bidder with the conditions precedent enumerated therein within the time specified, OWNER will enter into an Agreement.

Notice of Completion - A form signed by DESIGN CONSULTANT, CONSTRUCTION MANAGER and CONTRACTOR recommending to OWNER that the WORK is complete and fixing the date of completion. After acceptance of the WORK by OWNER's governing body, the form is signed by OWNER and filed with the County Recorder. This filing starts the thirty (30) Day lien filing period on the WORK.

Notice to Proceed - The written notice issued by OWNER to CONTRACTOR authorizing CONTRACTOR to proceed with the WORK and establishing the date of commencement of the Contract Time.

OWNER's Agent - CONSTRUCTION MANAGER is OWNER's Agent.

OWNER - The City of El Centro, acting through its legally designated officials, officers or employees.

Partial Utilization - Use by OWNER of a substantially completed part of the WORK for the purpose for which it is intended prior to Substantial Completion of all the WORK. (See Beneficial Occupancy)

PCBs - Polychlorinated biphenyls.

Petroleum - Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (sixty (60) degrees Fahrenheit and fourteen and seven-tenths (14.7) pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene and oil mixed with other non-Hazardous Wastes and crude oils.

Project - The total construction of which the WORK to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

Radioactive Material - Source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Sections 2011 *et seq*.) as amended from time to time.

Request for Information - The standardized form furnished by OWNER for CONTRACTOR's use when making written requests for information to CONSTRUCTION MANAGER, and upon which the response will be answered and returned.

Request for Proposal - The standardized form used by CONSTRUCTION MANAGER to request a proposal from CONTRACTOR for proposed changes in the WORK.

Samples - Physical examples of materials, equipment or workmanship that are representative of some portion of the WORK and which establish the standards by which such portion of the WORK will be judged.

Safety - Safety includes health and security.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of WORK and all illustrations, brochures, standard schedules, performance charts, instructions and diagrams to illustrate material or equipment for some portion of the WORK.

Specifications – The directions, provisions and requirements contained in the Bidding Documents, contract forms, conditions of the Agreement and the SPECIAL PROVISIONS, as listed in the Table of Contents.

Stop Notice - A legal remedy for Subcontractors and Suppliers who contribute to public works, but who are not paid for their work, which secures payment from construction funds possessed by OWNER. For public property, the Stop Notice remedy is designed to substitute for Mechanic's Lien rights.

Submittals - The information which is specified for submission to CONSTRUCTION MANAGER in accordance with Article 6.20 of the General Conditions.

Sub-Consultant - The individual, partnership, corporation, joint venture or other legal entity having a direct contract with DESIGN CONSULTANT, CONSTRUCTION MANAGER or with any of their consultants to furnish services with respect to the Project and who is identified as such in the Supplementary General Conditions.

Subcontractor - An individual, partnership, corporation, joint venture or other legal entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the WORK at the site.

Substantial Completion - Refers to when the WORK has progressed to the point where, in the opinion of CONSTRUCTION MANAGER as evidenced by Notice of Completion as applicable, it is sufficiently complete, in accordance with the Contract Documents, so that the WORK can be utilized for the purposes for which it is intended, and after the operation demonstration is complete, where applicable.

SPECIAL PROVISIONS – That section of the Contract Documents consisting of written technical descriptions of products and execution of the WORK.

Supplementary General Conditions - The part of the Contract Documents which make additions, deletions or revisions to these General Conditions.

Supplier - A manufacturer, fabricator, supplier, distributor, material worker or vendor.

Underground Utilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasement containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Unit Price Work - Specific WORK scope included in the Agreement WORK scope to be paid for on the basis of unit prices. OWNER may unilaterally direct CONTRACTOR to perform the WORK, or elect not to have the WORK performed.

WORK - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. WORK is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.

Work Change Directive - A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and recommended by CONSTRUCTION MANAGER, and signed by OWNER ordering an addition, deletion or revision in the WORK, or responding to differing or unforeseen physical conditions under which the WORK is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Time, but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Time.

ARTICLE 2 -- PRELIMINARY MATTERS

2.1 DELIVERY OF BONDS/INSURANCE CERTIFICATES - When CONTRACTOR delivers the signed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds and Insurance Policies and Certificates as CONTRACTOR may be required to furnish in accordance with the Contract Documents.

2.2 COPIES OF DOCUMENTS - OWNER shall furnish to CONTRACTOR ten (10) copies of the Contract Documents as specified in the Agreement and ten (10) sets of full-scale Drawings. Additional quantities of the Contract Documents will be furnished at reproduction cost.

2.3 COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED - The Contract Time will start to run on the commencement date stated in the Notice to Proceed.

2.4 STARTING THE WORK - CONTRACTOR shall begin to perform the WORK within ten (10) Days after the commencement date stated in the Notice to Proceed, but no work shall be done at the site prior to said commencement date. In addition, any requirements in the Supplemental General Conditions must be satisfied.

2.5 CONTRACTOR MUST STUDY CONTRACT DOCUMENTS - Before undertaking each part of the WORK, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to CONSTRUCTION MANAGER any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from CONSTRUCTION MANAGER before proceeding with any work affected thereby.

2.6 PRELIMINARY SUBMITTALS - Preliminary submittals shall be provided to CONSTRUCTION MANAGER in accordance with Division 1 requirements.

2.7 PRECONSTRUCTION CONFERENCE - CONTRACTOR is required to attend a preconstruction conference. This conference will be attended by CONSTRUCTION MANAGER and others as appropriate in order to discuss the WORK in accordance with the applicable procedures specified in the General Requirements.

CONTRACTOR is required to schedule and attend a preconstruction conference with the Imperial Irrigation District ("IID") prior to the construction or demolition of any electrical improvements.

2.8 SUBCONTRACTOR MOBILIZATION MEETING - Prior to the start of each major Subcontractor's site work, CONTRACTOR, the involved Subcontractor and CONSTRUCTION MANAGER shall attend a pre-start meeting to discuss the schedule, coordination, procedures and other administrative issues.

2.9 CONTRACTOR DUTY TO ADVISE OWNER OF KNOWN OR DISCOVERED PROBLEMS - CONTRACTOR is reminded of his obligation to advise OWNER of any errors and/or omissions in the Contract Documents, or changes to thereof, which CONTRACTOR may be aware through special knowledge or discovered during the Bid process.

ARTICLE 3 -- CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 INTENT - The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the WORK. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the WORK.

3.2 INTENT OF WORK TO BE FUNCTIONALLY COMPLETE

3.2.1 Work to be Complete - It is the intent of the Contract Documents to describe the WORK to be constructed in accordance with the Contract Documents. Any work, materials or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result shall be supplied whether or not specifically called for or identified in the Contract Documents. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe work, materials or equipment, such words or phrases shall be interpreted in accordance with that meaning unless a definition has been provided in Article 1 of the General Conditions.

3.2.2 Necessary Utilities - If utilities to equipment/fixtures are not shown but are necessary to operate the equipment/fixtures, the utilities service installation is considered to be part of the WORK. The implied WORK will conform to the appropriate sections of the technical Specifications.

3.3 CLARIFICATIONS AND INTERPRETATIONS OF THE CONTRACT DOCUMENTS

3.3.1 Referenced Standards - Reference to standard specifications, manuals or Codes of any technical society, organization or association or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or CONSTRUCTION MANAGER or any of their consultants, agents or employees from those set forth in the Contract Documents.

3.3.2 Discovery of Problem Notice - If, during the performance of the WORK, CONTRACTOR discovers any conflict, error, ambiguity or discrepancy with the WORK within the Contract Documents or between the Contract Documents and any provision of any such Laws and Regulations applicable to the performance of the WORK or of any such standard, specification, manual or code or of any instruction of any Supplier, CONTRACTOR shall report it to CONSTRUCTION MANAGER in writing within seven (7) calendar Days of discovery. CONTRACTOR shall not proceed with the WORK affected thereby, except in an emergency, unless directed by CONSTRUCTION MANAGER. Any WORK performed by CONTRACTOR that is not directed by CONSTRUCTION MANAGER shall be at its own risk.

3.3.3 Order of Precedence of Contract Documents - In resolving conflicts resulting from errors or discrepancies in any of the Contract Documents, the order of precedence shall be as follows:

3.3.3.1 Permits from other agencies as may be required by law.

3.3.3.2 Change Orders

3.3.3.3 Agreement

3.3.3.4 Addenda

3.3.3.5 CONTRACTOR's Bid (Bid Form)

3.3.3.6 Notice Inviting Bids

3.3.3.7 Instructions to Bidders

3.3.3.8 Supplementary General Conditions

3.3.3.9 General Conditions

3.3.3.10 SPECIAL PROVISIONS

3.3.3.11 Drawings

3.3.3.12 Referenced Standard Specifications

3.3.4 Order of Precedence of the Drawings - With reference to the Drawings the order of precedence is as follows:

3.3.4.1 Figures govern over scaled dimensions

3.3.4.2 Detail drawings govern over general drawings

3.3.4.3 Addenda/Change Order drawings govern over Contract Drawings

3.3.4.4 Contract Drawings govern over standard drawings

3.4 AMENDING AND SUPPLEMENTING CONTRACT DOCUMENTS

3.4.1 Amending Contract Documents - The Contract Documents may be amended to provide for additions, deletions and revisions in the WORK or to modify the terms and conditions thereof by a Change Order pursuant to Article 10.

3.4.2 Supplementing Contract Documents - The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the WORK may be authorized, by:

3.4.2.1 - A Construction Manager Order issued by CONSTRUCTION MANAGER.

3.4.2.2 - DESIGN CONSULTANT's approval of a Shop Drawing or Sample pursuant to Article 6

3.4.2.3 - DESIGN CONSULTANT's written interpretation or clarification

3.5 REUSE OF DOCUMENTS - Neither CONTRACTOR, nor any Subcontractor or Supplier, nor any other person or organization performing any of the WORK under a contract with OWNER shall have or acquire any title to or ownership rights in any of the Drawings, technical Specifications or other documents used on the WORK, and they shall not reuse any of them on the extensions of the Project or any other project without written consent of OWNER.

ARTICLE 4 -- AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

4.1 AVAILABILITY OF LANDS - OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the WORK is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. Nothing

contained in the Contract Documents shall be interpreted as giving CONTRACTOR exclusive occupancy of the lands or rights-of-way provided. CONTRACTOR shall provide, at no additional cost, for all additional lands and access thereto that may be required for temporary construction facilities, borrow areas, waste disposal areas or storage of materials and equipment; provided that CONTRACTOR shall not enter upon nor use any property not under the control of OWNER until a written temporary construction easement agreement has been executed by CONTRACTOR and the property owner, and a copy of said easement furnished to CONSTRUCTION MANAGER prior to said use; and, neither OWNER nor CONSTRUCTION MANAGER shall be liable for any claims or damages resulting from CONTRACTOR's unauthorized trespass or authorized use of any such properties.

4.2 PHYSICAL SITE CONDITIONS

4.2.1 Reports and Drawings - Reference is made to the Supplementary General Conditions for identification of:

4.2.1.1 Subsurface Condition Reports - Those reports of explorations and tests of subsurface conditions at or contiguous to the site that have been utilized by DESIGN CONSULTANT in preparing the Contract Documents; and

4.2.1.2 Drawings of Existing Structures - Reference is made to the Supplementary General Conditions for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Utilities referred to in section 4.4 of Article 4 herein) which are at or contiguous to the site that have been utilized in the preparation of the Contract Documents.

4.2.2 Limited Reliance By CONTRACTOR On The Technical Data - CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings or reports, however, nontechnical data, interpretations and opinions contained in such drawings or reports are not to be relied on by CONTRACTOR. CONTRACTOR may not rely upon or make any claims against OWNER, DESIGN CONSULTANT or CONSTRUCTION MANAGER with respect to:

4.2.2.1 the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and Safety precautions and programs incident thereto, or

4.2.2.2 other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings, or

4.2.2.3 any CONTRACTOR interpretation of or conclusion drawn from any technical data or any such data, interpretations, opinions or information.

4.3 DIFFERING SITE CONDITIONS - If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the site that is uncovered or revealed either:

4.3.1 is of such a nature as to establish that any technical data on which CONTRACTOR is entitled to rely as provided in paragraphs 4.2.1 is materially inaccurate, or

4.3.2 is of such a nature as to require a change in the Contract Documents, or

4.3.3 differs materially from that shown or indicated in the Contract Documents, or

4.3.4 is of an unusual nature and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents, CONTRACTOR shall immediately report it to CONSTRUCTION MANAGER then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions thereby or performing any work in connection therewith (except in an emergency as permitted by paragraph 6.23), notify OWNER and CONSTRUCTION MANAGER in writing about such condition. CONTRACTOR shall not further disturb such conditions or perform any work in connection therewith (except as aforesaid) until receipt of written order to do so.

4.3.5 OWNER Responsibility - OWNER shall promptly investigate the conditions, and if it finds that the conditions do materially so differ and cause a decrease or increase in CONTRACTOR's cost of, or the time required for, performance of any part of the WORK, OWNER shall issue a Change Order under the procedures described in Article 10. If OWNER determines that there is no bona fide work scope change or is a minor change which does not impact time or cost, OWNER shall notify CONTRACTOR of this finding within thirty (30) Days.

4.3.6 Disputed Work – If CONTRACTOR and OWNER are unable to reach agreement on Disputed Work, OWNER may direct CONTRACTOR to proceed with the WORK. Payment shall be as later directed by mediation or arbitration, if OWNER and CONTRACTOR agree thereto, or as fixed in a court of law.

Although not to be construed as proceeding under extra work provisions, CONTRACTOR shall keep and furnish records of Disputed Work in accordance with 11.3.

4.3.7 Disallowance of Entitlement - CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Time or will be deemed to have waived his right to such a claim if:

4.3.7.1 CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Time by the submission of a Bid or becoming bound under the Agreement; or

4.3.7.2 the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation of the site and contiguous areas suggested or required by the Bidding Documents: or

4.3.7.3 CONTRACTOR failed to give the written notice within the time and as required by Article 3.3.2.

4.4 UNDERGROUND UTILITIES

4.4.1 Utilities Indicated - The information and data indicated in the Contract Documents with respect to existing Underground Utilities at or contiguous to the site are based on information and data furnished to OWNER or CONSTRUCTION MANAGER by the owners of such Underground Utilities or by others. Unless it is expressly provided in the Supplementary General Conditions and/or the General Conditions, OWNER and CONSTRUCTION MANAGER shall not be responsible for the accuracy or completeness of any such information or data, and CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Utilities indicated in the Contract Documents, for coordination of the WORK with the owners of such Underground Utilities during construction, for the Safety and protection thereof and repairing any damage thereto resulting from the WORK, the cost of which will be considered as having been included in the Contract Price.

4.4.2 Utilities Not Indicated - If Underground Utilities are uncovered or revealed at or contiguous to the site which was not indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall identify the owner of such Underground Utilities and give written notice thereof to that owner and shall notify CONSTRUCTION MANAGER in accordance with the requirements of the General Conditions and General Requirements.

4.4.3 Action Prior To Starting Work - As provided in section 4216 of the California Government Code, at least two (2) working Days prior to commencing any excavation, CONTRACTOR shall contact the regional notification center (Underground Service Alert of Southern California) and obtain an inquiry identification number.

4.4.4 Locate Utilities - CONTRACTOR shall determine the location and depth of all utilities, including service connections, which have been marked by the respective owners and which may affect or be affected by its operations. Full compensation for such work shall be considered as included in CONTRACTOR's Bid price.

4.4.5 Protection Of Utilities - CONTRACTOR shall not interrupt the service function or disturb the support of any utility, without authority from OWNER or order from the utility owner. All valves, switches, vaults and meters shall be maintained readily accessible for emergency shutoff. Where protection is required to ensure support of utilities located as shown on the Plans, CONTRACTOR shall, unless otherwise provided, furnish and place the necessary protection at its expense.

4.4.6 Notification Requirements If Utility Disturbed - CONTRACTOR shall immediately notify CONSTRUCTION MANAGER and utility owner if any utility is disturbed or damaged.

CONTRACTOR shall bear the costs of repair or replacement of any utility damaged by CONTRACTOR.

4.4.7 Removal Of Abandoned Utilities - Unless otherwise specified, CONTRACTOR shall remove all interfering portions of utilities shown on the Plans or indicated in the Bidding Documents as abandoned. Before starting removal operations, CONTRACTOR shall ascertain from the Utility Owner whether the abandonment is complete. The costs involved in the removal and disposal shall be included in the price for the item of work necessitating such removals.

4.4.8 Relocation Of Utilities

4.4.8.1 When the Plans or Specifications provide for CONTRACTOR to alter, relocate or reconstruct a utility, all costs for such work shall be included in the Bid.

4.4.8.2 Temporary or permanent relocation or alteration of indicated utilities requested by CONTRACTOR for its convenience shall be its responsibility, and CONTRACTOR shall make all arrangements and bear all costs.

4.4.8.3 After award of the Agreement, portions of utilities not indicated in the Contract Documents which are found to interfere with the WORK may be relocated, altered or reconstructed by the utility owner, or CONSTRUCTION MANAGER may order changes in the WORK to avoid interference. Such changes will be paid for in accordance with Article 10.

4.4.9 Delays

4.4.9.1 CONTRACTOR shall immediately notify in writing the utility owner and CONSTRUCTION MANAGER of its construction schedule and any subsequent changes in the construction schedule which will affect the time available for protection, removal or relocation of utilities.

4.4.9.2 CONTRACTOR will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, as noted in the Contract Documents.

4.4.9.3 CONTRACTOR may be given a no cost extension of time for unforeseen delays attributable to unreasonably protracted interferences by others in the relocation of utilities.

4.4.10 Access to the WORK - When necessary, CONTRACTOR shall so conduct its operations as to permit access to the WORK site and provide time for utility work to be accomplished during normal work hours during the progress of the WORK.

4.5 REFERENCE POINTS

4.5.1 Bench Mark - The CONSTRUCTION MANAGER will provide one (1) benchmark, near or on the site of the WORK, and will provide two (2) points near or on the site to establish a base line for use by CONTRACTOR for alignment control. Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish all other lines, grades and benchmarks required for proper execution of the WORK.

4.5.2 Protection of Bench Marks - CONTRACTOR shall preserve all bench marks, stakes and other survey marks, and in case of their removal or destruction by any party, CONTRACTOR shall be responsible for the accurate replacement of such reference points by personnel qualified under Division 3, Chapter 15 of the California Business and Professions Code. CONTRACTOR shall report to CONSTRUCTION MANAGER whenever a reference point is lost, destroyed or requires relocation.

4.6 ASBESTOS, PCBS, PETROLEUM, HAZARDOUS WASTE OR RADIOACTIVE MATERIAL

4.6.1 OWNER Responsibility - OWNER shall be responsible for any hazardous material which includes hazardous substances and hazardous waste as defined by sections 25316 and 25117 of the Health and Safety Code, uncovered or revealed at the site which was not identified in the Contract Documents to be within the scope of the WORK. OWNER shall not be responsible for any such materials brought to the site by CONTRACTOR, Subcontractors, Suppliers or anyone else for whom CONTRACTOR is responsible.

4.6.2 CONTRACTOR's Responsibility - When such hazardous material is encountered, CONTRACTOR shall immediately stop all work in connection with such hazardous condition in any area affected thereby (except in an emergency as required by Article 6) and notify OWNER and CONSTRUCTION MANAGER in writing. OWNER shall promptly evaluate such hazardous condition and take corrective action. CONTRACTOR shall not be required to resume work in any such affected area until after OWNER has delivered to CONTRACTOR written notice specifying that such condition and any affected area has been rendered safe for the re-assumption of work, or specifying any special conditions under which such work may be resumed safely.

4.6.3 Dispute - If, after receipt of such special written notice, CONTRACTOR does not agree to resume work based on a reasonable belief it is unsafe, or does not agree to resume work under such special conditions, then OWNER may order such portion of the work that is in connection with such hazardous condition or in such affected area to be deleted from the WORK. OWNER may have such deleted portion of the work performed by OWNER's own forces or others in accordance with Article 7. If OWNER and CONTRACTOR cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Time as a result of work stoppage or of deleting such portion of the WORK, then either party may make a Claim as provided in Article 16.

4.6.4 NOT USED

ARTICLE 5 -- BONDS AND INSURANCE

5.1 PERFORMANCE, PAYMENT AND OTHER BONDS

5.1.1 Bond Requirement - CONTRACTOR shall furnish Performance and Payment Bonds, each in the amount set forth in the Supplementary General Conditions as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one (1) year after the filing date of Notice of Completion, except as otherwise provided by law or regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary General Conditions.

5.1.2 Licensed Surety - All Bonds shall be in the form prescribed by the Contract Documents and by such sureties which are admitted insurers in the State of California and are subject to regulation by the Department of Insurance, and which also satisfy the requirements stated in section 995.660 of the Code of Civil Procedure, except as provided otherwise by Laws or Regulations. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act. Surety companies must be duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds for the limits so required. Such surety companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary General Conditions.

5.1.3 Bankrupt or Insolvent Surety - If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the WORK is located, CONTRACTOR shall within seven (7) Days thereafter substitute another Bond and Surety, which must be acceptable to OWNER per paragraph 5.1.1 and 5.1.2 above.

5.2 NOT USED

ARTICLE 6 -- CONTRACTOR'S RESPONSIBILITIES

6.1. Responsibility Of CONTRACTOR To Perform - Unless otherwise specified in the Contract Documents, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the WORK. Such support that may need to be provided after normal working hours will be provided by CONTRACTOR at its expense.

6.2 Labor, Materials and Equipment All materials and equipment to be incorporated into the WORK shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to

the benefit of OWNER. If required by CONSTRUCTION MANAGER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provisions of any such instructions will be effective to assign to CONSTRUCTION MANAGER, any duty or authority to supervise or direct the furnishing or performance of the WORK.

6.2.1 The completed work shall include all necessary permanent Safety devices, such as machinery guards, emergency stops and similar Safety items required by OSHA, Cal-OSHA and other Federal, State and local health and Safety regulations. In addition, all equipment, products, components and/or package systems shall be designed, fabricated and installed in compliance with Seismic Zone 4 structural criteria. Further, any features of the work (including OWNER-selected equipment) subject to such Safety regulations and structural criteria shall be fabricated, furnished and installed in compliance with Seismic Zone 4 structural criteria. CONTRACTOR shall include provisions of this Article in his agreements with Subcontractors, Suppliers and manufacturers of equipment and/or products.

In selecting and/or accepting equipment and/or products for installation in the WORK, OWNER, DESIGN CONSULTANT and CONSTRUCTION MANAGER assume no responsibility for the injury, property damage or any other damages or claims resulting from failure of the equipment, products, components and/or package systems to comply with applicable Safety Codes or requirements, or the Safety requirements of a recognized agency, or failure due to manufacturer's faulty design concepts, or Defective Work and materials. CONTRACTOR shall defend, indemnify and hold OWNER, DESIGN CONSULTANT and CONSTRUCTION MANAGER harmless against any and all liability, claims, suits, damages, costs or expenses caused or claimed to be caused in whole or in part by the negligence or willful misconduct of the construction CONTRACTOR connected with the WORK. However, this indemnity will not extend to any loss, damage or expense caused by the established sole gross negligence or willful misconduct of OWNER or OWNER's Agents, servants or independent contractors.

6.3 SUPERVISION, SUPERINTENDENCE AND QUALITY - CONTRACTOR shall supervise, inspect and direct the WORK competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the WORK in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction and Safety precautions and programs incidental thereto. CONTRACTOR shall be responsible to see that the completed WORK complies accurately with the Contract Documents. CONTRACTOR is solely responsible for the quality of the WORK.

6.4 SUPERINTENDENT

6.4.1 Written Designation of Superintendent - CONTRACTOR shall designate in writing and keep on the work site at all times during its progress a technically qualified, English-speaking

superintendent and an alternate who are employees of CONTRACTOR and who shall not be replaced without written notice to OWNER and CONSTRUCTION MANAGER. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR. CONTRACTOR shall issue all its communications to OWNER and DESIGN CONSULTANT through CONSTRUCTION MANAGER.

6.4.2 Superintendent's Presence at Site - CONTRACTOR's superintendent or alternate shall be present at the site of the WORK at all times while work is in progress, and shall be available by phone for emergencies twenty-four (24) hours per Day, seven (7) Days per week. Failure to observe this requirement shall be considered suspension of the WORK by CONTRACTOR until such time as such the superintendent is again present at the site.

6.4.3 Removal of Superintendent - Upon written notice, OWNER may require replacement and removal from the WORK of CONTRACTOR's superintendent with cause, in which case CONTRACTOR shall submit a replacement superintendent subject to approval by OWNER, at no increase in Contract Price or Contract Time. Repeated Safety violation on the job site will be sufficient grounds for directing such replacement.

6.5 LABOR - CONTRACTOR shall provide competent, suitably-qualified personnel to survey and lay out the WORK and perform construction as required by the Contract Documents. Any person employed who is found to be incompetent, intemperate, troublesome, disorderly or otherwise objectionable, or who fails or refuses to perform work properly, acceptably and safely, shall be immediately removed from the WORK by CONTRACTOR and not be reemployed on the WORK. CONTRACTOR shall furnish, erect, maintain and remove the construction plant and any temporary works as may be required. CONTRACTOR shall at all times maintain good discipline and order at the site and will not permit the use or consumption of drugs (illegal substances) or alcoholic beverages at the site.

6.5.1 No Additional Compensation for Overtime - Except as otherwise provided in this Article, CONTRACTOR shall receive no additional compensation for overtime work, (i.e., work in excess of eight (8) hours in any one (1) calendar Day or forty (40) hours in any one (1) calendar week) even though such overtime work may be required under emergency conditions and may be ordered by CONSTRUCTION MANAGER in writing. Additional compensation will be paid CONTRACTOR for overtime work only in the event extra work is ordered by CONSTRUCTION MANAGER, and the Change Order specifically authorizes the use of overtime work and then only to such extent as overtime wages are regularly being paid by CONTRACTOR for overtime work of a similar nature in the same locality.

6.5.2 Approval Required to Work Outside Normal Work Hours - Except in connection with the Safety or protection of persons or the WORK or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all work at the site shall be performed during normal working hours, and CONTRACTOR will not permit overtime work or the performance of work on Saturday, Sunday or any holiday observed by OWNER without

OWNER's written consent. CONTRACTOR shall apply for this consent through CONSTRUCTION MANAGER. CONSTRUCTION MANAGER has to approve CONTRACTOR working Holidays, weekends or overtime. CONTRACTOR will be responsible for reimbursing OWNER for all cost to provide inspection services required to monitor WORK outside of normal working hours. CONTRACTOR will be charged for this actually incurred direct hourly cost plus OWNER-approved overhead cost plus OWNER-approved profit, and a deductive Change Order will be issued to cover this expense.

6.5.3 SUBCONTRACT LIMITATIONS - CONTRACTOR shall perform not less than twenty (20) percent of the WORK with its own forces without subcontracting. This requirement refers to the WORK whose value will not be less than twenty (20) percent of the Contract Price.

6.6 PROGRESS SCHEDULE - CONTRACTOR shall adhere to the progress schedule established in accordance with the General Requirements as it may be adjusted from time to time as provided below:

6.6.1 Non Impacting Adjustments - CONTRACTOR shall submit to CONSTRUCTION MANAGER for acceptance proposed adjustments in the progress schedule that will not change the Contract Time (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

6.6.2 Revisions To Milestones - Proposed revisions in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order in accordance with Article 12 of the General Conditions.

6.7 SUBSTITUTES OR "OR-EQUAL" ITEMS - Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to CONSTRUCTION MANAGER for review under the circumstances described below.

6.7.1 "Or-Equal" Items*:* If in CONSTRUCTION MANAGER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in the WORK will be required, it may be considered by CONSTRUCTION MANAGER as an "or-equal" item, in which case review and approval of the proposed item may, in CONSTRUCTION MANAGER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. A proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment CONSTRUCTION MANAGER determines that:
   i. it is at least equal in materials of construction, quality, durability, appearance, strength and design characteristics;
   ii. it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the WORK as a functioning whole;
   iii. it has a proven record of performance and availability of responsive service; and
b. CONTRACTOR certifies that, if approved and incorporated into the WORK:
   i. there will be no increase in cost to OWNER or increase in Contract Time, and
   ii. it will conform substantially to the detailed requirements of the item named in the Contract Documents.

6.7.2 Substitute Items

a. If in CONTRACT MANAGER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal," it will be considered a proposed substitute item.
b. CONTRACTOR shall submit sufficient information as provided below to allow CONTRACT MANAGER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. Requests for review of proposed substitute items of material or equipment will not be accepted by CONTRACT MANAGER from anyone other than CONTRACTOR.
c. The procedure requirements for review by CONTRACT MANAGER will be as set forth in Paragraph 6.7.2.d, and as CONTRACT MANAGER may decide is appropriate under the circumstances.
d. CONTRACTOR shall make written application to CONTRACT MANAGER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application:
   i. shall certify that the proposed substitute item will:
      1. perform adequately the functions and achieve the results called for by the general design,
      2. be similar in substance to that specified, and
      3. be suited to the same use as that specified;
   ii. will state:
      1. the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time;
      2. whether or not use of the proposed substitute item in the WORK will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for other work on the Project) to adapt the design to the proposed substitute item; and

3. whether or not incorporation or use of the proposed substitute item in connection with the WORK is subject to payment of any license fee or royalty;

iii. will identify:
   1. all variations of the proposed substitute item from that specified, and
   2. available engineering, sales, maintenance, repair and replacement services;

iv. and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.

6.7.3 Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence or procedure of construction is expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence or procedure of construction approved by CONTRACT MANAGER. CONTRACTOR shall submit sufficient information to allow CONTRACT MANAGER, in CONTRACT MANAGER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by CONTRACT MANAGER will be similar to those provided in Paragraph 6.7.2.d.

6.7.4 Contract Manager's Evaluation: CONTRACT MANAGER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.7.2.d and 6.7.3. CONTRACT MANAGER may require CONTRACTOR to furnish additional data about the proposed substitute item. CONTRACT MANAGER will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until CONTRACT MANAGER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." CONTRACT MANAGER will advise CONTRACTOR in writing of any negative determination.

6.7.5 Special Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

6.7.6 Contract Manager's Cost Reimbursement: CONTRACT MANAGER will record CONTRACT MANAGER's costs in evaluating a substitute proposed or submitted by CONTRACTOR pursuant to Paragraphs 6.7.2.d and 6.7.3. Whether or not CONTRACT MANAGER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of CONTRACT MANAGER for evaluating each such proposed substitute. CONTRACTOR shall also reimburse OWNER for the charges of CONTRACT MANAGER for making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER) resulting from the acceptance of each proposed substitute.

6.7.7 CONTRACTOR's Expense: CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense

6.8 PROJECT SITE COORDINATION

6.8.1 Work By Others - CONTRACTOR shall be responsible for ascertaining the nature and extent of any simultaneous, collateral and essential work by others as described in the General Requirements.

CONTRACTOR shall provide staging areas and include work windows for work by others into the overall construction schedule. No additional working days will be allowed for CONTRACTOR's failure to coordinate work by others.

6.8.2 Coordination Of Work - OWNER, CONTRACTOR and each of such workers, contractors and others shall cooperate to minimize interference.

6.8.3 Cost Of Coordination - CONTRACTOR shall include in its Bid all costs involved as a result of coordinating its WORK with others. CONTRACTOR will not be entitled to additional compensation from OWNER for damages resulting from such simultaneous, collateral and essential work. CONTRACTOR's sole and exclusive remedy as a third party beneficiary to other prime contracts for damages caused by another contractor will be a direct action against the separate contractor. If necessary to avoid or minimize such damage or delay, CONTRACTOR shall redeploy its work force to other parts of the WORK.

6.8.4 Obligation to Provide Access - CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (or OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate work performed by others with their WORK as described in these Contract Documents.

6.8.5 CONTRACTOR shall do all cutting, fitting and patching of the WORK that may be required to make its several parts come together properly and integrate with such other work.

6.8.6 CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of CONSTRUCTION MANAGER and the others whose work will be affected.

6.9 COORDINATION WITH SUBCONTRACTORS AND SUPPLIERS

6.9.1 CONTRACTOR shall be solely responsible for scheduling and coordinating the WORK of Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the WORK under a direct or indirect contract with CONTRACTOR. CONTRACTOR shall require all Subcontractors, Suppliers and such other persons and organizations performing or furnishing

any of the WORK to communicate with CONSTRUCTION MANAGER through CONTRACTOR. All WPRL performed by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents.

6.9.2 Subcontractor has no contractual relationship with OWNER. Nothing contained in this Article shall create any contractual relationship between any Subcontractor and OWNER or CONSTRUCTION MANAGER, nor relieve CONTRACTOR of any liability or obligation under the Agreement. CONTRACTOR shall include these General Conditions and the Supplementary General Conditions as a part of all its subcontract agreements.

6.9.3 DIVISION OF WORK - The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the WORK among Subcontractors or Suppliers or delineating the WORK to be performed by any specific trade.

6.10 PATENT FEES AND ROYALTIES - CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the WORK or the incorporation in the WORK of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the WORK and if to the actual knowledge of OWNER, or DESIGN CONSULTANT, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents.

6.11 PERMITS - Unless otherwise provided in the Supplementary General Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses from the agencies having jurisdiction, including the furnishing of insurance and Bonds if required by such agencies. The enforcement of such requirements under this Agreement shall not be made the basis for claims for additional compensation. OWNER shall assist CONTRACTOR, only when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the WORK, which are applicable at the time of opening of Bids. CONTRACTOR shall pay all charges of utility owners for connections to the WORK.

6.12 LAWS AND REGULATIONS - CONTRACTOR shall observe and comply with all Federal, State and local laws, ordinances, Codes, orders and regulations which in any manner affect those engaged or employed on the WORK, the materials used in the WORK or the conduct of the WORK. If any discrepancy or inconsistency should be discovered in this Agreement in relation to any such law, ordinance, code, order or regulation, CONTRACTOR shall immediately report the same in writing to CONSTRUCTION MANAGER.

6.13 TAXES - CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the WORK. OWNER is not exempt from sales tax.

6.14 Intentionally Omitted.

6.15 USE OF PREMISES

6.15.1 General - CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site, the land and areas identified in and permitted by the Contract Documents and the other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements as approved by CONSTRUCTION MANAGER. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the WORK. Should any claim be made against OWNER or CONSTRUCTION MANAGER by any such owner or occupant because of the performance of the WORK, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim through litigation.

6.16 PROJECT SITE MAINTENANCE AND INTERFERENCE WITH ADJACENT PROPERTY

6.16.1 Cost of General Requirements in Contract Price - CONTRACTOR is obligated to comply with the General Requirements. All costs associated with this compliance are to be included in the basic Contract Price.

6.16.2 Vehicle Load Limits - When materials are transported in prosecuting the WORK, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by law or regulation. When it is necessary to cross curbs, sidewalks or drainage facilities CONTRACTOR shall protect them from damage.

6.16.3 Work Outside The Agreement Limits - Despite the designation of Contract Documents or the indication of temporary fences or barricades, the provisions of the Contract Documents governing certain portions of the WORK may require that certain operations be carried out beyond such limits. In those cases, trenching, utility work, site development and landscaping shall be scheduled so as to occasion a minimum of inconvenience or disturbance to or interference with the normal operation of the owner, abutters and the public. CONTRACTOR shall obtain CONSTRUCTION MANAGER's prior approval and all necessary approvals from other agencies, public entities or the government for such operations, and prosecute such operations expeditiously and restore the premises affected to their original condition immediately upon completion of such operations, unless otherwise specified in the Contract Documents. All existing walks, roadways, paved or landscaped areas on which temporary driveways or walks are rerouted shall be restored to their original condition, immediately upon completion of those phases of the WORK, unless otherwise specified in the Contract Documents. Pumping, draining and control of surface and

ground water shall be carried out so as to avoid endangering the WORK or any adjacent facility or property, or interrupting, restricting or otherwise infringing or interfering with its use.

6.16.4 Responsibilities For Damage - All damage, injury or loss to any persons or property caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the WORK or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or CONSTRUCTION MANAGER or DESIGN CONSULTANT). CONTRACTOR's duties and responsibilities for Safety and for protection of the WORK shall continue until such time as all the WORK is completed and CONSTRUCTION MANAGER has issued a notice to OWNER and CONTRACTOR in accordance with Article 14 that the WORK is complete.

6.17 CONTRACTOR'S DAILY REPORTS - CONTRACTOR shall complete a daily report indicating his total manpower for each construction trade, major equipment on site, each Subcontractor's manpower, weather conditions and any other items required by CONSTRUCTION MANAGER. The daily report shall be completed on forms provided by CONSTRUCTION MANAGER and shall be submitted to CONSTRUCTION MANAGER by 9:00 a.m. the following work Day. The report should comment on the daily progress and status of the work within each major component of the WORK. These components will be determined by CONSTRUCTION MANAGER. Submitting acceptable daily reports as required is a precondition to approval of the monthly progress payment. However, these reports are not to be used to meet the notice requirements contained elsewhere in the General Conditions.

6.18 SAFETY

6.18.1 Safety Plan - CONTRACTOR will be required to comply with General Requirements provided by CONSTRUCTION MANAGER. CONTRACTOR shall submit a written Safety plan to CONSTRUCTION MANAGER prior to commencement of any work on site. CONTRACTOR shall be responsible for initiating, maintaining and supervising all Safety precautions and programs in connection with the WORK.

6.18.2 Safety Laws and Regulations - CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the Safety of persons or property or to protect them from damage, injury or loss and shall erect and maintain all necessary safeguards for such Safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Utilities when prosecution of the WORK may affect them and shall cooperate with them in the protection, removal, relocation and replacement of their property.

6.18.3 Safety Representative - CONTRACTOR shall designate a qualified and experienced Safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of Safety precautions and program. The Safety

representative must meet the requirements stated in Supplemental General Conditions 6.18 "Safety."

6.18.4 Safety Orders - CONTRACTOR shall have at the WORK site as applicable, copies or suitable extracts of: Construction Safety Orders, Tunnel Safety Orders and General Industry Safety Orders issued by the State Division of Industrial Safety. CONTRACTOR shall comply with provisions of these and all other applicable laws, ordinances and regulations.

6.18.5 Trench Shoring Plan - Before excavating any trench five (5) feet or more in depth, CONTRACTOR shall submit to OWNER a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for the workers' protection from the hazard of caving ground during the excavation of such trench. If the plan varies from the shoring system standards, the plan shall be prepared by a California registered civil construction manager. No excavation shall start until CONSTRUCTION MANAGER has accepted the plan and CONTRACTOR has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to CONSTRUCTION MANAGER and posted at the site.

6.18.6 Use of Explosives - Explosives may be used only when authorized in writing by CONSTRUCTION MANAGER, or as otherwise stated in the Specifications. Explosives shall be handled, used and stored in accordance with all applicable regulations. CONSTRUCTION MANAGER's approval of the use of explosives shall not relieve CONTRACTOR from liability for claims caused by blasting operations.

6.18.7 Hazardous Communication Program

6.18.7.1 Notification to employees is required when materials that contain hazardous substances or mixtures are required on the WORK. A material safety data sheet as described in section 5194 of the California Code of Regulations shall be requested by CONTRACTOR from the manufacturer of any hazardous product used.

6.18.7.2 Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturer's warnings and application instructions listed on the material safety data sheet and on the product container label.

6.18.7.3 CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in accordance with laws or regulations, with copies to CONSTRUCTION MANAGER.

6.18.7.4 Unsafe Products - CONTRACTOR shall notify CONSTRUCTION MANAGER if it considers a specified or required product or its intended usage to be unsafe. This notification must be given to CONSTRUCTION MANAGER prior to the product being ordered, or if provided by some other party, prior to the product being used or incorporated in the WORK.

6.18.8 Safety Measures In Bid - Payment for performing all work necessary to provide Safety measures shall be included in the prices bid for other items of work except where separate bid items for excavation Safety are provided.

6.18.9 Safety Reporting

6.18.9.1 Weekly First Aid Logs - This log should be delivered to CONSTRUCTION MANAGER three (3) Days after the weekly reporting period.

6.18.9.2 Accident and Injury Reports - This report should be delivered within twenty-four (24) hours of the injury or accident.

6.18.10 CONSTRUCTION MANAGER Safety Deficiency Report - CONTRACTOR is required to respond to this report within two (2) working Days explaining his corrective action and proposed schedule for this action.

6.19 EMERGENCY - In emergencies affecting the Safety or protection of persons or the WORK or property at or adjacent to the site, CONTRACTOR, without special instruction or authorization from CONSTRUCTION MANAGER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give CONSTRUCTION MANAGER prompt written notice if CONTRACTOR believes that any significant changes in the WORK have resulted because of the action taken in response to an emergency. If it is determined by OWNER that a change is required, a change shall be authorized by Change Order.

6.20 SHOP DRAWINGS AND SAMPLES

6.20.1 After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, CONTRACTOR shall submit to CONSTRUCTION MANAGER for DESIGN CONSULTANT's review all Shop Drawings in accordance with the accepted schedule of Shop Drawings Submittals specified in Bidding Documents section Bid Forms.

6.20.2 CONTRACTOR shall also submit to CONSTRUCTION MANAGER for review all Samples in accordance with the accepted schedule of sample Submittals specified in the General Requirements.

6.20.3 Before submittal of each Shop Drawing or Sample, CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the WORK and the Contract Documents.

6.20.4 CONTRACTOR shall, at his own expense, furnish for review, and obtain approval by the CONSTRUCTION MANAGER, three (3) copies each of detailed submittals for materials, installation drawings, and construction procedures for the following:

- Any material which differ from that specified with a brand name on the Plans and in this Special Provisions
- Public notification flyers
- Traffic control plans
- Portland cement concrete design mix
- Concrete curing compound
- Truncated domes for ADA ramps.
- Crack Seal mixes
- Slurry Seal mixes
- Conventional Asphalt mixes
- Class II Base
- Tack Coat Oil
- HMA submittal
- ARAM submittal
- Manhole Lid and/or material pertaining to the adjustment
- Valve Can, Lid and/or material pertaining to the adjustment
- Monument Well Can, Lid and/or material pertaining to the adjustment
- Monument Preservation Certificate **(prior to any construction/demolition activities)**
- Striping plans / Contractor notes
- Striping Paint, Thermoplastic, reflective beads, pavement markers and other material pertaining to installation of new traffic striping
- Erosion Control BMP items.

In addition, OWNER's representative may, at his discretion, require shop drawings on other equipment or construction activities not included in the above list. OWNER's representative shall have ten (10) working days to review and return the shop drawings to CONTRACTOR after receipt of said drawings.

6.21 SUBMITTAL ACCEPTANCE

6.21.1 DESIGN CONSULTANT Review Scope and Limitation - DESIGN CONSULTANT will review and approve Shop Drawings and Samples. DESIGN CONSULTANT's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the WORK, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. DESIGN CONSULTANT's review and approval will not extend to means, methods, techniques, sequences or procedures of construction except where a particular

means, method, technique, sequence or procedure of construction is specifically and expressly called for by the Contract Documents or to Safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by DESIGN CONSULTANT, and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by DESIGN CONSULTANT on previous Submittals.

6.21.2 CONTRACTOR's Responsibility Not Relieved By Approval - CONSTRUCTION MANAGER's and DESIGN CONSULTANT's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called DESIGN CONSULTANT's attention to each such variation at the time of submission and DESIGN CONSULTANT has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by DESIGN CONSULTANT relieve CONTRACTOR from responsibility for complying with the requirements of Article 6.

6.22 COMPLIANCE WITH CONSTRUCTION MANAGER ADMINISTRATIVE PROCEDURES - CONTRACTOR is required to comply with all CONSTRUCTION MANAGER administrative procedures including but not limited to daily reports, Requests for Proposal, Safety reporting, notice requirements, payment procedures, submittal processing, attendance at weekly and special meetings and others designated by CONSTRUCTION MANAGER.

6.23 ASSIGNMENT OF CONTRACT - CONTRACTOR shall not assign, sublet, sell, transfer or otherwise dispose of the Contract Documents or any portion thereof, or its right, title or interest therein, or obligations thereunder, without the written consent of OWNER except as imposed by law. If CONTRACTOR violates this provision, the Agreement may be terminated at the option of OWNER. In such event, OWNER shall be relieved of all liability and obligations to CONTRACTOR and to its assignee or transferee growing out of such termination.

6.24 CONTINUING THE WORK DURING DISPUTES

6.24.1 CONTRACTOR shall carry on the WORK and adhere to the progress schedule during all disputes or disagreements with OWNER over any WORK scope, price or time dispute. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as CONTRACTOR and OWNER may otherwise agree in writing.

6.24.2 If CONTRACTOR and OWNER are unable to reach agreement on Disputed Work, OWNER may direct CONTRACTOR to proceed with the WORK. Payment shall be as later determined by Article 16.

6.25 GENERAL WARRANTY AND GUARANTEE CONTRACTOR is responsible for providing warranty and guarantee in accordance with Article 13.

6.26.11 Survival of Obligations - All representations, indemnifications, warranties and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive Final Payment, completion and acceptance of the WORK and termination or completion of the Agreement.

ARTICLE 7 -- WORK BY OTHERS AT THE SITE

7.1 OWNER'S RIGHT TO WORK AT SITE - OWNER may perform other work related to the Project at the site by OWNER's own forces, have other work performed by utility owners, or let other direct contracts which may contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work.

7.2 CONTRACTOR REPORT ON DELAYS CAUSED BY OTHERS - If the proper execution or results of any part of CONTRACTOR's work depends upon the work of any such other contractor or utility owner (or OWNER), CONTRACTOR shall promptly inspect and report to CONSTRUCTION MANAGER in writing any apparent delays, defects or deficiencies in such other work that render it unavailable or unsuitable for such proper execution and results. CONTRACTOR's failure to report such delays, defects or deficiencies in writing before commencement of the affected WORK will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's work except for latent defects and deficiencies in the other work.

7.3 DAMAGE TO OTHERS CAUSED BY CONTRACTOR - If CONTRACTOR causes damage to the work, property or person of any other contractor employed by OWNER, or if any claim arising out of CONTRACTOR's performance of the WORK by any other contractor is made against CONTRACTOR, by OWNER, CONSTRUCTION MANAGER, DESIGN CONSULTANT, any other contractor or any other person, CONTRACTOR shall be responsible to settle and shall promptly attempt to settle and resolve the dispute.

7.4 COORDINATION

7.4.1 Coordination Responsibilities - CONTRACTOR's coordination responsibilities are in accordance with those found in Article 6 and in the described Supplementary General Conditions if applicable.

7.4.2 Coordination Delays - Should CONTRACTOR be delayed by OWNER, and such delay could not reasonably have been foreseen and prevented by CONTRACTOR, CONSTRUCTION MANAGER will determine the extent of the delay, the effect of the delay on the work as a whole, and any commensurate extension of time. CONSTRUCTION MANAGER shall arrange meetings with other contractors performing work on behalf of OWNER to plan coordination of construction

activities. Any difference or conflict arising between CONTRACTOR and any other contractor employed by OWNER shall be submitted to CONSTRUCTION MANAGER for a decision in the matter. CONTRACTOR shall comply with reasonable direction from CONSTRUCTION MANAGER whose decision on coordination matters will be final.

7.5 Remedy For Delays By Others - By entering into this Agreement, CONTRACTOR acknowledges that there may be other contractors on the site whose WORK will be coordinated with that of his own. CONTRACTOR expressly warrants and agrees that he will cooperate with other contractors and will do nothing to delay, hinder or interfere with the WORK of other separate contractors, OWNER, CONSTRUCTION MANAGER or DESIGN CONSULTANT. CONTRACTOR also expressly agrees that, in the event his work is hindered, delayed, interfered with or otherwise affected by a separate contractor, his sole remedy will be a direct action against the separate contractor. CONTRACTOR will have no remedy, and hereby expressly waives any remedy, against OWNER and/or CONSTRUCTION MANAGER or DESIGN CONSULTANT on account of delay, hindrance, interference or other event caused by a separate contractor.

7.6 Out Of Sequence Or Accelerated Work - When WORK is performed out of sequence and ahead of Interfacing Work, CONTRACTOR shall be responsible for taking reasonable steps to minimize damage or loss to the WORK which may be caused by others during the performance of their work, including but not limited to furnishing prompt written notice to CONSTRUCTION MANAGER and to the other contractors that WORK has been performed out of sequence and ahead of Interfacing Work.

7.7 NATIONAL LABOR RELATIONS BOARD REQUIREMENTS - CONTRACTOR's Price shall include all costs associated with complying with National Labor Relations Board requirements for accessing the Project site.

ARTICLE 8 -- OWNER'S RESPONSIBILITIES

8.1 GENERAL - OWNER has the final authority in all matters affecting the WORK.

8.2 COMMUNICATIONS - In general, OWNER and DESIGN CONSULTANT shall issue all written communications to CONTRACTOR through CONSTRUCTION MANAGER.

8.3 PAYMENTS - OWNER shall make payments to CONTRACTOR as provided in Article 14.

8.4 LANDS, EASEMENTS AND SURVEYS - OWNER's duties in respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Article 4. OWNER shall identify and make available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions at the site and in existing structures which have been utilized in preparing the Contract Documents as set forth in Article 4.

8.5 CHANGE ORDERS - OWNER shall execute Change Orders as indicated in Article 10.

8.6 INSPECTIONS AND TESTS - OWNER's responsibility with respect to inspections, tests and approvals is set forth in Article 13.

8.7 SUSPENSION OF WORK - In connection with OWNER's right to stop work or suspend work, see Articles 13 and 15.

8.8 TERMINATION OF AGREEMENT - Article 15 deals with OWNER's right to terminate services of CONTRACTOR.

8.9 OWNER'S RESPONSIBILITY FOR UNDISCLOSED HAZARDOUS MATERIALS - OWNER'S responsibility with respect to undisclosed Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Materials uncovered or revealed at the site is set forth in Article 4.

8.10 NO OWNER SUPERVISION INTENDED - Neither OWNER nor CONSTRUCTION MANAGER shall supervise, direct or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences or procedures of construction or the Safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the WORK. OWNER and CONSTRUCTION MANAGER will not be responsible for CONTRACTOR's failure to perform or furnish the WORK in accordance with the Contract Documents.

ARTICLE 9 -- CONSTRUCTION MANAGER'S STATUS DURING CONSTRUCTION

9.1 GENERAL

9.1.1 OWNER'S REPRESENTATIVE - CONSTRUCTION MANAGER will be OWNER's representative during the construction period. The duties and responsibilities and the authority of CONSTRUCTION MANAGER as CONSTRUCTION MANAGER during construction are set forth in the Contract Documents.

9.1.2 Contract Documents Terms - Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as reviewed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of CONSTRUCTION MANAGER as to the WORK, it is intended that such requirement, direction, review or judgment will be solely to evaluate the WORK for compliance with the requirements of the Contract Documents, and conformance with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents, unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to CONSTRUCTION MANAGER any duty or authority to supervise or direct the performance of the WORK or any duty or authority to undertake responsibility contrary to the Article 9.

9.2 PRESENCE ON SITE - CONSTRUCTION MANAGER will be on site during construction to observe the progress, quantity and quality of the WORK and to determine, in general, if the WORK is proceeding in accordance with the Contract Documents. CONSTRUCTION MANAGER will not supervise, direct or have control over CONTRACTOR's work.

9.3 CONTRACT DOCUMENT CLARIFICATIONS AND INTERPRETATIONS - CONSTRUCTION MANAGER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as CONSTRUCTION MANAGER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If CONTRACTOR believes that a written clarification or interpretation justifies an adjustment in the Contract Price or the Contract Time and the parties are unable to agree to the amount or extent CONTRACTOR may request an adjustment in the Contract Price or an extension of the Contract Time therefore as provided in Articles 11 or 12.

9.4 AUTHORIZED VARIATIONS IN WORK - CONSTRUCTION MANAGER may authorize minor variations in the WORK, (not resulting in changes to the Contract Price or Contract Time), which are consistent with the intent of the Contract Documents. These may be accomplished by a Construction Manager Order. If CONTRACTOR believes that a Construction Manager Order justifies an increase in the Contract Price or an extension of the Contract Time, CONTRACTOR may request an adjustment in the Contract Price or an extension of the Contract Time therefore as provided in Articles 11 or 12. If CONTRACTOR proceeds with the directed work without making such a request or providing notice he will be presumed to be in agreement with CONSTRUCTION MANAGER's determination that no change in price or time are involved, and will be considered to have waived his right to request an adjustment in Contract Time or Price.

9.5 ACCEPTANCE OF WORK - OWNER has the final authority in all matters affecting the WORK. Within the scope of the Agreement, CONSTRUCTION MANAGER has the authority to enforce compliance with the Plans and Specifications. CONTRACTOR shall promptly comply with instructions from CONSTRUCTION MANAGER or any authorized representative on all matters relating to quantities, the acceptability of material, equipment or work, the execution, progress or sequence of work and the interpretation of Specifications or Drawings. The decision of CONSTRUCTION MANAGER shall be precedent to any payment under the Agreement, unless otherwise ordered by OWNER. CONSTRUCTION MANAGER will recommend final acceptance to OWNER.

9.6 REJECTING DEFECTIVE WORK - CONSTRUCTION MANAGER will have authority to reject work which CONSTRUCTION MANAGER determines to be defective, or not in compliance with the Contract Documents or that DESIGN CONSULTANT or CONSTRUCTION MANAGER believes will not produce a completed Project or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. CONSTRUCTION MANAGER will also have authority to require special inspection

or testing of the WORK as provided in Article 13, whether or not the WORK is fabricated, installed or completed.

9.7 CONTRACTOR SUBMITTALS - CONTRACTOR shall provide submittals in accordance with the SPECIAL PROVISIONS.

9.8 CHANGE ORDER - In connection with CONSTRUCTION MANAGER's responsibilities as to Change Orders, see Articles 10, 11, and 12.

9.9 PAYMENTS In connection with CONSTRUCTION MANAGER's responsibility as to Applications for Payment, see Article 14.

9.10 FINAL APPLICATION FOR PAYMENT - CONSTRUCTION MANAGER's review of the Final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds and certificates of inspection, tests and approvals and other documentation required to be delivered by Article 14 will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests and approvals that the results certified indicate compliance with the Contract Documents.

9.11 DECISIONS ON DISPUTES

9.11.1 Interpreter Of Contract Documents - CONSTRUCTION MANAGER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the WORK thereunder. Claims, disputes and other matters relating to the acceptability of the WORK, the interpretation of the requirements of the Contract Documents pertaining to the performance of the WORK and those claims with respect to changes in the Contract Price or Contract Time will be referred initially to CONSTRUCTION MANAGER. The process to be followed is described in Article 16.

9.12 CONSTRUCTION MANAGER LIABILITY FOR INTERPRETATION - When functioning as interpreter under Article 9, CONSTRUCTION MANAGER will not show partiality to OWNER, DESIGN CONSULTANT or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by CONSTRUCTION MANAGER pursuant to Article 9 will be a condition precedent to any exercise by CONTRACTOR of such rights or remedies as he may otherwise have under the Contract Documents or by laws or regulations in respect of any such Claim, dispute or other matter pursuant to Article 16.

9.13 LIMITATION ON CONSTRUCTION MANAGER'S RESPONSIBILITIES

9.13.1 No Duty Arising Out Of Act Or Decision - Neither CONSTRUCTION MANAGER's authority to act under this Article 9 or other provisions of the Contract Documents, nor any decision made by CONSTRUCTION MANAGER in good faith either to exercise or not exercise

such authority shall give rise to any duty or responsibility of CONSTRUCTION MANAGER to CONTRACTOR, any Subcontractor, any Supplier, any surety for any of them or any other person or organization performing any of the WORK.

9.13.2 No Supervision Role - CONSTRUCTION MANAGER will not supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the Safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations, applicable to the performance of the WORK. CONSTRUCTION MANAGER will not be responsible for CONTRACTOR's failure to perform the WORK in accordance with the Contract Documents.

9.13.3 CONTRACTOR Acts Or Omissions - CONSTRUCTION MANAGER will not be responsible for the acts or omissions of CONTRACTOR nor of any Subcontractor, Supplier or any other person or organization performing any of the WORK.

ARTICLE 10 -- CHANGES IN THE WORK

10.1 CHANGES REQUESTED BY CONTRACTOR

10.1.1 CONSTRUCTION MANAGER Approval - Changes in the Plans and Specifications, requested in writing by CONTRACTOR, which do not materially affect the WORK and which are not detrimental to the WORK or to the interests of OWNER, may be granted to facilitate the WORK, when approved in writing by CONSTRUCTION MANAGER. If the method will result in a cost saving, an appropriate deductive change will be required.

10.1.2 Specified Methods - Changes in specified methods of construction may be made at CONTRACTOR's request when approved in writing by CONSTRUCTION MANAGER. If the method will result in a cost saving, an appropriate deductive change will be required.

10.1.3 No Right To Change - Nothing herein shall be construed as granting a right to CONTRACTOR to demand acceptance of such changes.

10.1.4 Request for Change Made in Good Faith - The request For change shall be made in good faith, and the amount requested accurately reflects the adjustments in Contract Price or Contract Time for which CONTRACTOR believes OWNER is liable, and covers all direct, supplemental, indirect, consequential, serial and cumulative costs and delays to which CONTRACTOR is entitled as a result of the change.

10.2 OWNER'S RIGHT TO MODIFY WORK

10.2.1 Requirement To Implement Directed Change - Without invalidating the Agreement and without notice to any surety, OWNER may at any time or from time to time, order additions, deletions or revisions in the WORK; these will be authorized by a written Change Order prepared by CONSTRUCTION MANAGER and issued by OWNER. Upon receipt of any such document,

CONTRACTOR shall promptly proceed with the work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

10.2.2 Request For Proposal - When OWNER desires a change in the WORK, CONSTRUCTION MANAGER will issue a Request for Proposal to CONTRACTOR. CONTRACTOR will be required to respond within the time indicated by CONSTRUCTION MANAGER or fifteen (15) Days, whichever is less. If CONTRACTOR fails to meet the submittal time required by this provision, CONTRACTOR will be solely liable for any delays or impacts caused by the delayed submittal of the proposal.

10.3 REQUIREMENT TO PROCEED WITH WORK - If OWNER and CONTRACTOR agree on the value of any work, and the amount of Contract Time that should be allowed as a result of CONTRACTOR's response to a Request for Proposal, CONTRACTOR shall proceed as directed by OWNER so as to minimize the impact on and delays to the work pending the issuance of a Change Order. If however, OWNER and CONTRACTOR are unable to agree as to the extent of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of CONTRACTOR's response to a Request for Proposal, OWNER can direct CONTRACTOR to proceed on the basis of a price for the WORK as estimated by CONSTRUCTION MANAGER or time and materials so as to minimize the impact on and delays to the work, in accordance with Article 11.

10.4 WORK NOT IN CONTRACT - CONTRACTOR shall not be entitled to an increase in the Contract Price nor an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified, supplemented by Change Order or Field Order, except in the case of an emergency and except in the case of uncovering work as provided in Article 13.

10.5 CHANGE ORDER PROCESS - OWNER and CONTRACTOR shall execute appropriate Change Orders covering:

10.5.1 OWNER Ordered Changes - Changes in the WORK which are ordered by OWNER pursuant to Article 10;

10.5.2 Changes Due To Defective Work - changes required because of acceptance of Defective Work under Article 13;

10.5.3 Mutually Agreed Price/Time Changes - changes in the Contract Price or Contract Time which are agreed to by the parties.

10.6 NOTICE TO SURETY - If notice of any change is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond shall be adjusted accordingly.

10.7 ALLOWABLE QUANTITY VARIATIONS - In the event of an increase or decrease in bid item quantity of a unit priced item in the Contract Documents, the total amount of WORK actually done or materials or equipment furnished shall be paid for according to the unit price established for such work under the Contract Documents, wherever such unit price has been established; provided, that an adjustment in the unit price may be made for changes which result in an increase or decrease in excess of the allowable percentage variations as set forth by the Contract Documents.

ARTICLE 11 -- CHANGE OF CONTRACT PRICE (Change Orders, Field Orders and Work Orders)

11.1 CONTRACT PRICE CHANGE - The Contract Price may only be changed by a written Change Order.

11.2 METHODS FOR DETERMINING ADJUSTMENTS IN CONTRACT PRICE

11.2.1 Methods - The methods to be used to determine an adjustment in Contract Price necessitated by changes ordered or negotiated pursuant to these General Conditions or work covered by a Request for Proposal are limited to the following:

11.2.1.1 Where the work involved is covered by lump sum prices in the Contract Documents: on the basis of a lump sum negotiation;

11.2.1.2 Where the work involved is covered or is of the same character as Unit Price Work: by application of those unit prices to the quantities of the items involved (subject to the provisions covering Unit Price Work);

11.2.1.3 Where the work involved is not covered by either of the preceding methods: by mutual acceptance of a lump sum price negotiated on the basis of CONTRACTOR's itemized estimate of the anticipated Cost of the WORK involved, determined as specified in this Article, and a contractor's fee as provided in this Article;

11.2.1.4 Where the work involved is not covered by either of the first two (2) methods, and CONSTRUCTION MANAGER and CONTRACTOR cannot achieve agreement on the anticipated cost of the work involved and OWNER directs CONTRACTOR to proceed with the work with payments to be made on the basis of CONSTRUCTION MANAGER's determination of the cost of the work involved: on a CONTRACTOR's profit of eighty (80) percent of the amount allowed by this Article;

11.2.1.5 Where the work involved is not covered by either of the first two (2) methods, and OWNER directs CONTRACTOR to proceed with the work involved with payments to be made on the basis of actual costs: on the basis of the actual cost of the work involved, determined as specified in this Article, and a CONTRACTOR's profit determined as fifty (50) percent of the amount allowed under this Article.

11.2.1.6 Where the work involved is not covered by any of the preceding methods, and when payment is to be determined by a court of competent jurisdiction, it is agreed that the actual cost method used for actual cost basis work shall be an appropriate method for determining the cost of the work involved.

11.2.2 CONTRACTOR'S Overhead and Profit Limitation - For all negotiated Change Orders the allowance for overhead and profit shall include full compensation for superintendence, insurance premiums, taxes, field office expense, extended overhead, home office overhead and all other items of expense or cost not included in the cost of labor, materials or equipment provided for in this Article. The allowance for overhead and profit will not exceed the following schedule:

	Overhead	**Profit**
Labor =	**Ten (10) percent**	**Ten (10) percent**
Materials =	**Ten (10) percent**	**Five (5) percent**
Equipment =	**Ten (10) percent**	**Five (5) percent**

To the sum of the costs and markups provided for in this Article, one (1) percent shall be added as compensation for bonding.

11.2.3 Subcontractor Mark Up - It is understood that labor, materials and equipment may be furnished by CONTRACTOR or by the Subcontractor on behalf of CONTRACTOR. When all or any part of the extra work is performed by a Subcontractor, the allowance specified herein shall be applied to the labor, materials and equipment costs of the Subcontractor, to which CONTRACTOR may add five (5) percent of the Subcontractor's total cost for the extra work. Regardless of the number of hierarchical tiers of Subcontractors, the five (5) percent increase above the performing Subcontractor's total cost which includes the allowances for overhead and profit may be applied one (1) time only.

11.2.4 Equipment Rental Rates

11.2.4.1 All equipment rental rates shall be in accordance with the rental rate source identified in the Supplementary General Conditions based on a monthly rate for the equipment, and based on an equipment utilization of one hundred seventy-three (173) hours per month. CONTRACTOR will be permitted to charge only for the hours the equipment is actually used in the changed work.

11.2.4.2 Equipment Required Specifically for the Additional Work - Whenever possible, changed work will be accomplished using equipment available on-site or owned by CONTRACTOR. If no on-site equipment can be used, and a specific piece of equipment must be rented to be used exclusively for the changed work, the rental rate will be the invoiced rate.

11.3 COST OF WORK (BASED ON TIME AND MATERIALS)

11.3.1 General - The term "cost of work" means the sum of all costs necessarily incurred and paid by CONTRACTOR for labor, materials and equipment in the proper performance of extra work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the excluded costs itemized in this Article.

11.3.2 Labor - The costs of labor will be the actual cost substantiated by certified payroll for wages prevailing for each craft or type of workers performing the extra work at the time the extra work is done, plus employer payments of payroll taxes, Workers' Compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds and other direct costs resulting from Federal, State or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. Labor costs for equipment operators and helpers shall be paid only when such costs are not included in the invoice for equipment rental. The labor costs for foremen shall be proportioned to all of their assigned work and only that applicable to extra work shall be paid. Nondirect labor costs including the superintendent, Project manager and other labor identified in 11.3.7.1 shall be considered part of the overhead markup identified in this Article.

11.3.3 Materials - The cost of materials reported shall be itemized at invoice or lowest current price at which materials are locally available and delivered to the job in the quantities involved, plus the cost of sales tax, freight, delivery and storage.

11.3.3.1 Trade discounts available to the purchaser shall be credited to OWNER notwithstanding the fact that such discounts may not have been taken by CONTRACTOR.

11.3.3.2 For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by CONSTRUCTION MANAGER.

11.3.3.3 Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on extra work items or the current wholesale price for such materials delivered to the work site, whichever price is lower.

11.3.3.4 If in the opinion of CONSTRUCTION MANAGER the cost of material is excessive, or CONTRACTOR does not furnish satisfactory evidence of the cost of such material, then the cost shall be deemed to be the lowest current wholesale price for the total quantity concerned delivered to the work site less trade discount.

11.3.3.5 OWNER reserves the right to furnish materials for the extra work and no claim shall be allowed by CONTRACTOR for costs and profit on such materials.

11.3.4 Equipment - CONTRACTOR will be paid for the use of equipment at the rental rate listed for such equipment specified in the Supplementary General Conditions. Such rental rate will be

used to compute payments for equipment whether the equipment is under CONTRACTOR's control through direct ownership, leasing, renting or another method of acquisition. The rental rate to be applied for use of each item of equipment shall be the rate resulting in the least total cost to OWNER for the total period of use. If it is deemed necessary by CONTRACTOR to use equipment not listed in the publication specified in the Supplementary General Conditions, an equitable rental rate for the equipment will be established by CONSTRUCTION MANAGER. CONTRACTOR may furnish cost data which might assist CONSTRUCTION MANAGER in the establishment of the rental rate.

11.3.4.1 All equipment shall, in the opinion of CONSTRUCTION MANAGER, be in good working condition and suitable for the purpose for which the equipment is to be used.

11.3.4.2 Before construction equipment is used on the extra work, CONTRACTOR shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to CONSTRUCTION MANAGER, in duplicate, a description of the equipment and its identifying number and the scheduled work activities planned.

11.3.4.3 Unless otherwise specified, manufacturer's ratings and manufacturer-approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

11.3.5 Rental Equipment

11.3.5.1 The rental time to be paid for equipment on the work site shall be the time the equipment is in productive operation on the extra work being performed and, in addition, shall include the time required to move the equipment to the location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location; except, that moving time will not be paid if the equipment is used on other than the extra work, even though located at the site of the extra work.

11.3.5.2 Rental time will not be allowed while equipment is inoperative due to breakdowns.

11.3.5.3 Computation Method - The following shall be used in computing the rental time of equipment on the work site.

11.3.5.3.1 When hourly rates are listed, any part of an hour less than thirty (30) minutes of operation shall be considered to be one-half (.5) hour of operation, and any part of an hour in excess of thirty (30) minutes will be considered one (1) hour of operation.

11.3.5.3.2 When daily rates are listed, any part of a Day less than four (4) hours operation shall be considered to be one-half (.5) Day of operation.

11.3.6 CONTRACTOR-Owned Equipment - For CONTRACTOR-owned equipment, the allowed equipment rental rate will be limited to the monthly equipment rental rate using a

utilization rate of one hundred seventy-three (173) hours per month which is found in the Equipment Rental Rate Tables authorized by the Supplementary General Conditions for rental equipment.

11.3.7 Special Services Special work or services are defined as that work characterized by extraordinary complexity, sophistication or innovation or a combination of the foregoing attributes which are unique to the construction industry.

11.3.7.1 When CONSTRUCTION MANAGER and CONTRACTOR determine that a special service is required which cannot be performed by the forces of CONTRACTOR or those of any of its Subcontractors, the special service may be performed by an entity especially skilled in the work. Invoices for special services based upon the current fair market value thereof may be accepted without complete itemization of labor, material and equipment rental costs, after validation of market values by CONSTRUCTION MANAGER.

11.3.7.2 All invoices for special services will be adjusted by deducting all trade discounts offered or available, whether the discounts were taken or not. In lieu of the allowances for overhead and profit specified in this Article, herein, an allowance of fifteen (15) percent will be added to invoices for special services.

11.3.8 Excluded Costs - The term "cost of the work" shall not include any of the following costs:

11.3.8.1 Overhead Cost - Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships) general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal office, a branch office or material yard and shop for general administration of the Work or not specifically covered by this Article all of which are to be considered administrative costs covered by CONTRACTOR's allowance for overhead and profit.

11.3.8.2 Office Expense - Expenses of CONTRACTOR's principal and branch offices.

11.3.8.3 Capital Expenses - Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the WORK and charges against CONTRACTOR for delinquent payments.

11.3.8.4 Premiums - Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same.

11.3.8.5 Negligence - Costs due to the negligence of CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

11.3.8.6 Other - Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in this Article.

11.3.8.7 Small Tools - Cost of small tools valued at less than five hundred dollars ($500) and that remain the property of CONTRACTOR.

11.3.8.8 Administrative Costs - Costs associated with the preparation of Change Orders (whether or not ultimately authorized), cost estimates or the preparation or filing of claims.

11.3.8.9 Anticipated Lost Profits - Expenses of CONTRACTOR associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings or unpaid retainage.

11.3.8.10 Home Office Overhead - Costs derived from the computation of a home office overhead rate by application of the Eichleay, Allegheny, Burden Fluctuation or other similar methods.

11.3.8.11 Special Consultants and Attorneys - Costs of special consultants or attorneys, whether or not in the direct employ of CONTRACTOR, employed for services specifically related to the resolution of a claim, dispute or other matter relating to the acceptability of the Work.

11.3.9 CONTRACTOR's Extra Work Report - In order to be paid for extra work based on time and materials, CONTRACTOR must submit a daily Extra Work Report on a form provided by CONSTRUCTION MANAGER. The form must be completely filled out based on the provisions of this Article and signed by CONTRACTOR and CONSTRUCTION MANAGER at the end of each work Day. Failure to complete the form and obtain appropriate signatures by the next working Day after the work was completed will result in CONTRACTOR's costs for extra work being disallowed until such form is completed and agreed to by CONSTRUCTION MANAGER. Delay in submitting the form beyond seven (7) Days will result in CONSTRUCTION MANAGER's records becoming the official record for payment purposes.

11.4 COSTS RELATING TO WEATHER DAMAGE

CONTRACTOR shall have no cost claims against OWNER for damages for any injury to work, materials or equipment, resulting from the action of the elements or weather. Weather-related adjustment to Contract Time will be made in accordance with Article 12.

11.5 WRITTEN JUSTIFICATION SUBSTANTIATING ADJUSTMENT

11.5.1 CONTRACTOR Initiated Change - Any request by CONTRACTOR for a change in the Contract Price shall be based on written notice delivered by CONTRACTOR to CONSTRUCTION MANAGER promptly (but in no event later than seven (7) Days) after the

start of the occurrence or the event giving rise to the request for adjustment and stating the general nature of the request.

11.5.2 Cost and Time Notice Requirements - Notice of the amount of the request for adjustment in cost and/or time with supporting data shall be delivered within fourteen (14) Days after such start of occurrence, unless CONSTRUCTION MANAGER allows an additional period of time to ascertain more accurate data in support of the request.

11.5.3 Proposal Form - CONTRACTOR's proposal shall be on forms acceptable to CONSTRUCTION MANAGER. CONTRACTOR proposal request shall certify in writing that the amounts included cover all direct, supplemental, indirect, consequential and cumulative costs and delays, as applicable, and that those costs and delays would be or were necessarily incurred, despite CONTRACTOR's reasonable and diligent efforts to mitigate them. Mitigation efforts undertaken by CONTRACTOR should be described.

11.5.4 Proposal Content - Where the change in Contract Price is to be determined on the basis of the cost of the work involved, CONTRACTOR's itemized estimates shall detail all applicable elements of cost, including, but not limited to, labor hours and payroll costs, quantities, crew mixes, production rates, material costs, Subcontractor and Supplier costs, equipment costs and supplemental costs. Where the change in Contract Price arises from changes in the schedule of all or part of the WORK, or where a change in Contract Time is sought, the submittal shall include analysis required by Article 12. With respect to work during other than normal hours, the labor charges associated with such work shall consist of straight time wages and burden plus the appropriate overtime or shift premium with no additional burden (i.e., fringe benefits) on the premium portion.

11.5.5 Additions and Deletions - The submittal shall cover all aspects of the work involved, whether relating to deleted, added, revised or impacted items of Work. Amounts for Subcontractors or Suppliers at any tier shall be similarly supported.

11.5.6 Requirements for Valid Proposal - No submittal for an adjustment in Contract Price or Contract Time shall be valid unless submitted in accordance with this Article.

11.5.7 Obligation of Surety - All work performed hereunder shall be subject to all of the provisions of the Contract Documents and CONTRACTOR's sureties shall be bound with reference thereto as under the Agreement. Copies of all amendments to surety Bonds or supplemental surety Bonds shall be submitted to OWNER when requested.

11.5.8 Documentation - CONTRACTOR is required to comply with CONSTRUCTION MANAGER's documentation requirements regarding format and level of detail for the Change Order process.

11.6 OWNER RIGHT TO DIRECT USE OF COMPETITIVE BID - OWNER reserves the right to direct CONTRACTOR to solicit competitive bids for additional work. If required by

OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who will then determine, with the advice of CONSTRUCTION MANAGER, which bids will be accepted.

ARTICLE 12 -- CHANGE OF CONTRACT TIME

12.1 GENERAL

12.1.1 CONTRACTOR Request For Time Extension - The Contract Time may only be changed by a Change Order or Field Order. Any request by CONTRACTOR for an extension of the Contract Time (or Milestones) shall be based on written notice delivered by CONTRACTOR to CONSTRUCTION MANAGER promptly (but in no event later than seven (7) Days) after the occurrence of the event giving rise to the request and stating the general nature of the request, unless otherwise noted. Notice of the extent of the request with supporting data shall be delivered within fourteen (14) Days after such occurrence (unless CONSTRUCTION MANAGER allows an additional period of time to ascertain more accurate data in support of the request) and shall be accompanied by CONTRACTOR'S written statement that the adjustment requested is the entire time adjustment to which CONTRACTOR has reason to believe it is entitled as a result of the occurrence of said event. An increase in Contract Time does not mean that CONTRACTOR is due an increase in Contract Price.

12.1.2 CONTRACTOR Required Analysis - An extension in Contract Time will not be granted unless CONTRACTOR can demonstrate through an analysis of the Critical Path Method Progress Schedule critical path that the increases in the time to perform or complete the WORK, or specified part of the WORK, beyond the corresponding Contract Time arise from unforeseeable causes beyond the control and without the fault or negligence of both CONTRACTOR and his Subcontractors, Suppliers or other persons or organizations, and that such causes in fact lead to performance or completion of the WORK, or specified part in question, beyond the corresponding Contract Time, despite CONTRACTOR's reasonable and diligent actions to guard against those effects.

12.1.3 OWNER's Right To Grant Time Extension - OWNER may elect, at its sole discretion, to grant an extension in Contract Time, without CONTRACTOR's request, because of delays or other factors.

12.2 TIME IS OF THE ESSENCE - With regard to all Milestones and all time limits stated in the Contract Documents, time is of the essence.

12.3 CRITERIA FOR DETERMINING ADJUSTMENTS IN CONTRACT TIME

12.3.1 Use Of Float and Critical Path - Use of float is in accordance with the SPECIAL PROVISIONS.

12.3.2 Types Of Delays Beyond CONTRACTOR's and OWNER'S Control - Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners, fires, floods, epidemics, abnormal weather conditions, labor slowdowns and strikes or acts of God. CONTRACTOR must provide CONSTRUCTION MANAGER written notice of the potential delay within twenty-four (24) hours of the occurrence.

12.3.3 Subcontractor Delays Within CONTRACTOR Control - Delays attributable to and within the control of Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR. No time extension will be allowed for such delays.

12.4 TIME ONLY ENTITLEMENT

12.4.1 - Where CONTRACTOR is prevented from completing any part of the WORK within the Contract Time (or Milestones) due to delay to a critical path activity beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Time (or Milestones) in an amount equal to the time lost on the critical path of the Project due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.4.2 - In no event shall OWNER be liable to CONTRACTOR, any Subcontractor, any Supplier or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out or resulting from (i) delays caused by or within the control of CONTRACTOR, or (ii) delays beyond the control of both parties including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7. CONTRACTOR must provide CONSTRUCTION MANAGER written notice of the potential delay within twenty-four (24) hours of the occurrence.

12.5 EXTENSIONS OF TIME FOR DELAY DUE TO WEATHER - An inclement weather delay is defined as a delay caused by inclement weather which prevents CONTRACTOR from working on the controlling item in CONTRACTOR's construction schedule. Should CONTRACTOR experience inclement weather delays over the course of contract duration in excess of the number of Days outlined in the Supplementary General Conditions, CONTRACTOR shall be granted a time extension in accordance with the provisions outlined in this Article. The time extension shall be based on the number of inclement weather Days in excess of the number of Days outlined in the Supplementary General Conditions.

12.5.1 Extension of Time For Delays due to Weather Damage - If, however, in the opinion of CONSTRUCTION MANAGER, CONTRACTOR has made all reasonable efforts to protect the materials, equipment and work, CONTRACTOR may be granted a reasonable extension of Contract Time to make proper repairs, renewals and replacements of the work, materials or equipment in accordance with Article 12.

ARTICLE 13 -- TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK; WARRANTY AND GUARANTEE

13.1 TESTS AND INSPECTIONS

13.1.1 ACCESS TO WORK FOR TESTING AND INSPECTION - OWNER, CONSTRUCTION MANAGER, their consultants, Sub-Consultants other representatives and personnel of OWNER, independent testing laboratories and governmental agencies with jurisdictional interests will have access to the WORK at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Safety procedures and programs so that they may comply.

13.1.2 Cost of Inspection/Notice - CONSTRUCTION MANAGER will make, or have made, such inspections and tests as CONSTRUCTION MANAGER deems necessary to see that the WORK is being accomplished in accordance with the requirements of the Contract Documents. Unless otherwise specified, the cost of such inspection and testing will be borne by OWNER. In the event such inspections or tests reveal non-compliance with the requirements of the Contract Documents, CONTRACTOR shall bear the cost of corrective measures deemed necessary by CONSTRUCTION MANAGER, as well as the cost of subsequent re-inspection and re-testing.

Neither observations by CONSTRUCTION MANAGER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents.

CONTRACTOR shall give CONSTRUCTION MANAGER timely notice as specified in the technical specification or five (5) Days if not identified of readiness of the WORK for all required on and off site inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

CONSTRUCTION MANAGER shall provide for the services of an independent testing laboratory to perform inspections, tests or approvals required by the Contract Documents except as otherwise specifically provided.

CONTRACTOR shall be responsible for arranging any inspection required by a public entity. CONTRACTOR shall provide adequate notice to the public entity and to CONSTRUCTION MANAGER for any required inspection.

13.1.3 Right to Stop Work - CONSTRUCTION MANAGER has the right to stop or suspend work activities which will cover CONTRACTOR work product which is to be inspected or tested, or which will interfere with the inspection or testing activities, for a reasonable time and CONTRACTOR will have no right to additional cost or time he may incur as a result of the work stoppage.

13.2 CONTRACTOR INSPECTION AND TESTING RESPONSIBILITY

13.2.1 - CONTRACTOR shall be responsible for performance of tests and inspections in accordance with the SPECIAL PROVISIONS.

13.2.2 If laws or regulations of any public body having jurisdiction other than OWNER require any work to specifically be inspected, tested or approved, CONTRACTOR shall pay all costs.

13.2.3 CONTRACTOR shall be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER's or CONSTRUCTION MANAGER's acceptance of a Supplier of materials or equipment proposed as a substitution or "or-equal" to be incorporated in the WORK, or of materials or equipment submitted for review prior to CONTRACTOR's purchase thereof for incorporation in the WORK.

13.2.4 CONTRACTOR shall pay all related costs, schedule related activities at appropriate times and secure and furnish for CONSTRUCTION MANAGER the required certificates of inspection, testing or approval. Any associated cost and time required by CONTRACTOR for inspections required under Article 13.2 shall be considered as having been included in the Contract Price and in CONTRACTOR's schedule for the performance of the WORK within the Contract Time.

13.2.5 All inspections, tests or approvals other than those required by laws or regulations of any public body having jurisdiction shall be performed by organizations acceptable to CONSTRUCTION MANAGER.

13.2.6 CONTRACTOR shall anticipate at a minimum the following testing and inspection requirements over and above those required by the Contract Documents:

<u>Civil Engineering Inspections/Reviews</u>

1. All form work
2. Crack Seal Placement
3. Slurry Seal Placement
4. Concrete placement
5. Asphalt compaction
6. Class II Base compaction
7. Remove and Replace areas
8. HMA process and materials
9. ARAM process and materials
10. Street cat-tracking prior to final paint striping

13.3 COVERING WORK TO BE INSPECTED

13.3.1 Covered Work Prior To Inspection Or Testing - If any WORK (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of CONSTRUCTION MANAGER, it must, when requested by CONSTRUCTION MANAGER, be uncovered for inspection. CONTRACTOR shall bear all direct, indirect, and consequential costs

and damages of such uncovering, unless CONTRACTOR has given CONSTRUCTION MANAGER and/or agencies timely notice of CONTRACTOR's intention to cover the same, and CONSTRUCTION MANAGER has not acted with reasonable promptness in response to such notice.

13.3.2 Covered Work Contrary To Written Request - If any WORK is covered contrary to the written request of CONSTRUCTION MANAGER, it must, when requested by the CONSTRUCTION MANAGER, be uncovered for CONSTRUCTION MANAGER's observation and recovered. CONTRACTOR shall bear all direct, indirect and consequential costs and damages of such uncovering.

13.3.3 CONSTRUCTION MANAGER Right to Direct That Work Be Uncovered For Inspection Or Testing

13.3.3.1 If CONSTRUCTION MANAGER considers it necessary or advisable that covered work be observed by CONSTRUCTION MANAGER or inspected or tested by others, CONTRACTOR, at CONSTRUCTION MANAGER's request, shall uncover, expose or otherwise make available for observation, inspection or testing as CONSTRUCTION MANAGER may require, that portion of the WORK in question, furnishing all necessary labor, material and equipment.

13.3.3.2 If it is found that such WORK is defective, CONTRACTOR shall bear all direct, indirect and consequential costs and damages of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including but not limited to fees and charges of engineers, architects, attorneys and other professionals. However, if such work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction based on the time and materials provisions as outlined in Article 11.

13.4 OWNER MAY STOP THE WORK - If the WORK is determined to be defective by CONSTRUCTION MANAGER, and CONTRACTOR fails to immediately correct the defect or CONTRACTOR fails to perform WORK in such a way that the completed WORK will conform to the Contract Documents, CONSTRUCTION MANAGER may order CONTRACTOR to stop the WORK, or any portion thereof, until the cause for such order has been eliminated; however, this right of CONSTRUCTION MANAGER to stop the WORK shall not give rise to any duty on the part of OWNER or CONSTRUCTION MANAGER to exercise this right for the benefit of CONTRACTOR or any other party. CONTRACTOR shall bear all direct, indirect and consequential costs and damages that result from this stop work notice.

13.5 CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.5.1 CONTRACTOR's Responsibility - If required by CONSTRUCTION MANAGER, CONTRACTOR shall promptly, either correct all Defective Work, whether or not fabricated, installed or completed, or, if the WORK has been rejected by CONSTRUCTION MANAGER,

remove it from the site and replace it with non-Defective Work. CONTRACTOR shall bear all direct, indirect and consequential costs and damages of such correction or removal.

13.5.2 OWNER Acceptance of Defective Work - If, instead of requiring correction or removal and replacement of Defective Work, OWNER prefers to accept the WORK, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER's evaluation of and determination to accept such Defective Work. If any such acceptance occurs prior to Final Payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK, and OWNER shall be entitled to an appropriate decrease in the Contract Price, determined by CONSTRUCTION MANAGER and charged to CONTRACTOR through a deductive Change Order.

13.5.3 OWNER May Correct Defective Work

13.5.3.1 If CONTRACTOR after receiving written notice, from CONSTRUCTION MANAGER or from OWNER, or both, fails within a reasonable time as specified in the notice, to correct Defective Work or to remove and replace rejected WORK, OWNER may correct and remedy any such deficiency. If CONTRACTOR after receiving written notice from CONSTRUCTION MANAGER or OWNER, or both, fails within reasonable time as specified in the notice, to perform the WORK in accordance with the Contract Documents, or fails to comply with any other provision of the Contract Documents, OWNER may correct and remedy any such deficiency.

13.5.3.2 In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously.

13.5.3.3 In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the WORK, and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere.

13.5.3.4 CONTRACTOR shall allow OWNER, Engineers, Agents and employees, OWNER's other contractors, CONSTRUCTION MANAGER and DESIGN CONSULTANT access to the site to enable OWNER to exercise the rights and remedies under this paragraph.

13.5.3.5 All claims, costs, losses and damages incurred or sustained by OWNER in exercising such rights and remedies will be charged against CONTRACTOR and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK, and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may unilaterally issue the Change Order through CONSTRUCTION MANAGER.

13.5.3.6 Such claims, costs, losses and damages will include but not be limited to all costs of repair or replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's Defective Work.

13.5.3.7 CONTRACTOR shall not be allowed an extension of the Contract Time (or Milestones) because of any delay in the performance of the WORK attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

13.6 WARRANTY AND GUARANTEE

13.6.1 General - CONTRACTOR warrants and guarantees to OWNER that all work will be in accordance with the Contract Documents and will not be defective. Prompt notice of defects known to OWNER or CONSTRUCTION MANAGER shall be given to CONTRACTOR. All Defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 13. Defective Work may be rejected even if approved by prior inspection.

13.6.2 One (1) Year Warranty Period - The warranty period shall commence when the Notice of Completion is issued, at notice of Beneficial Occupancy or at notice of Partial Utilization of the work to be warranted has been issued, or a later date if so specified in the Agreement, or mutually agreed to, and extend until one (1) year after that date or whatever longer period may be prescribed by laws or regulations or by the terms of any applicable special guarantee or specific provision of the Contract Documents.

13.6.3 Correction of Defective Work - If within the designated warranty period, or such longer period as may be required by Laws or Regulations, the WORK, or any part of the WORK, is discovered to be defective, CONTRACTOR shall promptly, without an adjustment in Contract Price and in accordance with OWNER's or CONSTRUCTION MANAGER's written instructions, either correct that Defective Work, or if it has been rejected by OWNER or CONSTRUCTION MANAGER, remove it from the site and replace it with non-Defective Work. If circumstances warrant it, including but not limited to, in an emergency, OWNER or CONSTRUCTION MANAGER may have the Defective Work corrected or the rejected WORK removed and replaced. In that event, CONTRACTOR shall not be allowed to recover any associated costs, and he shall reimburse OWNER for all direct, indirect and consequential costs of OWNER, and OWNER shall be entitled to an appropriate decrease in Contract Price, to withhold a set-off against amount recommended for payment, or make a claim on CONTRACTOR's bond if CONTRACTOR has been paid in full. Where Defective Work (and damage to other WORK resulting therefrom) has been corrected, removed or replaced during the warranty period, the one (1) year warranty period with respect to such WORK will be extended for an additional period of one (1) year after such correction or removal and replacement has been satisfactorily completed.

13.6.4 Early Completion - The one (1) year warranty period will not begin until the Notice of Completion is filed. If CONTRACTOR completes the WORK or portions thereof prior to this time, he shall preserve the equipment and/or facilities by developing and implementing a preventive maintenance program in compliance with manufacturer's recommendations to maintain

the equipment and/or facilities unless OWNER has issued a notice of Beneficial Occupancy or notice of Partial Utilization for the warranted WORK. At start up, CONTRACTOR will be required to get his equipment and/or facilities ready to put into service.

13.7 EXTENDED WARRANTIES AND GUARANTEES - OWNER may at its sole discretion extend the one (1) year warranty period up to twenty-four (24) months, in which case CONTRACTOR shall maintain the warranties and guarantees. If such extension of the one (1) year warranty period causes an increase in the cost of the warranties and guarantees provided by CONTRACTOR, an adjustment in Contract Price shall be made as provided by the Contract Documents.

13.7.1 Extended Warranties and Guarantees - OWNER may extend the one (1) year Warranty period for up to twenty-four (24) additional months.

ARTICLE 14 -- PAYMENTS TO CONTRACTOR AND COMPLETION

14.1 BASIS FOR PAYMENT

14.1.1 Lump Sum Items

14.1.1.1 General - Items for which quantities are indicated as Lump Sum shall be paid for at the price indicated in the Bid. Such payment shall be full compensation for the items of WORK and all work appurtenant thereto.

14.1.1.2 Critical Path Method ("CPM") Schedule Used For Payment - Payment for all lump sum costs and services shall be based on the value of WORK accomplished. The allocation of cost to CPM schedule activities will be utilized for payment computation.

14.1.1.3 Critical Path Method Schedule Required - CONTRACTOR shall submit to CONSTRUCTION MANAGER a detailed cost loaded and manpower loaded CPM schedule, to be used as a basis for determining progress payments in accordance with the General Requirements.

14.1.2 Unit Priced Items

14.1.2.1 General - Unit price items will be paid for based on equivalent quantities installed or performed. Unless otherwise specified, quantities of WORK shall be determined from measurements or dimensions in horizontal planes. However, linear quantities of pipe, piling, fencing and timber shall be considered as being the true length measured along the longitudinal axis. Unless otherwise provided in the Specifications, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. CONTRACTOR and CONSTRUCTION MANAGER will agree on the unit quantity to be used for payment prior to its installation or removal when possible, or immediately after installation.

14.1.2.2 Methods of Measurement - Materials and items of WORK which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in the particular sections involved.

14.1.2.3 Certified Weight - When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by CONSTRUCTION MANAGER, on a completely automated weighing and recording system. CONTRACTOR shall furnish CONSTRUCTION MANAGER with duplicate licensed weighmaster's certificates showing the actual net weights.

14.1.2.4 Units of Measurement - Measurements shall be in accordance with U.S. standard measures. A pound is an avoirdupois pound. A ton is two thousand (2,000) pounds avoirdupois. The unit of liquid measure is the U.S. gallon.

14.2 PAYMENT

14.2.1 Wasted Or Rejected Material - Payment will not be made for materials wasted or disposed of in a manner not called for in the Contract Documents. This includes rejected material not unloaded from vehicles, material rejected after it has been placed and material placed outside of the plan lines. No compensation will be allowed for disposing of rejected or excess materials.

14.2.2 CONTRACTOR Retains Ownership - Payment shall not relieve CONTRACTOR from its obligations under the Agreement, nor shall such payment be construed to be acceptance of any of the WORK. Payment shall not be construed as the transfer of ownership of any equipment or materials to OWNER. Responsibility of ownership shall remain with CONTRACTOR who shall be obligated to store, protect, repair, replace, rebuild or otherwise restore any fully or partially completed WORK or structure for which payment has been made, or replace any materials or equipment required to be provided under the Agreement which may be damaged, lost, stolen or otherwise degraded in any way prior to final acceptance of the WORK.

14.2.3 Payment Does Not Affect Warranty - Guarantee and warranty periods shall not be affected by any payment but shall commence as specified in Article 13.6.2.

14.2.4 Stop Notice - If, within the time fixed by law, a properly executed notice to stop payment is filed with OWNER, due to CONTRACTOR's failure to pay for labor or materials used in the WORK, all money due for such labor or materials will be withheld from payment to CONTRACTOR in accordance with applicable laws.

14.3 APPLICATION FOR PROGRESS PAYMENT

14.3.1 Payment Due Date - CONTRACTOR shall, on the payment application date designated by CONSTRUCTION MANAGER, submit to CONSTRUCTION MANAGER for review, an Application for Payment filled out and signed by CONTRACTOR covering the WORK completed

as of the date of the application and accompanied by such supporting documentation as is required by the General Requirements.

14.3.2 Payment Application Content - The Application for Payment shall identify, as a subtotal, the amount of CONTRACTOR's total earnings to date, plus the value of materials stored at the site which have not yet been incorporated in the WORK, and less a deductive adjustment for materials previously paid. Payment for such material shall not be construed as acceptance of the material.

14.3.3 Net Payment - The net payment due CONTRACTOR shall be the above-mentioned subtotal from which shall be deducted retainage and the total amount of all previous payments made to CONTRACTOR.

14.3.4 Retention - A retention of five (5) percent of each approved progress payment will be withheld until the work is fifty (50) percent complete; then OWNER may, at its option, refund that portion of retainage held by OWNER that is in excess of five (5) percent of the total of the WORK done to date and thereafter continue to retain five (5) percent of the value of all approved progress payment requests subsequently submitted. When the Notice of Completion is issued, OWNER at its option, may refund any portion of the remaining retention.

14.3.5 Retainage From Payments - CONTRACTOR may elect to receive one hundred (100) percent of payments due under the Contract Documents from time to time, without retention of any portion of the payment by OWNER, by depositing securities of equivalent value with OWNER in accordance with the provisions of section 22300 of the Public Contract Code. Such securities, if deposited by CONTRACTOR, shall be valued by OWNER, whose decision on valuation of the securities shall be final. Securities eligible for investment under this provision shall be limited to those listed in section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by CONTRACTOR and OWNER.

14.3.6 Reinstating Retention - OWNER may reinstate up to five (5) percent retention of the total of the WORK done if OWNER determines, at its discretion, that CONTRACTOR is not performing the WORK satisfactorily or there is other specific cause for such withholding.

14.3.7 Products Stored On and Off Site - Storage and payment for material supplies and/or equipment which will be incorporated into the WORK shall be in accordance with the provisions of the General Requirements.

14.4 CONTRACTOR'S WARRANTY OF TITLE - CONTRACTOR warrants and guarantees that title to all work, materials and equipment covered by an Application for Payment, whether incorporated in the WORK or not, will pass to OWNER at the time of Final Payment free and clear of all liens.

14.5 APPLICATIONS FOR PROGRESS PAYMENT - Thirty (30) Days after presentation of undisputed and properly submitted Application for Payment, the amount will become due and when due will be paid by OWNER to CONTRACTOR.

Any payment request that is disputed or determined to be improper shall be returned to CONTRACTOR not later than seven (7) Days after receipt accompanied by documentation describing the reason(s) why the payment request is not proper.

Any progress payment not made within thirty (30) Days of an undisputed and properly submitted payment request will require OWNER to pay interest as provided by Public Contract Code section 20104.50.

14.6 REJECT PAYMENT FOR DEFECTIVE WORK - CONSTRUCTION MANAGER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in CONSTRUCTION MANAGER's opinion to protect OWNER from loss because:

14.6.1 The WORK is defective, or completed WORK has been damaged requiring correction or replacement,

14.6.2 The Contract Price has been reduced by written amendment or Change Order,

14.6.3 OWNER has been required to correct Defective Work or complete WORK in accordance with Article 13.

14.6.4 CONSTRUCTION MANAGER has actual knowledge of the occurrence of any of the events enumerated in Article 15.

14.7 REJECTION OF PAYMENT BY OWNER - OWNER may refuse to make payment of the full amount recommended by CONSTRUCTION MANAGER because claims have been made against OWNER on account of CONTRACTOR's performance of the WORK or liens have been filed in connection with the WORK or there are other items entitling OWNER to a credit against the amount recommended, but OWNER must give CONTRACTOR written notice within seven (7) Days (with a copy to CONSTRUCTION MANAGER) stating the reasons for such action.

14.8 SUBSTANTIAL COMPLETION

14.8.1 When CONTRACTOR considers the WORK ready for its intended use CONTRACTOR shall notify CONSTRUCTION MANAGER in writing that the WORK is substantially complete. CONTRACTOR shall attach to this notice a list of all work items that remain to be completed.

14.8.2 Within a reasonable time thereafter, OWNER, CONTRACTOR and CONSTRUCTION MANAGER shall make an inspection of the WORK to determine the status of completion.

14.8.3 If CONSTRUCTION MANAGER does not consider the WORK substantially complete, or the list of remaining work items to be comprehensive, CONSTRUCTION MANAGER will notify CONTRACTOR in writing giving the reasons therefore.

14.8.4 If CONSTRUCTION MANAGER considers the WORK substantially complete, CONSTRUCTION MANAGER will prepare and deliver to OWNER a notice of Substantial Completion, which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before Final Payment. At the time of delivery of the notice of Substantial Completion, CONSTRUCTION MANAGER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending Final Payment between OWNER and CONTRACTOR with respect to security, operation, Safety, maintenance, heat, utilities, insurance and warranties and guarantees.

14.8.5 OWNER shall have the right to exclude CONTRACTOR from the WORK after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the list of remaining WORK items, or for warranty work.

14.9 PARTIAL UTILIZATION AND BENEFICIAL OCCUPANCY

14.9.1 Partial Utilization - OWNER shall have the right to utilize or place into service any item of equipment or other usable portion of the WORK which is substantially complete prior to completion of all of the WORK. Whenever OWNER plans to exercise said right, CONTRACTOR will be notified in writing with a notice of Partial Utilization signed by OWNER identifying the specific portion or portions of the WORK to be so utilized or otherwise placed into service. Liquidated damages will not be affected.

14.9.2 Beneficial Occupancy - OWNER shall have the right to take control of the entire WORK if it is substantially completed. Whenever OWNER plans to exercise said right CONTRACTOR will be notified in writing with a notice of Beneficial Occupancy. Such use by OWNER will terminate liquidated damages.

14.9.3 Responsibility For Care and Maintenance - It shall be understood by CONTRACTOR that until Beneficial Occupancy or Partial Utilization notices are issued or start up begins, all responsibility for care and maintenance of all of the WORK shall be the responsibility of CONTRACTOR. Upon issuance of said written notice of Beneficial Occupancy or notice of Partial Utilization, OWNER will accept responsibility for the protection and maintenance of all such items or portions of the WORK described in the written notice.

14.9.4 CONTRACTOR Responsible For Completion - CONTRACTOR shall retain full responsibility for satisfactory completion of the WORK, regardless of whether a portion thereof has been partially utilized by OWNER.

14.10 FINAL INSPECTION - Upon written notice from CONTRACTOR that the entire WORK or an agreed portion thereof is complete, CONSTRUCTION MANAGER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the WORK is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such WORK or remedy such deficiencies.

14.11 FINAL APPLICATION FOR PAYMENT - After CONTRACTOR has completed all of the remaining work items referred to in Article 14, removed all temporary structures and utilities, cleared the site, delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents and other documents, all as required by the Contract Documents, and after CONSTRUCTION MANAGER has indicated that the WORK is acceptable, CONTRACTOR may make application for Final Payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers satisfactory to OWNER of all liens arising out of or filed in connection with the WORK. If CONTRACTOR has specific claims outstanding he shall restate these claims by stating the nature of the claim, the basis for entitlement and the estimated value of the claim. CONTRACTOR shall specifically release OWNER from any other claims not renewed.

14.12 FINAL PAYMENT AND ACCEPTANCE

14.12.1 If, on the basis of CONSTRUCTION MANAGER's observation of the WORK during construction and final inspection, and CONSTRUCTION MANAGER's review of the final Application for Payment and accompanying documentation, all as required by the Contract Documents, CONSTRUCTION MANAGER is satisfied that the WORK has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, CONSTRUCTION MANAGER will, within fourteen (14) Days after receipt of the final Application for Payment, indicate in writing CONSTRUCTION MANAGER's recommendation of payment and present the Application for Payment to OWNER for payment. CONSTRUCTION MANAGER will also prepare a Notice of Completion.

14.12.2 After acceptance of the WORK by OWNER, OWNER will make Final Payment to CONTRACTOR of the amount remaining after deducting all prior payments and all amounts to be kept or retained under the provisions of the Contract Documents. OWNER will sign the Notice of Completion and file the Notice of Completion with the County Recorder.

14.13 LIQUIDATED DAMAGES

14.13.1 - Failure of CONTRACTOR to complete the WORK within the time allowed will result in damages being sustained by OWNER. For each consecutive calendar Day in excess of the time specified for completion of the WORK, CONTRACTOR shall pay to OWNER, or have withheld from monies due it, the sum provided for in the Contract Documents.

14.13.2 Execution of the Agreement shall constitute agreement by OWNER and CONTRACTOR that specified liquidated damages is the minimum value of the costs and actual damage caused by failure of CONTRACTOR to complete the WORK within the allotted time; that such sum is liquidated damages and shall not be construed as a penalty, and that such sum will be deducted from Final Payment due CONTRACTOR if such delay in completion occurs.

14.14 PARTIAL RELEASE OF RETENTION AT SUBSTANTIAL COMPLETION - If, through no fault of CONTRACTOR, final completion of the WORK is significantly delayed and if CONSTRUCTION MANAGER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of CONSTRUCTION MANAGER, and without terminating the Agreement, make payment of the balance due for that portion of the WORK fully completed and accepted. If the remaining balance to be held by OWNER for WORK not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in Article 5, the written consent of the surety to the payment of the balance due for that portion of the WORK fully completed and accepted shall be submitted by CONTRACTOR to CONSTRUCTION MANAGER with the Application for such payment. Such payment shall be made under the terms and conditions governing Final Payment, except that it shall not constitute a waiver of claims.

14.15 WAIVER OF CLAIMS - The making and acceptance of Final Payment will constitute:

14.15.1 OWNER - A waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled liens, from Defective Work appearing after final inspection pursuant to Article 14, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

14.15.2 CONTRACTOR - A waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled and specifically renewed in the Application for Payment.

14.16 RELEASE OF RETAINAGE AND OTHER DEDUCTIONS - After executing the necessary documents to initiate the lien period, and not more than thirty-five (35) Days thereafter (based on a thirty (30) Day lien filing period and five (5) Day processing time), OWNER will release to CONTRACTOR the retainage funds withheld pursuant to the Agreement, less any deductions to cover pending third-party claims and liquidated damages against CONTRACTOR.

14.17 CONTRACTOR'S CONTINUING OBLIGATION - CONTRACTOR's obligation to perform and complete the WORK in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or Final Payment by CONSTRUCTION MANAGER, nor the issuance of a Notice of Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the WORK or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review of a Shop Drawing or sample submittal, will constitute an acceptance of work not in accordance with the

Contract Documents or a release of CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents.

14.18 TERMINATION OF LIABILITY OF OWNER - The acceptance by CONTRACTOR of final payment referred to in Article 14 herein, shall be a release of OWNER and CONSTRUCTION MANAGER from all claims of liability to CONTRACTOR for anything done or furnished for, or relating to, the WORK or for any act or neglect of OWNER or of any person relating to or affecting the WORK, except demands against OWNER for the remainder, if any, of the amounts kept or retained under the provisions of Article 14 herein; and excepting pending, unresolved claims renewed with the final Application for Payment.

ARTICLE 15 -- SUSPENSION OF WORK AND TERMINATION

15.1 SUSPENSION OF WORK BY OWNER - OWNER, acting through CONSTRUCTION MANAGER, may, at any time and without cause, suspend the WORK or any portion thereof for a period of not more than ninety (90) Days by notice in writing to CONTRACTOR. CONTRACTOR shall resume the WORK on receipt from CONSTRUCTION MANAGER of a notice of resumption of WORK. CONTRACTOR may submit a request for a change in the Contract Price or of the Contract Time, or both, directly attributable to the suspension as provided in Articles 11 and 12.

15.2 ARCHAEOLOGICAL AND PALEONTOLOGICAL DISCOVERIES

15.2.1 If a discovery is made of an archaeological or paleontological interest, CONTRACTOR shall immediately cease operations in the area of the discovery and shall not continue until ordered by CONSTRUCTION MANAGER. This suspension of work may exceed the ninety (90) Day limit without creating a CONTRACTOR right to terminate the Agreement. When resumed, operations within the area of the discovery shall be as directed by CONSTRUCTION MANAGER.

15.2.2 Discoveries which may be encountered may include, but not be limited to, dwelling sites, stone implements or other artifacts, animal bones, human bones, fossils or any item with culturally significance.

15.2.3 CONTRACTOR shall be entitled to an extension of time and compensation in accordance with the provisions of the Contract Documents.

15.3 TERMINATION OF AGREEMENT BY OWNER FOR CAUSE

15.3.1 In the event of default by CONTRACTOR, OWNER shall give fourteen (14) Days written notice to CONTRACTOR of OWNER's intent to terminate the Agreement and provide CONTRACTOR opportunity to remedy the conditions constituting the default.

15.3.2 CONTRACTOR Default - It shall be considered a default by CONTRACTOR when CONTRACTOR:

15.3.2.1 Declares bankruptcy, becomes insolvent, assigns its assets for the benefit of its creditors, or is unable to pay debts as they become due;

15.3.2.2 Fails to provide materials or workmanship meeting the requirements of the Contract Documents, and fails to correct the Defective Work as required by Article 13;

15.3.2.3 Disregards or violates provisions of the Contract Documents or CONSTRUCTION MANAGER's instructions;

15.3.2.4 Fails to prosecute the WORK according to the approved progress schedule;

15.3.2.5 Fails to provide a qualified superintendent, competent workers or materials or equipment meeting the requirements of the Contract Documents;

15.3.2.6 Fails to maintain license or insurance.

15.3.3 If CONTRACTOR fails to remedy the conditions constituting default within the time allowed, OWNER may then issue the notice of termination.

15.3.4 In the event the Agreement is terminated in accordance with Article 15, OWNER may take possession of the WORK and may complete the WORK by whatever method or means OWNER may select. The cost of completing the WORK shall be deducted from the balance which would have been due CONTRACTOR had the Agreement not been terminated and the WORK completed in accordance with the Contract Documents. If such cost exceeds the balance which would have been due, CONTRACTOR shall pay the excess amount to OWNER. If such cost is less than the balance which would have been due, CONTRACTOR shall not have claim to the difference.

15.4 RIGHTS OF OWNER PRESERVED - Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.5 TERMINATION BY OWNER FOR JUST CAUSE - OWNER may terminate the Contract for just cause at its own discretion or when conditions encountered during the WORK make it impossible or impractical to proceed, or when OWNER is prevented from proceeding with the Agreement by act of God, by law or by official action of a public authority.

15.5.1 Termination for Convenience of OWNER

15.5.1.1 Termination of CONTRACTOR's Performance of WORK - OWNER may terminate, subject to the express terms and conditions set forth below, CONTRACTOR's performance of work under this Agreement, in whole or, from time to time, in part, if OWNER's City Council does not appropriate sufficient monies to fund the Agreement. The City Manager shall terminate

on behalf of OWNER by delivering to CONTRACTOR a notice of termination, in writing, specifying the extent of termination and the effective date

15.5.1.2 Notice of Termination - After receipt of the notice of termination, and except as otherwise directed by OWNER's City Manager, CONTRACTOR shall immediately proceed as follows:

15.5.1.2.1 Stop WORK immediately or as specified in the notice;

15.5.1.2.2 Immediately place no further subcontracts for materials, services or facilities, except as necessary to complete any authorized, continued portion of the Agreement;

15.5.1.2.3 Immediately terminate all subcontracts to the extent they relate to the WORK terminated;

15.5.1.2.4 With approval by OWNER's City Manager, settle all outstanding obligations arising from the termination of subcontracts, the approval of which will be final for purposes of this clause;

15.5.1.2.5 As directed by OWNER's City Manager, transfer the title and deliver to OWNER, completed or partially completed drawings, plans, calculations, Specifications and any other documents and records that, if the Agreement has been completed, would be required to be furnished to OWNER;

15.5.1.2.6 Complete performance of the WORK not terminated;

15.5.1.2.7 Take any action that may be necessary, or that OWNER's City Manager may direct, for the protection and preservation of the property related to the Contract Documents that is in the possession of CONTRACTOR and in which OWNER has or may acquire an interest.

15.5.1.3 Removal of CITY Property - CONTRACTOR may request OWNER to remove OWNER's property or enter into an agreement for its storage. Within sixty (60) Days, OWNER will accept title of property and remove it or enter into a storage agreement.

15.5.1.4 Termination Settlement - After termination, CONTRACTOR shall submit a final termination settlement proposal to OWNER's City Manager in the form and with the certification prescribed by OWNER's City Manager. CONTRACTOR shall submit the proposal promptly, but not later than six (6) months from the effective date of termination, unless extended in writing, by OWNER's City Manager upon written request of CONTRACTOR within this six (6) month period. However, if OWNER's City Manager determines that the facts justify it, a termination settlement proposal may be received and acted on after six (6) months or any extension. If CONTRACTOR fails to submit the proposal within the time allowed, OWNER may, in good faith, determine, on the basis of information available, the fair and reasonable amount, if any, due CONTRACTOR as a result of the termination and pay the amount determined. If CONTRACTOR does not agree that the amount determined by OWNER's City Manager is fair and reasonable, and

if CONTRACTOR gives notice of such disagreement to OWNER in accordance with this paragraph of the Agreement within thirty (30) Days of receipt of payment, then the amount due shall be as fixed in a court of law.

15.5.1.5 Payment for CONTRACTOR Due to Termination - Subject to the above paragraph, CONTRACTOR and OWNER's City Manager may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, exclusive of costs shown in Paragraph 15.5.1.6.3 below, may not exceed the total dollar amount authorized by OWNER as reduced by (1) the amount of payments previously made; and (2) the Contract Price of work not terminated. The Contract Documents shall be amended, and CONTRACTOR paid the agreed amount. The paragraph below shall not limit, restrict or affect the amount that may be agreed upon to be paid under this paragraph.

15.5.1.6 Failure to Agree on Payment - If CONTRACTOR and OWNER fail to agree on the whole amount to be paid because of the termination of WORK, OWNER shall pay CONTRACTOR the fair and reasonable amounts determined in good faith by OWNER as follows, but without duplication of any amounts agreed above:

15.5.1.6.1 The Contract Price for completed services accepted by OWNER not previously paid for, adjusted for any saving of freight and other charges.

15.5.1.6.2 The total of:

15.5.1.6.2.1 The costs incurred in the performance of the WORK terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs' attributable to services paid or to be paid under Paragraph 15.5.1.6;

15.5.1.6.2.2 The fair and reasonable cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the Agreement if not included in paragraph above; and

15.5.1.6.2.3 A sum, as profit on the above paragraph determined by OWNER's City Manager to be fair and reasonable under the circumstances; however, if it appears that CONTRACTOR would have sustained a loss on the entire Agreement had it been completed, OWNER shall allow no profit under this paragraph and shall reduce the settlement to reflect the indicated rate of loss.

15.5.1.6.3 The reasonable costs of settlement of the WORK terminated, including:

15.5.1.6.3.1 Accounting, legal, clerical and other expenses reasonably necessary for the preparation of termination of settlement proposals and supporting data;

15.5.1.6.3.2 The termination and settlement of subcontracts (excluding the amounts of such settlements); and

15.5.1.6.3.3 Storage, transportation and other costs incurred, reasonable necessary for the preservation, protection or disposition of property in which OWNER has or may acquire an interest.

15.5.1.7 Dispute of Payment - If CONTRACTOR does not agree that the amount determined by OWNER's City Manager under the paragraph above is fair and reasonable and if CONTRACTOR gives notice of such disagreement to OWNER in accordance with Paragraph 15.5.1.4 of this Contract within thirty (30) Days of receipt of payment, then the amount due shall be as determined in a court of law.

15.5.1.8 Payment for Property Destroyed, Lost Stolen or Damaged - Except to the extent that OWNER expressly assumed the risk of loss, OWNER's City Manager shall exclude from the amounts payable to CONTRACTOR under Paragraph 15.5.1.6 above, the fair value, as determined by OWNER's City Manager, of property that is destroyed, lost, stolen or damaged so as to become undeliverable to OWNER.

15.5.1.9 Determination of Amount Due CONTRACTOR - In arriving at the amount due CONTRACTOR under this clause, there shall be deducted:

15.5.1.9.1 All unliquidated advance or other payments to CONTRACTOR under the terminated portion of this Agreement;

15.5.1.9.2 Any claim which OWNER has against CONTRACTOR under this Agreement; and

15.5.1.9.3 The agreed price for, or the proceeds of sale of, materials, supplies or other things acquired by CONTRACTOR or sold under the provisions of this clause and not recovered by or credited to OWNER.

15.5.2 Partial Termination - If the termination is partial, CONTRACTOR may file a proposal with OWNER's City Manager for an equitable adjustment of the price(s) of the continued portion of the Agreement. OWNER shall make any equitable adjustment agreed upon. Any proposal by CONTRACTOR for an equitable adjustment under this clause shall be requested within ninety (90) Days from the effective date of termination unless extended, in writing, by OWNER's City Manager.

15.5.2.1 Partial Termination Payment - OWNER may, under the terms and conditions it prescribes, make partial payment and payments against costs incurred by CONTRACTOR for the terminated portion of the Agreement if OWNER's City Manager believes the total of these payments will not exceed the amount to which CONTRACTOR will be entitled. If the total payments exceed amount finally determined to be due, CONTRACTOR shall repay the excess to OWNER upon demand, together with interest. Interest shall be at a rate of six (6) percent per annum compounded daily and shall be computed for the period from the date the excess payment is received by CONTRACTOR to the date the excess is repaid. Interest shall not be charged on

any excess payment due to a reduction in CONTRACTOR's termination settlement proposal because of retention or disposition, or a later date determined by OWNER's City Manager because of the circumstances.

15.5.5.3 Records and Documents Relating to Termination - Unless otherwise provided in the Agreement or by statute, CONTRACTOR shall maintain all records and documents relating to the terminated portion of this Agreement for three (3) years after final settlement. This includes all books and other evidence bearing on CONTRACTOR's costs and expenses under this Agreement. CONTRACTOR shall make these records and documents available to OWNER, at CONTRACTOR's office, at all reasonable times, without any direct charge. If approved by OWNER's City Manager, photographs, microphotographs or other authentic reproductions may be maintained instead of original records and documents.

15.6 TERMINATION OF AGREEMENT BY CONTRACTOR - CONTRACTOR may terminate the Agreement upon ten (10) Days written notice to OWNER, whenever:

15.6.1 the WORK has been suspended under the provisions of Article 15, for more than ninety (90) consecutive Days through no fault or negligence of CONTRACTOR, and notice to resume work or to terminate the Agreement has not been received from OWNER within this time period; or,

15.6.2 OWNER should fail to pay CONTRACTOR any monies due him in accordance with the terms of the Contract Documents and within ninety (90) Days after presentation to CONSTRUCTION MANAGER by CONTRACTOR of a request therefor, unless within said ten (10) Day period OWNER shall have remedied the condition upon which the payment delay was based.

15.6.3 In the event of such termination, CONTRACTOR shall have no claims against OWNER except for those claims specifically enumerated in Article 15, herein, and as determined in accordance with the requirements of said paragraph.

ARTICLE 16 - DISPUTES

16.1 GENERAL - All claims, counterclaims, disputes and other matters in question arising under, or relating to, the Contract Documents and/or the breach thereof shall be processed in accordance with the provisions of this Article and are subject to audit by OWNER's internal audit staff in accordance with Article 17.

16.2 REQUESTS FOR CHANGE

16.2.1 CONTRACTOR's Right To Request a Change - In accordance with Articles 11 and 12, CONTRACTOR may request a change in the Contract Price or an extension of the Contract Time. Such a request shall be in writing, and shall be delivered to CONSTRUCTION MANAGER within the time periods outlined in Articles 11 and 12.

16.2.2 Initial Determination - CONSTRUCTION MANAGER shall make an initial determination on CONTRACTOR's request in writing, within twenty (20) working Days of receipt of the requested supporting data.

16.2.3 CONTRACTOR Appeal and Claim - Should CONTRACTOR disagree with CONSTRUCTION MANAGER's initial determination, CONTRACTOR may file a Claim requesting a final determination from CONSTRUCTION MANAGER. Such a request shall be in writing, and shall be delivered within twenty (20) working Days after receipt of CONSTRUCTION MANAGER's initial determination, and after certifying his Claim in accordance with Paragraph 16.3.

16.2.4 Waiver Of Rights - Failure of CONTRACTOR to notify CONSTRUCTION MANAGER and deliver supporting data in accordance with the time periods outlined above or failure to respond to CONSTRUCTION MANAGER's initial determination within the time period outlined in this paragraph, shall be deemed to be a waiver of objection or right to further Claim of this matter.

16.3 CLAIMS

16.3.1 Definition of Claim - A Claim means a written demand by CONTRACTOR seeking an adjustment in Contract Price and payment of monies so due, an extension or shortening in Contract Time, or other relief arising under or relating to the Agreement following denial of CONTRACTOR's request for a CONSTRUCTION MANAGER's initial determination. A written demand by CONTRACTOR seeking the payment of money or an extension of time is not a Claim under this Article until certified as required below. A voucher, invoice or other routine Application for Payment that is not in dispute when submitted, is not a Claim under this Article.

16.3.2 Claim Arising Under The Agreement - A Claim arising under the Agreement, unlike a Claim relating to the Agreement, is a Claim that can be resolved under an Agreement provision that provides for or excludes the relief sought by the claimant. Such Claims shall be resolved under the applicable provisions of the Agreement.

16.3.3 Period Of Claim - For any Claim under this Article to be valid, it shall be based upon written notice delivered by CONTRACTOR to CONSTRUCTION MANAGER promptly, but in no event later than twenty (20) working Days, after receipt of CONSTRUCTION MANAGER's initial determination as outlined in Paragraph 16.2. The responsibility to substantiate Claims shall rest with the party making the Claim.

16.3.4 Claim Certification Requirements - For all CONTRACTOR Claims seeking an increase in Contract Price or Contact Time, CONTRACTOR shall submit with the Claim an affidavit certifying that:

16.3.4.1 Claim Made In Good Faith - The Claim is made in good faith, and the amount claimed accurately reflects the adjustments in Contract Price or Contract Time for which CONTRACTOR believes OWNER is liable, and covers all direct, supplemental, indirect, consequential, serial and cumulative costs and delays to which CONTRACTOR is entitled as a result of the occurrence of the claimed event;

16.3.4.2 Cost And Pricing Data - Supporting cost and pricing data are current, accurate, complete and represent the best of CONTRACTOR's knowledge and belief; and,

16.3.4.3 CONTRACTOR's Agent - If CONTRACTOR is an individual, the affidavit shall be executed by that individual; if CONTRACTOR is not an individual, the affidavit shall be executed by a senior company official in charge at CONTRACTOR's plant or location involved or a responsible officer or general partner of CONTRACTOR.

16.3.5 Progress Schedule Analysis - All Claims for time shall be supported by an analysis of the CPM Progress Schedule detailing the impact of the claimed work on specific impacted schedule activities.

16.4 CLAIM RESOLUTION PROCESS

16.4.1 CONTRACTOR Claim - CONTRACTOR must submit his Claim certification and request for CONSTRUCTION MANAGER's Final Determination to OWNER within twenty (20) working Days of receipt of CONSTRUCTION MANAGER's initial determination.

16.4.2 CONSTRUCTION MANAGER Final Determination - CONSTRUCTION MANAGER must make a final written determination within twenty (20) working Days after receipt of CONTRACTOR's certified Claim and written request for a final determination.

16.4.3 CONTRACTOR Notice - Should CONTRACTOR disagree with CONSTRUCTION MANAGER's final determination, CONTRACTOR must submit a written request for a settlement meeting with OWNER to CONSTRUCTION MANAGER within fifteen (15) working Days.

16.4.4 Settlement Meeting - Within fifteen (15) working Days of receipt of CONTRACTOR's request for settlement meeting, OWNER will schedule a settlement meeting with CONTRACTOR's representative. This meeting will be an opportunity for CONTRACTOR to explain his Claim to OWNER. If a settlement agreement cannot be reached, OWNER will proceed to make his written determination.

16.4.5 OWNER Written Determination - OWNER shall make a written determination within twenty (20) working Days after the settlement meeting. OWNER's determination shall be final and binding on CONTRACTOR unless CONTRACTOR notifies OWNER and CONSTRUCTION MANAGER in writing of his objection within fifteen (15) working Days after receipt of OWNER's determination. Failure to give notice of objection within said fifteen (15) working Days period shall be deemed to be a waiver of his right to pursue the Claim.

Notwithstanding anything to the contrary, the following provisions shall apply regarding claims:

As set out in Public Contract Code Section 9204 (incorporated as pages CD24 to CD27), this provision shall apply to any claim by a contractor in connection with a public works project.
(c) For purposes of this section:
(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3) (A) "Public entity" means the City of El Centro.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant

may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as

to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

16.5 VENUE

16.5.1 State of California - CONTRACTOR, and any Subcontractor, Supplier and any other person or organization performing any part of WORK, agree that each of them will waive jurisdiction and venue and shall submit to the jurisdiction of the courts of the State of California, regardless of residence or domicile, with respect to any actions or suits at law or in equity arising under or related to the bidding, award or performance of the WORK.

16.5.2 County Where OWNER's Headquarters Located - CONTRACTOR, Subcontractor, Supplier or any other person or organization shall not commence any action, other than those in the State of California in the county where OWNER's Headquarters are located, against OWNER and CONSTRUCTION MANAGER or any of their consultants, and/or any of their respective directors, officers, employees, representatives or agents, with regard to any matter whatsoever arising out of or relating to the validity, construction, interpretation or reinforcement of the Agreement.

ARTICLE 17 -- MISCELLANEOUS

17.1 GIVING NOTICE - Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.2 CUMULATIVE REMEDIES - The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by the General Conditions and all of the rights and remedies available to OWNER and

CONSTRUCTION MANAGER thereunder are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

17.3 PROFESSIONAL FEES AND COURT COSTS INCLUDED - Whenever reference is made to claims, costs, losses and damages, it shall include in each case, but not be limited to, all fees and charges of engineers, architects and other professionals and all court or arbitration or other dispute resolution costs. Attorneys' fees are specifically excluded and shall be the responsibility of each party.

17.4 RIGHT TO AUDIT

17.4.1 Owner's Right - If CONTRACTOR submits a Claim or a time and material Change Order to OWNER for additional compensation, OWNER shall have the right, as a condition to considering the Claim, and as a basis for evaluation of the Claim, and until the Claim has been settled, to audit CONTRACTOR's books to the extent they are relevant.

17.4.2 Right Includes - This right shall include the right to examine books, records, documents and other evidence and accounting procedures and practices, sufficient to discover and verify all direct and indirect costs of whatever nature claimed to have been incurred or anticipated to be incurred and for which the claim has been submitted.

17.4.3 Right To Inspect Plans - The right to audit shall include the right to inspect CONTRACTOR's plans, or such parts thereof, as may be or have been engaged in the performance of the WORK.

17.4.4 CONTRACTOR further agrees that the right to audit encompasses all subcontracts and is binding upon Subcontractors. The rights to examine and inspect herein provided for shall be exercisable through such representatives as OWNER deems desirable during CONTRACTOR's normal business hours at the office of CONTRACTOR.

17.4.5 Accounting Records - CONTRACTOR shall make available to OWNER for auditing, all relevant accounting records and documents, and other financial data, and upon request, shall submit true copies of requested records to OWNER.

17.5 ALL LEGAL PROVISIONS INCLUDED - All provisions of law required to be inserted in the Agreement or Contract Documents shall be and are inserted herein. If through mistake, neglect, oversight or otherwise, any such provision is not herein inserted or inserted in improper form, upon the application of either party, the Agreement or Contract Documents shall be changed by OWNER, at no increase in Contract Price or extension in Contract Time, so as to strictly comply with the law and without prejudice to the rights of either party hereunder.

17.6 NO CONFLICT WITH LAWS OR REGULATIONS

17.6.1 The duties, obligations, criteria or procedure imposed by these General Conditions and the rights and remedies made available are in addition to, and are not to be construed in any way as a limitation of any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations, except that in the event that a specific part or detailed requirement of a provision, criterion or procedure in these General Conditions and a specific part or detailed requirement of a provision, criterion or procedure imposed or available by laws or regulations are in conflict, the specific part or detailed requirement of such provision, criterion or procedure imposed or available by laws or regulations in conflict shall govern. All other specific parts or detailed requirements in the provisions, criteria or procedures of the applicable laws or regulations and these General Conditions not in conflict shall remain in full force and effect and be read with the controlling specific part or detailed requirement.

17.6.2 The provisions of paragraph 17.6 will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

- END OF GENERAL CONDITIONS –

SUPPLEMENTARY GENERAL CONDITIONS

SUPPLEMENTARY GENERAL CONDITIONS

GENERAL

These Supplementary General Conditions make additions, deletions or revisions to the General Conditions as indicated herein. All provisions which are not so added, deleted or revised remain in full force and effect. Terms used in these Supplementary General Conditions which are defined in the General Conditions have the meanings assigned to them in the General Conditions.

SGC-1 DEFINITIONS

Apparent Low Bidder - The Bidder whose Bid, having been publicly opened and read aloud, meets all the material requirements of the Bidding Documents, OWNER deems responsible in accordance with the OWNER's municipal code, and whose Bid price is the lowest received.

S**GC-2.4.1 TIME OF COMPLETION** - The WORK must be completed within ninety (90) Working Days after the commencement date stated in the Notice to Proceed.

SGC-5.1 PERFORMANCE AND OTHER BOND AMOUNTS

CONTRACTOR shall furnish a satisfactory Performance Bond in the amount of one hundred (100) percent of the Contract Price and a satisfactory Payment Bond in the amount of one hundred (100) percent of the Contract Price.

SGC-5.2.2 CONTRACTOR shall provide the types and amounts of insurance as set out in the Agreement:

SGC-5.2.3 CONTRACTOR shall provide the indemnification set out in the Agreement.

SGC-6.18 SAFETY

SGC-6.18.3 CONTRACTOR shall provide a qualified on-site health and Safety representative, accepted by CONSTRUCTION MANAGER, with the authority to enforce all of the Safety requirements of CONTRACTOR's health and Safety program, including implementation of CONTRACTOR's injury and illness prevention program. CONSTRUCTION MANAGER will make a risk-based decision as to the qualification level of CONTRACTOR's Safety representative. During periods of active construction (i.e., excluding weekends, weather delays or other periods of work inactivity), CONTRACTOR must have a designated representative on the construction worksite who is knowledgeable of the Project's hazards and has full authority to act on behalf of CONTRACTOR. CONTRACTOR's designated representative must make frequent and regular inspections of the construction worksite to identify and correct any instances of noncompliance with the Project health and Safety requirements.

SGC-6.5 SUBCONTRACT LIMITATIONS

In addition to the provisions of Paragraph 6.5 of the General Conditions, CONTRACTOR shall perform not less than twenty (20) percent of the WORK with its own forces (i.e., without subcontracting). The twenty (20) percent requirement shall be understood to refer to the WORK, the value of which totals not less than twenty (20) percent of the Contract Price.

SGC-11.3.4 EQUIPMENT RENTAL RATES

CONTRACTOR will be paid for the use of equipment at the rental rate listed for such equipment specified in the current edition of the following reference publication:

A. "Rental Rate Blue Book" as published by Dataquest (a company of the Dunn and Bradstreet Corporation), 1290 Ridder Park Drive, San Jose, CA 95131, telephone number (408) 437-8000 or outside of California (800) 669-3282

SGC-12.5 INCLEMENT WEATHER DELAYS

CONTRACTOR's construction schedule shall be based upon the inclusion of five (5) Days of inclement weather delays.

An inclement weather delay is defined as a delay caused by inclement weather which prevents CONTRACTOR from working on the controlling item in CONTRACTOR's construction schedule. Should CONTRACTOR experience inclement weather delays over the course of contract duration in excess of the number of Days outlined above, CONTRACTOR shall be granted a time extension in accordance with the provisions outlined in Article 12 of the General Conditions. The time extension shall be based on the number of inclement weather Days in excess of the number of Days outlined above.

SGC-14.13 LIQUIDATED DAMAGES

SGC-14.13.3 OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the WORK is not completed within the time specified in Article 2 herein, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the WORK is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay one thousand and five hundred dollars ($1,500) for every working Day that expires in excess of the time specified for final completion of the WORK.

END OF SUPPLEMENTARY GENERAL CONDITIONS

SPECIFICATIONS

1.01 STANDARD SPECIFICATIONS

Unless indicated otherwise, the work embraced herein shall be done in accordance with the appropriate provisions of construction details as shown in the specifications entitled "GREEN BOOK Standard Specifications for Public Works Construction," the latest edition, insofar as the same may apply, which specifications are hereinafter referred to as the Standard Specifications and in accordance with the following provisions:

Class II base and Conventional Asphalt shall comply with Caltrans Standard Specifications, latest edition.

In case of conflict between the Standard Specifications and these General Conditions and Specifications, the General Conditions and Specifications shall take precedence over and be used in lieu of such conflicting portions.

1.02 SCOPE OF WORK

The work shall include grinding of existing asphalt concrete pavement, installation of conventional-asphalt concrete leveling course, installation of HMA, installation of ARAM, slurry seal, crack cleaning and filling, traffic striping, utility adjustments, curb/gutter, ADA ramps and sidewalks replacement, minor aggregate base, monument preservation, material testing, erosion control and traffic control as described in Chapter 5 of the Caltrans Traffic Manual and the latest edition of Manual of Uniform Traffic Control Devices ("California MUTCDCD@").

END OF SPECIFICATIONS

SPECIAL PROVISIONS

1. ORDER OF WORK

Prior to commencement of any work on the project, a preconstruction conference will be held for the purpose of review and discussion of progress schedule and construction procedures. At the discretion of the Director of Public Works, periodic meetings involving project personnel (the Contractor, utility and others) will be held for the purpose of coordinating project activities.

2. STARTING AND COMPLETION OF WORK

The work called for in these contract documents shall commence within (10) calendar days after that date set out in the **Notice to Proceed** issued by the City, and shall be diligently pursued to completion within **Ninety (90)** calendar days of said date.

3. FAILURE TO COMPLETE ON TIME AND LIQUIDATED DAMAGES

(See General Conditions 1-19) It is agreed by the parties to the Contract that in case of all work called for under the Contract is not completed before or upon the expiration of the time limits set forth in these Special Provisions, damages will be sustained by the City and that it will be impracticable to determine the actual damage by which the City will sustain in the event of and by reason of such delay and it is therefore agreed that the Contractor will pay to the City the sum of one thousand five hundred dollars ($1,500) per working day for each and every days delay beyond the time prescribed to complete the work.

4. MAINTAINING TRAFFIC

The Contractor shall maintain two-way traffic in the work area in accordance with the "Manual of Traffic Controls for Construction and Maintenance Work Zones" and the California MUTCD, latest Edition or as modified, available through the State of California, Department of Transportation, 1900 Royal Oaks Drive, Sacramento, California 95815.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way at any time, including any section closed to public traffic.

The Contractor shall make every effort to keep driveways open during working hours. After working hours, all driveways shall be accessible and safe. The payment for item shall be included in the bid price for the applicable item of work for which traffic control is performed.

The Contractor shall investigate and determine the extent of traffic control for the various areas of work. It shall be the Contractor's responsibility to provide traffic control plans and/or typical MUTCD applications which can be implemented for the various areas of work for City approval. As such, it shall be the Contractor's responsibility to implement the approved traffic control plans. The contractor shall submit traffic warning signs, barricades, traffic control devices and all other items to the City Engineer or his representatives for approval during the submittal process prior to implementing traffic control at the project sites. Contractor shall purchase or rent and maintain traffic warning signs, barricades, flagmen, and other traffic control devices as required and to maintain traffic flow as required by the City of El

Centro and State of California Transportation Department. All cost associated with maintaining traffic shall be included in the respective Traffic Control Lump Sum (LS) Item. No additional compensation or time extension will be provided for traffic control.

5. NOTICE AND POSTING REQUIREMENTS

The Contractor shall post and remove temporary "No Parking" signs as needed. Signs shall be in place for at least **two (2) business days** in advance of commencing of work. Signs may be attached to existing poles, or any available support that may exist in the public right-of-way or the Contractor may furnish sign supports as may be necessary.

Multiple notices shall be delivered and hung on door handles of each residence and to each business affected by the construction. The format and content of the notices shall be submitted to the City for approval at least two (2) weeks prior to use. Notices will be required as follows:

1) A general notice in all cases will be required two (2) weeks in advance of work, describing the sequence of activities that will affect parking and access to properties, to be delivered two (2) weeks prior to construction. This notice will generally addressing parking and access for street resurfacing with further details to follow on subsequent notices, except detailed information will be required in this first notice to explain the leveling course portion of the work.
2) A notice prior to ARAM, with specifics about parking and access, to be delivered **two (2) business days** prior to construction.
3) A notice prior to Slurry, with specifics about parking and access to be delivered **two (2) business days** prior to construction.

Notice numbers 1, 2 and 3 shall be delivered for System I and System II.

6. CONSTRUCTION AREA SIGNS

The Contractor shall furnish, install, maintain and remove all construction area signs in conformance with the plans and Sections 12-3.06 of the Standard Specifications.

7. REPAIR EXISTING ROADBED

Where directed by the Director of Public Works, broken or failed or other unsatisfactory portions of the existing roadbed shall be removed and disposed of and the resulting excavation shall be filled with asphalt concrete pavement in conformance with specifications and to be compensated by applicable bid item.

8. REMOVE PAVEMENT MARKINGS

Existing pavement markers, when no longer required for traffic lane delineation as directed by the Director of Public Works, shall be removed and disposed of.

Full compensation for removing and disposing of pavement markers shall be considered as included in the contract price for the applicable bid item for roadway surfacing and no separate payment will be made therefore.

9. ASPHALT CONCRETE LEVELING COURSE

The work shall consist of installing asphalt concrete conforming to specifications for Type A HMA one-half (½)inch Maximum, Medium, PG70-10.

9.01 Placing

All holes and cracks exceeding two (2) inches deep by five (5) inches wide by seven (7) inches long in all three (3) dimensions shall be filled with asphalt concrete approved for skin patch compacted level with the top of the existing pavement. All cracks and joints one-quarter (¼) inch or greater in width shall be blown thoroughly clear with high pressure air or power-broomed clean to a depth of three-quarters (¾) inch min. prior to final sweeping just ahead of leveling course.

Tack coat on all feathered areas and cold milled areas shall be SS-1h applied at .48 liters per square meter (.12 gal/sy).

The Contractor shall place asphalt concrete with a self-propelled asphalt paving machine. The Contractor shall provide a twenty (20) foot long automatic screed control on both sides of the paving machine for all paving with paving machine, as directed by the Engineer.

Each paving machine used will require a paving foreman for each machine along with a full set of rollers as specified and two (2) rakers and one (1) shoveler laborer as a minimum.

Asphalt concrete shall be placed at a minimum thickness of three-quarters (¾) inch. Non-uniform surface voids or scraped rock surfaces on the surface of the mat behind the screed will be considered indication of aggregate particle conflicts between screed and existing grade, resulting in cessation of paving until adjustment of thickness to provide for a smooth surface is provided to the satisfaction of the Engineer.

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint.
Rubber tire rollers shall be used on any leveling course.

Join lines between successive runs shall be within one hundred fifty (150) mm (six (6) inches) of lane lines or a minimum of three and six-tenths (3.6) m (twelve (12) feet) outside of the outer most lane line.

9.02 Compaction

The Contractor shall use the following equipment as a minimum:

One (1) pass with a steel-wheeled two (2) axle tandem vibratory breakdown roller weighing between ten (10) tons and twelve (12) tons with wheels whose diameter shall measure a minimum of forty (40) inches.

Two (2) passes with a pneumatic-tired roller weighing **not less than twelve (12) tons**.

An eight (8) to ten (10) ton roller shall perform finish rolling.

9.03 Payment

Payment of this item complete shall be by the square yard for leveling course, and shall be considered to include compensation for all holes and crack preparation as specified in this Section 9 of Special Provisions.

10. ASPHALT CONCRETE REPAIRS

10.01 Remove and replace Asphalt Pavement

The work under this item shall include removal and replacement of existing asphalt concrete pavement. Repair locations will be as marked by the Engineer on the existing pavement. The perimeter of all repairs shall be sawcut minimum three (3) inches deep. Replacement shall match existing asphalt thickness plus 25%.

Asphalt replacement shall be performed the same day as removals.

Asphalt concrete used for remove and replace asphalt pavement shall be HMA Type A three-quarters (¾) inches Maximum, Coarse, PG70-10.

Tack coat for vertical joints on repairs in AC shall be uniformly applied as two coats SS-1h applied uniformly at .64 liter per square meter (.20 gal/SY) each coat.

Compensation for Remove and Replace Asphalt Pavement will be made at the unit price per SF per bid item "Digouts". The price per SF shall include sawcut, excavation and removal, subgrade preparation including compaction, tack coat, and placement and compaction of HMA and all incidentals.

10.02 Skin Patch

Areas marked with an "S" shall receive a layer of a fine AC mix on existing pavement. The AC mix design shall be submitted to the Engineer for review and approval at least five (5) working days prior to use on the project. Pavement shall be allowed to dry prior to placement of any material and a torch shall be used to evaporate and thoroughly dry out any residual dampness prior to application of tack coat. Tack coat shall be applied in all areas to be paved, but no more than ten (10) minutes ahead of paving in wet areas. AC skin patch material shall be placed in the depressed area slightly below flush with surrounding pavement. Thorough compaction shall be provided by a walk behind roller or other small roller.

Tack coat on all feathered areas around the perimeter of skin patches shall be .13 gal/SY. It is considered extremely important that material used for feathers be rolled above minimum temperature. The Contractor shall provide a heated compartment to maintain temperature of material or bring enough material to maintain temperature of the mass of AC until placement is complete.

The unit price bid per square foot for Skin Patch will be considered full compensation for all preparation, tack coat, materials, placement and compaction of skin patch, including all incidentals.

10.03 Crack Filling/Sealing

This specification applies to areas on plan receiving: a) slurry seal

Crack sealing shall be limited to linear cracks, thermal cracks and block cracks. In no case shall alligator cracks be crack filled.

An alligator crack shall be considered to be a crack not meeting the definition of block crack and that that is located in the traffic wheel path.

A block crack shall be considered to be a crack on the perimeter of an otherwise uncracked asphalt pavement area when the largest dimension across said area four (4) feet or more. Cracks not fully interconnected in forming a complete perimeter shall be considered block cracks, unless the maximum dimension across the partial perimeter between cracks can be measured as less than four (4) feet. Such pavement area is defined by the cracks forming its perimeter.

1) The Contractor shall spray all weeds in cracks with Monsanto brand Roundup (or approved equal), a minimum of two (2) weeks prior to paving. All weeds shall be resprayed if rain occurs within forty-eight (48) hours after application;

2) All cracks and holes with weeds shall be routed clear to a depth of one (1) inch;

3) All holes and cracks exceeding one and one-half (1½) inches wide shall be filled with asphalt concrete approved for skin patch compacted level with the top of the existing pavement;

4) All cracks and joints one-quarter (¼) inch or greater in width shall be blown thoroughly clear with high pressure air or power broomed clean to a depth of three-quarters (¾) inch minimum immediately ahead of the crack filling operation; and

5) All joints and singular cracks between one-quarter (¼) inch (one-half (½) at ARAM system 1) and one and one-half (1½) inches in width shall be filled with Crafco Polyflex III or approved equal. Filler shall be within one-eighth (1/8) inch below and flush with existing pavement surface and shall be thoroughly squeegeed, as necessary, to attain this result.

Any crackfiller in excess of that specified at any point on the pavement after crackfiller has cooled shall be heated with a torch and thoroughly squeegeed to meet specifications. Crackfiller that becomes unbonded shall be removed, and the lack of bonding shall be considered evidence that the crack was not thoroughly blown clean, thereby requiring recleaning, refilling and squeegeeing.

Crackfiller material shall be allowed to cure for thirty (30) days prior to being covered by slurry or Fog Seal applications.

Payment for crack cleaning, crack filling, herbicide application and related street cleaning shall be made at the lump sum price for Crack Filling, and shall include all materials, equipment and labor for such work, and no additional compensation will be allowed.

11. SLURRY SEAL

Construction and materials for Emulsion-Aggregate Slurry shall conform to Subsection 203-5 and 302-4 of the GREENBOOK, except as modified herein.

SECTION 203-5 – RUBBERIZED EMULSION-AGGREGATE SLURRY

203-5.1 General

Emulsion-aggregate slurry shall be polymer modified.

203-5.2 Materials

Emulsion - aggregate slurry shall be Type II, unless otherwise indicated on the plans, bid schedule or in these specifications. The amount and type of accelerator or retardant used shall be approved by the Engineer, and shall provide for curing sufficiently to support traffic within two (2) hours.

Emulsified asphalt shall be CQS-1h.

Prior to the time of delivery of each shipment of asphalt emulsion, the Contractor shall deliver to the City certified copies of the test report for that emulsion. The test report shall indicate the name of the vendor, type and grade of asphalt emulsion, date and point of proposed delivery, quantity, purchase order number and results of the specified tests. The test report shall be signed by an authorized representative of the vendor, shall certify that the product delivered conforms to the standard specifications and is compatible with the proposed aggregate. Testing shall be accomplished by an accredited materials testing laboratory approved by the Engineer.

Prior to a change of emulsion, the Contractor shall thoroughly clean all emulsion tanks and mixing units to prevent any chemical reaction between the two (2) emulsions.

The Contractor shall schedule and coordinate the delivery of aggregate to the stockpile(s) such that (1) deliveries originate at the plant and arrive at the stockpile site within normal work hours on the same calendar day, (2) delivery site and project name are explicitly stated on each delivery ticket, (3) successive deliveries on the same calendar day show the cumulative total for that day, (4) copies of all delivery tickets are delivered to the Engineer before the end of the working day, whereas any delivery tickets not so delivered may be rejected by the Engineer. Any deviation from this process must have the prior approval of the Engineer.

203-5.2.1 Polymer Modified Emulsion. Polymer modified emulsion-aggregate slurry shall conform to Table 203-5.2.1(A).

Asphalt emulsions shall be composed of a paving asphalt base uniformly emulsified with water and an emulsifying or stabilizing agent. Polymer modified asphalt emulsions shall also contain a polymer.

The asphalt emulsion shall be homogeneous. Within thirty (30) days after delivery and provided separation has not been caused by freezing, the asphalt emulsion shall be homogeneous after thorough mixing. The polymer used in the manufacture of polymer modified asphaltic emulsion shall be, at the option of the Contractor, either neoprene, ethylene vinyl acetate or a blend of butadiene and styrene.

The emulsion supplier shall certify that the asphalt residue contains at least two and one-half (2½) percent polymer (dry weight) and that the polymer has either been added as a solid

polymer to the base asphalt, or has been added in the form of a latex at the time of emulsion manufacture.

Polymer modified emulsified asphalt shall be kept in a suspended state by an agitating mixer operated every three (3) days.

TABLE 203-5.2.1(A)

Requirements for Polymer Modified Cationic Quick Setting Emulsions (PMCQS1h)

Properties	Min.	Max.
Tests on Emulsions		
Viscosity SSF, @ 77□F	15.0	90.0
Sieve Test, %		0.3
Storage Stability, 1 day, %		1.0
Residue by Evaporation	57.0	
Particle Charge	Positive	
Tests on Residue from Evaporation Test		
Penetration, 77□ F	40.0	90.0
Ductility, 77□ F, cm	40.0	
Absolute Viscosity @ 140□ F, poise	2,250.0	
Solubility in Trichloroethylene	97.0	
Quantitative Test for Polymer Content		
Either;		
Torsional Recovery, %	18.0	
or		
Polymer Content in Residue, wt %	2.5	3.0

203-5.6 Test Reports and Certification. A certification of compliance shall be provided at least forty-eight (48) hours prior to delivery of emulsion to the project.

Testing shall be accomplished by an accredited materials testing laboratory approved by the Engineer. Tests performed shall provide values corresponding to all parameters set forth in the table of requirements for the materials specified.

302-4 SLURRY SEAL SURFACING

302-4.1 General. After application, slurry shall be rubber tire rolled in all areas. The work to be done consists of furnishing all plant, labor, materials, tools, equipment and services necessary for the application of emulsion-aggregate slurry upon designated ARAM street surface areas.

302-4.2 Mixing

302-4.2.1 General. Transit mix trucks shall not be used.

The Contractor shall arrange with the City for appropriate areas for stockpiling and batching. The stockpile areas shall be thoroughly cleaned, removing all excess material and all material contaminated by spilled oil and left with a neat, orderly appearance upon completion of slurry operations in that area. Stockpiles shall be covered as necessary to prevent contamination by all materials including excessive moisture. No equipment or materials shall be stored in the public right-of-way.

The Contractor shall be responsible for all stockpiling and batching materials and equipment.

All trucks which the Contractor proposes to use that exceed the legal load limit will be required to have overweight permits from the City.

Loaders used to load spreader trucks shall be equipped with functioning weighing devices with weight read-outs. The weight of each loader bucket added to a spreader truck shall be logged in writing by Contractor's personnel after each bucket load.

Prior to the beginning of slurry operations, the Contractor shall furnish, at no cost to the City, a current licensed weigh master's certificate indicating the net weight capacity of the aggregate bin.

The Contractor shall supply the Engineer with licensed weigh master's certificates of weights for all aggregate delivered to the job during the course of each day. Aggregate so certified as being delivered for use in the Contract shall be used only in the slurry mixture for the Contract. The Contractor shall also present weigh master's certificates for the amount of such aggregate remaining unused at the completion of the contract at no cost to the City. Payment shall be determined by deducting the amount of unused aggregate from the total amount of aggregate delivered, all as shown on the licensed weigh master's certificates. The certificates shall be presented to the Engineer on the same day the aggregate is delivered.

Water (excluding that water in the emulsified asphalt) shall be added at a rate of from five (5) to ten (10) percent by weight of dry aggregate to ensure proper dispersion of the emulsified asphalt and proper workability, while (1) avoiding excess water which would allow separation and settlement of the aggregate, (2) avoiding insufficient water which would result in balling and coagulation in the mixer, and (3) permitting uncontrolled vehicular traffic as specified herein. The exact rate will be determined by the Contractor based upon field conditions subject to approval of the Engineer.

302-4.2.2 Continuous-Flow Mixers. The mixing unit shall be equipped with a fines feeder for addition of accelerator.

The spreader box shall be equipped with a suitable drag to erase ridges. A minimum two (2) foot length of burlap material shall be attached to the entire width of the drag. The spreader box shall be equipped with a steering device.

The slurry spreader box shall be maintained in a good state of repair at all times. The spreader box main strike off squeegee (rubber) shall be new at the beginning of the Contract and shall be maintained in a good state of repair throughout the Contract.

Equipment shall be available for inspection before the beginning of the Contract and again before work is to be accomplished.

302-4.3 Application

302-4.3.1 General. The first paragraph of Subsection 302-4.3.1 of the Standard Specifications is hereby deleted and replaced with the following:

The work shall consist of preparation, mixing asphaltic emulsion, aggregate, accelerator and water, and spreading the mixture on the pavement where shown on the plans. Type II slurry shall be applied at a rate yielding a minimum twelve hundred (1,200) square feet per extra long ton.

Actual spread rates shall be approved by the Engineer.

302-4.3.1.1 Preparation.

Slurry shall not be applied over any manhole, valve, survey monument or miscellaneous frames and covers. Any material used to protect such devices shall be removed and disposed of lawfully by the Contractor.

302-4.3.2 Spreading. The first sentence of Subsection 302-4.3.2 is hereby deleted and replaced with the following:

Slurry seal shall be placed only when the ambient temperature is above fifty (50) degrees and rising. No slurry will be placed during inclement weather or the threat of. The Contractor will bear the responsibility of that may arise from non-cancellation.

Each slurry crew shall be composed of a coordinator at the project site at all times, a competent quick-set mixing worker, a competent driver, and sufficient laborers for any handwork and cleanup.

Prior to commencement of work, the Contractor shall perform test sections for review and approval by the Engineer. The area of the test sections shall be at least five thousand (5,000) square feet. The section locations shall be in the area of the work, to be specified prior to construction. In no case will the Contractor begin operations until the test sections have adequately cured and he has received written approval by the Engineer. The approved mix design and test section shall be considered the standard for the operation.

No slurry seal shall be placed on a wet street or crossing without the Engineer's consent.

Intersections and commercial driveways shall be completed in two (2) parts to allow ingress and egress to traffic. Sand may be spread over the fresh slurry only with the permission of the Engineer.

All slurried streets shall be fully swept five (5) to eight (8) days after slurry is complete, with residual material removed to a legal disposal site.

The cost of cleanup and/or damage caused by vehicles tracking through the slurry seal will be born solely by the Contractor.

302-4.3.2.1 Rubber Tire Rolling. Rolling shall be performed with two (2) complete coverages by a twelve (12) ton nine (9) wheel rubber tired roller with a tire pressure of fifty (50) psi. Rolling shall be performed after slurry and as soon as it sets up enough to support the roller and not pick up on the tires.

Areas of shade on the pavement that set up more than ten (10) minutes later than other areas shall be rolled separately, but as soon as they set up sufficiently to meet the requirements herein. Insufficient rubber-tire rollers to meet these requirements shall be cause for termination of slurry operations until rolling can keep pace with slurry spread.

302-4.4 Public Convenience and Traffic Control. The spreading schedule shall list the streets in order of proposed application and denote which streets are to be completed each day.

Traffic control with ample barricades, flaggers, standard regulatory and warning signs (no parking signs, etc.) shall be provided to protect the uncured slurry surface from all types of traffic. Any damage to the uncured slurry is the responsibility of the Contractor. Traffic control plan shall be submitted to and approved by the City's Director of Public Works prior to commencing work. The Contractor's work will be done on successive adjacent streets during the same day of the operation. Adequate means shall be provided to protect the slurry seal from damage by traffic for a minimum of four (4) hours of application or until such time that the mixture has cured sufficiently so that the slurry seal will not adhere to and be picked up by tires of vehicles.

Temporary "No Parking" signs shall be posted at least **two (2) business days** in advance of the work. The signs shall be placed no more than one hundred (100) feet apart on each side of the street and at shorter intervals if conditions warrant. The Contractor shall provide the signs and will be responsible for adding the dates and hours of closure to the signs, removal of the signs, and furnishing and placing of barricades, if necessary, for posting of the signs. All signs shall be removed within forty-eight (48) hours after the effective date.

The Contractor shall provide barricades and other traffic control devices as necessary to eliminate traffic on areas of fresh slurry that might sustain damage from such traffic. Any tracking of slurry seal on private property will be the responsibility of the Contractor to correct. The Contractor shall sweep the streets for five (5) consecutive days after

application of the slurry.

Slurry seal shall not be spread on the trash pickup day of each respective street.

Temporary striping devices shall be provided on all lane lines covered by slurry.

302-4.5 Measurement and Payment. The second paragraph of Subsection 302-4.5 of the Standard Specifications is hereby deleted and replaced with the following:

The Contract unit price per square yard shall be considered to include full compensation for furnishing emulsion, polymer as specified, accelerator or retardant and water, and all preparation, traffic control, rubber tire rolling where specified and other incidentals described in the work and no additional compensation will be provide therefor.

12. EARTHWORK

SECTION 300 of the Green Book– EARTHWORK IS AMENDED AS FOLLOWS:

300-1 Clearing and Grubbing

300-1.1 General

ADD THE FOLLOWING PARAGRAPHS:

Along with all items indicated on the Plans to be removed, clearing and grubbing shall also include, but not be limited to, the following items:

1. Clearing for and providing temporary graded driveways and continuing maintenance thereof to provide continuous access to all residences within the project area as directed by the Engineer.

2. Sawcutting of portland cement concrete and asphalt concrete to neat straight lines at joints and right of way limits.

3. Protection of existing and relocated utility lines and structures prior to and during construction of proposed improvements.

4. Removal and disposal of interfering portions of abandoned utility lines and structures.

5. Removal, relocation, adjusting or salvaging of all facilities so indicated on the Plans which are not designated as separate bid items or which are not included in other bid items.

6. Removal and disposal of any additional items not specifically mentioned which may be found within the work limits.

7. Maintenance of project appearance.

8. Control of water and dewatering during construction.

9. Hauling and disposal of deleterious materials resulting from clearing and grubbing operations at a site obtained by the Contractor and approved by the Engineer.

10. Cleanup of project area upon completion of work.

11. Removal existing signs as noted on the plans and as directed by the Engineer

12. Self-propelled drop hammers will not be allowed for removals.

The Contractor shall protect all existing structures or facilities which are adjacent to, or fall within, the limits of work to be done under the Contract in accordance with Sections 7-9 and 300-1 of the Standard Specifications. This item shall also include those structures and facilities which the Plans show or these Specifications indicate to be protected. Any structure or facility to be protected which is damaged as a result of the Contractor shall be repaired or replaced at his cost, to the satisfaction of the Engineer.

All materials removed shall be disposed of outside of the right of way at a legal dump site approved by the Engineer. Burning shall not be permitted under any circumstance. No accumulation of flammable material shall remain on or adjacent to the right of way. The roadway and adjacent areas shall be left with a neat and finished appearance.

300-1.4 Payment

DELETE THE FIRST PARAGRAPH AND SUBSTITUTE THE FOLLOWING:

The lump sum set forth in the Contract Documents for clearing and grubbing shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in clearing and grubbing as shown in the Plans and as described in the Contract Documents, and as directed by the Engineer, including preservation of property, relocation of various facilities, removal and disposal of material, salvage of material, cleanup and repairs. Payment shall be computed in accordance with the percentage of completion of the major items of work.

300-2 Unclassified Excavation

300-2.1 General

REVISE THE SUBSECTION TO READ:

Unclassified excavation shall consist of all excavation, including the removal of existing roadway asphalt pavement and base materials in areas shown on the Plans or as directed by the Engineer.

300-2.9 Payment

ADD THE FOLLOWING PARAGRAPH:

Quantities of unclassified excavation used for payment, other than unsuitable material and additional work ordered or deleted by the Engineer, shall be the quantity indicated in the awarded Contract and Plans and no further compensation will be awarded.

300-4 Unclassified Fill

300-4.1 General

ADD THE FOLLOWING PARAGRAPH:

All remaining excess materials not used on the project for fills, embankments and roadbed purposes shall be disposed of by the Contractor according to Subsection 300-2.6 of the Standard Specifications.

300-4.9 Measurement and Payment

ADD THE FOLLOWING PARAGRAPH:

Quantities of Unclassified Fill used for payment, other than additional work ordered or deleted by the Engineer, shall be the quantity indicated in the Contract.

13. ASPHALT-RUBBER HOT MIX – OPEN GRADED (ARHM-OG) and GAP GRADED (ARHM-GG)

ARHM Material shall conform to 203-11 of the GREENBOOK as modified herein.

ARHM Construction shall conform to 302-9 of the GREENBOOOK as modified herein.

203-11 ASPHALT-RUBBER HOT MIX (ARHM) WET PROCESS.

203-11.2 Materials.

203-11.2.3 Crumb Rubber Modifier (CRM).

The third and the last sentence of the first paragraph of Subsection 203-11.2.3 are hereby deleted and replaced with the following:

The high natural rubber shall be a single source material and not a blend of more than one (1) source. The high natural CRM shall not be tire rubber. A minimum two (2) ounce unground and ungranulated sample of the base stock high natural CRM shall be provided, along with a minimum four (4) ounce ground or granulated sample, the same as will be used for the work. The Contractor shall pay for any failed chemical analysis tests. The test for natural rubber content in the material shall be ASTM D297, paragraph 53.

The fifth paragraph of Subsection 203-11.2.3 is hereby deleted and replaced with the following:

The percentage of high natural CRM shall be equal to one thousand (1,000) divided by the percentage of natural rubber in the high natural CRM (using whole number percentages), e.g., one thousand divided by forty (1000/40) percent equals twenty-five (25) percent. The remainder of CRM shall be scrap tires.

The maximum value for Natural Rubber Content in Table 203-11.2.3(B) is hereby deleted.

The sixth (last) paragraph of Subsection 203-11.2.3 is hereby deleted.

203-11.2.4 Aggregate. The text of Subsection 203-11.2.4 is hereby deleted and replaced with the following:

The aggregate for ARHM shall conform to the "quality requirements" for asphalt concrete Type A as specified in Caltrans Standard Specifications, except for the following:

Maximum LA Rattler value at five hundred (500) revolutions shall be thirty-five (35).

Eighty-five (85) percent of coarse aggregate shapes shall be "proportioned particles," a proportioned particle being defined as a particle having a minimum dimension greater than one-half (½) the maximum dimension as measured with a caliper. The percentage of proportioned particles shall be tested by California Test 205 with the words "proportioned particles" substituted for "crushed particles."

California Test 205, Section D, definition of a crushed particle hereby revised as follows: "A particle having 2 or more fresh mechanically fractured faces shall be considered a crushed particle."

203-11.3 Composition and Grading.

All provisions of Subsection 203-11.3 shall apply to both Asphalt-Rubber Hot Mix Type GG (ARHM-GG) and Asphalt-Rubber Hot Mix Type OG (ARHM-OG), unless otherwise noted.

The following is hereby added to Subsection 203-6.4.1:

Acceptance as used in this subsection shall mean acceptance of material in production. Air voids will be used for mix design evaluation and for evaluation of material during production for conformance with mix design parameters. Variations of air void values exceeding those specified in these Special Provisions will be cause to terminate production in conformance with specifications.

Aggregate for testing mix designs shall be sampled from material that has passed the plant drum drier and shall include any mineral filler intended to be added during production of ARHM. The Engineer shall be provided with duplicate samples of aggregate and binder used for testing the mix design. Upon request, the Contractor shall supply to the Engineer samples of asphalt rubber binder and aggregate for testing. All samples used in testing shall be from the same source and composed of the same material intended for use in the work.

Any change in source of aggregate supply requires two (2) weeks advance notice in writing to the Engineer, and submittals and testing in conformance with specifications for a new mix design. No single bin shall receive aggregate from more than one (1) source. The Contractor shall provide a copy of aggregate delivery tickets for aggregate delivered for use on the project.

The aggregate for Asphalt-Rubber Hot Mix Type OG (ARHM-OG) shall conform to following gradations, which shall be considered included as an additional column in Table 203-11.3(A):

Sieve Size	Percent Passing
¾"	100
½"	95-100
3/8"	77-91
No. 4	25-40
No. 8	7-17
No. 16	0-11
No. 200	0-3

No mineral filler or material from sand or rock dust bins shall be included in the open graded mix.

The amount of asphalt-rubber binder to be mixed with the aggregate for Asphalt-rubber Hot Mix Type OG shall be determined by the Contractor using the samples of aggregates furnished by the Contractor in conformance with the provisions in Section 39-3.03, "Proportioning," of the Standard Specifications. The Engineer will determine the exact amount of asphalt-rubber binder to be mixed with the aggregate in conformance with the provisions in California Test 368 with the following exceptions. The aggregate shall be mixed with PG70-10 paving asphalt and the optimum bitumen content shall be determined in conformance with the test procedure. The optimum binder content for Asphalt-rubber Hot Mix Type OG shall then be determined using the following formula:

A. $OBC_2 = (OBC_1) \times 1.20$
B. OBC_1 = Optimum bitumen content using PG70-10 paving asphalt
C. OBC_2 = Optimum bitumen content using asphalt-rubber binder

The asphalt-rubber binder content of the Asphalt-rubber Hot Mix Type OG will be determined by California Test Method 382.

A mix design for ARHM-OG shall be provided with test documentation showing that the binder and aggregate to be used has conforms fully to specifications.

ARHM-GG shall be Class GG-C.

Values in Table 203-11.3 are hereby modified and supplemented as follows:

	Arterial Roadways	Local Roadways
Sieve Size	Percent Passing	Percent Passing
3/4”	99 - 100	100
1/2”	91 - 99	94 - 100
3/8”	78 – 92	78 – 92
No. 4	32 – 43	32 – 43
No. 8	15 – 28	17 – 30
No. 30	5 – 15	0 – 10
No. 200	1 – 5	1 – 5
Air Voids	3.5%.	3.2%.
VMA**	19 Min.	19 Min.
**VMA shall be calculated by method described in Asphalt Institute Mix Design Methods for Asphalt Concrete (MS-2).		

Streets shall be considered local unless speed limits exceed thirty-four (34) miles per hour and traffic signals exist at one (1) or more intersections on the route.

A mix design for ARHM-GG shall be provided with test documentation showing that the aggregate to be used has the minimum specified VMA, and has the specified air voids when mixed with the optimum binder content determined by California Test Method 367 as amended in Subsection 203-11.3.1 herein.

For all mixes, the gradation ranges shown in Table 203-11.3(A) shall be considered the Contract Compliance Range. The Operating Range for the one-half (½) inch sieve shall be the full contract compliance range. The Operating Range for all other sieves, except the No. 200 sieve, shall be two (2) percentage points inside both limits of the Contract Compliance Range. If gradation-testing results do not meet the Operating Range requirements but meet the Contract Compliance Range, placement of ARHM may be continued for the remainder of the day. However, another day of work shall not be started until tests, or other information, indicate to the satisfaction of the Engineer that the next material to be used in the work will comply with the requirements specified for Operating Range.

Except for the No. 200 sieve, it is the intent of the Specifications that the target percentage be the central value in the Contract Compliance Range.

The asterisk noted under Table 203-11.3 is hereby deleted and replaced with the following:

> Once the percent asphalt-rubber binder is determined by the mix design, the tolerance shall be +/- one-half percent (.5%) as determined by California Test

Method 382, and this tolerance shall be considered to include all sampling and testing tolerances. Variations of binder content on this basis at or exceeding +/- one-half percent (.5%) from the mix design will be cause to terminate paving operations until changes to provide specified tolerances are verified and approved by the Engineer.

Variations of percent air voids in plant produced mixtures below the minimum specified in Table 203-11.3(A) will be cause to terminate paving operations until changes to conform to the specified percent air voids are demonstrated and approved by the Engineer.

Once the air voids are determined by the mix design, the tolerance shall be +/- nine-tenths of a percent (.9%) as determined by California Test 309, and this tolerance shall be considered to include all sampling and testing tolerances. Air voids not meeting the specified tolerance will be cause to terminate paving operations until changes to provide specified tolerance are verified and approved by the Engineer.

California Test Method 367 as modified in Subsection 203-11.3.1 shall be used to determine the optimum binder content for gap graded mixes. Test results for all tests to verify conformance with these specifications shall be submitted to the Engineer for determination of approved percentage of binder in the mix.

203-11.3.1 Amended California Test Method 367. California Test Method 367 is hereby amended as follows for ARHM:

A. The Specific Gravity used in California Test 367, Section "B. Voids content of Specimen", shall be determined using California Test 308, Method A.

B. California Test 367, Section "C. Optimum Bitumen Content" is revised as follows:

    1. Plot asphalt rubber binder content versus void content for each specimen on form TL-306 (Figure 3), and connect adjacent points with straight lines.
    2. From Figure 3 select the theoretical asphalt rubber binder content that has the air voids specified in this Subsection 203-11.3.1. (Engineer may elect a lower binder content following a review of stability values.)
    3. Record the asphalt rubber binder content in Step 2 as the Optimum Bitumen Content (OBC).

C. Laboratory mixing and compaction shall be in conformance with the requirements of California Test 304, except the mixing temperature of the aggregate shall be between three hundred (300) and three hundred twenty-five (325) degrees Fahrenheit. The compaction temperature of the combined mixture shall be between two hundred eighty-nine (289) and three hundred (300) degrees Fahrenheit.

203-11.4 Mixing.

The third paragraph of Subsection 203-11.4 is hereby deleted and replaced with the following:

The proportions of the materials, by total weight of asphalt-rubber binder, shall be eighty (80) percent combined paving asphalt and asphalt modifier, and twenty (20) percent CRM. The temperature of the blended asphalt and modifier shall be between one hundred ninety (190) degrees Celsius (three hundred seventy-five (375) degrees Fahrenheit) minimum and two hundred twenty-six (226_ degrees Celsius (four hundred forty (440) degrees Fahrenheit) maximum when the CRM is added. The temperature shall not exceed six (6) degrees Celsius (ten (10) degrees Fahrenheit) below the actual flash point of the mixture. The CRM shall be combined and mixed together in an asphalt-rubber mechanical blender meeting the requirements of 203-11.5. The combined asphalt and CRM shall be pumped into a reaction tank or distributor truck meeting the requirements of 203-11.5, Item 3A). The temperature of the asphalt-rubber mixture shall be between one hundred ninety-four (194) degrees Celsius (three hundred eight (380) degrees Fahrenheit) minimum to two hundred eighteen (218) degrees Celsius (four hundred twenty-five (425) degrees Fahrenheit) maximum during the reaction period.

After reacting, the asphalt rubber binder shall conform to the requirements in Table 203-11.4 The minimum reaction period shall be the time from complete incorporation of materials into the mix to the time that the asphalt-rubber meets all specifications for reacted material, but no less than ninety (90) minutes. The reaction shall be considered complete when the second (2nd) of two (2) viscosity test results, taken fifteen (15) minutes apart, is significantly lower than the first (1st) result. Once established, the minimum reaction period shall remain unchanged, unless there are changes in materials or equipment that may affect rubber digestion, in which case a new reaction period shall be established per specifications. The Engineer's decision shall be final for determination of the minimum reaction period.

All material shall be tested for viscosity and verified as to complete reaction prior to transfer to any storage tank or use of the reaction tank for feet to the hot mix plant. Material reacted lower than specified temperature, but above one hundred eighty-five (185) degrees Celsius (three hundred sixty-five (365) degrees Fahrenheit), or transferred to a storage tank prior to completion of reaction as specified, shall be reacted for total period of three (3) hours prior to use. Any such transfer shall be described in the comments column of the Asphalt Rubber Batch Log.

Inability to maintain reaction temperatures above specified minimums will be cause to terminate paving operations. The Contractor is reminded that if the reaction tank does not have a gas retort heating system capable of raising the temperature of its contents at least twenty (20) degrees per hour, there exists the inherent potential for such below minimum temperatures to become an irreversible condition. **Certification was previously provided at time of bid opening in the bid that the asphalt-rubber hot mix plant owner, the paving subcontractor and asphalt-rubber supplier have been made fully aware of these provisions.**

The Contractor shall test viscosity and record the following information for every tank of asphalt-rubber prior to being transferred to storage or directed to feed to the hot mix plant:

1) Temperature of stored asphalt cement material at time of loading

2) Time at which the reaction tank is fully loaded
3) Tons of asphalt-rubber added to the tank for the batch
4) Total asphalt-rubber in the tank after loading
5) The beginning time of reaction (Fully loaded and above three hundred eighty (380) degrees Fahrenheit)
6) Binder temperature at time of sampling
7) Temperature of tested material
8) Viscosity reading
9) Time of viscosity test (All test results must be prior to use.)

If more than twenty (20) percent of a batch is holdover material, the reaction time may be reduced, but a line item must be provided on the Asphalt-Rubber Batch Log showing items 6, 7 and 8 for a test just prior to loading new material. Reaction shall be considered to begin after all material is added. If more than twenty (20) percent is holdover material, reaction time can be reduced to the fraction of total material that is holdover material, times ninety (90) minutes, but shall be no less than twenty (20) minutes.

A copy of the Asphalt-Rubber Batch Log shall be provided to the Engineer upon request. A copy of the batch log sheet and all circle charts for the day shall be faxed to the City within ninety (90) minutes of ending production of ARHM for the day. To fit eight and one-half (8½) by eleven (11) inch sheets, the circle chart may be faxed in two (2) parts with an overlap. See Subsection 203-11.5 for circle chart requirements.

The Maximum value for Haake Field Viscosity @ one hundred ninety-one (191) degrees Celsius (three hundred seventy-five (375) degrees Fahrenheit) in Table 203-11.4(A) is hereby changed to 2400 Centipoise.

The first fully reacted passing sample on each batch, prior to transfer to storage or converting to feed to the ARHM mix plant, shall be poured into a clean gallon can that has been pre-certified by the Engineer. It shall be the responsibility of the Contractor to ensure that sufficient sample cans with lids are at the plant, such that they can be pre-certified at least three (3) days prior to use. If the Engineer is not at the plant at start up, the Engineer will provide certified labels, which are pre-numbered and signed by Engineer to be affixed to the cans as they are consecutively used by number.

The Contractor shall conduct sampling such that the pre-certified sample can numbers correspond to the batch numbers beginning with one (1) at the start of the project, increasing consecutively with each batch, without restarting the count at any point. After testing and recording the information for the batch, the corresponding pre-certified sample can shall be filled and stored for the duration of the project or until the Engineer takes possession of the can.

211-4.3 The second and third sentences of Item C under Test Procedure is hereby deleted and replaced with the following:

In one (1) continuous operation, turn off the spindle rotation, remove the spindle vertically from the binder (after heating), discontinue stirring the binder and immediately insert the spindle back into the center of the binder to full immersion and wait five (5) seconds. While holding the viscometer level, turn the spindle on and watch the needle on the viscometer dial and record the maximum value obtained on the dial.

203-11.5 Equipment for production of Asphalt-Rubber.

Add the following to Item 3) of 203-11.5:

A) Reaction Tank. The asphalt-rubber material shall be held in a reaction tank separate from the storage tank feeding the ARHM plant, until the reaction is complete. The reaction tank shall have agitation sufficient to increase the viscosity of the mixture to a peak viscosity reading at least twenty (20) percent higher than the viscosity reading of the material measured at a time that the material otherwise meets specifications for reacted material. The time of reaction may be extended as needed to produce this result. It shall be the responsibility of the Contractor to demonstrate to the Engineer through viscosity readings at appropriate times that the equipment conforms to these requirements. If this cannot be demonstrated, the reaction time shall be three (3) hours. Once established, the reaction time shall be the minimum time for reaction unless there are changes in materials or equipment, in which case a new reaction time shall be established per specifications. The Engineer's decision shall be final.

The reaction tank shall have a functioning paper circle chart thermometer device, which shall record tank temperatures whenever asphalt-rubber is in any stage of production. Seven (7) days before production of asphalt-rubber starts, the Contractor shall provide the Engineer approximately double the number of charts estimated to be needed to produce the necessary binder quantity. These charts will be numbered and signed by the Engineer and returned to the Contractor prior to start of production. These signed and numbered charts shall be used throughout production of the asphalt-rubber binder. Charts shall be used in the consecutive order as numbered by the Engineer beginning with number one (1), and shall be returned weekly after use to the Engineer. Charts will be identified with the date they were used by the Contractor at time of installing on the equipment, and shall be identified as to the tank to which they were attached. Production of asphalt-rubber shall be terminated if this procedure is not followed and will not be restarted until the Contractor demonstrates to the Engineer that it is capable of complying with this requirement.

At the start of each production day, the paper chart shall be replaced with a new signed, dated and numbered sheet, the lead scribe shall be sharpened or ink well filled, and the circle chart shall be calibrated against a sample of material drawn early from the first batch of the day. Any calibration adjustments shall be recorded in the appropriate space provided on the batch log sheet. A spare functional circle chart device shall be at the plant at all times for immediate installation should failure

occur on a circle chart device being used. Calibration shall be performed as part of such installation. The lack of a functional circle chart device on the reaction tank shall be cause to terminate production of asphalt-rubber binder. A blunt lead scribe or low ink, or a paper chart used on a prior day will be considered to render the device non-functional.

B) Storage Tank. After a complete reaction is verified by viscosity readings acceptable to the Engineer, the material shall be held in a storage tank that is fully isolated from material that is not fully reacted. This tank shall be the only tank feeding the ARHM plant. No material shall be transferred to the storage tank feeding the plant until reaction is complete in the reaction tank.

302-9 Asphalt-Rubber Hot Mix (ARHM).

302-9.1 General.

ARHM construction shall be complete in all areas prior to slurry.

Tack coat material for overlay shall be SS-lh applied at a rate of 0.32 liter per square meter (0.08 gal/SY) on all areas except on ARAM, where tack coat shall be at a rate of 0.24 liter per square meter (0.05 gal/SY).

All PCC surfaces, to be crossed by trucks used to haul ARHM, that are within five hundred (500) feet of the work limits shall be covered with sand or other durable covering prior to applying tack coat.

The Contractor shall have sufficient power brooms on site during all periods of distribution and spreading to provide for cleanup of haul routes and work areas. Power broom shall provide miscellaneous cleanup of ARHM spoils as directed by the Engineer.

302-9.2 Mixing Binder with Aggregate.

For drum plants, the system shall run fully automatic with the only input to the AC plant computer being information transmitted automatically from a Corealis mass flow meter on the line of the asphalt-rubber feed to the AC plant. All automatic shutdown features of the AC plant shall be fully functional.

302-9.4 Distribution and Spreading.

The ambient temperature shall not exceed 105F at time of placing ARHM.

The temperature of ARHM shall be minimum two hundred ninety (290) degrees Fahrenheit directly behind the paving machine and high enough upon delivery that pavement temperature after two (2) passes with the breakdown roller exceeds two hundred forty (240) degrees Fahrenheit.

To avoid picking up loose rock in the overlay area, the tires of all trucks must be lightly oiled with linseed oil or soy bean oil or approved equal. Diesel fuel will not be allowed

on the project at all for oil down of any equipment.

Raking of ARHM shall be eliminated as much as possible. ARHM material shall not be cast across the mat under any circumstance. Raking shall be just enough to set up edges for uniform joins without casting material. Screed controls shall be the predominant means of controlling material at joins. In areas where paving machines cannot be used due to space constraints, material shall not be thrown by shovels. Material shall be removed directly from the paving machine hopper and shall be placed directly in its final location, to be distributed with minimal raking. Material may be dumped directly from a truck, but further material distribution shall be by shovel directly to its final location with minimal raking. A small rubber tire tractor with a screed type attachment may be used to spread a pile dumped from a truck, but raking shall be minimized after spreading.

The paving machine screed shall not be pulled across an area already paved with ARHM, even adjacent to narrow areas to be paved. Such narrow areas shall have ARHM distributed by methods specified by shovel or rubber tire tractor, unless the adjacent area has hardened enough and will not be significantly marred by passing the screed over it. Even if hardened adequately, the Contractor shall spread rock dust by hand tools to avoid cohesion of the ARHM in the screed to the existing surface of such areas of freshly cured ARHM.

The Contractor shall maintain a functioning infrared heat measurement device in close proximity to each paving machine at all times. The Contractor shall provide a pavement temperature reading, with an infrared heat measurement instrument, when requested by the Engineer. Inaccessibility of a heat measurement shall be cause for termination of paving operations.

Transverse cold joints shall be provided such that longitudinal joints are not left exposed at the end of the workday.

Asphalt pavers shall be equipped with automatic screed controls and a sensing device or devices. Automatic grade and slope control shall be used for overlays.

All joints shall be sealed after rolling.

When placing asphalt concrete to the lines and grades noted in the plans or as approved by the Engineer, the automatic screed controls shall control the longitudinal grade and transverse slope of the screed. Grade and slope references shall be furnished, installed, and maintained by the Contractor. The Contractor shall use a ski device, the minimum length of the ski device shall be ten (10) m (thirty (30) ft.). The ski device shall be a rigid one (1) piece unit and the entire length shall be utilized in activating the sensor. The Contractor may use a laser to control the screed.

When placing the initial mat of asphalt concrete on existing pavement, the end of the screed nearest the center line shall be controlled by a sensor activated by a ski device not less than ten (10) m (thirty (30) ft.) long. The end of the screed farthest from center line shall be controlled by an automatic transverse slope device set to reproduce the cross slope approved by the Engineer.

When paving contiguously with previously placed mats, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to the grade of the previously placed mat and will reproduce the grade in the new mat within a three (3) mm (one one-hundredths (0.01) ft.) tolerance. The end of the screed farthest from the previously placed mat shall be controlled in the same manner as when placing the initial mat.

Should the automatic screed controls fail to operate properly during any day's work, the Contractor may use manual control of the spreading equipment for the remainder of that day; however, the equipment shall be corrected or replaced with alternative automatically controlled equipment conforming to the requirements in this section before starting the next day's work.

302-9.4 Rolling.

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint.

Join lines between successive runs shall be within one hundred fifty (150) mm (six (6) inches) of lane lines or a minimum of three and six-tenths (3.6) m (twelve (12) feet) outside of the outer most lane line.

For ARHM-OG, initial breakdown rolling shall be static. Breakdown roller shall make two (2) passes over all areas. A pass shall mean one (1) passage of the roller over an area. An intermediate roller of the same or greater width than the breakdown roller shall be rolling directly behind the breakdown roller at all times, and paving shall cease if intermediate rolling is terminated for any reason. Additional intermediate rollers may be necessary depending on production rates. Intermediate roller shall make two (2) passes unless otherwise directed or approved by the Engineer.

For ARHM-GG, initial breakdown rolling shall be vibratory. Rolling in vibratory mode shall not be performed after ARHM material temperature falls below two hundred forty (240) degrees Fahrenheit, due to disturbance of the bonds beginning to set up in the binder at lower temperatures. An intermediate roller of the same or greater width than the breakdown roller shall be rolling directly behind the breakdown roller at all times, and paving shall cease if intermediate rolling is terminated for any reason. Additional intermediate rollers may be necessary depending on production rates.

The rolling pattern shall be approved by the Engineer and once established, the rolling pattern shall remain consistent, unless conditions change and a modified rolling pattern is needed to conform to specification. Engineer shall be notified immediately on change of rolling pattern.

All finish rolling shall be performed by a separate finish roller.

To ensure optimum quality control, the use of more than one (1) paver must be approved in advance by the Engineer, and will generally require one (1) foreman, one (1) sweeper

and a full complement of rollers per Subsection 302-5 of the Standard Specifications and this Subsection 302-9.5 for each paving machine.

An extra breakdown roller shall be on site at all times, free of defects.

A finish roller shall be provided in addition to intermediate rolling to perform all finish rolling, such that the intermediate roller can stay immediately behind the breakdown roller at all times.

302-9.5.1 Density and Smoothness. For ARHM-GG, density and smoothness shall conform to Subsection 302-5.6.2, except the second and third paragraph of Subsection 302-5.6.2 shall not apply to ARHM.

The compaction after rolling shall be ninety-five (95) percent of density obtained with the California Kneading Compactor, California Test 304 as modified and measured in conformance to this Subsection 302-9.5.1.

The field density of compacted ARHM shall be determined by:

1) A nuclear asphalt testing device, calibrated in conformance with California Test 375, except as modified in this Subsection 302-9.5.1, in the field designed to measure the density of pavement of the thickness being constructed; or

2) Core with density determined as follows:

   a) Saw the ARHM lift of pavement from the top of the core approximately perpendicular to the axis of the core, just above any underlying pavement or as necessary to obtain a clean flat surface at the bottom of the sample.
   b) Clean and dry the sample as described in ASTM 1188.
   c) Perform California DOT Test 308 Method A step a.
   d) Prior to proceeding to steps 308A b., 308A c., 308A d. and 308A e., place the core, top surface down, firmly into a flat pan of hot liquid paraffin approximately one-quarter (¼) inches deep. Allow the sample and paraffin to cool to firm solid state and remove the sample from the pan by cutting around the perimeter. Trim the edges of paraffin parallel to the side of the sample cylinder, and weigh the cylinder to obtain:

      G = Mass in grams of level sealed paraffin-treated specimen in air.

   e) Perform 308A b., 308A c., and 308A d on the sample from D) above.
   f) Complete the remainder of Test 308A, except replace the formula in 308A e. with the following: Bulk Specific Gravity

$$= \frac{A}{(D - E) - (D - G) / F}$$

In case of dispute, method 1 shall be used, except the Contractor may elect

to use method 2, but all costs for such procedures shall be borne by the Contractor to provide the full set of coring, tests and documentation in conformance with the Standard Specifications, and all test methods shall be modified as specified in these Special Provisions. Also, the Contractor shall notify the Engineer at least three (3) days in advance of coring operations, and immediately after core testing is complete the Contractor shall deliver cores to the City for verification.

302-9.5.1.2 Maximum Density. Maximum density samples shall be prepared in conformance with Calif. Test 304, except:

1) Compaction shall be performed between two hundred eighty-five (285) and two hundred ninety (290) degrees Fahrenheit.
2) The leveling load shall be applied while material is between one hundred ninety (190) and two hundred (200) degrees Fahrenheit.
3) A Marshall base shall be used during leveling load procedure.
4) Sample shall be allowed to cool to less than one hundred (100) degrees Fahrenheit prior to removal from test sleeve and Marshall base assembly.

Nuclear test procedures, including correlation with core densities, shall be in conformance with California Test 375, except as follows:

Core locations for correlation with cores shall be selected based on appearance of relatively tight surface texture, and the test strip shall be selected on this basis. If a test location is determined to have a significantly open texture relative to other areas within the test strip, the location shall not be used. This selection criteria is not to be considered significant to the outcome of, but only as a guideline towards obtaining samples that are relatively well compacted to yield results with minimum standard deviation. The locations shall be well clear of grade breaks and joints. One (1) core centered on the gauge will be used instead of two (2) at each location. Use method 2 in this Subsection 302-9.5.1 to determine density of cores. Surface voids shall not be filled with sand.

The Contractor will be notified in writing at least five (5) days in advance of such correlation testing and will be invited to have a nuclear gauge onsite to correlate a second gauge. If not independently calibrating at that time, the Contractor shall bear the full expense of performing correlation for his nuclear gauge under the specified procedures, but shall notify the City five (5) days in advance of such correlation testing, such that the City can correlate with the Contractor's gauge, if Contractor disagrees with City's test results.

302-9.5.2 Compaction Payment Reductions. Based on laboratory tests on AC pavements revealing a highly significant loss of life span for each one (1) percent reduction of compaction, and the well known catastrophic effect of oxidation and stripping of asphalt products due to interconnected voids that develop below ninety-five (95) percent compaction, and the extreme expense of removing and replacing pavement not compacted to the specified minimum, a nominal deduction of payment will be applied for under-compacted ARHM pavement. The bidder in submitting a bid fully accepts the provisions in this Subsection 302-9.5.2 and agrees

that the nominal payment deduction is acceptable and reasonable for these purposes.

Payment reductions will be applied to ARHM compacted less than ninety-five (95) percent of maximum density, the specified minimum, and greater than ninety-one and nine-tenths (91.9) percent of the maximum density based on nuclear testing with Part 3 Test Site Selection of California Test 375 modified as follows:

A lot will be one day's production or other lesser area of paving as determined by the City to be deficient in terms of compaction, and a pull will be the width between joints or edge of pavement as the lot is placed.

Test site selection will conform to California Test 375 Part 3, except the number of tests shall be the area of the lot in square feet divided by 400 and any test site within one-half (½) m of a grade break or pavement joint shall be relocated laterally towards the center of the pull to one-half (½) m from such joint or grade break.

The mathematical mean average of percent of maximum density represented by all these tests shall be calculated, except any test results outside of this mean plus two (2) standard deviations based on all tests, shall be rejected. The mean average shall be calculated directly from the remaining values. A compensation reduction in conformance with Table 302-9.5.1A will be applied to the contract unit price for ARHM for material within any lot determined to be below minimum relative compaction, except any lot with tests indicating compaction ninety-one and nine-tenths (91.9) percent or less shall be removed and replaced at the Contractor's expense.

TABLE 302-9.5.1A
REDUCED COMPENSATION FACTORS

Relative Compaction (Percent)	Reduced Compensation Factor	Relative Compaction (Percent)	Reduced Compensation Factor
95.0	0.000	93.4	0.062
94.9	0.002	93.3	0.068
94.8	0.004	93.2	0.075
94.7	0.006	93.1	0.082
94.6	0.009	93.0	0.090
94.5	0.012	92.9	0.098
94.4	0.015	92.8	0.108
94.3	0.018	92.7	0.118
94.2	0.022	92.6	0.129
94.1	0.026	92.5	0.142
94.0	0.030	92.4	0.157
93.9	0.034	92.3	0.175
93.8	0.039	92.2	0.196
93.7	0.044	92.1	0.225
93.6	0.050	92.0	0.300
93.5	0.056		

302-9.5 Rock Dust Blotter. The second sentence of Subsection 302-9.6 is hereby deleted and replaced with the following:

Rock dust blotter shall be washed concrete sand per Fine Aggregate in Section 90, spread at rate of two (2) to three (3) pounds per square yard as necessary to maintain traffic at the direction of the Engineer. Excess sand spread on adjoining areas to receive ARHM-OG shall be thoroughly swept before spreading any binder.

14. ASPHALT-RUBBER AND AGGREGATE MEMBRANE (ARAM) SURFACING AND INTERLAYER

ARAM shall conform to Subsection 302-10 of the GREENBOOK, except as modified herein.

302-10 Asphalt-Rubber and Aggregate Membrane (ARAM)

Where ARAM is to be placed directly on existing pavement, pavement preparation shall include the following preparation.

Areas as directed by the Engineer shall be skin patched in conformance with Subsection 10.02 of these Special Provisions.

Cracks shall be treated as follows:

A singular crack shall be considered to be a crack on the perimeter of an otherwise uncracked asphalt pavement area exceeding four (4) feet in minimum dimension. Cracks not fully interconnected in forming a complete perimeter shall be considered singular cracks, unless the maximum dimension across the partial perimeter between cracks can be measured as less than four (4) feet. Such pavement area is defined by the cracks forming its perimeter.

1) The Contractor shall spray all weeds in cracks with Monsanto brand Roundup, a minimum of two (2) weeks prior to paving. All weeds shall be resprayed if rain occurs within forty-eight (48) hours after application;
2) All cracks and holes with weeds shall be routed clear to a depth of one (1) inch;
3) All holes and cracks exceeding one and one-half (1½) inches wide shall be filled with asphalt concrete approved for skin patch compacted level with the top of the existing pavement;
4) All cracks and joints one-quarter (¼) inch or greater in width shall be blown thoroughly clear with high pressure air or power broomed clean to a depth of three-quarters (¾) inch minimum immediately ahead of the crack filling operation; and
5) All joints and singular cracks between one-quarter (¼) inch and one and one-half (1½) inches in width shall be filled with Crafco Polyflex III or equal.

Filler shall be within one-eighth (1/8) inch below and flush with existing pavement surface and **shall be thoroughly squeegeed,** as necessary, to attain this result, except in cold mill areas. In cold milled areas, crackfiller shall be flush or below the top of cold mill texturing and shall be thoroughly squeegeed, as necessary, to attain this result.

Any crackfiller in excess of that specified at any point on the pavement after crackfiller has cooled shall be heated with a torch and thoroughly squeegeed to meet specifications. Crack

filler in cold mill areas that becomes unbonded shall be removed, and the lack of bonding shall be considered evidence that the crack was not thoroughly blown clean, thereby requiring recleaning, refilling and squeegeeing.

All crack preparation shall be performed after cold milling.

Payment for crack filling will be compensated by the lump sum bid item for crack filling. All other preparation work related to crack preparation, including weed killing and power brooming or blowing out cracks will considered included in the unit price bid for ARAM per square yard.

302-10.1 Application

The maximum viscosity of asphalt-rubber material in Table 203-11.4(A) shall be 2400 Centipoise.

The maximum ambient temperature for placement of ARAM shall be one hundred five (105) degrees Fahrenheit.

Temperature of asphalt-rubber spread for ARAM shall be between three hundred ninety-five (395) degrees Fahrenheit and four hundred twenty-five (425) degrees Fahrenheit.

Asphalt-Rubber shall conform to Subsection 203-11 of GREENBOOK including modification of that section included in these Special Provisions.

The Contractor shall provide a pavement temperature reading, with an infrared heat measurement instrument, when requested by the Engineer.

Item 4. of the second paragraph of Subsection 302-10.1 is hereby deleted and replaced with the following:

Material shall be applied at a rate between two and one-half (2½) and three (3) Liters per square meter (six-tenths (.60) to seven-tenths (.70) gallons per square yard) as directed by the Engineer.

The first sentence of the third paragraph of Subsection 302-10.1 is hereby deleted and replaced with the following:

> The asphalt-rubber mixture may be applied to the roadway immediately after mixing and reacting at a temperature between two hundred one (201) degrees Celsius (three hundred ninety-five (395) degrees Fahrenheit) minimum to two hundred eighteen (218) degrees Celsius (four hundred twenty-five (425) degrees Fahrenheit) maximum.

Reference is made to Subsection 7-1.01F Air Pollution Control whereby the Contractor shall comply with all air pollution rules and regulations.

302-10.2 Screenings The first sentence of the first paragraph of Subsection 302-10.2 is hereby deleted and replaced with the following:

Following application of asphalt-rubber, screenings shall be placed over all areas receiving asphalt-rubber. Screenings shall conform to quality requirements of Class A aggregate with the following modifications:
Maximum LA Rattler value at five hundred (500) revolutions shall be thirty-five (35).
Eighty-five (85) percent of coarse aggregate shapes shall be "proportioned particles," a proportioned particle being defined as a particle having a minimum dimension greater than one-half (½) the maximum dimension as measured by caliper. Percentage of proportioned particles shall be determined by California Test 205 with the words "proportioned particles" substituted for "crushed particles."

California Test 205, Section D, definition of a crushed particle is revised as follows: "A particle having two (2) or more fresh mechanically fractured faces shall be considered a crushed particle."

The aggregate for screenings shall conform to following gradations:

Sieve Size	Percent Passing
¾"	100
½"	95-100
3/8"	70 -85
No. 4	0-10
No. 8	0-3
No. 200	0-1

No mineral filler or material from sand or rock dust bins shall be included in the mix.

The gradation ranges shown for screenings shall be considered the Contract Compliance Range. The Operating Range for the one-half (½") sieve shall be the full contract compliance range. The Operating Range for all other sieves, except the 200 sieve, shall be two (2) percentage points inside both limits of the Contract Compliance Range. If gradation-testing results do not meet the Operating Range requirements but meet the Contract Compliance Range, placement of ARAM may be continued for the remainder of the day. However, another day of work shall not be started until tests, or other information, indicate to the satisfaction of the Engineer that the next material to be used in the work will comply with the requirements specified for Operating Range.

Except for the No. 200 sieve, it is the intent of the Specifications that the target percentage be the central value in the Contract Compliance Range.

Any change in source of aggregate supply requires two (2) weeks advance notice in writing to the Engineer, and submittals and testing in conformance with specifications for a new mix design. No single bin shall receive aggregate from more than one (1) source. The Contractor shall provide a copy of aggregate

delivery tickets for aggregate delivered for use on the project.

Trucks for hauling cover material shall be tailgate discharged and shall be equipped with a device to lock onto the hitch at the rear of the aggregate spreader. Haul trucks shall also be compatible with the aggregate spreader so that the dump bed will not push down on the spreader when fully raised or have too short an apron resulting in aggregate spillage while dumping into the receiving hopper.

Screenings shall be coated completely black on the full particle surface with AR4000 asphalt at a central mixing plant to prevent free dust, and shall be preheated one hundred twenty-seven (127) degrees Celsius (two hundred sixty (260) degrees Fahrenheit) to one hundred sixty-three (163) degrees Celsius (three hundred twenty-five (325) degrees Fahrenheit).
Screenings shall be placed at a rate between thirty-two (32) and forty (40) pounds per square yard.

All rollers shall be operational at all time unless full roller coverage is complete and cessation of rolling is authorized by the Engineer. The spreader shall not stop over an area of rocks that are spread but not rolled.
The spreader shall clear all areas to allow rollers to complete roller coverage without any delay.

A layer of washed concrete sand per Fine Aggregate in Section 90 spread at rate of two (2) to three (3) pounds per square yard shall be applied as necessary to maintain traffic at the direction of the Engineer. Excess sand spread on adjoining areas to receive ARAM shall be thoroughly swept before spreading any binder.

15. CUL-DE-SAC ASPHALT CONCRETE OVERLAY

Cul-de-sac AC paving shall be paved prior to slurry. The cul-de-sac bulbs shall be paved with one-half (½) inch Maximum Medium PG70-10 asphalt concrete in conformance with the Cul-de-sac Bulb typical section. The rolling pattern in the Standard Specifications may be modified at the Contractor's discretion to achieve the minimum level of compaction hereby specified as ninety-five (95) percent of relative maximum density. Payment shall be by the unit price bid for Cul-de-sac AC Overlay including materials, tack coat, placement, compaction, traffic control and all incidentals.

16. CONCRETE AND MASONRY CONSTRUCTION

Concrete shall conform to Subsection 303 of the GREENBOOK, except as modified herein.

SECTION 303 IS AMENDED AS FOLLOWS:

303-1 Concrete Structures

303-1.12 Payment

ADD THE FOLLOWING PARAGRAPH:

Payment for concrete structures shall include full compensation for excavation, structural excavation, disposal of excess dirt, backfill, concrete, forming, and reinforcing, complete and in place and no additional payment will be made therefor.

303-5 Concrete Curbs, Walks, Gutters, Cross Gutters, Alley Intersections, Access Ramps, and Driveways.

303-5.1.1 General

ADD THE FOLLOWING:

When removals of curb and/or sidewalk are located at curb return, the Contractor shall install access ramps. The Contractor is to construct all access ramps in accordance with American Disability Act ("ADA") Standards/California Code of Regulations Title 24 – Accessibility Regulations. If the ramps constructed by the Contractor are found to be in non-compliance with ADA Standards, the Contractor will be required to remove and replace the ramps to ADA Standards at the Contractor's expense.

All removed curb and gutter, cross gutters, spandrels, driveway approaches, and sidewalks shall be replaced within three (3) calendar days, unless the Contractor provides reasonable documentation to exceed the three (3) day limit five (5) working days before removal and approved in writing by the Engineer. The Asphalt Concrete patch shall be placed within five (5) working days after the curb and gutters are replaced, and seven (7) days after the cross gutter and spandrels are replaced.

No PCC shall be ordered and/or placed until the forms and subgrade have been inspected and approved by the Engineer in the field.

All pull boxes, water meter boxes, and water valve covers shall be adjusted to proposed finish grade and approved by the Engineer in the field prior to placement of the PCC.

303-5.1.3 Driveway Entrances

REPLACE LAST PARAGRAPGH WITH THE FOLLOWING:

Driveway approaches shall be one hundred fifty (150) mm (six (6) in.) thick for single family residential areas and two hundred (200) mm (eight (8) in.) thick for all other areas.

303-5.3 Placing Concrete

ADD THE FOLLOWING:

All temporary storage of PCC liquid residues and mixer wash out on the project site shall be deposited within a self-containment area or bin. The Contractor may elect to allow the moisture to evaporate and dispose of the material as a solid or dispose of the material as a liquid. The Contractor shall notify the Engineer in writing, as a preconstruction meeting submittal, what method of disposal will be utilized.

If disposal of the material in liquid form is chosen, the Contractor must provide in writing, as part of the preconstruction meeting submittal, the name, location, telephone number, and a copy of the California Regional Water Quality Control Board permit for disposal of PCC liquid residue, or if the disposal site is located outside of the State of California, a copy of a permit issued by that state is required. The Engineer will verify the information before the Notice to Proceed is issued.

All PCC and related work, including grading and forming, shall be suspended if the Contractor does not have a PCC liquid residue or mixer wash out containment area or bin on site one (1) working day before the scheduled placement of PCC. The Contractor will not be allowed any additional compensation or extension of time for suspended operations due to not having a containment area or bin on site. The containment area or bin shall have sufficient room for two (2) days deposit of material.

The Contractor shall provide the Engineer with a copy of the landfill receipts or disposal site receipt and weight ticket showing disposal of PCC liquid residues and wash out within five (5) working days of disposal.

303-5.4.3 Weakened Plane Joints, (a) General

ADD THE FOLLOWING:

All weakened plane joints shall be spaced at a maximum of three (3) m (ten (10) ft.) for curbs, gutters, and sidewalks. Scoring lines shall conform to those prevailing in the area and be uniform in spacing.

303-5.5.2 Curb

ADD THE FOLLOWING:

The curb and gutter surface shall not vary more than three (3) mm (one-one hundredth (0.01) ft.) from three (3) m (ten (10) ft.) straightedge except at the grade changes. Prior to the removal of the forms, the surface shall be finished true to grade by means of a straightedge float of not less than three (3) m (ten (10) ft.) in length, and operated longitudinally over the surface of the concrete. Form clamps shall be so constructed as not to interfere with the operation of the float. In no event shall forms be removed while the concrete is sufficiently plastic to slump. The top and face of the finished curb shall be

true and straight and top surface of curbs shall be of uniform width, free from humps, sags, blemishes or other irregularities.

303-5.5.3 Walk

ADD THE FOLLOWING:

The sidewalk surface shall not vary more than five (5) mm (two one-hundredths (0.02)') from the three (3) m (ten (10)') straightedge except at grade changes, and the finished surface shall be free from humps, sags, blemishes or other irregularities. All sidewalks shall be a minimum of one hundred (100) mm (four (4)") thick, except at driveways where the sidewalks shall be a minimum of one hundred fifty (150) mm (six (6)") thick for single family residential areas and two hundred (200) mm (eight (8)") thick for all other areas.

303-5.6 Curing

ADD THE FOLLOWING:

Curing compound shall be translucent with red fugitive dye, Type 1, in accordance with Section 201-4, "Concrete Curing Compound," of the Standard Specifications.

In order to minimize vandalism damage to the finished PCC surfaces, the Contractor shall plan his work so that no PCC is poured after one o'clock (1:00) p.m., unless otherwise authorized by the Engineer in the field.

The Contractor shall barricade and protect placed Portland Cement Concrete from all damages, marks, mars, and/or graffiti. Any Portland Cement Concrete damaged, defaced, discolored or defective shall be replaced to the satisfaction of the Engineer at the Contractor's expense, and no additional time will be allowed.

Grading, patching or other remedies to correct the situation will not be accepted unless in the opinion of the Engineer the vandalized area is so small that it does not warrant replacement. Concrete replacement areas shall be from score mark or control joint to score mark or control joint, and full width of the sidewalk. All replacement areas shall be saw cut.

17. EXISTING LOOP DETECTORS

The Contractor or representative will meet with the City's Director of Public Works and will clearly mark existing loops not to be damaged or removed.

If any part of the loop conductor, including the portion leading to the adjacent pull box, is damaged by the Contractor's operations, the entire detector loop shall be replaced. If any adjacent loop(s) are/is damaged during such replacement, that loop shall also be replaced.

18. TRAFFIC STRIPING, PAVEMENT MARKINGS, AND PAVEMENT MARKERS

Traffic striping, pavement markings and pavement markers shall be replaced with the same pattern as

existing in conformance with these Special Provisions.

All details and dimensions for traffic striping and marking shall conform to the Caltrans Traffic Manual and Maintenance Manual. All arrows and "STOP" legends/limit lines shall be thermoplastic when over RAC, Conventional AC and paint when over slurry.

18.01 Layout, Alignment, and Spotting. The Contractor shall furnish the necessary control points for all striping, markers and markings, and shall be responsible for the completeness and accuracy thereof to the satisfaction of the Engineer.

The Contractor shall supply the Engineer with a copy of a complete inventory of striping, markers and marking prior to any cold milling or installation of any material. For each stripe, marker and marking, the inventory shall include sufficient definition about type of marker, stripe or marking and dimensions for control points to allow for accurate reestablishment.

In no case shall any section of street be left without the proper striping for more than forty-eight (48) hours or over weekends or holidays.

18.02 SECTION 310 – PAINTING – IN THE GREEN BOOK IS AMENDED AS FOLLOWS:

310-5 Painting Various Surfaces

310-5.6 Painting Traffic Striping, Pavement Markings, and Curb Markings

DELETE THE ENTIRE SUBSECTION AND SUBSTITUTE THE FOLLOWING:

Painted traffic stripes (lane lines and speed limit markings) and applying thermoplastic pavement markings (word and symbol markings, limit lines, crosswalk, etc.) shall conform to the provisions in Section 84, "Traffic Stripes and Pavement Markings," of the State of California Standard Specifications and these Special Provisions.

The subparagraphs of the first paragraph in Section 84-3.02, "Materials," of the State of California Standard Specifications are amended to read:

	State Specification No.
Rapid Dry Water Base, Traffic Line.—White, Yellow and Black	PTWB-01

The second and third paragraphs in Section 84-3.02, "Materials," of the State of California Standard Specifications are amended to read:

State Specifications for traffic paint and glass beads may be obtained from the Transportation Laboratory, 5900 Folsom Boulevard, Sacramento, CA 95819-4612, telephone number (916) 227-7289.

Glass beads shall conform to 1-ACOT type beads or equal.

The Contractor shall layout and "cat-track" the alignment of the proposed striping at four and one-half (4½) m (fifteen (15) ft) intervals and "spot" the proposed pavement markings as called for on the Plans. Striping shall vary no more than twelve (12) mm (two (2) in) in fifteen and two-tenths (15.2) m (fifty (50) ft) from the specified alignment. The Engineer may waive minor variations.

The Contractor shall not proceed with the painting of any striping or applying thermoplastic pavement markings until the Engineer has checked and approved the cat-tracking and spotting, and has authorized the Contractor to proceed.

Traffic striping shall be applied with airless equipment. All traffic striping shall be performed with a road liner type striping machine. Where the configuration or location of a traffic stripe is such that the use of a road liner type striping machine is unsuitable, traffic paint and glass beads may be applied by other methods and equipment approved by the Engineer. The Engineer shall determine if the road liner type striping machine is unsuitable for a particular use.

The first coat of paint shall be applied upon completion of the surfacing. The second coat of paint shall not be applied until seven (7) calendar days after the first coat. Each coat of paint shall be applied at the wet film thickness of ten (10) – twelve (12) mils for white and yellow paint and seven (7) mils for black paint. All paint shall be applied at a relative humidity below seventy-five percent (75%) and an ambient temperature above thirteen (13)° Celsius (fifty-five (55)° Fahrenheit), unless otherwise approved by the Engineer.

Except for black paint, No. 1 reflective glass beads shall be uniformly incorporated in all coats of paint concurrently with the application of the paint. The glass beads shall be embedded in the coat of traffic paint being applied to a depth of at least one-half (½) their diameters. The reflective glass beads shall be applied to the first coat of paint at the rate of seven-tenths (0.7) kg (one and one-half (1½) lb) of beads per liter (twenty-six one hundredths (0.26) Gal) of paint, and to the second coat of paint at the rate of ninety-five one hundredths (0.95) kg (two (2) lb) of beads per liter (twenty-six one hundredths (0.26) Gal) of paint.

Except as otherwise noted on the Plans or as directed by the Engineer, all angle points, as shown on the striping Plans shall be painted as a smooth, tangent curve with a radius and length as approved in the field.

Temporary tape or reflective markers utilized for the purposes of interim delineation for centerline, lane lines and crosswalk lines shall be placed to the side of the final striping pattern in such a way so that it will not interfere with the first coat of paint. All temporary tape and reflective markers applied for the purpose of interim delineation shall be removed by the Contractor at no additional cost to the City upon completion of the first coat of striping and prior to the final striping.

Stencils used for pavement markings must conform to the latest Caltrans approved Non-Metric Stenciling Standards.

Add to Subsection 84-1.04, "Protection from Damage," of the State of California Standard Specifications the following:

> Newly painted or existing striping or applied thermoplastic pavement markings which are damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be repainted or thermoplastic replaced, and any associated removals shall be performed as outlined in these Special Provisions at the sole expense of the Contractor and no separate compensation will be allowed therefore.

Existing traffic striping and pavement markings that do not conform to the approved Plans shall be removed by wet sandblasting. Other methods may be requested by the Contractor, but shall be submitted in writing to the Engineer for approval. Blackout of existing traffic striping or pavement markings, which do not conform to the approved Plan, shall not be allowed.

Painting traffic stripes and applying of thermoplastic pavement markings shall not be separately measured.

The Contract lump sum **(LS)** price paid for **STREET STRIPING AND PAVEMENT MARKINGS** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in painting traffic stripes and applying thermoplastic pavement markings including establishing alignment for stripes, layout work and sandblasting markers, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions and as approved by the Engineer, and no additional compensation will be allowed therefore.

PAVEMENT MARKERS

Pavement markers shall conform to the provisions in Section 85, "Pavement Markers," of the State of California Standard Specifications and these Special Provisions.

Certificates of compliance shall be furnished for pavement markers as specified in "Prequalified and Tested Signing and Delineation Materials," elsewhere in these Special Provisions.

Reflective pavement markers shall comply with the specific intensity requirements for reflectance after abrading the lens surface in accordance with the "Steel Wool Abrasion Procedure," specified for pavement markers placed in pavement recesses in Section 85-1.05, "Reflective Pavement Markers," of the State of California Standard Specifications.

Non-reflective pavement markers shall conform to the requirements of the Section 85-1.04, "Non-Reflective Pavement Markers," of the State of California Standard Specifications. The bituminous adhesive used to install the markers shall be a hot melt bituminous adhesive asphaltic material with a homogeneously mixed mineral filler and shall conform with the requirements specified in Subsection 85-1.055, "Adhesives," of the State of California Standard Specifications.

Reflective pavement markers shall be installed per the approved Plan unless otherwise approved by the Engineer. The composition of the material shall be such that its properties shall not deteriorate when heated to, and applied at temperatures up to two hundred eighteen (218)° Celsius (four hundred twenty-five (425)° Fahrenheit), using either air or oil jacketed melters.

Reflected pavement markers shall be placed at locations as established by the applicable Caltrans striping detail noted on the approved striping Plan which includes, but is not limited to temporary painted line(s), new striping or existing striping. There shall be one marker for each location. The Contractor shall perform all work necessary to establish satisfactory locations for markers.

The Contractor shall remove existing reflective pavement markers that do not conform to the approved Plan.

Reflective pavement markers shall be of the prismatic reflector type (3M model white RP290w and yellow RPM 2912y or equal) as outlined in Subsection 85-1.05, "Reflective Pavement Markers," of the State of California Standard Specifications.

Existing pavement markers (blue) designating location of the fire hydrants shall be replaced "in kind" after the paving is completed.

The Contract unit price paid for pavement markers (blue) shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing pavement markers (blue) complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions and as approved by the Engineer.

Full compensation for pavement markers (traffic delineation) shall be considered as included in the Contract lump sum **(LS)** price paid for **STREET STRIPING AND PAVEMENT MARKINGS** and no additional compensation will be allowed therefore.

19. UTILITY COVER ADJUSTMENTS TO GRADE

Manholes and watervalves shall be adjusted to grade in accordance with Section 403-3, "Manholes in Asphalt Concrete Pavement," of the GREENBOOK and as supplemented herein.

19.01 Reference Setting.

The Contractor shall note and reference the locations of the manholes and water valves and vaults prior to placing pavement in order to locate and raise them following the work. Manhole, water valve and of vault locations and distance from reference points to the center of each such facility shall be marked on either a curb face or other reference point indicators (stakes) by the Contractor prior to be getting any paving.

19.02 Adjustment to Grade

The Contractor shall lower manhole and water valves within areas designated for cold milling prior to

cold milling operations. Each such manhole water valve or utility box shall be lowered to a depth below the required milling depth. Frames and covers and utility boxes shall be removed to the City yard facility and a one-half (½)" thick steel plate shall be provided to cover the hole where the utility facility exists. Temporary AC shall be provided to fill any voids in the roadway surface which remain after the cover is in its final lowered position.

After completion of paving, the facility shall be raised to grade. The finish grade of raised facilities shall be one-quarter (¼) inch below the finish grade of the asphalt concrete pavement.

The Contractor shall exercise care such that rocks, dirt and debris do not enter sewer lines.

The water valves shall be raised as follows: the asphalt pavement immediately adjacent to the water valve shall be removed, the existing frame and cover removed, the existing sleeve extended or replaced with matching material to extend from the valve to the new valve frame elevation, the water valve frame and cover placed to match the respective water district's standards, the water valve and cover and adjusted to proper grade, and the pavement replaced with a minimum of two inches of asphalt concrete.

The Contractor shall notify the respective utility owners at least five (5) working days in advance of the paving operations and again after completion of paving operations. Such notifications of utilities to be adjusted to grade by others shall be made in writing. The Contractor shall mark locations of utilities for those locations of facilities to be adjusted to grade by others.

The Contractor shall take care to insure no intrusion of gravel or pulverized material into the manholes or valve stem areas.

19.03 Payment.

Compensation for raising utility facilities to grade based on the applicable bid item for each type of facility and type of adjustment, and whether single or double. Single shall mean leaving the facility in place until paving is complete and raising the grade thereafter. Double shall mean removing the facility prior to paving and reestablishing the facility at finish grade per specifications after paving. The unit price bid shall be considered full compensation for removing the facility, and storing and replacing it as applicable, protecting the facility at all times during the procedure and as specified, and resetting the facility at finish grade, including all materials, equipment and labor and incidentals.

20. COOPERATION

Attention is directed to Sections 7-1.14, "Cooperation" and 8-1.10, "Utility and Non-Highway Facilities" of the Standards Specifications.

21. SANITARY ARRANGEMENTS

The Contractor shall make provisions for and maintain in a sanitary manner at the work site all necessary and sanitary conveniences for the workmen, in accordance with the rules and regulations of the State Board of Health.

22. ACCESS

The Contractor's attention is directed to the existing pedestrian and vehicular access ways crossing the lines of work. These access ways shall not be closed unless an alternate access way is provided. The Contractor shall assume full responsibility for providing alternate access. The compensation for the work in this item shall be considered as included in the cost of the various contract items of work and additional compensation will be made therefore.

23. INSURANCE

The Contractor's attention is directed to the amount of insurance as shown in the General Conditions 1-48.

24. CONSTRUCTION CONFERENCE

The Contractor's attention is directed to the preconstruction conference as stated in General Conditions 1-54.

25. EXISTING IMPROVEMENTS

The Contractor shall make every effort to protect all existing improvements and facilities from damage during the progress of his work. No trees, planters, walks, shrubs, signs, fences or other such facilities shall be removed except as shown or called for on the plans or unless specifically authorized in writing by the Engineer. The Contractor shall be held responsible for the care and preservation of the present premises and of adjacent premises and coterminous property. Any parts of them which are injured, damaged or disturbed because of his work shall be repaired, replaced or cleaned by him at his expense.

The Contractor shall apply either water and/or dust palliative for the alleviation or prevention of dust nuisance and damage originating from the Contractor's operation.

26. MAINTENANCE CALL-OUTS

Any expense for maintenance call-outs by the City's traffic signal maintenance personnel resulting from the Contractor's operations and construction of this project shall be borne by the Contractor.

27. WARRANTIES, GUARANTEES AND INSTRUCTION SHEETS:

Warranties, guarantees and instruction sheets shall conform to the provisions in Section 86-1.04, "Warranties, Guarantees and Instruction Sheets" of the State Standard Specifications and these Special Provisions.

Completed work shall be guaranteed to the City by the Contractor for a period of not less than twelve (12) months following the date of acceptance thereof. Where Contractor-installed equipment and/or facilities are damaged prior to final acceptance by the City, the Contractor shall repair or replace such equipment and/or facilities at his/her own expense.

28. STORAGE OF MATERIAL.

The site of work shall be maintained clean at all times. Excavated material shall be loaded directly and hauled away from job site for disposal at the Contractor's expense. The Contractor shall not store material

on job site. He shall store material at a site convenient to the job, off public ways, arranged and paid as a part of his Contract work.

29. GRINDING MATERIALS

All grinding materials shall be removed by the contractor and hauled away from job site for disposal at the Contractor's expense. The cost for removal and relocation must be included in the price bid item cold milling of Base Bid and no additional cost will be allowed therefore.

30. VERIFYING, MARKING, AND RE-ESTABLISHING SURVEY MONUMENTATION

Prior to work, the Contractor shall locate all survey monuments and property corners within the areas of demolition, concrete and paving. Survey ties shall be performed to allow the Contractor to reset/reestablish survey monumentation and/or property markers. All work shall be done by a licensed Surveyor or Civil Engineer authorized to practice Land Surveying in the State of California. Contractor shall submit to the Imperial County. Contractor shall also submit City of El Centro form ED-006 Certificate of Monument preservation completed prior to construction acitivies.

31. CONSTRUCTION STAKING

The Contractor shall perform all construction staking necessary for the Contract. This includes providing surveying for pre and post paving operations. The Contractor shall maintain existing grade throughout and ensure cross slopes are at least two (2) percent unless otherwise directed by the Engineer or his representative.

32. CONSTRUCTION WATER SUPPLY

The Contractor may use City water at the current rate through a water meter to be provided by the City contingent upon a refundable deposit of five hundred dollars ($500).

33. MAINTAINING EXISTING AND TEMPORARY ELECTRICAL SYSTEMS

Traffic signal system shutdown, if required, shall be limited to periods between the hours of nine (9:00) AM and three thirty (3:30) PM, Monday through Friday. Contractor shall coordinate with the City of El Centro for City owned intersections, and shall coordinate with Caltrans for State-Owned intersections.

The Contractor shall place "STOP AHEAD" and "STOP" signs shall be furnished by the Contractor and shall conform to the provisions in Section 12-3.06, "Construction Area Signs," of the Standard Specifications, except that the base material for the signs shall not be plywood.

Two "STOP AHEAD" signs and two "STOP" signs shall be placed for each direction of traffic. Location of the signs shall be as directed by the City Traffic Engineer.

Full compensation for furnishing, installing, maintaining, and removing temporary "STOP AHEAD" and "STOP" signs, and for covering signs not in use, shall be considered as included in the contract lump sum price paid for the signal item involved and not additional compensation will be allowed therefore.

All existing signal indications, pedestrian push buttons, detectors, and control equipment shall be maintained in operation at all times, except during shutdown hours as specified above.

Costs for overhead temporary wiring, which may be required to keep the signals in operation during intersection re-wiring, shall be considered as a part of the lump sum bid price for each intersection.

34. CLEANUP OF SITE.

During the progress of the work, the Contractor shall keep the premises occupied by him in a neat, orderly and sanitary condition. He shall dispose of refuse as often as directed, or as may be necessary so that at no time shall there be any accumulation of rubbish, excavated material or equipment that will interfere with convenience or operation of materials so as to provide the minimum obstruction to traffic at all times.

Dirt, dust, mud, native earth material, sand, gravel, asphalt debris, cement debris and all other construction-related material shall be swept from the street areas in the vicinity of the project sites on a daily basis. The material shall be removed and disposed of by the Contractor. The clean-up wok shall be incidental to respective mobilization bid item and shall be included in the lump sum cost.

35. MOBILIZATION

Mobilization shall consist of: submittals, project meetings, administration, performance bond, payment bond, bid bond, insurance, freight, taxes, safety requirements, Caltrans Encroachment Double Permit, notification and signage of work to community, El Centro Business License, project identity signs, County of Imperial Air Pollution Control District requirements, As-Built Drawings.

36. Encroachment Double Permit

Project improvements are located, just adjacent, to the California State Department of Transportation (Caltrans) Right of Way. It is currently estimated; the Contractor will be required to submit a permit inspection deposit fee of $2,000 at the time the Contractor obtains the double encroachment permit. Contractor shall consider this estimated fee under the appropriate mobilization bid item where Caltrans involvement will be necessary. Contractor shall obtain the Caltrans Double Encroachment Permit and pay all associated encroachment permit fees after the Notice to Proceed is issued to the contractor. The final Encroachment Permit fee will be determined at the conclusion of the project. If the final Encroachment Permit fee is less than $2,000 then a negative change order will be processed for the difference between the original estimated fee and the actual Encroachment Permit Fee. If the final Encroachment Permit fee is greater than $2,000 then a positive change order will be processed compensating the Contractor for the difference between the actual Encroachment Permit Fee and the original estimated fee. In the case where the Contract Documents conflict with Caltrans requirements, the most stringent shall apply.

37. El Centro Business License

The Contractor and Subcontractors performing work on the project shall obtain a city business license from the City of El Centro at 1275 W. Main St. El Centro, CA 92243, telephone number (760) 337-4508. The Contractor and Subcontractors shall contact the Community Development Department regarding the cost of the license and include the business license cost in the proposal.

38. Air Pollution Control District Requirements

The contractor shall be required to comply with the County of Imperial Air Pollution Control District's requirements. County of Imperial Air Pollution Control District forms, requirements and information are available via the internet at https://apcd.imperialcounty.org/. The contractor shall be responsible for completing, submitting, and implementing the construction notification form and dust control plan as required. The contractor shall be responsible for all necessary air pollution requirements. All costs associated with air pollution mitigation shall be included in the respective Mobilization Lump Sum (LS) Item.

39. BMP Inspection and Maintenance

Inspection and maintenance are required for all BMPs (run-off control, and sediment control) to maintain effectiveness for reducing or eliminating the amount of sediment that leaves a site for the duration of the project. All cost associated with BMP Inspection and Maintenance shall be included in the respective Erosion Control Lump Sum (LS) item.

40. Material Delivery Tickets

The Contractor shall provide material delivery tickets to the City for Class II Base, P.C.C. Concrete, Asphalt Concrete, and similar items delivered to the project site. The material tickets shall be presented to the City immediately upon the material item arriving at the project site.

END OF SPECIAL PROVISIONS

CITY OF EL CENTRO

2026 STREETS OVERLAY PROJECT

SPECIFICATIONS

1. GENERAL

1.00 All work and materials shall be in accordance with the applicable codes, ordinances and regulations of the City of El Centro, the State of California, and all other public authorities having jurisdiction. Codes governing this work include, but are not limited to, the latest approved edition of the following: State of California Department of Transportation Standard Specifications, latest edition; Occupational Safety and Health Act (OSHA); and the City of El Centro ordinances and regulations. Requirements of codes and regulations shall be considered as minimum. Where codes conflict, the more stringent shall apply. The contractor shall furnish all materials and labor required for compliance with codes and regulations, even though not specifically mentioned or illustrated.

1.01 Approvals: All work performed and materials furnished for completion of improvements called for on these drawings shall be subject to the inspection and approval of authorized representatives of the City and shall not be covered, buried or otherwise concealed until such has been so inspected and approved. If deemed necessary by the City, earthwork shall be subject to the inspection, testing and approval of a soils testing firm approved by the City. Each subcontractor shall give the inspecting authority no less than 24 hour notice of his need for inspection or testing.

1.02 Site Conditions: Each Contractor and/or subcontractor doing work on this project shall assume sole and complete responsibility for the safety of all persons and property within his work areas, day and night, during both working and non-working hours; and, shall provide all barricades, shoring, flagmen, signs, lighting and other devices required therefore.

1.03 Standard Specifications: The Standard Specifications referenced in these specifications shall be those of the State of California, Department of Transportation (Caltrans) current when these drawings were approved by the City. Copies of such are obtainable from: Caltrans, Central Publication Distribution Unit, 6002 Folsom Blvd, Sacramento, CA 95819. All the work shown or called for on these drawings shall conform to these specifications and those sections of the Standard Specifications referenced herein, including those other sections and ASTM, AWWA and AASHTO standards therein referenced.

1.06 Traffic control: Each Contractor and/ or subcontractor doing work on this project shall provide traffic control signs, lights, flagmen and other devices necessary to protect his work and excavations and to protect vehicular and pedestrian traffic passing through or near his work areas in accordance with the latest adopted edition of the "Manual of Uniform Control Devices" (MUTCD). Each Contractor doing work or operating equipment within ten (10) feet of existing roadway and pedestrian walkways, shall prepare and submit to the City a plan showing the type, location, and other pertinent details of the traffic control signs, lights, flagmen, and other devices he propose to use for traffic control. No work shall commence until: said plan has been reviewed and approved by the City and, where applicable, the County or State; copies of the approved plan have been furnished to all interested agencies; and, said control devices are in place.

1.07 Testing: Each Contractor and/or subcontractor shall include as a part of his work all testing of material and workmanship required by the City and other agencies and utilities having jurisdiction over the work. Testing shall be by an independent laboratory approved by that agency or utility requiring same; including all trench backfill, and compaction of same, Copies of all test reports shall be provided to the City and other agencies and utilities requiring tests. Materials and workmanship found deficient shall be removed, repaired or otherwise corrected to the satisfaction of the governing agency or utility.

1.08 Trench Safety: Each subcontractor shall provide shoring, sheeting, shields and excavated slopes in trench excavations conforming to the requirements of the California Occupational Safety and Health Act (CAL/OSHA) as administered by the State of California, Department of Industrial Relations and depicted in the "Trench and Excavation Safety Guide" available from CAL/OSHA Communications, 525 Golden Gate Avenue, San Francisco, CA 94102.

1.09 Certificates of Compliance: The Contractors and/or subcontractors doing concrete and paving items of work shall provide written and signed certifications from concrete and paving suppliers certifying that all materials supplied by him for the project comply with these Specifications. Certificates shall be of approved form and content, signed by an authorized representative of the product supplier and endorsed by the subcontractor installing the product. Three (3) wet signed copies of said certificates shall be furnished to the City immediately upon completion of the work.

1.10 Encroachment Permits: Subcontractors doing work or operating equipment within City Street, County Road, State Highway, Imperial Irrigation District Ditch and/or Canal or Railroad rights-of-way, shall obtain an encroachment permit from said agencies and shall comply with all the provisions and requirements of said permit. A copy of said permits shall be provided to the City before commencing any work in such areas.

1.11 Design Mixes: Subcontractors providing asphaltic concrete paving, base aggregate or any kind of portland cement concrete, except portland cement concrete required for thrust blocks, post footings and pipeline encasements, shall provide design mixes to the City for approval prior to commencing any work incorporating such materials. Said mix designs shall be the product of an individual qualified and licensed to provide such services and when approved by City, shall become a requirement of these Specifications to the same extent as if fully set out herein.

1.12 Disabled Access:
a. All grades shown on this plan were designed at or below maximums allowed by the Americans with Disability Act (A.D.A.) It is the contractors' responsibility to familiarize themselves with the disability act guidelines (A.D.A.A.G.). In the event that a design question should arise, or a field condition present itself that is different from those shown on these plans, work should cease and the city engineer be notified so that an acceptable solution can be determined.
b, The contractor is advised to carefully check all phases of work relating to A.D.A.A.G. access for this project.Since the code does not allow for construction tolerance, any construction that exceeds maximum or minimum dimensions and slopes as called out by A.D.A.A.G. are subject to rejection and may be required to be removed and replaced, at the contractors' expense.

1.13 Utilities: The existence and location of underground utilities or structures shown on these plans were generated from record plans. To the best of our knowledge the contractor is required to take precautionary measures to protect the utility lines shown hereon and any others not of record or not shown on these plans. All damages thereto caused by the contractor shall be repaired to the appropriate specifications at the expense of the contractor.

2. EARTHWORK

2.01 Clearing: All areas of the work shall be cleared of obstructions and grubbed to a depth of no less than eight (8) inches. Vegetation shall be removed and holes and depressions shall be filled with compacted earth. Debris, vegetation and other deleterious matter not suitable for incorporation into earth fills and embankments shall be removed from the site of work and disposed of in a lawful manner by that subcontractor whose work has generated same. All costs for exporting debris and additional native material shall be the responsibility of the Contractor.

2.02 Grading: The finished surfaces of walkways, ramps, curbs and gutters shall be brought to the elevations shown or indicated on these drawings. All excavation, watering, backfill and embankment work required to complete such grading shall conform to the recommendations of the soils report or as referenced on these drawings. Imported earth, if required, shall be tested and approved as suitable for incorporation into the work by a firm approved by the City. Surplus earth shall be removed and disposed of as required for debris; except, where the drawings show or indicate an area for disposal of surplus earth, all earth suitable for incorporation into fills and embankments shall be uniformly spread and watered over said area. The finished surface of ground after completion of grading shall be within plus (high) or minus (low) 0.10 foot of elevations shown on these drawings. The elevation of finished ground surface between elevations set out on these drawings shall be that obtained by straight-line interpolation. The City shall not pay for any additional material necessary to bring actual grades to design grades as shown on plan.

2.05 Roadway Excavations: All excavations within ten (10) feet of an established public roadway shall be filled and compacted at the end of each work day. Like- wise, piles of material within ten (10) feet of an established public roadway shall be leveled or graded flush. Where excavations for paving work are made adjacent to existing travelways, such excavations shall be backfilled with compacted Class 2 aggregate base to top of existing pavement or grade, sloping away therefrom at a slope safe for passing vehicles. In no case shall said slope be steeper than 20 horizontal to 1 vertical (20:1). Fills near roadways shall be maintained flush with pavement, free of loose surface material, continuously, day and night, until the final surface pavement is in place.

2.06 Compaction: Where on these drawings and in these specifications compaction is called out to be 90% of maximum, plus or minus 3%, such shall be interpreted to mean that tests of compaction shall average at least ninety percent (90%) with none more than ninety-three percent (93%) and none less than eighty-seven percent (87%). Also, in no case shall three consecutive tests of compacted earth work be less than ninety percent (90%).

2.07 Clean-up: Before contract retention money is released, the entire work site shall be cleaned of all debris and refuse that would make the area unsafe or unsightly.

3. STREET WORK

3.01 Concrete: Concrete curbs, sidewalks and gutters shall conform to Sections 73-1.01 thru 73-1.06 of the Standard Specifications. Weakened plane and expansion joints shall be located, spaced and sealed as detailed on these drawings. All concrete shall be furnished with a "Certificate of Compliance" conforming to these Specifications. Unless otherwise shown or detailed, all concrete shall be Class "B" and shall attain a compressive strength of no less than 3000 psi within 28 days of placement per ASTM C-192. Slump at time of placement shall not exceed 4 inches. Curing shall be by application of a pigmented curing compound to all exposed surfaces and the formed edges of walks, driveways and gutters where forms have been removed.

Expansion and weakened plane joints shall be installed and sealed in all concrete curbs, gutters, cross-gutters, ramps, sidewalks and driveways as detailed on these drawings and as herein specified. Sidewalk joints shall match joints in contiguous or parallel curbing. Joints to be sealed shall be sealed with a premium grade, one-component, polyurethane non-sag elastomeric sealant, equal to Sikaflex-15 LM. Sealant shall be applied to gutter joints as shown in details and all sidewalk joints in the vicinity of driveways. Contraction joints shall be placed at 15'-0" on centers and expansion joints shall be placed at 30'-0" on centers and all connections with structures, curb returns, handicap ramps and driveways. Tooled joints in sidewalks shall be spaced 5'-0" on centers.

Prior to the placement of concrete, the subgrade depth shall be inspected to insure that the full depth of concrete, as noted on the plans, is attained. Excess fill material shall be removed as required by the engineer. Areas which are over excavated below the depth of the underlying class 2 base or sand backfill shall be brought to subbase elevation (the bottom of the class 2 base or granular sand backfill) with native material compacted to 90 percent of maximum density at 2 percent over optimum moisture content per ASTM D-1557. The form boards shall be checked for the proper elevation. Compaction tests on the subgrade shall have achieved the density requirements specified. The engineer shall then allow the placement of concrete.

The flowline of all curb and gutter and ribbon gutter shall be water tested before acceptance of the project. Curb extruding machines may be allowed in accordance with CALTRANS STANDARD SPECIFICATIONS SECTION 73-1.05B.

3.02 Subgrade: Subgrade for all street work shall be uniform and compacted to a density of no less than 90% of maximum for a depth of at least eight (8) inches below bottom of concrete or base material to be placed. Subgrade shall be finished to within plus (high) 0.00 foot. or minus (low) 0.15 foot of design surface shown or indicated by these drawings. Moisture in subgrade material at time overlying concrete or base material is placed shall be between optimum and optimum plus 6%. No less than one density test showing compliance of the work with these Specifications shall be provided for each 5000 sq. ft. of subgrade area constructed. The City shall not pay for any additional material necessary to bring actual grades to design grades as shown on plan.

3.03 Aggregate Base: Aggregate base for street paving and associated facilities shall be Class 2 conforming to Sections 26-1.01 thru 26-1.06 of the Standard Specifications; except, motor graders may be used for spreading and shaping material so long as serious segregation does not occur. The finished surface of base just prior to placement of overlying asphaltic or portland cement concrete shall be within plus (high) 0.03 foot or minus (low) 0.03 foot of design surface indicated on these drawings. All base aggregate shall be furnished with a "Certificate of Compliance". Testing of in place material for compaction shall be as required for subgrade.

3.04 Asphaltic Concrete: Asphaltic concrete (AC) paving shall be Type "A" conforming to Section 39-1.01 thru 39-6.03 of the Standard Specifications. Aggregate gradation and asphaltic binder content shall be as required by City; except, in no case shall percent of binder be less than 5% of total weight of mix. Where asphaltic concrete does not abut the edge of other paving or concrete, subcontractor shall either: install a 3" x 6" redwood header; double the thickness of AC for a distance of eighteen (18) inches from the edge; or, extend base and subgrade twelve (12) inches beyond edge of asphalt. All asphalt paving shall be fog sealed after completion in accordance with Sections 37-1.01 thru 37-1.05. Asphalt paving density after compaction shall be no less than 134 pounds per cubic foot. All asphalt shall be furnished with a "Certificate of Compliance."

3.05 Paving Joints: Where new paving joins existing, including areas where paving must be removed and replaced for pipeline or other improvement excavations, sufficient areas of the existing paving shall be removed to insure that a smooth transition between the old and new surfaces results. The new pavement section shall be equal to that removed; except, in no case shall the new paving be less than that called for, shown or required by these drawings for new pavement construction.

4. DEMOLITION NOTES

4.01 Prior to the removal of any trees the contractor shall obtain approval for the removal from the city engineer. Contractor shall coordinate with the city engineer for site inspection of the trees planned for removal.

4.02 Prior to the removal of any private improvements (including landscaping and irrigation) the contractor shall obtain approval for the removal from the City Engineer. Contractor shall coordinate with the City Engineer for site inspection of the improvements planned for removal. The limits of removal shall be adjusted as directed by the City Engineer.

4.03 All private improvements outside of the public right of way removed to facilitate the construction of the new improvements shall be replaced in-kind by the contractor.

4.04 The limits of removal shown on the plans for private concrete driveways and walkways are approximate. The actual limits shall be extended, where needed, to existing construction joints when the limit shown on the plans fall within 5' of the existing construction joint. Contractor shall review the proposed limits of private concrete driveway and walkway removals with the city engineer prior to the work being done. Driveway profiles shall be adjusted accordingly.

5. CONSTRUCTION NOTES

5.01 The existing conditions reflected on these plans are as of the date the plans were signed by the engineer of work. The contractor shall make necessary adjustments in the new improvements (ramps and walkway) locations, widths, and materials) to conform to the conditions at the time of construction. The contractor shall review all proposed adjustments with the city engineer prior to their construction.

5.02 All improvements constructed in private property to transition from the new public improvements to existing private improvements shall be installed with the following criteria:

Maximum longitudinal slope: Walkways = 5%
Maximum Cross Slope: Walkways = 2 %

6. SURVEY MONUMENTS

6.01 The contractor shall be responsible for the locating and protection of all existing survey monuments and/or markers during construction. Contractor shall submit an executed certificate of monument preservation form ED-006 prior to construction activities. Should any monumentation be disturbed during construction, it shall be the Contractor's Responsibility to install new monument(s) as required by City Standards. Refer to Project Specifications for additional direction.

7. UNDERGROUND UTILITY CONFLICT NOTES

7.1 Locations and depths of underground utilities shown are approximate and based on available record drawings. Locations and depths of existing gas laterals are unknown.

7.2 Contractor is responsible for coordinating the mark-out and pot-holing of all underground facilities prior to any excavation.

7.3 Contractor is responsible for coordinating the double adjustment of the gas valves with the Gas Company a minimum of (5) days before the work is completed.

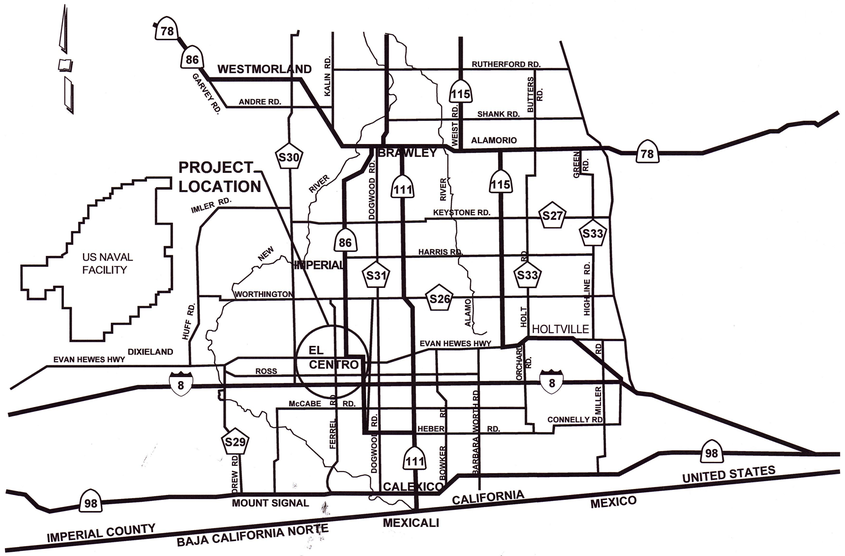
8. ABBREVIATIONS

"XX" L	LEFT OF STATION
"XX" R	RIGHT OF STATION
AC	ASPHALTIC CONCRETE
ECP	ASBESTOS CEMENT PIPE.
BFP	BACK FLOW PREVENTER
BVC	BEGIN VERTICAL CURVE
C&G	CURB AND GUTTER
CI	CURB INLET
CL	CENTERLINE
C.L.	CHAIN LINK
CLR	CLEAR
CO	CLEANOUT
CONC.	CONCRETE
CP	CONCRETE PIPE
DI	DUCTILE IRON
D/W	DRIVEWAY
DWG	DRAWING
EAST	EAST
EL	ELEVATION
ELEC	ELECTRIC
EVC	END VERTICAL CURVE
EX	EXISTING
EXIST	EXISTING
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
G	GAS
GRADE	GRADE
GB	GRADE BREAK
HORIZ.	HORIZONTAL
HP	HIGH PRESSURE
I.E.	INVERT ELEVATION
IID	IMPERIAL IRRIGATION DISTRICT
L.F.	LINEAL FEET
MDD	MAXIMUM DRY DENSITY
MH	MANHOLE
MIN.	MINIMUM
MJ	MECHANICAL JOINT
NORTH	NORTH
NIS	NOT IN SUBMITTAL
N.P.	NON-POTABLE ZONE (PRIVATE RAW WATER LINES
NW	NON-POTABLE WATER
OC	ON CENTER
OG	ORIGINAL GROUND
O/H	OVERHEAD
PCR	POINT OF CURB RETURN
PT	POINT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INFLECTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RR	RAILROAD
R/W	RIGHT OF WAY
SOUTH	SOUTH
S	SEWER
SD	STORM DRAIN
SDRSD	SAN DIEGO REGIONAL STANDARD DRAWINGS
SL	SEWER LINE
SMH	SEWER MANHOLE
STA	STATION
STD	STANDARD
TC	TOP OF CURB
TELE	TELEPHONE
TV	TELEVISION
TYP	TYPICAL
UIG	UNDERGROUND
U.N.O.	UNLESS NOTED OTHERWISE
U.S.P.S.	UNITED STATES POSTAL SERVICE
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT.	VERTICAL
W	WATER
WEST	WEST
W/	WITH
WPJ	WEAKEND PLANE JOINT

NO WORK SHALL BE DONE ON THIS SITE UNTIL BELOW AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE.
Underground Service Alert
Call: TOLL FREE
1-800
422-4133
TWO WORKING DAYS BEFORE YOU DIG

NOTES TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. PRIOR TO ANY WORK THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT TO VERIFY LOCATION AND DEPTHS OF ANY EXISTING UTILITIES
2. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.



REGIONAL MAP

SCALE: N.T.S.

EROSION AND SEDIMENT CONTROL PLAN STANDARD NOTES

1. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THERE IS A FIFTY PERCENT (50%) CHANCE OF RAIN WITHIN A FORTY-EIGHT (48) HOUR PERIOD. SILT AND DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.
2. ONE HUNDRED TWENTY FIVE PERCENT (125%) OF ALL SUPPLIES NEEDED FOR BMP MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL DEPLOYMENT AND COMPLETE INSTALLATION IN FORTY EIGHT (48) HOURS OR LESS OF A FORECASTED RAIN.
3. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
4. CONTRACTOR TO CONDUCT STREET SWEEPING EACH DAY AT CLOSE OF BUSINESS TO REMOVE CONSTRUCTION DEBRIS. INCREASE FREQUENCY IF DEBRIS ARE NOTICEABLE WITHIN THE TRAVELLED WAY.
5. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED. MAINTENANCE SHALL INCLUDEE REMOVAL OF SILT FROM BARRIERS AND SEDIMENTATION DEVICES, SEEDING OR MULCHING OF DAMAGED STABILIZED AREAS AND REPLACEMENT OR REPAIR OF WORN OR DAMAGED GEOTEXTILE FABRIC.
6. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
7. ALL BARE SLOPES AND DISTURBED AREAS SHALL BE PLANTED AS EACH STAGE OF GRADING IS COMPLETE. SUITABLE MEASURES TO PREVENT SLOPE EROSION, INCLUDING, BUT NOT LIMITED TO, RAPID GROWING VEGETATION SUITABLE TO STABILIZE THE SOILS SHOULD BE INSTALLED ON ALL AREAS, AND/OR SUCH AREAS SHOULD BE MULCHED, WHILE THE PERMANENT VEGETATION COVER MATURES ENOUGH TO PROVIDE STABILITY.
8. ANY DISTURBED AREA THAT WILL NOT HAVE ANY SOIL DISTURBING ACTIVITIES FOR 14 DAYS OR MORE MUST BE FULLY PROTECTED FROM EROSION UNTIL ADEQUATE LONG-TERM PROTECTIONS ARE INSTALLED. ALL EROSION CONTROL MEASURES SHALL REMAIN INSTALLED AND MAINTAINED DURING ANY INACTIVE PERIOD.
9. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OR VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
10. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
11. CONSTRUCTION MATERIALS SHALL BE STORED IN STAGING AREAS ON-SITE UNTIL NEEDED FOR INSTALLATION. WASTE WILL EITHER BE PLACED IN DUMPSTERS OR IN WASTE MANAGEMENT AREAS. ALL WASTE WILL BE TRANSPORTED OFF-SITE IN A TIMELY MANNER TO APPROVED WASTE DISPOSAL AREAS (DUMPS). STORAGE, HANDLING AND TRANSPORTATION OF WASTE SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS.
12. CONSTRUCTION MATERIALS DELIVERED TO THE SITE SHALL BE STORED THROUGHOUT THE SITE. THE CONTRACTOR SHALL STORE THE MATERIALS AS TO MINIMIZE THE RISK OF STORM WATER POLLUTION, GROUND WATER POLLUTION, SOIL CONTAMINATION AND INJURY TO WORKERS AND VISITORS.
13. EQUIPMENT TO BE STORED, FUELED AND MAINTAINED ON SITE SHALL BE KEPT AWAY FROM ANY DRAINAGE COURSES.
CONTRACTORS SHALL USE A DRAINAGE PAN OR DROP CLOTH TO CATCH ANY LEAKS OR SPILLS AT A MINIMUM.

NOTE:

EROSION CONTROL PLAN MUST BE APPROVED BY THE CITY OF EL CENTRO AND IMPLEMENTED ON-SITE BEFORE ANY GRADING ACTIVITIES OCCUR.

UTILITIES

DOMESTIC WATER, SANITARY SEWER, STORM SEWER	*CITY OF EL CENTRO* *PUBLIC WORKS DEPARTMENT* 307 W. BRIGHTON AVE. EL CENTRO, CALIFORNIA 92243 PHONE: 760-337-4505 CONTACT: MARCO CANCHOLA, UTILITIES/STREETS SUPERVISOR	
	ENGINEERING DEPARTMENT 1275 MAIN ST. EL CENTRO, CALIFORNIA 92243 PHONE: 760-337-5182 CONTACT: FELIX DE LEON PRINCIPAL ENGINEER	
TELEPHONE	*AT&T* 1029 S. 2ND STREET, ROOM 3 EL CENTRO, CA 92243 PHONE: 760-337-3358	
ELECTRICITY	*IMPERIAL IRRIGATION DISTRICT* 333 E. BARIONI BLVD. P.O. BOX 937 IMPERIAL, CA 92251 PHONE: 760-339-9263	
CABLE TV	*SPECTRUM CABLE* 580 E. Danenberg Dr., Suite 201 EL CENTRO, CALIFORNIA 92243 PHONE: (866) 874-2389	
GAS	*SOUTHERN CALIFORNIA GAS COMPANY* 920 N. 4TH STREET EL CENTRO, CA 92243 PHONE: 800-227-2600	
EMERGENCY FIRE DEPT.	*FIRE DEPARTMENT* 1910 N. WATERMAN AVE. EL CENTRO, CA 92243 PHONE: 760-337-4530	

SHEET INDEX

1.1 TITLE SHEET/GENERAL & TECHNICAL NOTES
2.1 KEY MAP AND IMPROVEMENTS PLAN
2.2 IMPROVEMENTS PLAN AND STANDARD DETAILS
3.1 STANDARD DETAILS
3.2 8TH STREET STRIPING PLANS

UNAUTHORIZED CHANGES AND USES: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

CITY OF EL CENTRO
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

ENGINEERING DEPARTMENT
1275 MAIN STREET
EL CENTRO, CALIFORNIA
(760) 337-5182

APPROVED: DATE 11/2/26
ABRAHAM CAMPOS, P.E.
CITY ENGINEER / PUBLIC WORKS DIRECTOR

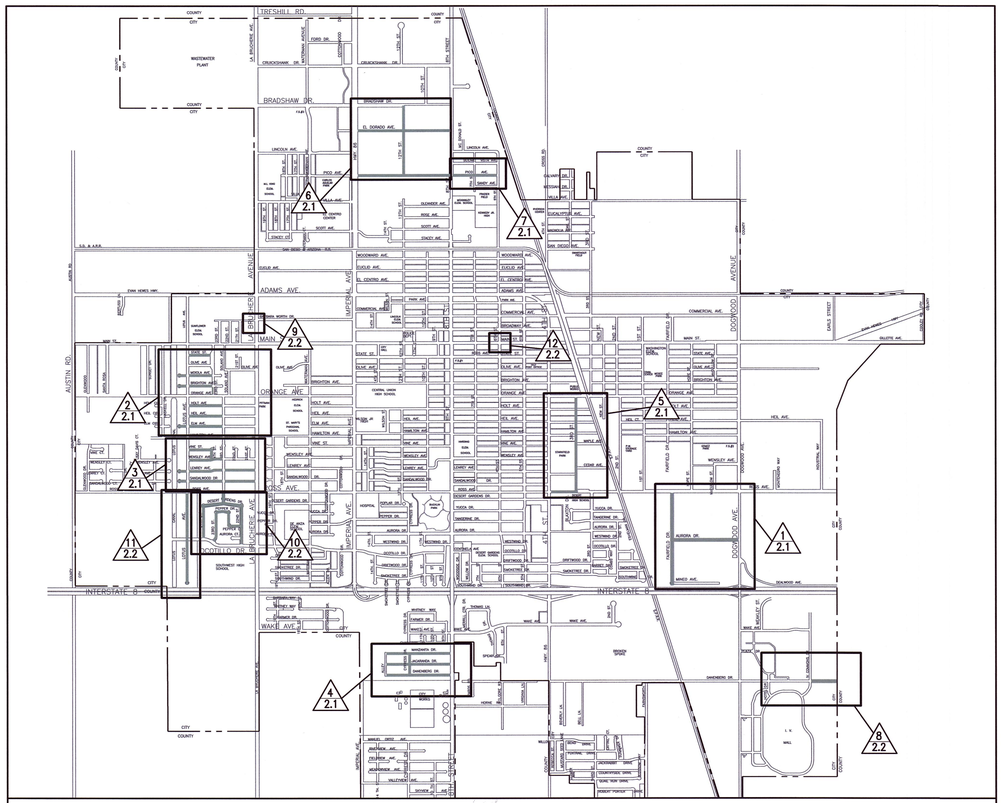
REGISTERED PROFESSIONAL ENGINEER
ABRAHAM CAMPOS
No. 76081
09/30/26
CIVIL
STATE OF CALIFORNIA

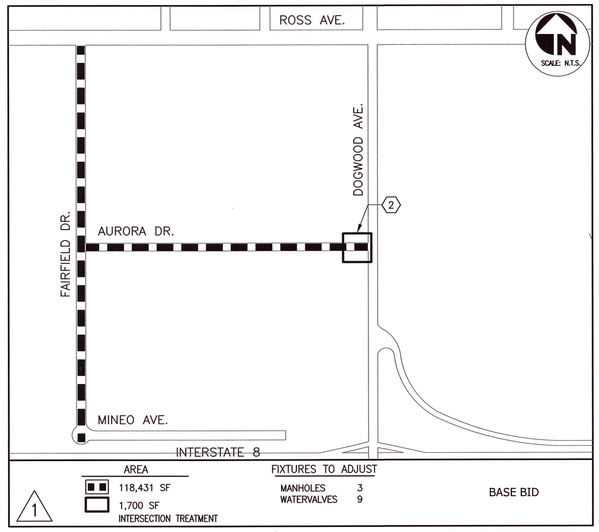
PROJECT TITLE : 2026 STREETS OVERLAY PROJECT
SHEET CONTENT : TITLE SHEET/GENERAL & TECHNICAL NOTES

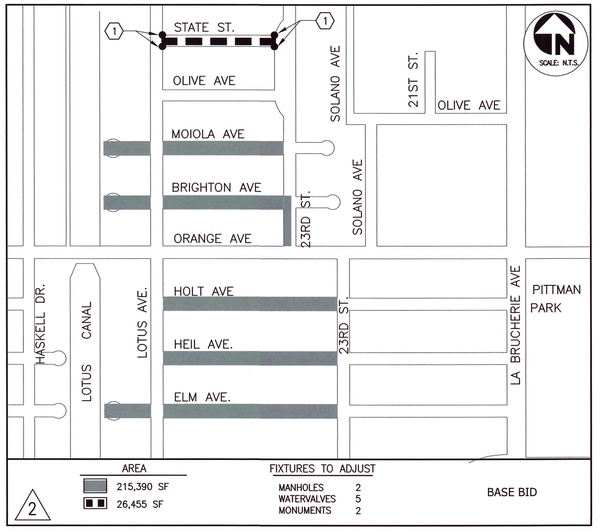
NO.	REVISION	DATE
1	ORIGINAL	

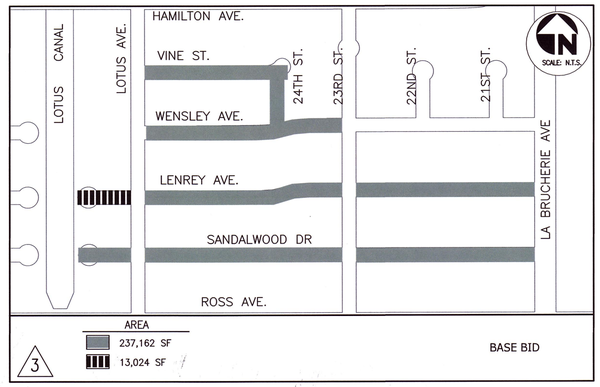
DESIGN BY:	ENG.
DRAWN BY:	G.M.
CK'ED. BY:	H.S.
APV'ED.BY:	A.C.

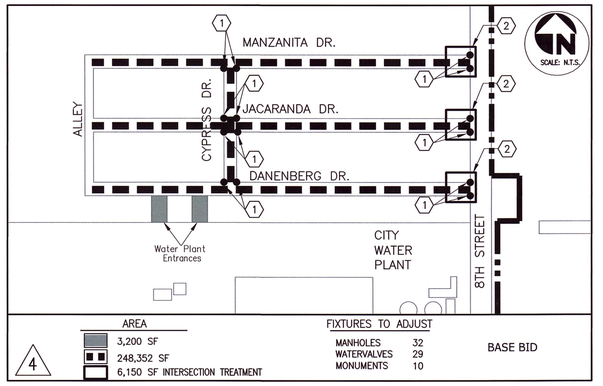
SHEET 1.1
1 OF 5 SHEETS











GENERAL NOTES

1. CONTRACTOR TO SUBMIT TRAFFIC CONTROL PLANS FOR CITY ENGINEER REVIEW, 2 WEEKS PRIOR TO WORK, FOR EACH RESPECTIVE PROJECT AREA.
2. PAVING AND GRINDING OPERATIONS SHALL BE CONDUCTED IN COMPLIANCE WITH STANDARD "NS-3 PAVING AND GRINDING OPERATIONS" AS PUBLISHED BY THE CALTRANS STORM WATER QUALITY HANDBOOKS CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
3. ALL WORK LIMITS SHALL BE COORDINATED WITH THE CITY ENGINEER OR HIS/HER REPRESENTATIVE PRIOR TO BEGINNING WORK.
4. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS. IN THE EVENT PLANS ARE INCORRECT, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IN WRITING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR BENCHMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYOR'S ACT (BUSINESS AND PROFESSIONS CODE SECTION 8771). REFER TO PROJECT SPECIFICATION FOR ADDITIONAL DIRECTION.
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7. WORK SHALL STOP AT THE NEAREST CURB LINE OF THE PERPENDICULAR STREET NOT RECEIVING WORK.
8. WHEN MULTIPLE SYSTEMS JOIN AT AN INTERSECTION THE HIGHER SYSTEM SHALL PREVAIL ACROSS THE ENTIRE INTERSECTION.
9. RE-GRADE AREAS OF WORK AS NECESSARY TO PROVIDE A FINISHED APPEARANCE. DISPOSE OF EXCESS MATERIAL.
10. INFORMATION ON THIS SHEET REGARDING DIMENSIONS IS APPROXIMATE AND IS ONLY PROVIDED FOR BIDDING AND ILLUSTRATIVE PURPOSES. ACTUAL LENGTHS MAY VARY SLIGHTLY AND MAY BE MODIFIED IN FIELD TO MATCH EXISTING IMPROVEMENTS.
11. CONCRETE COLLARS SHALL BE RE-ESTABLISHED AROUND ALL ADJUSTED FIXTURES. SEE DETAIL 5 & 7 ON SHEET 2.2
12. THE CONTRACTOR SHALL POST AND REMOVE TEMPORARY "NO PARKING" SIGNS AS NEEDED. SIGNS SHALL BE IN PLACE FOR AT LEAST TWO (2) BUSINESS DAYS IN ADVANCE OF COMMENCING OF WORK. SIGNS MAY BE ATTACHED TO EXISTING POLES, OR ANY AVAILABLE SUPPORT THAT MAY EXIST IN THE PUBLIC RIGHT-OF-WAY OR THE CONTRACTOR MAY FURNISH SIGN SUPPORTS AS MAY BE NECESSARY.
13. MULTIPLE NOTICES SHALL BE DELIVERED AND HUNG ON DOOR HANDLES OF EACH RESIDENCE AND TO EACH BUSINESS AFFECTED BY THE CONSTRUCTION. THE FORMAT AND CONTENT OF THE NOTICES SHALL BE SUBMITTED TO THE CITY FOR APPROVAL AT LEAST TWO (2) WEEKS PRIOR TO USE. NOTICES WILL BE REQUIRED AS FOLLOWS:

   A) A GENERAL NOTICE IN ALL CASES WILL BE REQUIRED TWO (2) WEEKS IN ADVANCE OF WORK, DESCRIBING THE SEQUENCE OF ACTIVITIES THAT WILL AFFECT PARKING AND ACCESS TO PROPERTIES, TO BE DELIVERED TWO (2) WEEKS PRIOR TO CONSTRUCTION. THIS NOTICE WILL GENERALLY ADDRESSING PARKING AND ACCESS FOR STREET RESURFACING WITH FURTHER DETAILS TO FOLLOW ON SUBSEQUENT NOTICES, EXCEPT DETAILED INFORMATION WILL BE REQUIRED IN THIS FIRST NOTICE TO EXPLAIN THE LEVELING COURSE PORTION OF THE WORK.

GENERAL NOTES

B) A NOTICE PRIOR TO ARAM, WITH SPECIFICS ABOUT PARKING AND ACCESS, TO BE DELIVERED TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION.

C) A NOTICE PRIOR TO SLURRY, WITH SPECIFICS ABOUT PARKING AND ACCESS TO BE DELIVERED TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION.

STRIPING GENERAL NOTES

1. ALL PAVEMENT MARKING AND REFLECTIVE MARKERS SHALL CONFORM TO THE 2024 CALTRANS STANDARD SPECIFICATIONS, AND LATEST MUTCD.
2. ALL INTERSECTION WITH A STOP SIGN OR CROSSWALK SHALL BE REPLACED WITH MARKINGS PER DETAIL 16 ON SHEET 3.1. YELLOW COLOR CONTINENTAL CROSSWALK SHALL BE CONSIDERED WHEN WITHIN SPECIFIC DISTANCES AS PER VEHICLE CODE, DIVISION 11, CHAPTER 2, ARTICLE 1, 21368.
3. CONTRACTOR SHALL CONSTRUCT DETAILED RECORD OF EXISTING STRIPING IN ALL AREAS WHERE WORK IS PERFORMED, AND SHALL RE-STRIPE ROADWAYS AFTER WORK IS COMPLETE. STOP BAR AND STOP LEGEND SHALL BE INSTALLED AT ALL EXISTING STOP SIGNS WITHIN THE PROJECT AREA. ALL NOTES TO BE SUBMITTED TO CITY.
4. REMOVE ALL CONFLICTING STRIPING BY SAND BLASTING OR WATER BLASTING METHOD.
5. ALL STRIPING SHALL BE "CAT-TRACKED" AND APPROVED BY CITY ENGINEER OR HIS REPRESENTATIVE PRIOR TO PLACEMENT OF PERMANENT STRIPING.
6. ARROWS SHALL BE 8' IN ADVANCE OF STOP BARS OR CROSSWALKS WHERE OCCURS.
7. ALL EXISTING RAISED PAVEMENT MARKERS (RPMS) SHALL BE REMOVED AND SHALL BE REPLACED WITH THE APPLICABLE PAVEMENT DELINEATION TREATMENTS SPECIFIED IN THE 2025 CALTRANS STANDARD PLANS AS FURTHER DETAILED IN THE TABLE BELOW.

EXISTING PATTERN	APPROVED DETAIL
DOUBLE YELLOW LINE	DETAIL 22 FROM 2025 CALTRANS STD PLAN A20A
TWO-WAY LEFT TURN LANES	DETAIL 32 FROM 2025 CALTRANS STD PLAN A20B
CHANNELIZING LINE	DETAIL 38 FROM 2025 CALTRANS STD PLAN A20D
LANE LINE	DETAIL 9 FROM 2025 CALTRANS STD PLAN A20A

KEYNOTES

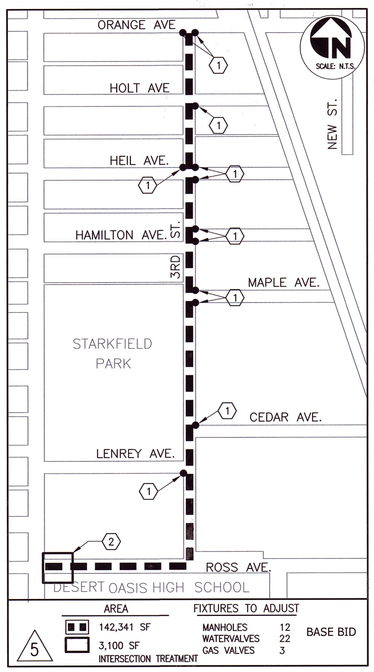
(1) REMOVE AND REPLACE NEW ADA RAMP PER CITY STANDARDS. TYPE OF RAMP TO BE COORDINATED WITH CITY REPRESENTATIVE DURING CONSTRUCTION.

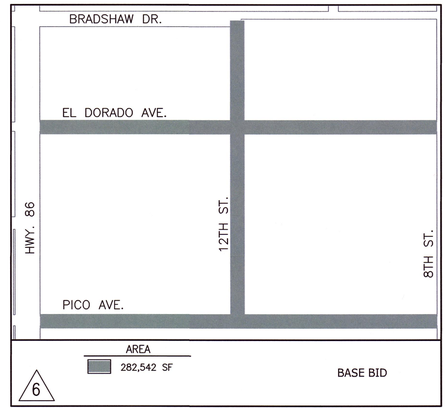
(2) INTERSECTION JOINT/TREATMENT SYSTEM II PER DETAIL 3 ON SHEET 2.2

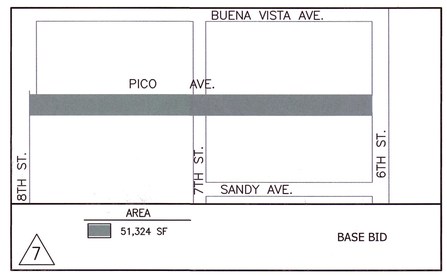
LEGEND

MAINTENANCE TREATMENT:

- TYPE II SLURRY SEAL AND CRACK SEALING
- SYSTEM I PER DETAIL 1 ON SHEET 2.2
- SYSTEM II PER DETAIL 2 ON SHEET 2.2
- REMOVE AND REPLACE ADA RAMP PER CITY STANDARDS. SEE DETAILS PAGE FOR TYPICAL RAMPS.







CITY OF EL CENTRO
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

(760) 337-5182
EL CENTRO, CALIFORNIA

ENGINEERING DEPARTMENT
1275 MAIN STREET

APPROVED: 1/2/26 DATE

ABRAHAM CAMPOS, PE.
CITY ENGINEER / PUBLIC WORKS DIRECTOR

PROFESSIONAL ENGINEER ABRAHAM CAMPOS No. 70281 09/30/26 CIVIL STATE OF CALIFORNIA

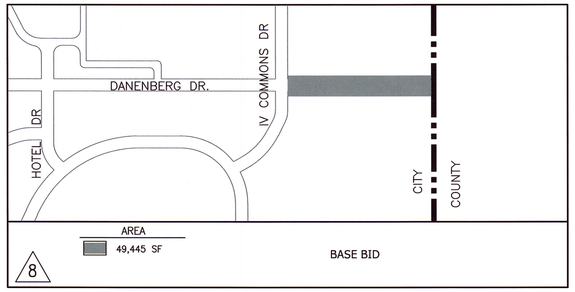
PROJECT TITLE : 2026 STREETS OVERLAY PROJECT

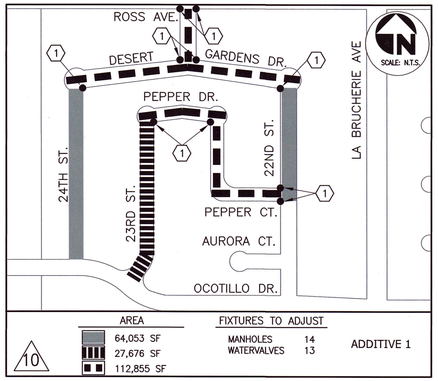
SHEET CONTENT : KEY MAP & IMPROVEMENT PLANS

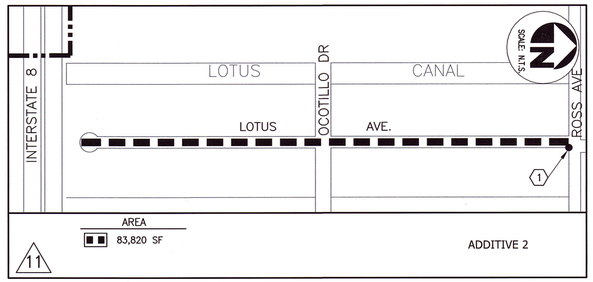
NO.	REVISION	DATE
1	ORIGINAL	

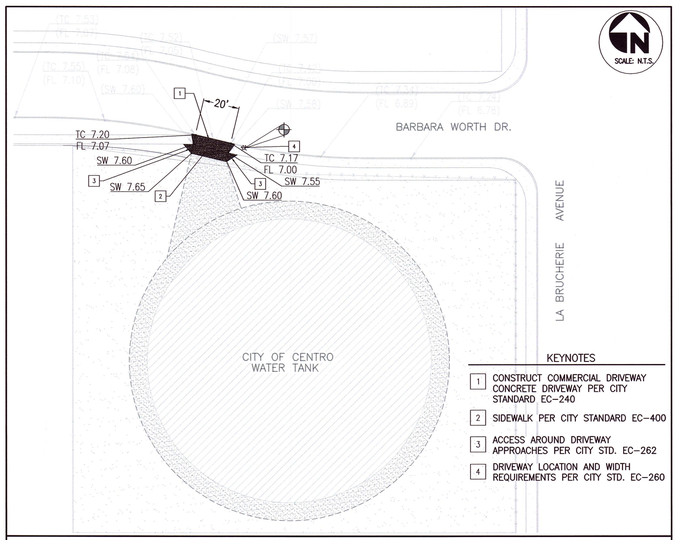
DESIGN BY: ENG.
DRAWN BY: G.M.
CK'ED. BY: H.S.
APV'ED.BY: A.C.

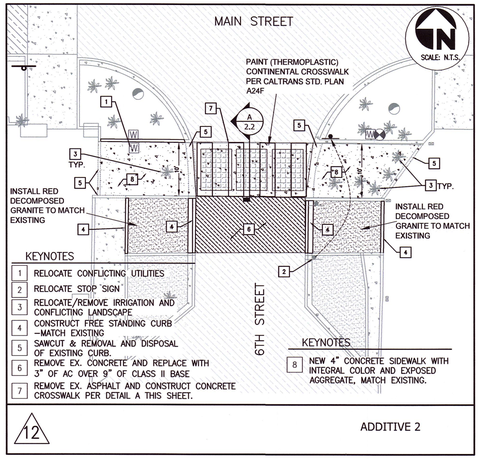
SHEET 2.1
2 OF 5 SHEETS

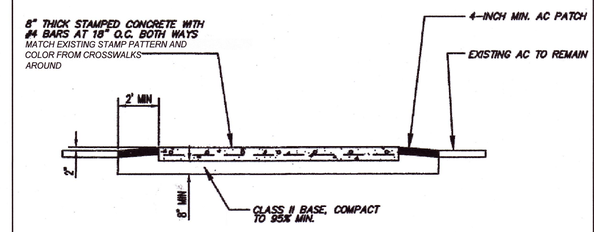








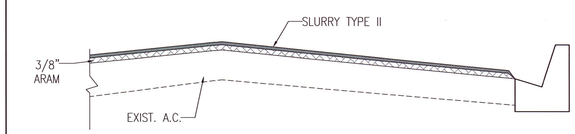




CROSSWALK SECTION A

SCALE: N.T.S.

A



SYSTEM I

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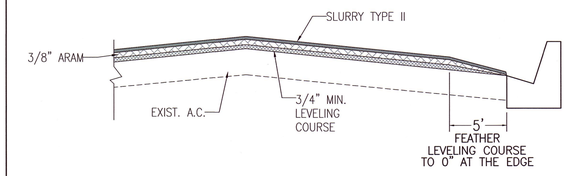

SYSTEM II

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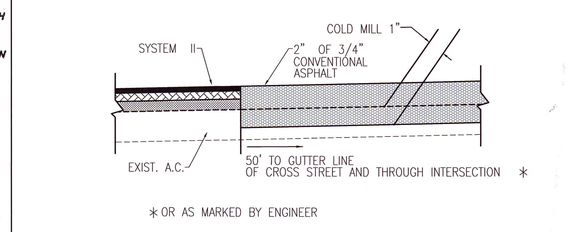

INTERSECTION JOINT SYSTEM II

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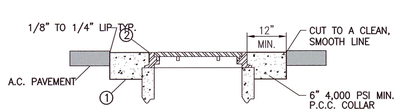


CONSTRUCTION NOTES

① TO ALL CONTACT SURFACES AND CONSTRUCT 6" THICK P.C.C. COLLAR OVER SUBGRADE COMPACTED TO 95% MIN. RELATIVE COMPACTION.

② PROVIDE GRADE RINGS AS NEEDED TO SET FRAME AND COVER TO GRADE (11" MAX).

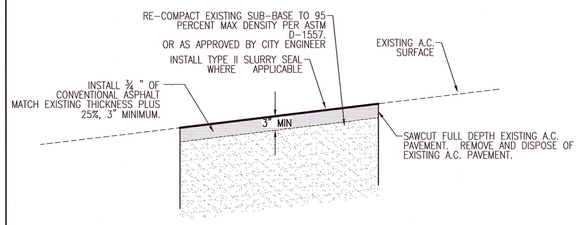
GENERAL NOTES

1. ALL ADJUSTMENT WORK OF THE FRAME AND COVER SHALL BE DONE WITHIN THE SAME WORKING DAY. DURING THE TIME THE ADJUSTMENT WORK IS BEING DONE, THE WORK SHALL BE PROTECTED IN ACCORDANCE WITH THE MUTCD.
2. THE CONTRACTOR SHALL NOT LEAVE THE SLOT AROUND THE MANHOLE / VALVE UNPROTECTED.

ADJUST MANHOLE / VALVE TO GRADE

SCALE: N.T.S.

5



DIG-OUT DETAIL

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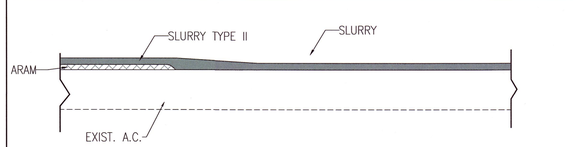
6

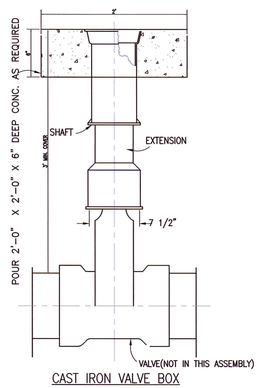


NOTE: PATCH AND REPAIR AS DIRECTED BY ENGINEER

CUL-DE-SAC JOIN AT BULB - SLURRY ONLY

SCALE: N.T.S.

4



CAST IRON VALVE BOX

VALVE BOX & COVER ASSEMBLY TYPICAL

SCALE: N.T.S.

7

GENERAL NOTES

1. CONTRACTOR TO SUBMIT TRAFFIC CONTROL PLANS FOR CITY ENGINEER REVIEW, 2 WEEKS PRIOR TO WORK, FOR EACH RESPECTIVE PROJECT AREA.
2. PAVING AND GRINDING OPERATIONS SHALL BE CONDUCTED IN COMPLIANCE WITH STANDARD "NS-3 PAVING AND GRINDING OPERATIONS" AS PUBLISHED BY THE CALTRANS STORM WATER QUALITY HANDBOOKS CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
3. ALL WORK LIMITS SHALL BE COORDINATED WITH THE CITY ENGINEER OR HIS/HER REPRESENTATIVE PRIOR TO BEGINNING WORK.
4. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS. IN THE EVENT PLANS ARE INCORRECT, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IN WRITING.
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11. CONCRETE COLLARS SHALL BE RE-ESTABLISHED AROUND ALL ADJUSTED FIXTURES. SEE DETAIL 5 & 7 ON SHEET 2.2
12. THE CONTRACTOR SHALL POST AND REMOVE TEMPORARY "NO PARKING" SIGNS AS NEEDED. SIGNS SHALL BE IN PLACE FOR AT LEAST TWO (2) BUSINESS DAYS IN ADVANCE OF COMMENCING OF WORK. SIGNS MAY BE ATTACHED TO EXISTING POLES, OR ANY AVAILABLE SUPPORT THAT MAY EXIST IN THE PUBLIC RIGHT-OF-WAY OR THE CONTRACTOR MAY FURNISH SIGN SUPPORTS AS MAY BE NECESSARY.
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GENERAL NOTES

B) A NOTICE PRIOR TO ARAM, WITH SPECIFICS ABOUT PARKING AND ACCESS, TO BE DELIVERED TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION.

C) A NOTICE PRIOR TO SLURRY, WITH SPECIFICS ABOUT PARKING AND ACCESS TO BE DELIVERED TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION.

STRIPING GENERAL NOTES

1. ALL PAVEMENT MARKING AND REFLECTIVE MARKERS SHALL CONFORM TO THE 2024 CALTRANS STANDARD SPECIFICATIONS, AND LATEST MUTCD.
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5. ALL STRIPING SHALL BE "CAT-TRACKED" AND APPROVED BY CITY ENGINEER OR HIS REPRESENTATIVE PRIOR TO PLACEMENT OF PERMANENT STRIPING.
6. ARROWS SHALL BE 8' IN ADVANCE OF STOP BARS OR CROSSWALKS WHERE OCCURS.
7. ALL EXISTING RAISED PAVEMENT MARKERS (RPMS) SHALL BE REMOVED AND SHALL BE REPLACED WITH THE APPLICABLE PAVEMENT DELINEATION TREATMENTS SPECIFIED IN THE 2025 CALTRANS STANDARD PLANS AS FURTHER DETAILED IN THE TABLE BELOW.

EXISTING PATTERN	APPROVED DETAIL
DOUBLE YELLOW LINE	DETAIL 22 FROM 2025 CALTRANS STD PLAN A20A
TWO-WAY LEFT TURN LANES	DETAIL 32 FROM 2025 CALTRANS STD PLAN A20B
CHANNELIZING LINE	DETAIL 38 FROM 2025 CALTRANS STD PLAN A20D
LANE LINE	DETAIL 9 FROM 2025 CALTRANS STD PLAN A20A

KEYNOTES

① REMOVE AND REPLACE NEW ADA RAMP PER CITY STANDARDS. TYPE OF RAMP TO BE COORDINATED WITH CITY REPRESENTATIVE DURING CONSTRUCTION.

② INTERSECTION JOINT/TREATMENT SYSTEM II PER DETAIL 3 ON SHEET 2.2.

LEGEND

MAINTENANCE TREATMENT:

- TYPE II SLURRY SEAL AND CRACK SEALING
- SYSTEM I PER DETAIL 1 ON SHEET 2.2
- SYSTEM II PER DETAIL 2 ON SHEET 2.2
- REMOVE AND REPLACE ADA RAMP PER CITY STANDARDS. SEE DETAILS PAGE FOR TYPICAL RAMPS.

CITY OF EL CENTRO
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
ENGINEERING DEPARTMENT
1275 MAIN STREET
EL CENTRO CALIFORNIA
(760) 337-5182

APPROVED: 9/2/26
DATE
ABRAHAM CAMPOS, PE.
CITY ENGINEER / PUBLIC WORKS DIRECTOR

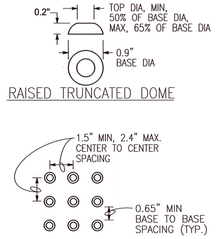
REGISTERED PROFESSIONAL ENGINEER ABRAHAM CAMPOS No. 70281 09/30/26 STATE OF CALIFORNIA

PROJECT TITLE : 2026 STREETS OVERLAY PROJECT
SHEET CONTENT : IMPROVEMENTS PLAN AND STANDARD DETAILS

NO.	REVISION	DATE
1	ORIGINAL	

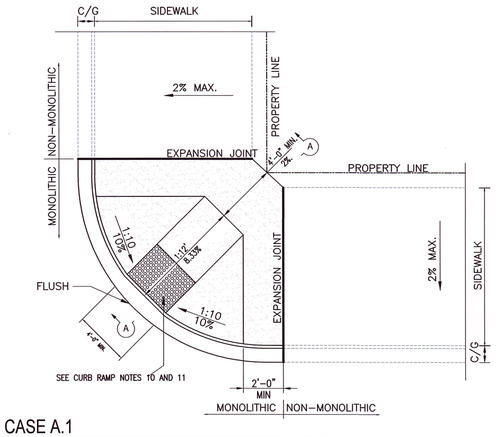
DESIGN BY:	ENG.
DRAWN BY:	G.M.
CK'ED. BY:	H.S.
APV'ED.BY:	A.C.

SHEET 2.2
3 OF 5 SHEETS



DETECTABLE WARNING SURFACE

SCALE: N.T.S. — 8



CASE A.1

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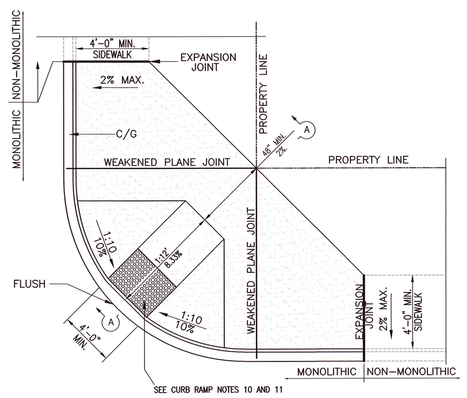

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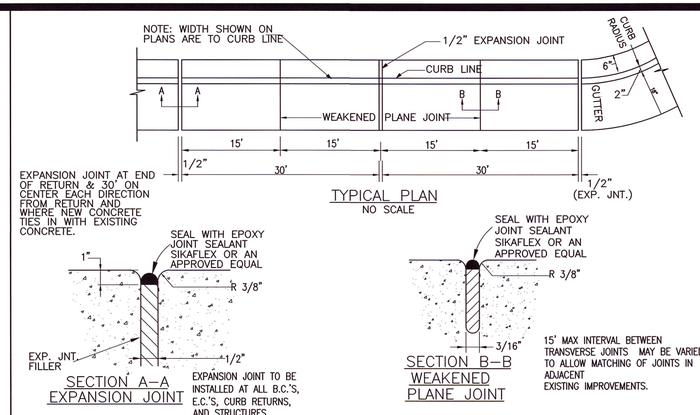
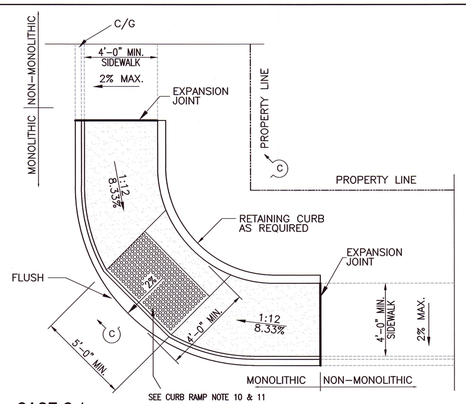


CURB AND GUTTER JOINTS - (MATCH SIDEWALK)

SCALE: N.T.S. — 11



CASE C.1

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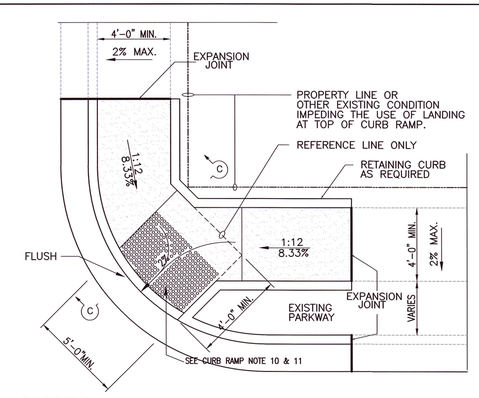

CASE C.3

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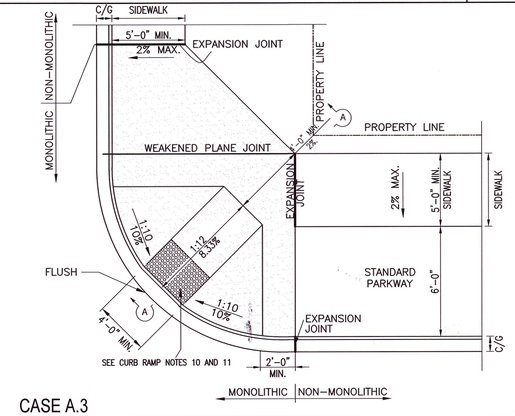

CASE A.3

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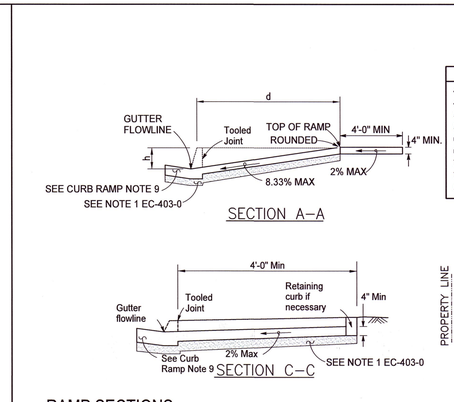

RAMP SECTIONS

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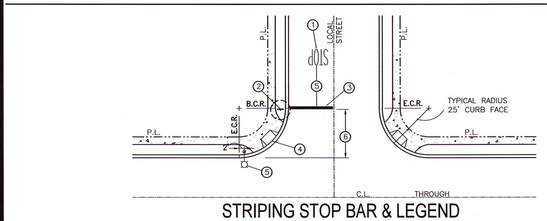


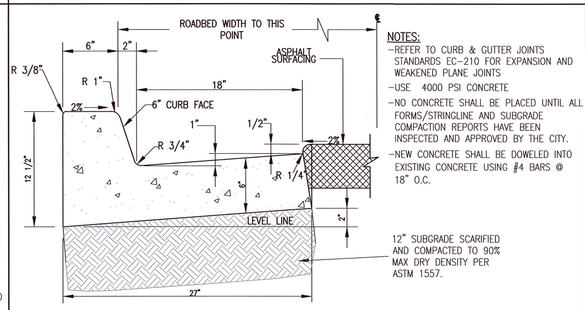
STRIPING STOP BAR & LEGEND

1. STOP LEGEND – THERMO PLASTIC. CENTERED ON TRAVEL LANE.
2. STOP SIGN R1(36") INSTALLED PER STD. DETAIL EC-831
3. 12" STOP BAR–WHITE–THERMO PLASTIC
4. ADA RAMP PER CITY SANDARDS
5. SHALL BE INSTALLED 8' FROM STOP BAR
6. VARIES. 12' MINIMUM. TYPICAL AT BCR. WHEN CROSSWALK EXISTS, SHALL BE 4' FROM IT.

NOTE 1: TO BE PAINT WHEN OVER SLURRY AND THERMOPLASTIC WHEN OVER ASPHALT.
NOTE 2: STOP BAR AND STOP LEGEND SHALL BE PAINTED IN ALL EXISTING STOP SIGNS WITHIN THE PROJECT AREA.

STRIPING R1

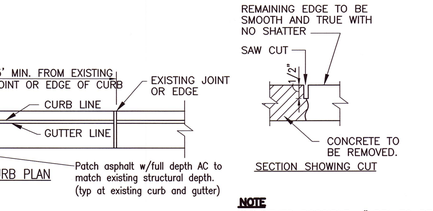
SCALE: N.T.S. — 16



NOTES:
- REFER TO CURB & GUTTER JOINTS STANDARDS EC-210 FOR EXPANSION AND WEAKENED PLANE JOINTS
- USE 4000 PSI CONCRETE
- NO CONCRETE SHALL BE PLACED UNTIL ALL FORMS/STRINGLINE AND SUBGRADE COMPACTION REPORTS HAVE BEEN INSPECTED AND APPROVED BY THE CITY.
- NEW CONCRETE SHALL BE DOWELED INTO EXISTING CONCRETE USING #4 BARS @ 18" O.C.

TYPE A-6 CURB

SCALE: N.T.S. — 17

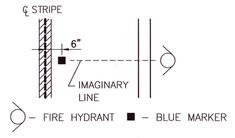


NOTE
WHENEVER POSSIBLE "AREA TO BE REMOVED" SHALL BE EXTENDED TO JOINT, EDGE OR SCORE MARK. FINAL DETERMINATION SHALL BE MADE BY CITY ENGINEER.

CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: N.T.S. — 18

"BLUE DOT" MARKER PLACEMENT
1. THE REFLECTIVE SIDE SHALL FACE THE FLOW OF TRAFFIC.
2. THE "BLUE DOT" SHALL BE IN LINE WITH THE FIRE HYDRANT, EXCEPT WHERE TWO (2) DOTS ARE USED FOR INTERSECTIONS.
3. A BLUE REFLECTIVE MARKER WILL BE PLACED 6" ON CENTER FROM PAINTED LINES AS PER PLACEMENT STANDARDS EC-813-1, OR 2 AS APPLICABLE. IF NO TRAFFIC LINES EXIST, PLACE BLUE DOT 6" FROM CENTER OF THE STREET ON THE FIRE HYDRANT SIDE.
4. IF A PAINTED TRAFFIC LIMIT LINE FOR STOP SIGNS EXISTS, PLACE THE SECOND "BLUE DOT" TWO FEET BACK FROM LINE, 6" ON CENTER FROM PAINTED TRAFFIC LIMIT LINE (SEE STANDARD EC-813-1, "TWO LANE STREET AT INTERSECTION").
5. IF NO TRAFFIC LIMIT LINE FOR STOP SIGNS EXISTS, PLACE "BLUE DOT" IN LINE WITH SIDEWALK EDGE ON THE SIDE CLOSEST TO PROPERTY LINE, 6" ON CENTER FROM THE CENTER OF THE STREET LINE (SEE STANDARD EC-813-1, "TWO LANE STREET AT INTERSECTION").
6. THE "BLUE DOT" SHALL BE APPLIED TO A DRY, DIRT FREE STREET AND ENOUGH EPOXY SHALL BE APPLIED SO THAT SOME EPOXY OOZES OUT AROUND THE EDGES OF THE "BLUE DOT".

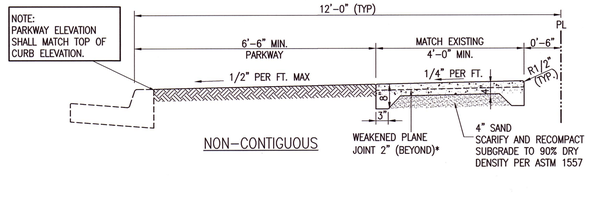


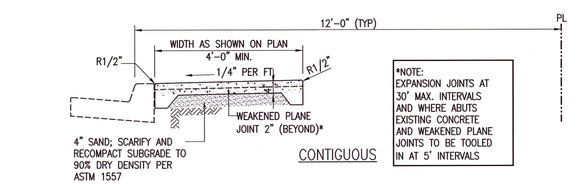
UNMARKED STREETS: PLACE MARKER 6" FROM EDGE OF IMAGINARY LINE OF STREET ON

MARKED STREET: PLACE MARKER 6" FROM CENTERLINE OF PAINTED LINE TO CENTERLINE OF MARKER ON HYDRANT SIDE.

"BLUE DOT" MARKER PLACEMENT

SCALE: N.T.S. — 19





NOTES:
1. CONCRETE SHALL BE 4,000 PSI MIN.
2. SEE STANDARD DRAWING EC-401 & EC-402 FOR ADDITIONAL INFORMATION.
3. LIGHT BROOM FINISH SHALL BE USED FOR SIDEWALK.
4. NEW CONCRETE TO BE DOWELED TO EXISTING CONCRETE USING #4 BARS @ 18" O.C.

SIDEWALK (TYPICAL SECTIONS)

SCALE: N.T.S. — 20

CURB RAMP NOTES

1. SIDEWALK AND RAMP SHALL BE 4 INCHES P.C.C. AND ATTAIN 4,000PSI COMPRESSIVE STRENGTH AFTER 28 DAY CURING. CONCRETE SHALL BE PLACED OVER 6" CLASS II BASE. SUBGRADE SHALL BE SCARIFIED AND RECOMPACTED TO 90% MAX. DRY DENSITY PER ASTM 1557 WITH OPTIMAL MOISTURE.
2. IF DISTANCE FROM CURB TO BACK OF SIDEWALK IS TOO SHORT TO ACCOMMODATE RAMP AND 4'–0" PLATFORM (LANDING) AS SHOWN IN CASE A (EC–403–2), THE SIDEWALK MAY BE DEPRESSED LONGITUDINALLY AS IN CASE C (EC–403–7), OR MAY BE WIDENED AS IN CASE D (EC–403–11).
3. WHEN RAMP IS LOCATED IN CENTER OF CURB RETURN, CROSSWALK CONFIGURATION MUST BE SIMILAR TO THAT SHOWN FOR DETAIL B OF THE CALTRANS 2024 STD. PLAN A88A & A88B.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL DETERMINE AND LOCATE THE EXISTING RIGHT OF WAY AT CURB RAMPS, SEE NOTE 2 ABOVE. MODIFICATIONS TO THE RAMPS SHOWN ARE AT THE DISCRETION OF THE CITY ENGINEER.
5. IF LOCATED ON A CURVE, THE SIDES OF THE RAMP NEED NOT BE PARALLEL, BUT THE MINIMUM WIDTH OF THE RAMP SHALL BE 4'–0".
6. SIDE SLOPE OF RAMP FLARES VARY UNIFORMLY FROM A MAXIMUM OF 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP, EXCEPT IN CASE C.
7. THE CURB RAMP SHALL NOT BE OUTLINED.
8. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
9. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP AND CONTINUOUS PASSAGE TO THE CURB RAMP SHALL NOT EXCEED 5 PERCENT WITHIN 4'–0" OF THE TOP OR BOTTOM OF THE CURB RAMP.
10. CURB RAMPS SHALL HAVE A DETECTABLE SAFETY YELLOW WARNING SURFACE THAT EXTENDS THE FULL WIDTH AND 3'–0" DEPTH OF THE RAMP. DETECTABLE WARNING SURFACES SHALL CONFORM TO THE DETAILS SHOWN IN EC–403–1 AND THE REQUIREMENTS IN THE CALTRANS SPECIAL PROVISIONS. DETECTABLE WARNING SURFACE SHALL BE CAST IN PLACE POLYMER COMPOSITE/FIBERGLASS RIGID PANELS. SURFACE APPLIED SYSTEMS ARE TO BE USED ONLY AT RETROFIT CONDITIONS AND WITH THE APPROVAL OF THE CITY ENGINEER.
11. THE EDGE OF THE DETECTABLE WARNING SURFACE NEAREST THE STREET SHALL BE BETWEEN 6" AND 8" FROM THE GUTTER FLOWLINE.
12. UTILITY PULL BOXES, MANHOLES, VAULTS AND ALL OTHER UTILITY FACILITIES WITHIN THE BOUNDARIES OF THE CURB RAMP WILL BE RELOCATED OR ADJUSTED TO GRADE BY THE CONTRACTOR PRIOR TO, OR IN CONJUNCTION WITH, CURB RAMP CONSTRUCTION. APPROVAL FOR RELOCATION SHALL BE OBTAINED FROM THE CITY ENGINEER.
13. FOR RETROFIT CONDITIONS, SAWCUT EXISTING CURB, GUTTER & SIDEWALK PER EC–220. ALSO, EXISTING CORNER MONUMENTS SHALL BE TIED AND FILED AT THE COUNTY OF IMPERIAL AND RE–PLACED BY A LICENSED LAND SURVEYOR.
14. CONCRETE CURB RAMP AND ADJOINING CURB GUTTER SHALL BE PLACED MONOLITHIC.
15. ALL DETAILS USED AND/OR MODIFIED PER CALTRANS 2024 STD. PLAN A88A & A88B.
16. REFERENCE CALTRANS 2024 STD. PLAN A88A & A88B FOR OTHER CONDITIONS. MORE STRINGENT CONDITION SHALL APPLY; CITY ENGINEER HAS ULTIMATE DISCRETION.
17. NEW CONCRETE SHALL BE DOWELED INTO EXISTING CONCRETE USING #4 BARS @ 18" O.C.
18. ALL RAMPS WILL HAVE A 1'–0" WIDE ASPHALT PATCH WITH FULL DEPTH HMA TO MATCH EXISTING STRUCTURAL DEPTH.

CITY OF EL CENTRO
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
ENGINEERING DEPARTMENT
1275 MAIN STREET
(760) 337-5182
EL CENTRO CALIFORNIA

APPROVED: DATE 1/2/26

ABRAHAM CAMPOS, P.E.
CITY ENGINEER / PUBLIC WORKS DIRECTOR

REGISTERED PROFESSIONAL ENGINEER ABRAHAM CAMPOS No. 70281 09/30/26 CIVIL STATE OF CALIFORNIA

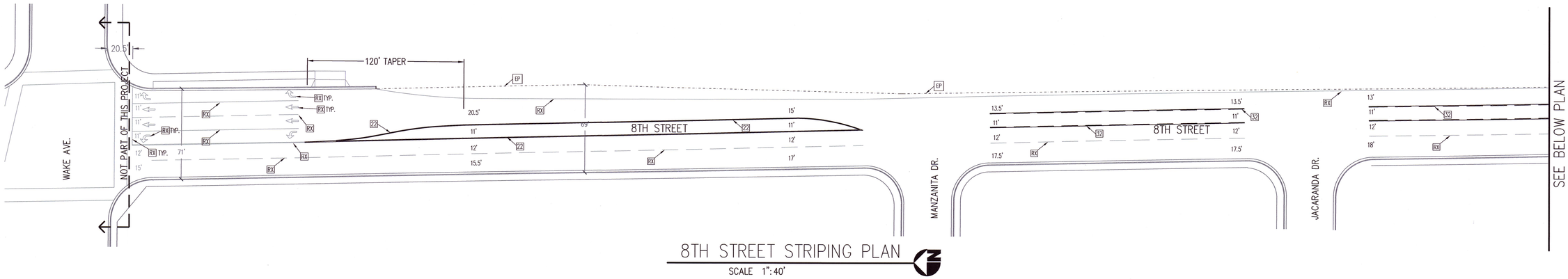
PROJECT TITLE : 2026 STREETS OVERLAY PROJECT

SHEET CONTENT : STANDARD DETAILS

NO.	REVISION	DATE
1	ORIGINAL	

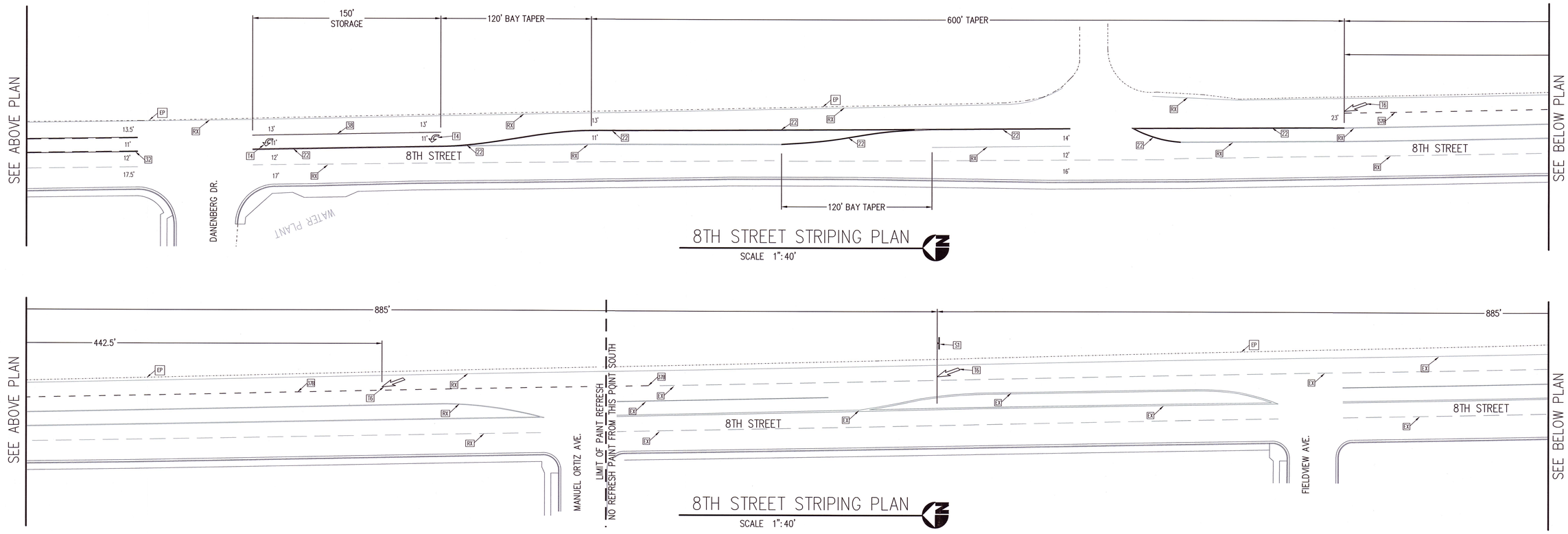
DESIGN BY:	ENG.
DRAWN BY:	G.M.
CK'ED. BY:	H.S.
APV'ED.BY:	A.C.

SHEET 3.1
4 OF 5 SHEETS



8TH STREET STRIPING PLAN

SCALE 1": 40'



8TH STREET STRIPING PLAN

SCALE 1": 40'

8TH STREET STRIPING PLAN

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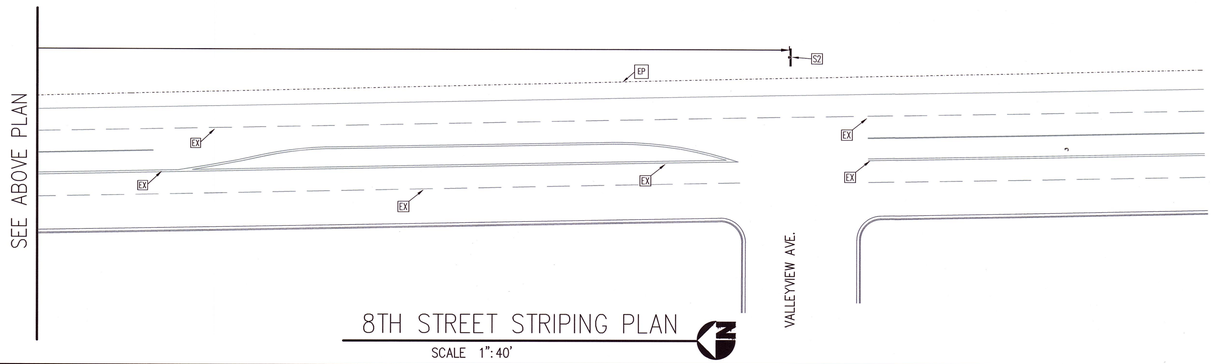

8TH STREET STRIPING PLAN

SCALE 1": 40'

STRIPING GENERAL NOTES

1. ALL PAVEMENT MARKING AND REFLECTIVE MARKERS SHALL CONFORM TO THE 2025 CALTRANS STANDARD SPECIFICATIONS, AND LATEST MUTCD.
2. REMOVE ALL CONFLICTING STRIPING BY SAND BLASTING OR WATER JETTING METHOD.
3. ALL STRIPING SHALL BE "CAT-TRACKED" AND APPROVED BY CITY ENGINEER OR HIS REPRESENTATIVE PRIOR TO PLACEMENT OF PERMANENT STRIPING.
4. LINES AND LEGENDS SHALL BE EITHER DOUBLE COAT PAINT OR THERMOPLASTIC AS CALLED FOR IN THE KEY NOTES SECTION OF THIS SHEET. ALLOW AT LEAST 24 HOURS BETWEEN PAINT COATS.
5. REMOVE AND RELOCATE ALL CONFLICTING SIGNS/POSTS TO MATCH NEW STRIPING.
7. ALL EXISTING RAISED PAVEMENT MARKERS (RPMS) SHALL BE REMOVED AND SHALL BE REPLACED WITH THE APPLICABLE PAVEMENT DELINEATION TREATMENTS SPECIFIED IN THE 2025 CALTRANS STANDARD PLANS AS FURTHER DETAILED IN THE TABLE BELOW.

EXISTING PATTERN	APPROVED DETAIL
DOUBLE YELLOW LINE	— DETAIL 22 FROM 2025 CALTRANS STD PLAN A20A
TWO-WAY LEFT TURN LANES	— DETAIL 32 FROM 2025 CALTRANS STD PLAN A20B
CHANNELIZING LINE	— DETAIL 38 FROM 2025 CALTRANS STD PLAN A20D
LANE LINE	— DETAIL 9 FROM 2025 CALTRANS STD PLAN A20A

KEY NOTES

- 22 DOUBLE-YELLOW PER CALTRANS STANDARD PLAN A20A DETAIL 22 (PAINT)
- 32 TWO WAY LEFT TURN PER CALTRANS STANDARD PLAN A20B DETAIL 32(PAINT)
- 38 CHANNELIZING LINE PER CALTRANS STANDARD PLAN A20D DETAIL 38 (PAINT)
- T4 LEFT TURN ARROW PER CALTRANS STANDARD PLAN A24A TYPE IV (L) ARROW (THERMO)
- T6 LANE-REDUCTION ARROW PER CALTRANS STANDARD PLAN A24A TYPE VI ARROW (THERMO)
- T8 LANE DROP PER CALTRANS STANDARD PLAN A20C DETAIL 37B (PAINT)
- 38 CHANNELIZING LINE PER CALTRANS STANDARD PLAN A20D DETAIL 38 (PAINT)
- S1 INSTALL NEW POLE AND W4-2R (CA) LANE REDUCTION SIGN
- S2 INSTALL NEW POLE AND W74 (CA) "THRU TRAFFIC MERGE LEFT" SIGN
- EX EXISTING STRIPING TO REMAIN AND PROTECT IN PLACE.
- RX EXISTING STRIPING TO REMAIN, REFRESH PER STRIPING GENERAL NOTE 7.

CITY OF EL CENTRO
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

ENGINEERING DEPARTMENT
1275 MAIN STREET
EL CENTRO CALIFORNIA
(760) 337-5182

APPROVED:

1/12/26
DATE

ABRAHAM CAMPOS, P.E.
CITY ENGINEER / PUBLIC WORKS DIRECTOR

REGISTERED PROFESSIONAL ENGINEER
ABRAHAM CAMPOS
No. 70281
09/30/26
CIVIL
STATE OF CALIFORNIA

PROJECT TITLE : 2026 STREETS OVERLAY PROJECT

SHEET CONTENT : 8TH STREET STRIPING PLAN

NO.	REVISION	DATE
1	ORIGINAL	

DESIGN BY:	ENG.
DRAWN BY:	G.M.
CK'ED. BY:	H.S.
APV'ED.BY:	A.C.

SHEET
3.2
5 OF 5 SHEETS

Adopt Resolution 26- A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, APPROVING AN AGREEMENT BETWEEN THE CITY OF EL CENTRO AND BURKE, WILLIAMS, & SORENSEN, LLP FOR CITY ATTORNEY SERVICES.

CITY MANAGER'S RECOMMENDATION:

Adopt Resolution 26- A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, APPROVING AN AGREEMENT BETWEEN THE CITY OF EL CENTRO AND BURKE, WILLIAMS, & SORENSEN, LLP FOR CITY ATTORNEY SERVICES.

FISCAL IMPACT:

The City negotiated hourly rates for General Legal Services at $385 and Special Legal Services at $485. There is sufficient funds in the adopted Fiscal Year 2026-27 budget to cover the anticipated legal services.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

N/A

BACKGROUND:

Burke, Williams & Sorensen, LLP (Burke) is a full-service public law firm with multiple offices in California, including San Diego and Riverside. Burke was founded in 1927 and represents over 200 local governmental entities, including serving as City/Town Attorney for 42 cities throughout the state.

Burke has the expertise and resources to effectively represent the City as its City Attorney.

DISCUSSION:

Burke has proposed Joanna Smith Hoff to serve as City Attorney. She has served public agency clients for 20 years, leading to expertise in local government laws, real property, land use and water law, and environmental laws, including the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and state and federal Endangered Species Acts.

She will be supported by the firm's Public Law group, with over 100 specialists in any area that the City may need, including the Brown Act, Public Records Act, conflicts of interest, elections law, public contracting, land use and environmental law, real estate, housing, labor and personnel, litigation, code enforcement, and utilities (e.g., rates).

CONCLUSION:

Adopt Resolution 26- A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, APPROVING AN AGREEMENT BETWEEN THE CITY OF EL CENTRO AND BURKE, WILLIAMS, & SORENSEN, LLP FOR CITY ATTORNEY SERVICES.

ATTACHMENTS:

1. Resolution No 26-
2. Legal Services Agreement - City of El Centro (City Attorney)

RESOLUTION 26-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, APPROVING AN AGREEMENT BETWEEN THE CITY OF EL CENTRO AND BURKE, WILLIAMS & SORENSEN, LLP FOR CITY ATTORNEY SERVICES

WHEREAS, the City of El Centro ("City) is in need of City Attorney services; and

WHEREAS, Burke, Williams, & Sorensen, LLP ("Client") is a full-service public law firm with the expertise to serve the City as its City Attorney; and

WHEREAS, an agreement for legal services with Burke, William & Sorensen LLP is needed to provide City Attorney Services.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. That the above recitations are true, correct and hereby adopted.

2. That the agreement with Burke, Williams & Sorensen LLP for City Attorney Services is approved.

3. That the Mayor and/or City Manager is authorized to sign an Agreement with Burke, Williams & Sorensen, LLP.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026.

City of El Centro

By:_____
Mike Crankshaw, Mayor

ATTEST:

By _____
Norma Wyles, City Clerk

01/2026/cdz/A26-0009/Reso/LegalServicesBurkeWilliamsSorensen

APPROVED AS TO FORM
Office of the City Attorney

By _____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CIYT OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California, do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at a regular meeting of the City Council of the City of El Centro, California held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By:_____
Norma Wyles, City Clerk

01/2026/cdz/A26-0009/Reso/LegalServicesBurkeWilliamsSorensen

BURKE, WILLIAMS & SORENSEN, LLP
444 South Flower Street - 40th Floor
Los Angeles, California 90071-2942
voice 213.236.0600 - fax 213.236.2700
www.bwslaw.com

Direct No.: (951) 801-6625
evail@bwslaw.com

January 14, 2026

Robert Sawyer, City Manager
City of El Centro
rsawyer@cityofelcentro.org

Re: Retainer Agreement for City Attorney Legal Services

Dear Mr. Sawyer:

We are pleased to represent City of El Centro with respect to the matters described in this Agreement. The following sets forth the terms pursuant to which **BURKE, WILLIAMS & SORENSEN, LLP** ("Burke") and City of El Centro ("Client") agree that Burke will provide legal services to Client as City Attorney. The hallmark of any productive professional relationship is effective communication, and we would invite you to contact us at any time during or after our representation with regard to any questions you may have associated with our representation or the matters described herein.

1. CONDITIONS. This Agreement will not take effect, and Burke will have no obligation to provide legal services, until Client returns a signed copy of this Agreement. The effective date of this Agreement will be January 20, 2026.

2. SCOPE OF SERVICES. Client hires Burke to provide as needed legal services in the matters set forth in Attachment "A" to this Agreement. No representation outside of the matters set forth in Attachment "A" to this Agreement shall be provided by Burke to Client. No representation of any directors, officers, employees, shareholders, or any other persons or entities affiliated with Client shall be provided unless such representation is expressly included in Attachment "A" to this Agreement. Burke will provide those legal services reasonably required to represent Client. Burke will take reasonable steps to keep Client informed of progress and to respond to Client's inquiries. If a court action is filed, Burke will represent Client through trial and post-trial motions. This Agreement does not cover representation on appeal or in execution proceedings after judgment. Separate arrangements must be agreed to for those services. Services in any matter not described above will require a separate written agreement or a written modification to this Agreement.

3. CLIENT'S DUTIES. Client agrees to be truthful with Burke, to cooperate, to keep Burke informed of any information or developments which may come to Client's attention, to abide by this Agreement, to pay Burke's bills on time, and to keep Burke advised of Client's address, telephone number, and whereabouts. Client will assist Burke in providing necessary information and documents and will appear when necessary at legal proceedings.

4. CONFLICTS OF INTEREST. Before accepting representation of Client, Burke has undertaken reasonable and customary efforts to determine whether there are any potential conflicts of interest or adversity of positions between Client and any other person or entity that would bar Burke from representing Client in general or in any of the specific matters listed in Attachment "A". Burke has reviewed this issue in accordance with the Rules of Professional Conduct adopted in California. Burke believes that those rules, rather than the rules of any other jurisdiction, are applicable to Client's representation. Client's execution and return of the enclosed copy of this letter represents an express agreement to the applicability of the Rules of Professional Conduct adopted in California to any and all representation arising under this Agreement.

5. LEGAL FEES AND BILLING PRACTICES. Client agrees to pay by the hour at Burke's prevailing rates for all time spent on Client's matter by Burke's legal personnel. Current hourly rates for legal personnel are set forth in Attachment "B" to this Agreement.

Burke's rates are subject to change on 30 days' written notice to Client. Rates shall automatically increase annually on July 1 of each year as set forth in Attachment "B" to this Agreement. If Client declines to pay increased rates, Burke will have the right to withdraw as attorney for Client.

The time charged will include the time Burke spends on telephone calls relating to Client's matter, including calls with Client, witnesses, opposing counsel or court personnel. The legal personnel assigned to Client's matter may confer among themselves about the matter, as required and appropriate. When they do confer, each person will charge for the time expended, as long as the work done is reasonably necessary and not duplicative. Likewise, if more than one of the legal personnel attends a meeting, court hearing or other proceeding, each will charge for the time spent. Burke will charge for waiting time in court and elsewhere and for travel time, both local and out-of-town.

6. COSTS AND OTHER CHARGES.

(a) Burke will incur various costs and expenses in performing as needed legal services under this Agreement. Client agrees to pay for all costs, disbursements and expenses in addition to the hourly fees. The costs and expenses commonly include: service of process charges, filing fees, court and deposition reporters' fees, jury fees, notary fees, deposition costs, long distance telephone charges, messenger and other delivery fees, postage, photocopying and other reproduction costs, travel costs including parking, mileage, transportation, meals and hotel costs, investigation expenses, consultants' fees, expert witness, professional, mediator, arbitrator and/or special master fees, unavoidable administrative staff and secretarial overtime, and other similar items. Except for the items listed below, all costs and expenses will be charged at Burke's cost.

In-office photocopying/page:	$ .20
In-office color photocopying/page	$ 1.00
Facsimile charges/page:	$ 1.00
Mileage/mile:	$ .72.5 (per IRS notices)

(b) Out-of-town travel. Client agrees to pay transportation, meals, lodging and all other costs of any necessary out-of-town travel by Burke's personnel. Client will also be charged the hourly rates for the time legal personnel spend traveling.

(c) Experts, Consultants and Investigators. To aid in the preparation or presentation of Client's case, it may become necessary to hire expert witnesses, consultants, investigators, and outsourced support services. Client agrees to pay such fees and charges. Burke will select any expert witnesses, consultants, investigators or support services to be hired**,** and Client will be informed of persons chosen and their charges.

Additionally, Client understands that if the matter proceeds to court action or arbitration, Client may be required to pay fees and/or costs to other parties in the action. Any such payment will be entirely the responsibility of Client.

7. BILLING STATEMENTS. Burke will send Client periodic statements for fees and costs incurred. Each statement will be payable within 30 days of its mailing date. Client may request a statement at intervals of less than 30 days. If Client so requests, Burke will provide one within 10 days. The statements shall include the amount,

rate, basis of calculation or other method of determination of the fees and costs, which costs will be clearly identified by item and amount.

8. INTEREST CHARGES. If a billing statement is not paid by its due date, interest will be charged on the principal balance (fees, costs, and disbursements) shown on the statement. Interest will be calculated by multiplying the unpaid balance by the periodic rate of .833% per month (TEN PERCENT [10%] ANNUAL PERCENTAGE RATE). The unpaid balance will bear interest from the date of the invoice until paid.

9. DISCHARGE AND WITHDRAWAL. Client may discharge Burke at any time. Burke may withdraw with Client's consent or for good cause. Good cause includes Client's breach of this Agreement, refusal to cooperate or to follow Burke's advice on a material matter or any fact or circumstance that would render Burke's continuing representation unlawful or unethical. When Burke's services conclude, all unpaid charges will immediately become due and payable. When services conclude, Burke will, upon Client's request, deliver Client's file, and property in Burke's possession, whether or not Client has paid for all services.

10. DOCUMENT RETENTION POLICY. Client is entitled upon written request to any files in Burke's possession relating to the legal services performed by Burke for Client, excluding Burke's internal accounting records and other documents not reasonably necessary to Client's representation, subject to Burke's right to make copies of any files withdrawn by Client. Once a matter is concluded, Burke will close the file, and Client will receive notice thereof. Client's physical files may be sent to storage offsite, and thereafter there may be an administrative cost for retrieving them from storage. Thus, it is recommended that Client request the return of a file at the conclusion of a matter. Under Burke's document retention policy, Burke normally destroys files five (5) years after a matter is closed, unless other arrangements are made with Client.

All client-supplied materials and all attorney end product (referred to generally as "client material") are the property of Client. Attorney end product includes, for example, finalized contracts, pleadings, and trust documents. Attorney work product is the property of Burke. Attorney work product includes, for example, drafts, notes, internal memoranda and electronic files, and attorney representation and administration materials, including attorney-client correspondence and conflicts materials.

After the close of a matter, Burke will notify Client of any client materials that remain in Burke's possession. Client will be invited to retrieve these client materials within 45 days of notice, or Client may direct Burke to forward the client materials to Client, at

Client's expense. If within 45 days of this notice Client fails to retrieve the client materials or request Burke to forward them, Client authorizes Burke to destroy the client materials.

After the 45-day period, Burke will, consistent with all applicable rules of professional conduct, use its discretion as to the retention or destruction of all attorney work product and any client materials that remain with Burke.

11. TECHNOLOGY. At its discretion, unless otherwise stated, Burke will employ technology to facilitate electronic discovery. This may include scanning of paper documents, culling of documents, converting electronically stored information into a format suitable for review, the usage of electronic review software, etc. Applicable associated costs, including electronic storage and transfer costs, will be billed to Client.

Burke uses artificial intelligence tools known as Co-Counsel 1.0 and Co-Counsel 2.0 in the representation of Client. The tools do not permit the vendor (Thomson Reuters) to acquire ownership or control or to use information for the vendor's purposes outside the protection of the attorney-client privilege or the attorney work product doctrine. Burke continues to maintain control over Client's confidential information during the use of the tools mentioned here. Burke's AI policy does not authorize the use of any other generative or agentic AI.

12. DISCLAIMER OF GUARANTEE AND ESTIMATES. Nothing in this Agreement and nothing in Burke's statements to Client will be construed as a promise or guarantee about the outcome of the matter. Burke makes no such promises or guarantees. Burke's comments about the outcome of the matter are expressions of opinion only. Any estimate of fees given by Burke shall not be a guarantee. Actual fees may vary from estimates given.

13. MEDIATION/ARBITRATION; WAIVER OF JURY TRIAL. If a dispute arises out of or relating to any aspect of this Agreement between Client and Burke, or the breach thereof, and if the dispute cannot be settled through negotiation, Burke and Client agree to discuss in good faith the use of mediation before resorting to arbitration, litigation, or any other dispute resolution procedure. Nothing herein shall limit or otherwise affect your right under Sections 6200-6206 of the California Business and Professions Code to request arbitration of any fee dispute by an independent, impartial arbitrator or panel of arbitrators through a bar association program created solely to resolve fee disputes between lawyers and clients. However, should discussions, mediation or the non-binding arbitration provided through a local bar association program not resolve the dispute, the dispute shall be determined by binding arbitration before the American Arbitration Association under its then prevailing commercial arbitration rules, except that discovery

may be taken in that arbitration pursuant to the California Code of Civil Procedure. The claims or controversies subject to this provision shall include, without limitation, any claim of professional negligence or malpractice. The arbitration shall be held in Los Angeles, California, unless we mutually select another venue, and judgment may be entered upon the arbitrator's award by any court having jurisdiction. Should you refuse or neglect to appear or participate in the arbitration proceedings, the arbitrator is empowered to decide the claim or controversy in accordance with the evidence presented. You should realize that by accepting the arbitration provision, YOU WILL WAIVE YOUR RIGHT TO A JURY TRIAL AND THE RIGHT, EXCEPT UNDER LIMITED CIRCUMSTANCES, TO APPEAL THE ARBITRATOR'S DECISION.

_____(Client Initial Here) _____(Burke Initial Here)

14. ATTORNEYS' FEES CLAUSE. The prevailing party in any action or proceeding arising out of or to enforce any provision of this Agreement, with the exception of a fee arbitration or mediation under Business and Professions Code Sections 6200-6206, will be awarded reasonable attorneys' fees and costs incurred in that action or proceeding, or in the enforcement of any judgment or award rendered.

15. ENTIRE AGREEMENT. This Agreement contains the entire agreement of the parties. No other agreement, statement, or promise made on or before the effective date of this Agreement will be binding on the parties.

16. SEVERABILITY IN EVENT OF PARTIAL INVALIDITY. If any provision of this Agreement is held in whole or in part to be unenforceable for any reason, the remainder of that provision and of the entire Agreement will be severable and remain in effect.

17. MODIFICATION BY SUBSEQUENT AGREEMENT. This Agreement may be modified by subsequent agreement of the parties only by an instrument in writing signed by both of them**,** or an oral agreement only to the extent that the parties carry it out.

18. EFFECTIVE DATE. This Agreement will govern all legal services performed by Burke on behalf of Client commencing with the date Burke first performed services. The date at the beginning of this Agreement is for reference only. Even if this Agreement does not take effect, Client will be obligated to pay Burke the reasonable value of any services Burke may have performed for Client.

THE PARTIES HAVE READ AND UNDERSTOOD THE FOREGOING TERMS AND AGREE TO THEM AS OF THE DATE BURKE FIRST PROVIDED SERVICES. IF MORE THAN ONE CLIENT SIGNS BELOW, EACH AGREES TO BE LIABLE, JOINTLY AND SEVERALLY, FOR ALL OBLIGATIONS UNDER THIS AGREEMENT. CLIENT SHALL RECEIVE A FULLY EXECUTED DUPLICATE OF THIS AGREEMENT.

DATED:_____

CITY OF EL CENTRO

By: _____
Robert Sawyer, City Manager
1275 W Main Street
El Centro, CA 92243
Telephone: (760) 337-4540

DATED: January 14, 2026

BURKE, WILLIAMS & SORENSEN, LLP

By: _____
Eric Vail, Partner and Chair of the
Public Law Practice Group

Enclosure: return copy

Attachment "A"

1. **General City Services**

General City Services are routine, customary legal services for normal operations of the City and include the following:

- Public Meetings, attendance and preparation for City Council and commission meetings. Others public meetings as requested.
- Office hours and attendance at Executive Team meetings and other meeting as requested.
- Code Enforcement/City Prosecutor:
  - Advice on enforcement strategies.
  - Draft demand letters, notice of violations and/or administrative citations.
  - Prosecution of all criminal or civil actions necessary and appropriate to enforce municipal ordinances.
- Contracts and Insurance.
  - Preparation and review of standard form service contracts and purchase documents.
  - Review of standard public works contracts.
  - Provide advice re insurance coverage matters.
  - Provide other standard forms and templates.
- Document Review. Review, approve, and prepare ordinances, resolutions, staff reports and other general legal document required by the City.
- General City Support items.
  - Routine real property acquisitions, easements, and dedications.
  - Legal opinions (except as related to bond or public financing).
  - Brown Act Compliance.
  - Public Records Act Compliance.
  - Political Reform Act / Conflict of Interest Laws compliance.
  - Election law (general in nature).

- Procedural issues and due process.
- Intergovernmental relations.
- Joint powers authority issues and relations.
- Assistance responding to Public Records Act requests.
- Maintenance of Municipal Code.

- Land Use & Zoning.
  - Legal research, review and recommendation.
  - Interpretation of Zoning Code and/or General Plan language.
  - Assistance with Specific Plans.
- Legislation, monitor and provide updates on pending and current legislation and court decisions.
- Monitor and supervise activities of any special outside counsel retained by the City.
- Other. Perform such other legal duties as may be required by the City Council or City Manager (except for Special Legal Service Matters described below).
- Post-redevelopment and successor agency work.
- Render advice and assistance to City departments on personnel disciplinary and/or labor relations matters, review memoranda of understanding or other labor agreements, draft implementing legislation or pertinent documents and represent City on matters arising from memoranda of understanding or the City's personnel rules.
- Research. Perform research and interpret laws, court decisions and other legal authorities.
- Trainings. Provide standard and routine trainings to City Council and City Staff.

2. **Special Legal Services**

Special Legal Services include those legal services of a non-routine nature or a routine task that, due to its complexity, requires additional analysis and research. Special services will include all services not included within the General Services, including the following:

- Affordable Housing and Successor Housing Agency

  - Drafting or review of affordable housing agreements with third parties or service providers.
- Assessment districts and CFD issues
- Complex economic development agreement, post-redevelopment incentive districts and programs.
- Complex public construction projects, bid disputes, protests, and suits.
- Election disputes, including initiatives, recall, referendums, districting, election challenges, and qualification issues.
- Eminent Domain.
- Environmental matters.
  - Review of any documents prepared to analyze a project's environmental impacts pursuant to CEQA and NEPA.
- Formal administrative hearings.
  - Represent the City in non-adversarial administrative proceedings, legislative hearings, and other intergovernmental hearings.
  - Represent the City, and its officers, agents, and employees in matters before state and federal administrative agencies (such as the Department of Industrial relations, Regional Water Quality Control Board, Department of Fair Employment and Housing, Equal Opportunity Commission, Worker's Compensation Appeals Board, etc.)
- Fees, charges and taxes (Mitigation Fee Act, Prop 218).
- Franchising.
  - Cable television.
  - Solid waste.
- Housing laws.
- Litigation.
- Matters that are complex, novel or unusual.
- Non-routine land use and development matters including general or specific plan updates, local coastal plan amendment, and development agreements.
- Non-routine negotiation matters.

- Prevailing wage disputes.
- Telecommunications.
- Toxic substances matters (CERCLA, RCRA).
- Water rights, wastewater, storm water, and water quality issues.

Attachment "B"

Rates for Attorneys and other timekeepers through December 31, 2026:

(a) **General Legal Services Rates**

Staffing	Hourly Rate
Attorneys	$385
Paralegals	$225

(b) **Special Legal Services Rates**

Staffing	Hourly Rate
Attorneys	$485
Paralegals	$235

Effective each January 1, the foregoing base rates shall be increased based on the U.S. Department of Labor Bureau of Labor Statistics Los Angeles-Riverside-Orange County Consumer Price Index-All Urban Consumers ("CPI-U"), using the CPI-U for each prior October as the base and the value to escalate the hourly rates in the ratio of the most recent October CPI-U value, rounded up to the nearest $10 increment.

The U.S. Dept. of Labor Bureau of Labor Statistics (BLS) website will be the source of the data utilized (if the URL is changed, the parties shall agree on the replacement web page to be as close as reasonably possible to the page detailed herein): http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data_tool=dropmap&series_id=CUURA421SA0,CUUSA421SA0

Presentation and Overview of Proposed Fiber Internet Services by Vero Fiber

CITY MANAGER'S RECOMMENDATION:

FISCAL IMPACT:

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

BACKGROUND:

DISCUSSION:

CONCLUSION:

ATTACHMENTS:
None

Updated Home Investment Partnership Program (HOME) Program Guidelines.

CITY MANAGER'S RECOMMENDATION:
Approve Resolution No. 26- RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO ADOPTING THE UPDATED HOME INVESTMENT PARTNERSHIPS PROGRAM (HOME) OWNER-OCCUPIED REHABILITATION PROGRAM GUIDELINES

FISCAL IMPACT:
There is no fiscal impact on the City's general fund. Program activities and administrative costs will be funded through a $400,000 grant received from the HOME Grant Program.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:
Financial & Governance Stability & Sustainability
Community Health, Safety & Welfare

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:
N/A

BACKGROUND:
For more than twenty-five years, the City’s Economic Development Division has periodically administered a HOME-funded owner-occupied housing rehabilitation program serving low-income households. The program provides eligible homeowners with loan assistance to rehabilitate or reconstruct their single-family residences.

On December 1, 2021, the California Department of Housing and Community Development (HCD) released a Notice of Funding Availability (NOFA) under the HOME Program. The City submitted a $400,000 application in March 2022 and, in July 2022, received notice that the full amount had been awarded. The City has since received multiple program inquiries and completed applications from eligible households, and staff anticipates utilizing the full $400,000 allocation based on current demand.

DISCUSSION:
The current HOME Owner-Occupied Rehabilitation Program Guidelines were approved by the City Council in 2018 and have not been updated since that time. HCD regulations require participating jurisdictions to adopt written policies and procedures governing the use, administration, and monitoring of HOME funds to ensure compliance with federal requirements. Staff has updated the HOME guidelines, which have also been reviewed and approved by HCD, to reflect current regulations, updated federal guidance, and best practices in program administration. Adoption of the updated guidelines will ensure consistent and compliant administration of HOME-funded rehabilitation activities.

The Guidelines are attached for consideration. It is important to underscore that, because the funding source is federal, there is limited flexibility to revise core program requirements. The information below provides a summary of the key program provisions:

Program Purpose & Overview

- Program provides deferred loans to income-qualified owner-occupied households for home repairs that address health, safety, code violations, and habitability.

Eligibility

- Home must be owner-occupied and located within City limits.
- Household income must be less than or equal to 80 percent of the Area Median Income based on HCD annual income limits.
- Applicants must provide documentation and maintain the home as their primary residence for the loan term.

Loan and Grant Structure

- Assistance provided primarily as 0% deferred loans, payable only when the home is sold, transferred, or no longer occupied by the owner.
- Program allows grants for emergency repairs and accessibility modifications, relocated, and required project costs.
- Maximum loan amounts vary by funding source and cannot exceed after-rehabilitation value limits.

Application and Selection Process

- First-come, first-served waiting list.
- Requires a completed application, income verification, title review, and inspection.
- Work is competitively bid, and the City oversees scopes, cost reasonableness, and contractor eligibility.

Eligible Construction Activities

- Priority categories include:
    1. Health and Safety Repairs
    2. Code Compliance
    3. Lead paint hazard evaluation/remediation
    4. Rehabilitation/reconstruction when needed

Contracting Requirements

- Licensed and insured contractors only; HUD debarment checks required.
- Homeowners may solicit bids, but City verifies qualifications and manages workflow.

- Contractors may be suspended/removed for misconduct.

Monitoring and Compliance

- City conducts jobsite inspections and approves payments through completion.
- Recipients must provide annual proof of occupancy, homeowner's insurance, and property tax status.
- Loans are due if the homeowner moves, rents the home (with limited exceptions), or violates program terms.

Appeals and Disputes

- Applicants may appeal eligibility or decisions through the Loan Review Committee (Finance Director, James Garcia (Realtor, Economic Development Manager), City Council, and ultimately HCD.
- Construction contract disputes use binding arbitration.

CONCLUSION:
Staff respectfully requests the approval of the updated HOME program guidelines by approving Resolution No. 26- RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO ADOPTING THE UPDATED HOME INVESTMENT PARTNERSHIPS PROGRAM (HOME) OWNER-OCCUPIED REHABILITATION PROGRAM GUIDELINES

ATTACHMENTS:
1. Resolution FINAL
2. HOME_OOR Program Guidelines_FINAL

RESOLUTION NO. 26-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO ADOPTING THE UPDATED HOME INVESTMENT PARTNERSHIPS PROGRAM (HOME) OWNER-OCCUPIED REHABILITATION PROGRAM GUIDELINES

WHEREAS, the current HOME Investment Partnerships Program (HOME) owner-occupied rehabilitation program guidelines were approved by the City Council in 2018 and have not been updated since; and

WHEREAS, the California Department of Housing and Community Development (HCD) has provided the City of El Centro with updated owner-occupied rehabilitation program guidelines; and

WHEREAS, HCD regulations require participating jurisdictions to adopt written policies and procedures governing the use, administration, and monitoring of HOME funds to ensure compliance with federal requirements; and

WHEREAS, City staff have reviewed and updated the City's HOME Program Guidelines to reflect current federal regulations, local policies, project monitoring, and program administration practices, and the update has been reviewed by HCD; and

WHEREAS, the updated HOME Program Guidelines will serve as the governing document for applicant eligibility, project selection, funding requirements, long-term affordability, compliance monitoring, and other program operations; and

WHEREAS, the City Council finds it in the best interest of the City and its residents to adopt the updated HOME Program Guidelines to ensure consistent, transparent, and compliant administration of the HOME Program.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. That the foregoing is true, correct, and hereby adopted.

2. That the City Manager or designee, is authorized to implement, administer, and enforce the HOME Program Guidelines, including making technical amendments as required by HCD regulations, provided such amendments do not materially change program intent or funding allocations.

3. Any changes or corrections to the Program Guidelines required by HCD shall be included in the Guidelines without requiring re-approval by the City Council.

4. Such Program Guidelines shall apply to all existing loans as well as those made on or after the date of adoption of this Resolution.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026.

CITY OF EL CENTRO

By _____
Mike Crankshaw, Mayor

ATTEST:

By _____
Norma Wyles, City Clerk

APPROVED AS TO FORM
Office of the City Attorney

By _____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CIYT OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California, do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at a regular meeting of the City Council of the City of El Centro, California held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By _____
Norma Wyles, City Clerk

CITY OF EL CENTRO

SINGLE-FAMILY HOUSING REHABILITATION ASSISTANCE PROGRAMS

(HOME, CDBG, CalHome)

PROGRAM DESIGN AND PROCESS





HCD Version August 9, 2024

CalHome Approved (date)
CDBG Approved (date)
HOME Approved (1/12/2026)

City of El Centro
HOUSING REHABILITATION
PROGRAM GUIDELINES

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City of El Centro
HOUSING REHABILITATION
PROGRAM GUIDELINES

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CITY OF EL CENTRO
HOUSING REHABILITATION
PROGRAM GUIDELINES

Adopted date

1.0. GENERAL

The above-named entity, hereinafter referred to as the "Sponsor", has entered into a contractual relationship with the California Department of Housing and Community Development ("HCD") to administer one or more HCD-funded housing rehabilitation programs. The rehabilitation program described herein and hereinafter referred to as the "Program" is designed to provide assistance to eligible homeowners for correction of health and safety items, as well as code violations, located within the Program's eligible area, as described in Section 3.0. The Program provides this assistance in the form of deferred payment loans used to finance the cost of necessary repairs that will provide the homeowner with a healthy, safe, sanitary and code compliant home, referred to herein as "housing unit". The Program will be administered by City of El Centro, hereinafter referred to as the "Program Operator".

1.1. PROGRAM OUTREACH AND MARKETING

All outreach efforts will be made in accordance with state and federal fair lending regulations to ensure nondiscriminatory treatment, outreach and access to the Program. No person shall, on the grounds of age, ancestry, color, creed, physical or mental disability or handicap, marital or familial status, medical condition, national origin, race, religion, gender or sexual orientation, be excluded, denied benefits or subjected to discrimination under the Program. The Sponsor will ensure that all persons, including those qualified individuals with handicaps, have access to the Program.

A. The Fair Housing Lender and Accessibility logos will be placed on all outreach materials. Fair housing marketing actions will be based upon a characteristic analysis comparison (census data may be used) of the Program's eligible area compared to the ethnicity of the population served by the Program (includes, separately, all applications given out and those receiving assistance) and an explanation of any underserved segments of the population. This information is used to show that protected classes (age, gender, ethnicity, race, and disability) are not being excluded from the Program. A Fair Housing Marketing Plan can be found as Attachment D. Flyers or other outreach materials, in English and any other language that is the primary language of a significant portion of the area residents, will be widely distributed in the Program-eligible area and will be provided to any local social service agencies. The Program may sponsor homeownership education classes to help educate homeowners about credit, budgeting, predatory lending, foreclosure prevention and home maintenance, as well as future responsibilities.

B. Section 504 of the Rehabilitation Act of 1973 prohibits the exclusion of an otherwise qualified individual, solely by reason of disability, from participation under any program receiving Federal funds. The Program Sponsor will take appropriate steps to

ensure effective communication with disabled housing applicants, residents and members of the public.

1.2. APPLICATION PROCESS AND SELECTION

A. Waiting List/Homeowner Contact

The Sponsor will utilize a waiting list. In response to a homeowner's request, the homeowner is placed on the waiting list. Homeowners are offered the opportunity to qualify for assistance by waiting list priority (a first-come, first served basis).

The Program Operator will contact homeowners by mail and/or by telephone to advise of funding availability. The homeowner has 30 days to complete and return the loan application and supporting documentation. Should a homeowner fail to respond to the initial contact for assistance or to provide any of the required documentation within the 30-day period, the homeowner's name will be removed from the waiting list. If the homeowner desires assistance at a later time, he/she will be placed on the waiting list at that time.

Should the waiting list be exhausted, the Program will be marketed in accordance with the Sponsor's Marketing Plan. **See Attachment D.**

B. Application/Interview

An application packet is provided to the homeowner for completion and submittal to the Program Operator, along with supporting documentation. An interview is scheduled with the applicant. The Program is fully explained; application forms and documentation are reviewed. Verifications are obtained for income, assets, employment, benefits, and mortgage. Title report and appraisals are also obtained.

If the Program Operator encounters material discrepancies and/or misrepresentations, and/or there are income, asset, household composition, or other important questions that can't be resolved, the Sponsor reserves the right to deny assistance to the household. In this case, the applicant may re-apply after six months have elapsed from the time of written assistance denial.

C. Household Selection

Households selected for participation in the Sponsor's Housing Rehabilitation Program are those determined eligible upon completion of processes described in A. and B. above.

D. Initial Inspection/Work Write-Up/Estimate

Prospective units are inspected by the Program Operator, a certified housing inspector, or a Sponsor representative to determine eligibility and acceptability of properties for participation in the Program.

If the home is a pre-1978 unit, the initial inspection will also include paint testing by a certified Lead-Based Paint (LBP) inspector/assessor or presumption of LBP. Code deficiencies will be corrected and if presumption is used or lead hazards are found they will be properly treated according to HUD regulations (Section 6.1.E & F) and cleared by a certified LBP inspector/assessor. **Note: CalHome-funded projects do not require LBP compliance. CDBG projects shall refer to Chapter 20, Lead-Based Paint Requirements for guidance in the CDBG Grant Management Manual.**

Measurements and observations are noted about the property, including special conditions with potential cost consequences (dilapidated outbuildings, absence of curb and gutter when required by code, etc.). A floor plan and site plan, as needed, are drawn for the home and property, including all appurtenances.

Findings are noted on an inspection form, and later used by the Program Operator to prepare the work write-up. Estimated costs are determined by the Program Operator who has years of experience in the building industry, and in reviewing contractor bids and verifying costs with materials suppliers. The homeowner reviews the completed work write-up and cost estimate, and the approved write-up is incorporated into bid documents.

E. **Bid Solicitation**

A bid walk-through date and time are scheduled. The homeowner may choose to solicit his/her own bids or request that the Program Operator solicit bids on his/her behalf. Invitations to bid are mailed to all eligible contractors on file in efforts to obtain three reasonable bids. Bid results will be provided to participating contractors.

Contractors must be licensed and bonded by the State of California Contractors Licensing Board. Contractors must also provide Program Operator with evidence of Workers' Compensation Insurance and Comprehensive General Liability and Property Damage Insurance with Combined Single Limits of at least $1,000,000.

Cost reasonableness is determined by comparing the bids received with the cost estimate prepared by the Program Operator. Bids should be within 10% of the Program Operator's cost estimate, otherwise an explanation must be provided to the file for any bid selected exceeding 10% of the estimate. The homeowner is encouraged to accept the lowest reasonable bid.

The Program Operator determines eligibility of the contractor by contacting the State Contractors License Board and checking the Federal List of Debarred Contractors and the City of El Centro's Business License Division. The contractor is also required to provide self-certification stating that he/she is not on the Federal debarred list. Once determined eligible, the contractor is then notified of provisional award of bid (pending loan approval). Notices of non-award are mailed to participating contractors.

F. **Loan Request/Approval**

A report and loan request are prepared on behalf of the homeowner by the Program Operator. The loan request includes the cost of construction, a contingency fund, and other project costs (listed in Section 6.3.). Note: For HOME, the project costs listed in Section 6.3 are considered activity delivery costs to be paid by the Sponsor and may not be charged to the homeowner's loan. A Loan Review Committee meeting is scheduled to hear the loan request. Section 1.3 provides additional information on the loan approval process. Once approved, loan documents are executed and the loan is funded.

G. **Pre-Construction Conference**

A pre-construction conference is scheduled with homeowner, contractor, and Program Operator. The Program Operator reviews the Owner-Contractor Construction Contract, including the work write-up, start date, pay schedule, and date of completion, with the homeowner and contractor. The construction contract and Notice to Proceed are executed.

H. **Start-Up/Field Inspections**

The Program Operator monitors date of start-up and performs field inspections on a regular basis. The Program Operator will visit the job site regularly in order to check the scope of work, inspect materials, and to confirm the job is on schedule and within budget. The Program Operator works with the Sponsor's Building Inspector to ensure the work meets building codes, while not exceeding funding limits.

The Program Operator reviews the work status with the homeowner and with the contractor in order to remedy any developing problems quickly and to ensure that both are satisfied with the construction process. At the completion of each phase, the Program Operator inspects the work and the homeowner authorizes contractor payments.

The Program Operator will refer back to original plans and specifications to verify the work was completed as contracted.

I. **Change Orders**

Written change orders are required when the homeowner requests any changes in the write-up, such as eliminating an item completely, eliminating one item and substituting another, or adding items. The change order will state the change and dollar value for the change. The change order must be signed by both the contractor and the homeowner, and submitted to the Program Operator for approval. If the change order exceeds the approved financing, the homeowner will be asked to provide additional funds or a report and request for additional funds may be presented to the Sponsor's Loan Review Committee for approval prior to Program Operator signing-off on the change order.

J. **Progress Payments**

Ninety percent (90%) of the contract amount is distributed to the contractor in the form of progress payments during construction. The final ten-percent (10%) of the contract amount is set aside as a retention payment. The contractor requests a progress payment from the Program Operator. Upon favorable inspection by the Program Operator, and Sponsor or Sponsor's Building Inspector, the payment authorization is signed by the Program Operator and submitted for payment.

K. **Final Inspections/Notice of Completion/Final Payment**

When the project is completed, the Program Operator inspects the work item by item with the homeowner, the contractor, and/or the Sponsor. The Sponsor's Building Inspector performs a final inspection. Any corrections or deficiencies are noted and corrected by the contractor. Upon favorable final inspections, a Notice of Completion is prepared, signed by the homeowner, and then recorded. The final ten-percent (10%) retention payment is released 35 days after the recording of the Notice of Completion.

1.3. LOAN PROCESS

The Sponsor's Loan Review Committee must approve all loans and grants. The Loan Review Committee may approve assistance with CDBG financing exceeding 100 percent of after-rehabilitation value as needed in cases where no other financial resources are available to cover the cost of the repairs and where clear and convincing documentation exists, justifying why the exception is needed.

However, if the project is CalHome funded, the total financing cannot be more than 105 percent of the after- rehabilitation value. For HOME-funded loans, the total financing cannot be more than 100 percent of the after-rehabilitation value, unless per HOME Management Memorandum 13-01 at https://www.hcd.ca.gov/grants-funding/grants-management-memos/docs/Memo_13-01_re_grants_for_OOR.doc the entire HOME assistance amount is granted rather than loaned, due to a lack of any equity after rehabilitation, based on existing loans on the property and an after-rehabilitation value appraisal. In addition, the amount of HOME assistance, including Sponsor's claimed Activity Delivery Costs, cannot exceed the Sponsor's County HOME Per-Unit Subsidy Limits, and the after-rehabilitation value cannot exceed the HOME Homeownership Value Limits. **See Attachment C for current limits and link to HCD Limits webpage.**

In order to obtain financing, applicants must meet all property and eligibility guidelines in effect at the time the application is considered. Homeowners will be provided with written notification of approval or denial. Any reason for denial will be provided to the applicant in writing.

1.4. CONFLICT OF INTEREST REQUIREMENTS

When the Sponsor's program contains Federal funds, the applicable Conflict of Interest requirements of 24 CFR section 570.611 shall be followed for CDBG assistance. 24 CFR section 92.356 of the HOME Final Rule shall be followed for HOME assistance, as follows:

(a) Conflicts prohibited. No persons described in paragraph (b) of this section who exercises or has exercised any functions or responsibilities with respect to activities assisted with HOME funds or who are in a position to participate in a decision making process or gain inside information with regard to these activities, may obtain a financial interest or benefit from a HOME-assisted activity, or have a financial interest in any contract, subcontract or agreement with respect to the HOME-assisted activity, or the proceeds from such activity, either for themselves or those with whom they have business or immediate family ties, during their tenure or for one year thereafter. Immediate family ties include (whether by blood, marriage or adoption) the spouse, parent (including stepparent), child (including stepchild), brother, sister (including a stepbrother or stepsister), grandparent, grandchild and in-laws of a covered person.

(b) Persons covered. The conflict of interest provisions of paragraph (a) of this section apply to any person who is an employee, agent, consultant, officer, or elected official or appointed official of the participating jurisdiction, State recipient, or subrecipient which are receiving HOME funds.

(c) Exceptions: Threshold requirements. Upon the written request of the participating jurisdiction to HCD, HUD may grant an exception to the provisions of paragraph (a) of this section on a case-by-case basis when it determines that the exception will serve to further the purposes of the HOME Investment Partnerships Program and the effective and efficient administration of the participating jurisdiction's program or project. See 24 CFR section 92.356(d)(1-6) for details on the documentation needed in order to submit an exception request to HUD.

A contractor with a vested interest in the property cannot bid on a rehabilitation job. Such a contractor may act as owner/builder, subject to standard construction procedures. Owner/builders are reimbursed for materials purchased which are verified by invoice/receipt and used on the job. Reimbursement occurs after the installation is verified by the Program Operator to be part of the scope of work. Owner/builders are not reimbursed for labor.

2.0. APPLICANT QUALIFICATIONS

2.1. INCOME LIMITS

All homeowners must certify that they meet the household income eligibility requirements for the applicable HCD program(s) and have their household income documented. The income limits in place at the time of loan approval will apply when

determining applicant income eligibility. All applicants must have incomes at or below 80% of the County's area median income (AMI), adjusted for household size, as published by HCD each year. **See Attachment C for current limits and link to HCD Limits webpage**.

Household: means one or more persons who will occupy a housing unit. Unborn children do not count in family size determination.

Annual Income: Generally, the gross amount of income of all adult household members is anticipated to be received during the coming 12-month period.

2.1.1 OWNER-OCCUPIED REQUIREMENTS

Owner-Occupant - to be eligible, household income must be equal to or less than the applicable HCD income limits. Owner will be required to provide income documentation. Refer to Income Inclusions and Exclusions for further guidance to the types of incomes to be included or excluded when calculating gross annual income. **See Attachment A for HOME and CDBG. See Attachment A-1 for CalHome.** Refer to Asset Inclusions and Exclusions for further guidance to the types of assets to be included or excluded when calculating gross annual income. **See Attachment B.**

Owner-occupants housing and/or debt ratios are not considered, nor is a credit report required, as the funding provided creates no additional monthly financial obligation. If an owner-occupant has a mortgage, it is verified that all payments are current and that no late payments have been received in the past twelve months.

2.2. INCOME QUALIFICATION CRITERIA

Projected annual gross income of the applicant household will be used to determine whether they are above or below the published HCD income limits. Income qualification criteria for HOME and CDBG, as shown in the most recent HCD program-specific guidance at https://www.hcd.ca.gov/grants-and-funding/income-limits/income-calculation-and-determination-guide, will be followed to independently determine and certify the household's annual gross income. Income will be verified by reviewing and documenting tax returns, copies of wage receipts, subsidy checks, bank statements and third-party verification of employment forms sent to employers. All documentation shall be dated within six months prior to loan closing and kept in the applicant file and held in strict confidence.

A. HOUSEHOLD INCOME DEFINITION:

Household income is the annual gross income of all adult household members that is projected to be received during the coming 12-month period, and will be used to determine program eligibility. Refer to Income Inclusions and Exclusions for further guidance to the types of incomes to be included or excluded when calculating gross annual income. For those types of income counted, gross amounts (before any deductions have been taken) are used. Two types of income that are not considered would be income from minors and of live-in aides.

Certain other household members living apart from the household also require

special consideration. The household's projected ability to pay must be used, rather than past earnings, when calculating income.

See Attachment A: HOME and CDBG 24 CFR Part 5 Annual Income Inclusions and Exclusions and Attachment A-1: CalHome Title 25 Section 6914 Annual Income inclusions and Exclusions (State)

B. ASSETS:

There is no asset limitation for participation in the Program. Income from assets is, however, recognized as part of annual income under the Part 5 definition. An asset is a cash or non-cash item that can be converted to cash. The value of necessary items such as furniture and automobiles is not included. *(Note: it is the income earned – e.g. interest on a savings account – not the asset value, which is counted in annual income.)*

An asset's cash value is the market value less reasonable expenses required to convert the asset to cash, including Penalties or fees for converting financial holdings and costs for selling real property. The cash value (rather than the market value) of an item is counted as an asset.

See Attachment B: Part 5 Annual Income Net Family Asset Inclusions and Exclusions

2.3. HOMEOWNER ELIGIBILITY AND RESIDENCY REQUIREMENTS

The Sponsor's Housing Rehabilitation Program allows for owner-occupied properties to participate in the Program. Owner-occupied units must be the owner's principal place of residence. A photocopy of a recent utility bill will verify proof of occupancy. No unit to be rehabilitated will receive financial assistance if it is currently occupied by an over-income household or does not meet the eligibility standards outlined in these guidelines.

2.3.1 OWNER-OCCUPIED

A. Continued residency is monitored annually by Attachment F for the term of the loan. Occupancy will be verified by the submission of the following:

1. Proof of occupancy in the form of a copy of a current utility bill; and

2. Statement of unit's continued use as primary residence of the owner.

3. Current Homeowner's Insurance Policy; and

4. Current Property Tax Bill

B. In the event that a homeowner sells, transfers title, or discontinues residence in the rehabilitated property for any reason, the loan becomes due and payable, unless the following conditions are met:

The homeowner who received the loan dies and the heir to the property meets income requirements and intends to occupy the home as his/her principal residence. If the heir does not meet applicable eligibility requirements, the loan is due and payable. **Note: Loans provided by CalHome are not assumable.**

C. If a homeowner converts the property to a rental unit, or any commercial or non-residential use, the loan is due and payable, unless the loan was funded with CDBG and tenant and homeowner meet eligibility requirements.

If the loan is funded with a CalHome Loan it is not transferable except under the following limited circumstances:

(a) The transfer of the Property to the surviving joint tenant by devise, descent or operation of the law, on the death of a joint tenant;

(b) A transfer of the Property where the spouse becomes an owner of the property;

(c) A transfer of the Property resulting from a decree of dissolution of marriage, legal separation or from an incidental property settlement agreement by which the spouse becomes an owner of the Property; or

(d) A transfer to an inter vivos trust in which the Borrower is and remains the beneficiary and occupant of the property.

3.0. PROPERTY ELIGIBILITY

3.1. CONDITIONS

A. No unit will be eligible if a household's income exceeds the prescribed income limits listed in Attachment C.

B. Units to be rehabilitated must be located within the incorporated areas of the Sponsor's jurisdiction.

C. Property must contain a legal residential structure intended for continued residential occupancy.

D. All repair work will meet Local Building Code standards. At a minimum, health and safety hazards must be eliminated. For CDBG the priority will be the elimination of health and safety hazards. Sponsor may also require elimination of code deficiencies. When HOME funds are used for housing rehabilitation, the property must meet all applicable current codes, rehabilitation standards,

ordinances, and zoning ordinances at the time of project completion. However, if certain components of the house are sound and were built to code prescribed at the time of installation, no repair or alteration will be made to those components. Section 8 Housing Quality Standards may be required on rentals by Sponsor when CDBG funds are used.

3.2. ANTI-DISPLACEMENT POLICY AND RELOCATION ASSISTANCE

Tenants will be informed of their eligibility for temporary relocation benefits if occupancy during rehabilitation constitutes a danger to health and safety of occupants or public danger or is otherwise undesirable because of the nature of the project. Relocated persons will receive increased housing costs, payment for moving and related expenses and appropriate advisory services, as detailed in the Sponsor's "Residential Anti-displacement and Relocation Assistance Plan" **(Attachment E).**

Owner-occupants are not eligible for temporary relocation benefits, unless health and safety threats are determined to exist by the Program Operator. In cases where relocation is determined to be necessary by the Sponsor/Program Operator, assistance may be provided for actual costs incurred from the applicant's loan proceeds or as a grant **(see Section 4.4. for allowable grants)**. HOME-funded projects will provide relocation assistance in the form of a grant, which shall be included in the maximum assistance amount.

Note: Relocation benefits are not a requirement under CalHome, but are acceptable and may be covered by loan proceeds.

3.3. NOTIFICATION AND DISCLOSURES - Not required by CalHome

A. Occupants of units constructed prior to 1978 will receive proper notification of Lead-Based Paint (LBP) hazards as follows:

The Lead Hazard Information Pamphlet published by the EPA/HUD/Consumer Product Safety Commission will be given to all owners regardless of the cost of rehabilitation or paint test findings. If lead-based paint is found through testing or if presumed, a Notice of Lead Hazard Evaluation or Presumption will also be supplied. When Lead hazards are present, a Notice of Lead Hazard Reduction Activity and a Lead Hazard Evaluation Report will also be provided **(Attachment I)**.

B. Tenants located in properties that will receive housing rehabilitation will be provided with a notice outlining their relocation rights and benefits **(Attachment E)**.

3.4. ENVIRONMENTAL REVIEW

The Program Operator must conduct an environmental review in order to comply with 24 CFR section 92.352(a), which requires that the environmental effects of, and upon, each activity carried out with HOME funds be assessed in accordance with the provision of the National Environmental Policy Act of 1969 (NEPA) and the related authorities listed in HUD's implementing HOME regulations at 24 CFR Part 58.

The Program Operator must use the *Categorically Excluded, Subject To 58.5* ("CEST") format found on the HUD Environmental Review page at https://www.hudexchange.info/programs/environmental-review/, and Sponsor's NEPA Certifying Officer must sign the completed certification. Sponsor must also use applicable worksheets at https://www.hudexchange.info/programs/environmental-review/federal-related-laws-and-authorities/, for each CEST factor.

The Sponsor's HOME Standard Agreement requires that HOME Program written approval of each project's environmental review package is received, prior to committing funds to any rehabilitation project. HCD recommends that Program pre-approval of the environmental review package is obtained prior to the NEPA Certifying Officer signature.

The default NEPA Certifying Officer, until and unless delegated by an individual still in that position or by the governing body, is only the mayor, City Manager or City Administrator, County Administrative Officer or equivalent, or the Chair of the Board of Supervisors. NEPA Certifying Officer delegations must contain HUD-required language, and must be separate from other signatory delegations. Required language is available from the HOME Program.

4.0. THE PROGRAM LOAN

4.1. MAXIMUM AMOUNT OF PROGRAM ASSISTANCE

An eligible homeowner may qualify for the full cost of rehabilitation/reconstruction work needed to comply with State and local codes and ordinances. Maximum assistance shall not exceed the Sponsor's County maximum HOME Per-Unit Subsidy Limits in **Attachment C, which has a link to the HCD Limits webpage. For CDBG-funded programs, the maximum assistance for rehabilitation/reconstruction will not exceed $190,430.**

4.2. AFFORDABILITY PARAMETERS FOR HOMEOWNERS

A. Total indebtedness against property shall not exceed 100 percent of after-rehabilitation value as determined by "Estimates of value" or an appraisal, for CDBG or HOME projects. The exception for HOME loans is per HOME Management Memorandum 13-01 at https://www.hcd.ca.gov/grants-funding/grants-management-memos/docs/Memo_13-01_re_grants_for_OOR.doc, wherein the entire HOME assistance amount is granted rather than loaned, due to a lack of any after-rehabilitation equity based on existing loans on the property. An estimate of after-rehab value will be made prior to making a commitment of funds using the method outlined in Section 4.5. Note: This does not apply to CalHome projects.

B. HOME-funded units' after-rehabilitation values shall not exceed the HOME Homeownership Value Limits for Sponsor's County as updated by HUD and published on the HCD Website. **See Attachment C for current limits, which may reflect temporary waivers not published on the HCD Website, and for a link to the HCD Limits webpage.**

C. Total indebtedness against property shall not exceed 105 percent of the after-rehabilitation value as determined by an appraisal for CalHome projects. An estimate of After-Rehab Value will be made prior to making a commitment of funds using the method outlined in Section 4.5. Note: This does not apply to HOME or CDBG projects.

D. Costs may be supplemented with personal financing, or with other loan or grant programs, which are sources of leverage for the Sponsor.

E. Any bid within 10% of the Program Operator's estimate may be selected, otherwise an explanation must be provided to the file for a bid selected exceeding 10% of the estimate.

4.3. RATES AND TERMS

4.3.1. OWNER-OCCUPANTS

A. Homeowners are eligible for Deferred Payment Loans (DPL), at zero interest, evidenced by a Promissory Note and secured by a Deed of Trust, with no payment required for 30 years unless the borrower sells or transfers title or discontinues residence in the dwelling. Payments may be made voluntarily on a DPL. **Note: If it is determined by the Sponsor that repayment of a CalHome or CDBG Program loan at the maturity date causes a hardship to the homeowner, the Sponsor may opt for the following**:

1. Amend the note and deed of trust to defer repayment of the amount due at maturity, that is balance of the original principal plus the accrued interest, for up to an additional 30 years (at 0% additional interest). This may be offered one time;

2. Convert the debt at loan maturity; that is the balance of the original principal plus any accrued interest, to an amortized loan, repayable in 15 years at 0% additional interest.

B. If the homeowner dies, and if the heir(s) to the property live(s) in the house and is/are income eligible, the heir(s) may be permitted, upon approval of the Sponsor, to assume the loan at the rate and terms the heir(s) qualifies for under current participation guidelines. **Note: CalHome loans are not assumable.**

C. If the homeowner dies and the heir(s) is/are not income eligible, the loan becomes all due and payable.

D. If a homeowner converts the rehabilitated property to any residential-rental, commercial or non-residential use, the loan becomes all due and payable.

E. As specified in the Rehabilitation Loan Agreement, all applicants who participate in the Program must maintain the property at post-rehabilitation conditions for the term of the loan. Should the property not be maintained accordingly, the loan shall be considered in default and becomes all due and payable, and if necessary, foreclosure proceedings will be initiated. A method of inspection will be established by the Sponsor.

4.4. GRANTS

A. CDBG-funded programs may provide grants as follows:

1. A grant of up to $7,500 is available for any one of the following qualifying factors:

   (a) Senior Citizen - at least 62 years old**;** or

   (b) Handicapped – for only handicap modifications to a house with one or more physically handicapped occupants who would function more independently if such modifications were installed**;** or

   (c) Lowest Targeted Income Group – with gross annual income less than 50 percent of County median income; or

   (d) Equity maintenance – if financing rehabilitation entirely with a loan would cause indebtedness to exceed 100% of after-rehabilitation value; or

   (e) Curb, gutter and sidewalk – when curb, gutter and/or sidewalk are required by City code; or

   (f) Building permits, school fees, appraisals, property report/title insurance, building permits, termite report, land survey, grading plans, recording fees and/or flood insurance; or

   (g) Emergencies – failure of a major household component that would require the participant to live without basic plumbing, electrical, heating, cooling, or security. (These funds are not for use during a normal rehabilitation, they are for true emergency situations, such as a failed sewer line or water heater, blown electrical panel, etc.)

2. Grants of up to $10,000 are available for Fire Sprinkler installation and associated costs – for reconstruction projects, as required by CCR, Title 24, Part 2.5 of the 2010 California Residential Code.

3. Grants are available for the repair, replacement, or abandonment of domestic water wells and/or associated costs (such as water pump lowering) based on invoices from contracted well drillers and/or water pump installers. The Program Operator must approve a total cost estimate from a contracted well driller and/or water pump installer prior to financing approval to ensure cost reasonableness.

4. Grants of up to $7,500 are available for asbestos containment and/or removal.

B. HOME and CDBG provide grants for all actual costs of lead-based paint evaluation and reduction activities.

C. HOME and CDBG provide grants for relocation assistance. See Relocation Assistance Plan, **Attachment E**.

   1. Owner-Occupant – Limit of $3,000.

D. HOME-funded projects include grants, if necessary, to cover the costs of financing in excess of available equity. Available equity will be determined by subtracting

the current total indebtedness from the after-rehabilitation value. Grants provided may be up to 25 percent of the applicable HUD Per-Unit Subsidy Limits established pursuant to 24 CFR section 92.250(a). This grant amount is in addition to any grant funds provided pursuant to Section 4.4.B. and 4.4.C.

E. **Grants are not available in CalHome-funded programs**.

4.5. APPRAISAL

A. The After-Rehab Value for rehabilitation projects is determined using the "Estimates of value" method. The Sponsor or Program Operator determines estimates of value based on the sale prices of at least three (3) comparable properties, sold within the last six months (within one year of the assistance date, which is the date the promissory note is signed), and located within one mile of the subject property. The participants' file will include the estimate of value and document the basis for the value estimates. The purpose of the "Estimates of value" is to determine that the After-Rehabilitation Value Limit of the housing unit will not exceed the permitted amount per HCD Program regulations **(See Attachment C)**. If three comparable properties cannot be found, or if there is any question regarding the After-Rehab Value, the ARV will be determined by a licensed appraiser, as described in Section 4.5.B. below.

B. A licensed appraiser determines the After-Rehab Value for rehabilitation projects, when the "Estimates of value" method cannot be used. For rehabilitation projects the appraiser determines the value of the unit with the rehabilitation building plans and specifications included. For HOME only, the cost of the appraisal will be paid by the Sponsor, not by the homeowner. The purpose of the appraisal is to determine that the after-rehabilitation value of the housing unit will not exceed the permitted amount per HCD Program regulations **(See Attachment C),** and that the combined loans will not exceed the maximum combined loan-to-value limit, as described in Section 4.2.A above.

C. The After-Rehab Value for reconstruction projects is determined by a licensed appraiser. The After-Rehab Value for reconstruction projects is determined by an appraisal completed of the building plans and specifications for the new home. For HOME only, the cost of the appraisal will be paid by the Sponsor, not by the homeowner. The purpose of the appraisal is to determine that the After-Rehabilitation Value Limit of the housing unit will not exceed the permitted amount per HCD Program regulations **(See Attachment C)**.

4.6. INSURANCE

4.6.1. HAZARD INSURANCE

The homeowner shall maintain hazard insurance on the property for the duration of the Program loan(s). This insurance must be an amount adequate to cover all encumbrances on the property. The insurer must identify the Sponsor as Loss Payee for the amount of the Program loan(s). Evidence of this shall be provided to the Sponsor.

In the event the applicant fails to make the hazard insurance premium payments in a timely fashion, the Sponsor at its option, may make such payments for a period not to exceed 60 days. The Sponsor may, in its discretion and upon the showing of special circumstances, make such premium payments for a longer period of time. Should the Sponsor make any payments, it may, in its sole discretion, add such payments to the principal amount that the applicant is obligated to repay the Sponsor under this Program. The premium may be paid by the Program loan for one year. **Note: HOME and CDBG funds cannot be used to pay insurance costs beyond those identified as initial loan costs**. **Note: CalHome funds cannot be used to pay insurance at any time.**

4.6.2. FLOOD INSURANCE

For homes in a 100-year flood zone, the owner is required to maintain flood insurance in an amount adequate to secure the Program loan and all other encumbrances. This policy must designate the Sponsor as Loss Payee and a binder shall be provided to the Sponsor and maintained in the borrower's file. The premium may be paid by the Program loan for one year. **Note: HOME funds cannot be used to pay insurance costs beyond those identified as initial loan costs**. **Note: CalHome funds cannot be used to pay insurance at any time.**

4.7. LOAN SECURITY

A. Loan security for all owner-occupied rehabilitation stick-built homes will be secured by the real property and improvements, and will also include a Deed of Trust, Promissory Note and Loan Agreement in favor of the Sponsor.

B. A manufactured home in a mobile home park or on leased land that is not on a permanent foundation will be secured by an HCD 480.7 or an HCD 484 Statement of Lien, and will also include a Promissory Note and Loan Agreement.

C. Entering a subordinate lien is acceptable. However, the Sponsor will not subordinate a first lien position once established.

5.0. PROGRAM LOAN SERVICNG AND MAINTENANCE

5.1. PAYMENTS ARE VOLUNTARY

Borrowers may begin making voluntary payments at any time.

5.2. RECEIVING LOAN REPAYMENTS

A. Program loan payments will be made to:

AmeriNat
P.O. Box 52211
Phoenix, AZ 85072-2211

B. The Sponsor will be the receiver of loan payments or recapture funds and will

maintain a financial record-keeping system to record payments and file statements on payment status. Payments shall be deposited and accounted for in the Sponsor's appropriate Program Income Account, as required by all three HCD programs. The Program Sponsor will accept loan payments from borrowers prepaying deferred loans and from borrowers making payments in full upon sale or transfer of the property. All loan payments are payable to the Sponsor. The Sponsor may, at its discretion, enter into an agreement with a third party to collect and distribute payments and/or complete all loan servicing aspects of the Program.

5.3. LOAN SERVICING POLICIES AND PROCEDURES

See **Attachment F** for local loan servicing policies and procedures. While the attached policy outlines a system that can accommodate a crisis that restricts borrower repayment ability, it should in no way be misunderstood: The loan must be repaid. All legal means to ensure the repayment of a delinquent loan as outlined in the Loan Servicing Policies and Procedures will be pursued.

5.4. LOAN MONITORING PROCEDURES

Homeowners will be required to submit each of the following to the Sponsor at the time of annual occupancy verification per Attachment F:

- Proof of occupancy in the form of a copy of a current utility bill;
- Statement of unit's continued use as a residence;
- Declaration that other title holders do not reside on the premises;
- Verification that Property Taxes are current; and
- Verification of current required insurance policies.

5.5. DEFAULT AND FORECLOSURE

If an owner defaults on a loan, and foreclosure procedures are instituted, they shall be carried out according to the Program Foreclosure Policy adopted by the Sponsor, and attached to these guidelines as **Attachment G**.

5.6. SUBORDINATIONS

The Sponsor may approve a request to subordinate a loan, in order for the owner to refinance the property, under the following conditions:

A. The lien position of the Sponsor loan will remain the same or be advanced.

B. The new primary loan is no greater than the balance of the loan being refinanced, except the costs of refinancing the loan may be added to the principal balance.

C. The purpose of the new primary loan is to reduce the interest rate being paid and/or reduce the owner's payment.

D. The refinanced loan must have an impound account for taxes and insurance.

E. The refinancing terms must be acceptable to the Sponsor.

F. CDBG allows refinancing with CDBG funds in conjunction with only rehabilitation of the unit.

6.0. CONSTRUCTION

6.1. STANDARDS

A. All repair work will meet Local Building Code standards. At a minimum, health and safety hazards must be eliminated. For CDBG the priority will be the elimination of health and safety hazards. Sponsor may also require elimination of code deficiencies. When HOME funds are used for housing rehabilitation, the property must meet all applicable current codes, rehabilitation standards, ordinances, and zoning ordinances at the time of project completion. However, if certain components of the house are sound and were built to code prescribed at the time of installation, no repair or alteration will be made to those components. Section 8 Housing Quality Standards may be required on rentals by Sponsor when CDBG funds are used.

B. Contracting Process

1. Contracting will be done on a competitive basis.

2. The homeowner will be the responsible agent, but the Sponsor and/or its Program Operator will prepare the work write-up, prepare and advertise the bid package, and assist the owner in negotiating the construction contract.

3. A competitive bid process will be followed for all rehabilitation work. Upon bid review, the homeowner will select a contractor whose total bid amount is within 10% of the in-house estimate.

4. If during the course of the housing rehabilitation project the Housing Inspector deems it necessary to re-construct the entire dwelling due to unforeseen circumstances, the project will cease and a Test for Reconstruction will be submitted to HCD for approval prior to a change order being executed with contractor.

5. The Sponsor does not warrant any construction work, or provide insurance coverage.

C. Approved Contractors

1. Contractors are required to be licensed with the State of California, and be active and in good standing with the Contractors' License Board.

2. Contractors will be checked against HUD's list of federally debarred contractors. No award will be granted to a contractor on this list.

3. Contractors must have public liability and property damage insurance, and worker's compensation, unemployment and disability insurance, to the extent required by State law.

4. Contractor must agree to comply with all federal and state regulations.

D. Unprofessional Conduct by Contractor

In the event that the Community Services Director determines that a participating contractor is found to have displayed unprofessional conduct that goes against the City's program guideline and California Business and Professions Code, the contractor will be temporarily suspended for a minimum of six (6) months or permanently removed from participation in the City's Housing Programs. A written Notice of suspension will be mailed to the contractor via certified mail/return receipt stating the reason(s) for the decision.

1. Offering homeowner(s) additional incentives not included in the original scope of work in order to entice the homeowner(s) to select them for the project.
2. Making derogatory comments of other participating contractors or City Staff to homeowner(s).
3. Threatening or accusing City staff of unprofessional behavior and/or favoritism.
4. Refusal to honor all aspects of contract between homeowner and contractor.
5. Any other conduct deemed unprofessional by City Staff.

E. Suspension.

Contractors may be suspended for a minimum of six (6) months or may be removed permanently from participating in the City's Housing Programs. Once the suspension period has ended, the Contractor may submit in writing a letter requesting reinstatement to participate in the City's Housing Programs. Upon approving request, City staff will mail the Contractor a letter requesting a new application and updated documentation as required by the program. The Contractor will be notified in writing of reinstatement once all of the documentation has been verified and approved.

F. Contractor Appeal Procedure

Contractors suspended from participating in the City's Housing Programs may file a written appeal protesting the decision within five (5) calendar days after receiving the Notice of Suspension from the City to the Community Services Director. Any claim not presented within the limit specified in this paragraph shall be deemed to have been waived.

If the Contractor does not agree with the decision of the Community Services Director, the Contractor may file a written appeal to the City Manager within three (3) calendar days after the decision of the original appeal. All decisions of the City Manager will be final and be made within thirty (30) calendar days of the receipt of the filing of the appeal. Written notification of the City Manager's decision will be mailed to the contractor.

G. Occupants of units constructed prior to 1978 will receive proper notification of Lead-Based Paint (LBP) hazards as identified in Section 3.3.A. **Note: Units funded solely with CalHome funds are not required to comply with LBP regulations.**

H. Units constructed prior to 1978 will also be inspected according to the following HUD regulations. **Note: Units funded solely with CalHome funds are not required to comply with LBP regulations**. For CDBG funded programs please refer to Chapter 20, Lead-Based Paint Requirements for guidance in the CDBG Grant Management Manual.

1. If the total amount of Federal assistance or the total amount of rehabilitation hard cost is up to and including $5,000, the following is required:

   (a) Paint testing or presume LBP;
   (b) Clearance of disturbed work areas; and
   (c) Notifications listed in Section 3.3.A.

2. If the amount of Federal assistance or the total amount of rehabilitation hard cost is more than $5,000 up to and including $25,000, the following is required:
   (a) Paint testing or presume LBP;
   (b) Risk assessment; and
   (c) Clearance of unit.

   If LBP hazards are identified, interim controls will be implemented. This level will also require a notice of "Abatement of Lead Hazards Notification" at least five days prior to starting work.

3. If the amount of Federal assistance or the total amount of rehabilitation hard cost is more that $25,000, the following is required:
   (a) Items (a), (b), and (c) of 2. above;
   (b) Abatement of all LBP hazards identified or produced;
   (c) Use of interim controls on exterior surfaces not disrupted by rehab; and all notices listed above in Sections 3.3.A. and 6.1.F.2.

4. All paint tests that result in a negative finding of lead-based paint are exempt from any and all additional requirements. If defective paint surfaces are found, they will be properly treated or abated. A State-certified Inspector/Assessor will perform all paint testing, risk assessments, and clearances. A trained supervisor may oversee interim controls; however, a certified supervisor and workers will perform all abatement.

6.2. ELIGIBLE CONSTRUCTION COSTS

"Rehabilitation" means, in addition to the definition in Section 50096 of the Health and Safety Code, repairs and improvements to a manufactured home necessary to correct any condition causing the home to be substandard pursuant to Section 1704 of Title 25, California Code of Regulations. Rehabilitation also includes room additions to alleviate overcrowding. Rehabilitation also means repairs and improvements where necessary to

meet any locally-adopted standards used in local rehabilitation programs. Rehabilitation does not include replacement of personal property.

Rehabilitation includes reconstruction. Federal law and policy allow the use of HOME funds to demolish and reconstruct owner-occupied residential structures. Reconstruction is defined as the demolition and construction of a structure. The Sponsor and/or Program Operator must document that the reconstruction costs are less than the cost to rehabilitate the existing substandard housing. This will be done using the State's CDBG Test for Reconstruction, for projects funded with CDBG funds; or, using the State's HOME Test for Reconstruction, for projects funded with HOME funds.

Additionally, the Sponsor must determine that the project's value after reconstruction (housing and land combined) is less that the HOME Homeownership Value Limits for Newly-Constructed housing, in the Sponsor's jurisdiction (**see Attachment C**).

The residential structure to be reconstructed must be a structure with cooking, eating, sleeping, and sanitation facilities which have been legally occupied as a residence within the preceding 12 months. Fifth wheels or recreational vehicles, for example, are not considered dwellings and therefore are not eligible under this Program.

Like for like requires that the structure being demolished must be replaced with a like structure (replace manufactured housing with manufactured housing, for example). However, additions may be approved by the HCD Program when required by Codes/Ordinances or to alleviate overcrowding **(see Attachment C).**

Temporary relocation benefits must be planned for and budgeted into the total allowable subsidy for the project, but if required it would be in the form of a grant.

Depending on the outcome of the federal environmental review, a reconstructed project may require Authority from the State before funds are committed to the project. See Environmental Section 3.4.

Allowable rehabilitation\reconstruction costs include:

A. Cost of building permits and other related government fees.

B. Cost of architectural, engineering, and other consultant services which are directly related to the rehabilitation of the property.

C. Rehabilitation or Replacement of a manufactured home not on a permanent foundation. Rehabilitation of a manufactured home may include the replacement of the unit with a used manufactured home and the cost to repair it, as long as the unit has been occupied and is not used as a demonstration model. Should the unit meet the criteria for reconstruction a new manufactured home can be used for replacement and all costs associated with the purchase and transportation can be added to the loan.

D. Owner-occupied rehabilitation activity delivery fees, pursuant to Section 7733(f), as reimbursement to the Sponsor for the actual costs of services rendered to the homeowner that are incidentally but directly related to the rehabilitation work (e.g. planning, engineering, construction management, including inspections and work write-ups).

E. Rehabilitation will address the following issues in the order listed. Eligible costs are included for each item.

1. Health and Safety Issues

   Eligible costs include, but are not limited to, energy-related improvements, lead-based paint hazard evaluation and reduction activities, improvements for handicapped accessibility, and repair or replacement of major housing systems.

   Per the federal HOME Regulations at 24 CFR section 92.251(b), Major Systems are:

   - structural support
   - roofing
   - cladding and weatherproofing (e.g., windows, doors, siding, gutters)
   - plumbing
   - electrical
   - heating, ventilation, and air conditioning.

   Upon project completion, each of the major systems must have a remaining useful life for a minimum of five (5) years, so these systems must be rehabilitated or replaced as part of the rehabilitation work in order to achieve this requirement.

   A driveway may be considered part of rehabilitation if it is determined to be a health and safety issue.

2. Code and Regulation Compliance

   Eligible costs include, but are not limited to, additional work required to rehabilitate and modernize a home to bring it into compliance with current building codes and regulations. Painting and weatherization are included.

3. Demolition

   Eligible costs include, but are not limited to, the tear down and disposal of dilapidated structures when they are a part of the reconstruction of an affordable housing unit. If a garage or carport is detached, it may not be rehabilitated but may be demolished, if it is determined to be a health and

safety issue.

4. Upgrades (based on overcrowding)

   Eligible costs include additional bedrooms and bathrooms if the need can be demonstrated by HUD's or Sponsor's overcrowding guidelines listed in **Attachment C**. The Program will not fund additions to a home for a den or family room, or for any luxury items.

   The CalHome Program's requirement is that a bedroom or bathroom can be added to omit overcrowding, and this is up to the Recipient to decide what is overcrowding.

5. General Property Improvements

   Eligible costs include, but are not limited to addition or replacement of an oven, stove, dishwasher, or fixture; replacing floor coverings; painting; and repair or installation of fencing.

   All improvements must be physically attached to the property and permanent in nature. Non-code general property improvements (including fencing, landscaping, driveway, etc.) will be *limited to 15 percent* of the rehabilitation loan amount. Any cash contribution by the property owner will be considered a general property improvement and be included in this percentage. Luxury items are not permitted. Items such as stoves and dishwashers that are not built-in may be replaced due only to incipient failure or documented medical condition of the homeowner, and must be of moderate quality.

6. Rehabilitation Standards

   All repair work related to health and safety conditions will meet Local Building Code standards. The priority will be the elimination of all health and safety hazards and code compliance, which is required for HOME-funded projects.

6.3. ELIGIBLE PROJECT COSTS

Examples of eligible project costs for all administrative expenses related to the paperwork for processing and insuring a loan application are listed below. For HOME, these costs are considered activity delivery costs and may not be charged to the homeowner's loan.

- Appraisal
- Property Report/Title Insurance
- Building Plan
- Termite Report
- Land Survey
- Grading Plan

- Recording Fees
- Hazard/Course of Construction Insurance
- Flood Insurance, as applicable (not allowed with CalHome or HOME funds)

Costs are based on charges currently incurred by the Sponsor, or its Program Operator, for these products and/or services. Except for HOME loans, any cost increases charged to the Sponsor/Program Operator for these products and/or services will be passed on to the homeowner and included in the loan. All fees are subject to change and are driven by the market.

6.4. REPAIR CALLBACKS

Contractors will comply with State law regarding all labor and material warranties. All labor and material shall meet FHA minimum specifications.

7.0. EXCEPTIONS AND SPECIAL CIRCUMSTANCES

7.1. AMENDMENTS

The Sponsor may make amendments to these Participant Guidelines. Any changes made shall be in accordance with federal and state regulations, shall be approved by the Sponsor's Loan Committee and/or local governing body and submitted to HCD for approval.

7.2. EXCEPTIONS

Any case to which a standard policy or procedure, as stated in the guidelines, does not apply or an applicant treated differently from others of the same class would be an exception.

7.2.1 PROCEDURES FOR EXCEPTIONAL CIRCUMSTANCES

A. The Sponsor or its Program Operator may initiate consideration of an exception and prepare a report. This report shall contain a narrative, including the Sponsor's/Program Operator's recommended course of action and any written or verbal information supplied by the applicant.

B. The Sponsor shall make a determination of the exception based on the recommendation of the Program Operator. The request can be presented to the Sponsor's loan committee and/or governing body for decision.

8.0. DISPUTE RESOLUTION AND APPEALS PROCEDURES

8.1. PROGRAM COMPLAINT AND APPEAL PROCEDURE

Complaints concerning the Sponsor's Rehabilitation Program should be made to the Program Operator first. If unresolved in this manner, the complaint or appeal shall be made in writing and filed with the Sponsor. The Sponsor will then schedule a meeting with the Sponsor's Loan Review Committee. Their written response will be made within thirty (30) working days. If the applicant is not satisfied with the committee's decision, a request for an appeal may be filed with the local governing body. Final appeal may be filed in writing with HCD within one year after denial or the filing of the Project Notice of Completion.

8.2. GRIEVANCES BETWEEN PARTICIPANTS AND CONSTRUCTION CONTRACTOR

Contracts signed by the contractor and the participant include the following clause, which provides a procedure for resolution of grievances:

> Any controversy arising out of or relating to this Contract, or the breach thereof, shall be submitted to binding arbitration in accordance with the provisions of the California Arbitration Law, Code of Civil Procedure 1280 et seq., and the Rules of the American Arbitration Association. The arbitrator shall have the final authority to order work performed, to order the payment from one party to another, and to order who shall bear the costs of arbitration. Costs to initiate arbitration shall be paid by the party seeking arbitration. Notwithstanding, the party prevailing in any arbitration proceeding shall be entitled to recover from the other all attorney's fees and costs of arbitration.

ATTACHMENT A
INCOME INCLUSIONS AND EXCLUSIONS

24 CFR Part 5 Annual Income Inclusions and Exclusions

5.609 Annual income.

(a) Annual income includes, with respect to the family:

(1) All amounts, not specifically excluded in paragraph (b) of this section, received from all sources by each member of the family who is 18 years of age or older or is the head of household or spouse of the head of household, plus unearned income by or on behalf of each dependent who is under 18 years of age, and

(2) When the value of net family assets exceeds $50,000 (which amount HUD will adjust annually in accordance with the Consumer Price Index for Urban Wage Earners and Clerical Workers) and the actual returns from a given asset cannot be calculated, imputed returns on the asset based on the current passbook savings rate, as determined by HUD.

(b) Annual income does not include the following:

(1) Any imputed return on an asset when net family assets total $50,000 or less (which amount HUD will adjust annually in accordance with the Consumer Price Index for Urban Wage Earners and Clerical Workers) and no actual income from the net family assets can be determined.

(2) The following types of trust distributions:

(i) For an irrevocable trust or a revocable trust outside the control of the family or household excluded from the definition of net family assets under § 5.603(b):

(A) Distributions of the principal or corpus of the trust; and

(B) Distributions of income from the trust when the distributions are used to pay the costs of health and medical care expenses for a minor.

(ii) For a revocable trust under the control of the family or household, any distributions from the trust; except that any actual income earned by the trust, regardless of whether it is distributed, shall be considered income to the family at the time it is received by the trust.

(3) Earned income of children under 18 years of age.

(4) Payments received for the care of foster children or foster adults, or State or Tribal kinship or guardianship care payments.

(5) Insurance payments and settlements for personal or property losses, including but not limited to payments through health insurance, motor vehicle insurance, and workers' compensation.

(6) Amounts received by the family that are specifically for, or in reimbursement of, the cost of health and medical care expenses for any family member.

(7) Any amounts recovered in any civil action or settlement based on a claim of malpractice, negligence, or other breach of duty owed to a family member arising out of law, that resulted in a member of the family becoming disabled.

(8) Income of a live-in aide, foster child, or foster adult as defined in §§ 5.403 and 5.603, respectively.

(9)

(i) Any assistance that section 479B of the Higher Education Act of 1965, as amended (20 U.S.C. 1087uu), requires be excluded from a family's income; and

(ii) Student financial assistance for tuition, books, and supplies (including supplies and equipment to support students with learning disabilities or other disabilities), room and board, and other fees required and charged to a student by an institution of higher education (as defined under Section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002)) and, for a student who is not the head of household or spouse, the reasonable and actual costs of housing while attending the institution of higher education and not residing in an assisted unit.

(A) Student financial assistance, for purposes of this paragraph (9)(ii), means a grant or scholarship received from—

(*1*) The Federal government;

(*2*) A State, Tribe, or local government;

(*3*) A private foundation registered as a nonprofit under 26 U.S.C. 501(c)(3);

(*4*) A business entity (such as corporation, general partnership, limited liability company, limited partnership, joint venture, business trust, public benefit corporation, or nonprofit entity); or

(*5*) An institution of higher education.

(B) Student financial assistance, for purposes of this paragraph (9)(ii), does not include—

(*1*) Any assistance that is excluded pursuant to paragraph (b)(9)(i) of this section;

(*2*) Financial support provided to the student in the form of a fee for services performed (*e.g.,* a work study or teaching fellowship that is not excluded pursuant to paragraph (b)(9)(i) of this section);

(*3*) Gifts, including gifts from family or friends; or

(*4*) Any amount of the scholarship or grant that, either by itself or in combination with assistance excluded under this paragraph or paragraph (b)(9)(i), exceeds the actual covered costs of the student. The actual covered costs of the student are the actual costs of tuition, books and supplies (including supplies and equipment to support students with learning disabilities or other disabilities), room and board, or other fees required and charged to a student by the education institution, and, for a student who is not the head of household or spouse, the reasonable and actual costs of housing while attending the institution of higher education and not residing in an assisted unit. This calculation is described further in paragraph (b)(9)(ii)(E) of this section.

(C) Student financial assistance, for purposes of this paragraph (b)(9)(ii) must be:

(*1*) Expressly for tuition, books, room and board, or other fees required and charged to a student by the education institution;

(*2*) Expressly to assist a student with the costs of higher education; or

(*3*) Expressly to assist a student who is not the head of household or spouse with the reasonable and actual costs of housing while attending the education institution and not residing in an assisted unit.

(D) Student financial assistance, for purposes of this paragraph (b)(9)(ii), may be paid directly to the student or to the educational institution on the student's behalf. Student financial assistance paid to the student must be verified by the responsible entity as student financial assistance consistent with this paragraph (b)(9)(ii).

(E) When the student is also receiving assistance excluded under paragraph (b)(9)(i) of this section, the amount of student financial assistance under this paragraph (b)(9)(ii) is determined as follows:

(*1*) If the amount of assistance excluded under paragraph (b)(9)(i) of this section is equal to or exceeds the actual covered costs under paragraph (b)(9)(ii)(B)(4) of this section, none of the assistance described in this paragraph (b)(9)(ii) of this section is considered student financial assistance excluded from income under this paragraph (b)(9)(ii)(E).

(*2*) If the amount of assistance excluded under paragraph (b)(9)(i) of this section is less than the actual covered costs under paragraph (b)(9)(ii)(B)(4) of this section, the amount of assistance described in paragraph (b)(9)(ii) of this section that is considered student financial assistance excluded under this paragraph is the lower of:

(*i*) the total amount of student financial assistance received under this paragraph (b)(9)(ii) of this section, or

(*ii*) the amount by which the actual covered costs under paragraph (b)(9)(ii)(B)(4) of this section exceeds the assistance excluded under paragraph (b)(9)(i) of this section.

(10) Income and distributions from any Coverdell education savings account under section 530 of the Internal Revenue Code of 1986 or any qualified tuition program under section 529 of such Code; and income earned by government contributions to, and distributions from, "baby bond" accounts created, authorized, or funded by Federal, State, or local government.

(11) The special pay to a family member serving in the Armed Forces who is exposed to hostile fire.

(12)

(i) Amounts received by a person with a disability that are disregarded for a limited time for purposes of Supplemental Security Income eligibility and benefits because they are set aside for use under a Plan to Attain Self-Sufficiency (PASS);

(ii) Amounts received by a participant in other publicly assisted programs which are specifically for or in reimbursement of out-of-pocket expenses incurred (*e.g.*, special equipment, clothing, transportation, childcare, etc.) and which are made solely to allow participation in a specific program;

(iii) Amounts received under a resident service stipend not to exceed $200 per month. A resident service stipend is a modest amount received by a resident for performing a service for the PHA or owner, on a part-time basis, that enhances the quality of life in the development.

(iv) Incremental earnings and benefits resulting to any family member from participation in training programs funded by HUD or in qualifying Federal, State, Tribal, or local employment training programs (including training programs not affiliated with a local government) and training of a family member as resident management staff. Amounts excluded by this provision must be received under employment training programs with clearly defined goals and objectives and are excluded only for the period during which the family member participates in the employment training program unless those amounts are excluded under paragraph (b)(9)(i) of this section.

(13) Reparation payments paid by a foreign government pursuant to claims filed under the laws of that government by persons who were persecuted during the Nazi era.

(14) Earned income of dependent full-time students in excess of the amount of the deduction for a dependent in § 5.611.

(15) Adoption assistance payments for a child in excess of the amount of the deduction for a dependent in § 5.611.

(16) Deferred periodic amounts from Supplemental Security Income and Social Security benefits that are received in a lump sum amount or in prospective monthly amounts, or any deferred Department of Veterans Affairs benefits that are received in a lump sum amount or in prospective monthly amounts.

(17) Payments related to aid and attendance under 38 U.S.C. 1521 to veterans in need of regular aid and attendance.

(18) Amounts received by the family in the form of refunds or rebates under State or local law for property taxes paid on the dwelling unit.

(19) Payments made by or authorized by a State Medicaid agency (including through a managed care entity) or other State or Federal agency to a family to enable a family member who has a disability to reside in the family's assisted unit. Authorized payments may include payments to a member of the assisted family through the State Medicaid agency (including through a managed care entity) or other State or Federal agency for caregiving services the family member provides to enable a family member who has a disability to reside in the family's assisted unit.

(20) Loan proceeds (the net amount disbursed by a lender to or on behalf of a borrower, under the terms of a loan agreement) received by the family or a third party (*e.g.*, proceeds received by the family from a private loan to enable attendance at an educational institution or to finance the purchase of a car).

(21) Payments received by Tribal members as a result of claims relating to the mismanagement of assets held in trust by the United States, to the extent such payments are also excluded from gross income under the Internal Revenue Code or other Federal law.

(22) Amounts that HUD is required by Federal statute to exclude from consideration as income for purposes of determining eligibility or benefits under a category of assistance programs that includes assistance under any program to which the exclusions set forth in paragraph (b) of this section apply. HUD will publish a notice in the Federal Register to identify the benefits that qualify for this exclusion. Updates will be published when necessary.

(23) Replacement housing "gap" payments made in accordance with 49 CFR part 24 that offset increased out of pocket costs of displaced persons that move from one federally subsidized housing unit to another Federally subsidized housing unit. Such replacement housing "gap" payments are not excluded from annual income if the increased cost of rent and utilities is subsequently reduced or eliminated, and the displaced person retains or continues to receive the replacement housing "gap" payments.

(24) Nonrecurring income, which is income that will not be repeated in the coming year based on information provided by the family. Income received as an independent contractor, day laborer, or seasonal worker is not excluded from income under this paragraph, even if the source, date, or amount of the income varies. Nonrecurring income includes:

(i) Payments from the U.S. Census Bureau for employment (relating to decennial census or the American Community Survey) lasting no longer than 180 days and not culminating in permanent employment.

(ii) Direct Federal or State payments intended for economic stimulus or recovery.

(iii) Amounts directly received by the family as a result of State refundable tax credits or State tax refunds at the time they are received.

(iv) Amounts directly received by the family as a result of Federal refundable tax credits and Federal tax refunds at the time they are received.

(v) Gifts for holidays, birthdays, or other significant life events or milestones (*e.g.*, wedding gifts, baby showers, anniversaries).

(vi) Non-monetary, in-kind donations, such as food, clothing, or toiletries, received from a food bank or similar organization.

(vii) Lump-sum additions to net family assets, including but not limited to lottery or other contest winnings.

(25) Civil rights settlements or judgments, including settlements or judgments for back pay.

(26) Income received from any account under a retirement plan recognized as such by the Internal Revenue Service, including individual retirement arrangements (IRAs), employer retirement plans, and retirement plans for self-employed individuals; except that any distribution of periodic payments from such accounts shall be income at the time they are received by the family.

(27) Income earned on amounts placed in a family's Family Self Sufficiency Account.

(28) Gross income a family member receives through self-employment or operation of a business; except that the following shall be considered income to a family member:

(i) Net income from the operation of a business or profession. Expenditures for business expansion or amortization of capital indebtedness shall not be used as deductions in determining net income. An allowance for depreciation of assets used in a business or profession may be deducted, based on straight line depreciation, as provided in Internal Revenue Service regulations; and

(ii) Any withdrawal of cash or assets from the operation of a business or profession will be included in income, except to the extent the withdrawal is reimbursement of cash or assets invested in the operation by the family.

[88 FR 9657, Feb. 14, 2023]

Title 25 Section 6914 Gross Income Inclusions – For CalHome activities

"Gross income" shall mean the anticipated income of a person or family for the twelve-month period following the date of determination of income.

"Income" shall consist of the following:

(a) Except as provided in subdivision (b), "Exclusions", all payments from all sources received by the family head (even if temporarily absent) and each additional member of the family household who is not a minor shall be included in the annual income of a family. Income shall include, but not be limited to:

(1) The gross amount, before any payroll deductions, of wages and salaries, overtime pay, commissions, fees, tips and bonuses;

(2) The net income from operation of a business or profession or from rental or real or personal property (for this purpose, expenditures for business expansion or amortization of capital indebtedness shall not be deducted to determine the net income from a business);

(3) Interest and dividends;

(4) The full amount of periodic payments received from social security, annuities, insurance policies, retirement funds, pensions, disability or death benefits and other similar types of periodic receipts;

(5) Payments in lieu of earnings, such as unemployment and disability compensation, worker's compensation and severance pay;

(6) Public Assistance. If the public assistance payment includes any amount specifically designated for shelter and utilities which is subject to adjustment by the public assistance agency in accordance with the actual cost of shelter and utilities, the amount of public assistance income to be included as income shall consist of:

(A) The amount of the allowance or grant exclusive of the amount specifically designated for shelter and utilities, plus

(B) The maximum amount which the public assistance agency could in fact allow for the family for shelter and utilities,

(7) Periodic and determinable allowances such as alimony and child support payments, and regular contributions or gifts from persons not residing in the dwelling;

All regular pay, special pay and allowances of a member of the Armed Forces (whether or not living in the dwelling) who is head of the family or spouse.

ATTACHMENT B

Asset Inclusions and Exclusions

24 CFR Part 5 Asset Inclusions and Exclusions

ASSET INCLUSIONS (section 5.603):

5.603 Definitions:

Net family assets.

(1) Net family assets are the net cash value of all assets owned by the family, after deducting reasonable costs that would be incurred in disposing real property, savings, stocks, bonds, and other forms of capital investment.

(2) In determining net family assets, PHAs or owners, as applicable, must include the value of any business or family assets disposed of by an applicant or tenant for less than fair market value (including a disposition in trust, but not in a foreclosure or bankruptcy sale) during the two years preceding the date of application for the program or reexamination, as applicable, in excess of the consideration received therefor. In the case of a disposition as part of a separation or divorce settlement, the disposition will not be considered to be for less than fair market value if the applicant or tenant receives consideration not measurable in dollar terms. Negative equity in real property or other investments does not prohibit the owner from selling the property or other investments, so negative equity alone would not justify excluding the property or other investments from family assets.

sition will not be considered to be for less than fair market value if the applicant or tenant receives consideration not measurable in dollar terms. Negative equity in real property or other investments does not prohibit the owner from selling the property or other investments, so negative equity alone would not justify excluding the property or other investments from family assets.

ition will not be considered to be for less than fair market value if the applicant or tenant receives consideration not measurable in dollar terms. Negative equity in real property or other investments does not prohibit the owner from selling the property or other investments, so negative equity alone would not justify excluding the property or other investments from family assets.

[88 FR 9656, Feb. 14, 2023; 88 FR 12560, Feb. 28, 2023]

ASSET EXCLUSIONS:

From 24 CFR Section 5.603 (continued):

(3) Excluded from the calculation of net family assets are:

(i) The value of necessary items of personal property;

(ii) The combined value of all non-necessary items of personal property if the combined total value does not exceed $50,000 (which amount will be adjusted by HUD in accordance with the Consumer Price Index for Urban Wage Earners and Clerical Workers);

(iii) The value of any account under a retirement plan recognized as such by the Internal Revenue Service, including individual retirement arrangements (IRAs), employer retirement plans, and retirement plans for self-employed individuals;

(iv) The value of real property that the family does not have the effective legal authority to sell in the jurisdiction in which the property is located;

(v) Any amounts recovered in any civil action or settlement based on a claim of malpractice, negligence, or other breach of duty owed to a family member arising out of law, that resulted in a family member being a person with a disability;

(vi) The value of any Coverdell education savings account under section 530 of the Internal Revenue Code of 1986, the value of any qualified tuition program under section 529 of such Code, the value of any Achieving a Better Life Experience (ABLE) account authorized under Section 529A of such Code, and the value of any "baby bond" account created, authorized, or funded by Federal, State, or local government.

(vii) Interests in Indian trust land;

(viii) Equity in a manufactured home where the family receives assistance under 24 CFR part 982;

(ix) Equity in property under the Homeownership Option for which a family receives assistance under 24 CFR part 982;

(x) Family Self-Sufficiency Accounts; and

(xi) Federal tax refunds or refundable tax credits for a period of 12 months after receipt by the family.

(4) In cases where a trust fund has been established and the trust is not revocable by, or under the control of, any member of the family or household, the trust fund is not a family asset and the value of the trust is not included in the calculation of net family assets, so long as the fund continues to be held in a trust that is not revocable by, or under the control of, any member of the family or household.

(5) .

[88 FR 9656, Feb. 14, 2023; 88 FR 12560, Feb. 28, 2023]

ATTACHMENT B-1

Title 25 Section 6914 Gross Income Inclusions – For CalHome activities

(b) The following items shall not be considered as income:

(1) Casual, sporadic or irregular gift items;

(2) Amounts which are specifically for or in reimbursement of the cost of medical expenses;

(3) Lump-sum additions to family assets, such as inheritances, insurance payments (including payments under health and accident insurance and worker's compensation), capital gains and settlement for personal or property losses;

(4) Amounts of educational scholarships paid directly to the student or to the educational institution, and amounts paid by the government to a veteran for use in meeting the costs of tuition, fees, books and equipment. Any amounts of such scholarships, or payments to veterans not used for the above purposes of which are available for a subsistence are to be included in income;

(5) The special pay to a serviceman head of a family away from home and exposed to hostile fire;

(6) Relocation payments made pursuant to federal, state, or local relocation law;

(7) Foster childcare payments;

(8) The value of coupon allotments for the purchase of food pursuant to the Food Stamp Act of 1964 which is an excess of the amount actually charged the eligible household;

(9) Payments received pursuant to participation of the following volunteer programs under the ACTION Agency:

(A) National Volunteer Antipoverty Programs which include VISTA, Service Learning Programs and Special Volunteer Programs.

(B) National Older American Volunteer Program for persons aged 60 and over which include Retired Senior Volunteer Programs, Foster Grandparent Program, older American Community Services Program, and National Volunteer Program to Assist Small Business Experience, Service Corps of Retired Executive (SCORE) and Active Corps of Executives (ACE).

ATTACHMENT C

MAXIMUM AFTER-REHABILITATION VALUES FOR IMPERIAL COUNTY
(HOME Homeownership Value Limits as of)

COUNTY NAME	One-Family
IMPERIAL	$XXX,XXX

[Note from HOME to remove: if you have exception limits approved by HOME, modify this table as needed and indicate from/through date of the exception]

HOME MAXIMUM PER-UNIT SUBSIDY LIMITS FOR STATE OF CALIFORNIA
(Limits are effective)

O-BDR	1-BDR	2-BDR	3-BDR	4-BDR
$	$	$	$	$

HOUSEHOLD INCOME LIMITS FOR IMPERIAL COUNTY*
(Limits are effective)

Number of Persons in Household								
	1	2	3	4	5	6	7	8
80% of AMI	$	$	$	$	$	$	$	$

HCD 20XX INCOME LIMITS FOR CALHOME
ADJUSTED FOR FAMILY SIZE FOR XXX COUNTY

Income Level	Household Size							
	1	2	3	4	5	6	7	8
80%	$	$	$	$	$	$	$	$

Sponsor will insert the limits for the county in which the Program is located, and will update the income limits annually as HCD provides new information. The link to the official, HCD-maintained Value, Subsidy, and Income limits is: State and Federal Income, Rent, and Loan/Value Limits | California Department of Housing and Community Development for HOME and CDBG limits, choose "CDBG, HOME, and NHTF/HHC Article I - Income, Value, Subsidy, and Rent Limits"; for CalHome income limits, choose "Official State Income Limits").

SPONSOR STANDARDS FOR BEDROOM AND BATHROOM ADDITIONS TO ALLEVIATE OVERCROWDING

Maximum No. of Persons in the Household	Number of Bedrooms	Number of Bathrooms
1	SRO	1
1	0-BR	1
2	1-BR	1
4	2-BR	2
6	3-BR	2
8	4-BR	3

10	**5-BR**	**3**
12	**6-BR**	**4**

- Opposite sex children under 6 years of age may share a bedroom, up to 2 children per bedroom.
- Opposite-sex children 6 years of age and older may have their own bedroom.
- Children shall be permitted a separate bedroom from their parents.
- Same-sex children of any age may share a bedroom, up to 2 children per bedroom.
- Adults not in a partner relationship may have their own bedroom.
- **4** or more people – a second bathroom may be added.
- **8** or more people – a third bathroom may be added.
- Same rules apply to mobile home units.

The chart above is used as a guide to overcrowding.

ATTACHMENT D

HOUSING REHABILITATION MARKETING PLAN

SUMMARY

The Sponsor will continue its efforts to market the Housing Rehabilitation Program in a manner that will reach all community members.

All marketing related to the Housing Rehabilitation Program is publicized in both English and Spanish. All marketing materials include information identifying the Sponsor's commitment to fair housing laws and affirmative marketing policy, and are widely distributed. Equal opportunity is emphasized in written materials and oral presentations. A record is maintained by the Sponsor identifying what marketing materials are used, and when and where they are distributed.

Forms of marketing may include fliers, brochures, newspaper ads, articles and public service announcements. Fliers and brochures are distributed at local government buildings, other public buildings and through the mail, as well as to businesses that assist those not likely to apply without special outreach. Advertisements and articles are published in newspapers that are widely circulated within the community.

Established working relationships with local lending agencies also aid in informing the public by facilitating the distribution of informational fliers to households seeking financial assistance for repairs that are unable to obtain conventional financing.

Informational meetings are offered to potential participants to explain Program requirements. Often, minimal formal outreach efforts are required as the need for assistance generally exceeds funds available. However, marketing measures are actively performed in order to maintain a healthy interest list.

Characteristics on all applicants and participants are collected and compared with the Sponsor's demographics. Should the Sponsor find that there are underserved segments of the population, a plan to better serve them will be developed and implemented.

MARKETING FORMS

- Fliers
- Brochures
- Newspaper Ads and Articles
- Public Service Announcements
- Public Informational Meetings

MARKETING VENUES

- Local Government Buildings
- Local Public Services Buildings
- Private Businesses
- Lending Agencies
- Real Estate Offices

Newspaper
Radio
Mail

ATTACHMENT E

RESIDENTIAL ANTI-DISPLACEMENT AND TEMPORARY RELOCATION PLAN
Version 2

The Housing and Community Development Act of 1974, as amended, and the National Affordable Housing Act of 1990, require all grantees of Community Development Block Grant (CDBG) funds or Home Investment Partnership (HOME) funds to follow a written Residential Anti-displacement and Relocation Assistance Plan (Plan) for any activities which could lead to displacement of occupants whose property is receiving funds from these or other federal funding sources. Having been developed in response to both aforesaid federal legislations, this Plan is intended to inform the public of the compliance of the City of El Centro (Sponsor) with the requirements of federal regulations 24 CFR section 570.606 under state recipient requirements and Section 104(d) of the Housing and Community Development Act of 1974 and 24 CFR 92 of the HOME federal regulations. The Plan will outline reasonable steps, which the Sponsor will take to minimize displacement and ensure compliance with all applicable federal and state relocation requirements. The Sponsor's governing body has adopted this plan via a formal resolution.

This Plan will affect rehabilitation activities funded by the U.S. Department of Housing and Urban Development (HUD) under the following program titles: HOME, CDBG, Urban Development Action Grant (UDAG), Special Purpose Grants, Section 108 Loan Guarantee Program, and such other grants as HUD may designate as applicable, which take place within the Sponsor's jurisdiction limits.

The Sponsor will provide permanent relocation benefits to all eligible "displaced" households either owner-occupied or renter-occupied units which are permanently displaced by the housing rehabilitation program **(See Section E below.)**. In addition, the Sponsor will replace all eligible occupied and vacant occupiable low-income group dwelling units demolished or converted to use other than low-income group housing as a direct result of rehabilitation activities. This applies to all units assisted with funds provided under the Housing and Community Development Act of 1974, as amended, and as described in the Federal Regulations 24 CFR section 570.496(a), Relocation, Displacement and Acquisition: Final Rule dated July 18, 1990 (Section 104(d)) and 49 CFR Part 24, Uniform Relocation Assistance (URA) and Real Property Acquisition Regulations Final Rule and Notice (URA) dated March 2, 1989.

All Sponsor programs/projects will be implemented in ways consistent with the Sponsor's commitment to Fair Housing. Participants will not be discriminated against on the basis of race, color, religion, age, ancestry, national origin, sex, familial status, or handicap. The Sponsor will provide equal relocation assistance available 1) to each targeted income group household displaced by the demolition or rehabilitation of housing or by the conversion of a targeted income group dwelling to another use as a direct result of assisted activities; and 2) to each separate class of targeted income group persons temporarily relocated as a direct result of activities funded by HUD programs.

A. Minimizing Permanent Displacement and Temporary Relocation Resulting from Housing Rehabilitation or Reconstruction Activities

Consistent with the goals and objectives of activities assisted under the Act, the Sponsor will take the following steps to minimize the displacement of persons from their homes during housing rehabilitation or reconstruction funded by HUD programs:

1. Provide proper notices with counseling and referral services to all tenants so that they understand their relocation rights and receive the proper benefits. When necessary, assist permanently displaced persons to find alternate housing in the neighborhood.

2. Stage rehabilitation of assisted households to allow owner-occupants and/or tenants to remain during minor rehabilitation.

3. Encourage owner investors to temporarily relocate tenants to other available safe and sanitary vacant units on the project site area during the course of rehabilitation or pay expenses on behalf of replaced tenants.

4. Work with area landlords, real estate brokers, and/or hotel/motel managements to locate vacancies for households facing temporary relocation.

5. When necessary, use public funds, such as CDBG funds, to pay moving costs and provide relocation/displacement payments to households permanently displaced by assisted activities.

B. Lead Based Paint Mitigation Which Causes Temporary Relocation:

On September 15, 2000, the Final Rule for Lead Based Paint Hazard Control went into effect. Among other things, it requires that federally-funded rehabilitation must use safe work practices so that occupants and workers can be protected from lead hazards. **At no time should the tenant-occupant(s) be present in work areas or designated adjacent areas while LHC activities are taking place in any dwelling unit interior, common area, or exterior.** As such, occupants may not be allowed to remain in their units during the time that lead-based paint hazards are being created or treated. Once work that causes lead hazards has been completed, and the unit passes clearance, the occupants can return. **The tenant-occupants may not reoccupy a work area or adjacent area until post-lead hazard reduction clearance standards have been achieved and verified with laboratory results.** The final rule allows for certain exceptions: programs:

1. The work will not disturb lead-based paint, or create dust-lead or soil-lead hazard; or

2. The work is on exterior only and openings are sealed to prevent dust from entering the home, the work area is cleaned after the work is completed, and the residents have alternative lead free entry; or

3. The interior work will be completed in one period of less than 8-daytime hours and the work site is contained to prevent the release of dust into other areas of the home; or

4. The interior work will be completed within five (5) calendar days, the work site is

contained to prevent the release of dust, the worksite and areas within 10 feet of the worksite are cleaned at the end of each day to remove any visible dust and debris, and the residents have safe access to kitchen and bath and bedrooms.

If temporary relocation benefits are not provided because the Sponsor believes that the project meets one of the above criteria, then proper documentation must be provided in the rehabilitation project file to show compliance. It is up to the Sponsor to ensure that the owner occupant or tenant in the project does not get impacted by lead paint mitigation efforts. In most cases where lead paint mitigation is taking place, occupants (tenants or owners) will be strongly encouraged to relocate even for just a few days until a final lead clearance can be issued by a certified lead-based paint assessor. Occupants who are temporarily relocated because of lead based paint mitigation are entitled to the same relocation benefits as those who are relocated because of substantial rehabilitation or reconstruction activities.
se of substantial rehabilitation or reconstruction activities.

C. Temporary Relocation of Owner Occupants:

Owner occupants are not allowed to stay in units which are hazardous environments during lead-based paint mitigation. When their home is having lead based paint mitigation work done which will not make it safe to live in, then they are eligible for temporary relocation benefits up to $3,000, which will be provided as a grant. In the same way, a unit requiring substantial rehabilitation (with or without lead based paint mitigation) which will not allow the family to access a bath or kitchen facility, or if the unit is being demolished and reconstructed, then the family will be eligible for temporary relocation benefits up to $3,000, which will be provided as a grant. In no case shall the grant for temporary relocation exceed $3,000 for any one owner occupant.

Owner occupants will be encouraged to move in with family or friends during the course of rehabilitation, since they are voluntarily participating in the Program. The housing rehabilitation loan specialist and/or the rehabilitation construction specialist will complete a temporary relocation benefits form **(See Appendix C)** to document that the owner occupant understands that they must relocate during the course of construction and what benefits they wish to be reimbursed for as part of their relocation.

D. Temporary Relocation of Residential Tenants:

If continued occupancy during rehabilitation is judged to constitute a substantial danger to health and safety of the tenant or the public, or is otherwise undesirable because of the nature of the project, the tenant may be required to relocate temporarily. The contract administrator or rehabilitation specialist will make determination of the need for temporary relocation. The temporary relocation period will not exceed 180 days. All conditions of temporary relocation will be reasonable. Any tenant required to relocate temporarily will be helped to find another place to live which is safe, sanitary and of comparable value and they have the first right to move back into the original unit being rehabilitated at the same rent or lower. He or she may move in with family and friends and still receive full or partial temporary assistance based on eligible cost incurred. The housing rehabilitation loan specialist and/or the rehabilitation specialist will ensure that each tenant-occupied unit under the Program will receive a General Information Notice (GIN) (as soon as possible after a loan application is received) and the tenant will receive

a Notice of Non-displacement (after loan approval), and each tenant-occupied unit will have a temporary relocation benefits form completed for them. **(See Appendix C).** These notices will document that each tenant understands what their relocation rights are, and if they must relocate during the course of construction, that they receive the proper counseling and temporary relocation benefits.

A tenant receiving temporary relocation shall receive the following:

1. Increased housing costs (e.g. rent increase, security deposits) and

2. Payment for moving and related expenses, as follows:

    a. Transportation of the displaced persons and personal property within 50 miles, unless the grantee determines that farther relocation is justified;

    b. Packing, crating, unpacking, and uncrating of personal property;

    c. Storage of personal property, not to exceed 12 months, unless the grantee determines that a longer period is necessary;

    d. Disconnection, dismantling, removing, reassembling, and reinstalling relocated household appliances and other personal property;

    e. Insurance for the replacement value of personal property in connection with the move and necessary storage;

    f. The replacement value of property lost, stolen or damaged in the process of moving (not through the fault of the displaced person, his or her agent, or employee) where insurance covering such loss, theft or damage is not reasonably available;

    g. Reasonable and necessary costs of security deposits required to rent the replacement dwelling;

    h. Any costs of credit checks required to rent the replacement dwelling;

    i. Other moving related expenses as the grantee determine to be reasonable and necessary, except the following ineligible expenses:
        1) Interest on a loan to cover moving expenses; or
        2) Personal injury; or
        3) Any legal fee or other cost for preparing a claim for a relocation payment or for representing the claimant before the Grantee; or
        4) Costs for storage of personal property on real property already owned or leased by the displaced person before the initiation of negotiations.

E. Rehabilitation Activities Requiring Permanent Displacement

The Sponsor's rehabilitation program will not typically trigger permanent displacement and permanent displacement activities fall outside of the scope of this plan. If a case of

permanent displacement is encountered, then the staff responsible for the rehabilitation program will consult with Sponsor's legal counsel to decide if they have the capacity to conduct the permanent displacement activity. If local staff does not have the capacity, then a professional relocation consultants will be hired to do the counseling and benefit determination and implementation. If local staff does wish to do the permanent displacement activity, then they will consult and follow the HUD Relocation Handbook 1378.

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F. Rehabilitation Which Triggers Replacement Housing

If the Sponsor's rehabilitation program assists a property where one or more units are eliminated then under Section 104 (d) of the Housing and Community Act of 1974, as amended applies and the Sponsor is required to replace those lost units. An example of this would be a duplex unit which is converted into a single-family unit. In all cases where rehabilitation activities will reduce the number of housing units in the jurisdiction, then the Sponsor must document that any lost units are replaced and any occupants of reduced units are given permanent relocation benefits. (This does not apply to reconstruction or replacement housing done under a rehabilitation program where the existing unit(s) is demolished and replaced with a structure equal in size without in loss number of units or bedrooms.)

Replacement housing will be provided within three years after the commencement of the demolition or conversion. Before entering into a contract committing the Sponsor to provide funds for an activity that will directly result in such demolition or conversion, the Sponsor will make this activity public (through a noticed public hearing and/or publication in a newspaper of general circulation) and submit to the California Department of Housing and Community Development or the appropriate federal authority the following information in writing:

1. A description of the proposed assisted activity;

2. The location on a map and the approximate number of dwelling units by size (number of bedrooms) that will be demolished or converted to use other than as targeted income group dwelling units as a direct result of the assisted activity;

3. A time schedule for the commencement and completion of the demolition or conversion;

4. The location on a map and the approximate number of dwelling units by size (number of bedrooms) that will be provided as replacement dwelling units;

5. The source of funding and a time schedule for the provision of the replacement

dwelling units;

6. The basis for concluding that each replacement dwelling unit will remain a targeted income group dwelling unit for at least 10 years from the date of initial occupancy; and,

7. Information demonstrating that any proposed replacement of dwelling units with smaller dwelling units (e.g., a two-bedroom unit with two one-bedroom units) is consistent with the housing needs of targeted income group households in the jurisdiction.

The Program Operator for the Sponsor is responsible for tracking the replacement of housing and ensuring that it is provided within the required period. The Sponsor is responsible for ensuring requirements are met for notification and provision of relocation assistance, as described in Section 570.606, to any targeted income group displaced by the demolition of any dwelling unit or the conversion of a targeted income group dwelling unit to another use in connection with an assisted activity.

G. Record Keeping and Relocation Disclosures/Notifications

The Sponsor will maintain records of occupants of federally funded rehabilitated, reconstructed or demolished property from the start to completion of the project to demonstrate compliance with section 104(d), URA and applicable program regulations. Each rehabilitation project, which dictates temporary or permanent or replacement activities, will have a project description and documentation of assistance provided. (See sample forms in HUD Relocation Handbook 1378, Chapter 1, Appendix 11, form HUD-40054)

Appropriate advisory services will include reasonable advance written notice of (a) the date and approximate duration of the temporary relocation; (b) the address of the suitable, decent, safe, and sanitary dwelling to be made available for the temporary period; (c) the terms and conditions under which the tenant may lease and occupy a suitable, decent, safe, and sanitary dwelling.

Notices shall be written in plain, understandable primary language of the people involved. Persons who are unable to read and understand the notice (e.g. illiterate, foreign language, or impaired vision or other disability) will be provided with appropriate translation/communication. Each notice will indicate the name and telephone number of a person who may be contacted for answers to questions or other needed help. The notices and process below are for only temporary relocation. If permanent relocation is involved then other sets of notice and noticing process and relocation benefits must be applied (See HUD relocation handbook 1378 for those forms and procedures) The Temporary Relocation Advisory Notices to be provided are as follows:
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1. General Information Notice: As soon as feasible when an owner investor is applying for Federal financing for rehabilitation, reconstruction, or demolition, the tenant of a housing unit will be mailed or hand delivered a General Information Notice that the project has been proposed and that the tenant will be able to occupy his or her present house upon completion of rehabilitation. The tenant will be informed that the rent after rehabilitation will not exceed current rent or 30 percent of his or her average monthly gross household income. The tenant will be informed that if he or she is required to move temporarily so that the rehabilitation can be completed, suitable housing will be made available and he or she will be reimbursed for all reasonable extra expenses. The tenant will be cautioned that he or she will not be provided with relocation assistance if he or she decides to move for personal reasons. **See Appendix A for sample notice to be delivered personally or by certified mail.**

2. Notice of Non-Displacement: As soon as feasible when the rehabilitation application has been approved, the tenant will be informed that they will not be permanently displaced and that they are eligible for temporary relocation benefits because of lead based paint mitigation or substantial rehabilitation, or reconstruction of their unit. The tenant will also again be cautioned not to move for personal reasons during rehabilitation, or risk losing relocation assistance. **See Appendix B for sample notice to be delivered personally or by certified mail.**
3. **y certified mail.**

4. Disclosure to Occupants of Temporary Relocation Benefits: This form is completed to document that the Sponsor is following it's adopted temporary relocation plan for owner occupants and tenants. **See Appendix C for a copy of the disclosure form.**

5. Other Relocation/Displacement Notices: The above three notices are required for temporary relocation. If the Sponsor is attempting to provide permanent displacement benefits, then there are a number of other forms which are required. Staff will consult HUD's Relocation Handbook 1378 and ensure that all the proper notices are provided for persons who are permanently displaced as a result of housing rehabilitation activities funded by CDBG or other federal programs.

APPENDIX A

Dear _____,

On (date), (property owner) submitted an application to the _____ for financial assistance to rehabilitate the building which you occupy at (address).

This notice is to inform you that, if assistance is provided and the building is rehabilitated, you will not be displaced. Therefore, we urge you not to move anywhere at this time. (If you do elect to move for reasons of your choice, you will not be provided with relocation assistance.)

If the application is approved and Federal assistance is provided for the rehabilitation, you will be able to lease and occupy your present apartment (or another suitable, decent, safe and sanitary apartment in the same building) upon completion of the rehabilitation. Of course, you must comply with standard lease terms and conditions.

After the rehabilitation, your initial rent, including the estimated average monthly utility costs, will not exceed the greater of (a) your current rent/average utility costs, or (b) 30 percent of your gross household income. If you must move temporarily so that the rehabilitation can be completed, suitable housing will be made available to you for the temporary period, and you will be reimbursed for all reasonable extra expenses, including all moving costs and any increase in housing costs.

Again, we urge you not to move. If the project is approved, you can be sure that we will make every effort to accommodate your needs. Because Federal assistance would be involved, you would be protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

This letter is important and should be retained. You will be contacted soon. In the meantime, if you have any questions about our plans, please contact (name), (title), at (telephone number), (address).

Sincerely,

(name)
(title)

APPENDIX B

(date)

Dear _____:

On (date), we notified you that the owner of your building had applied for assistance to make extensive repairs to the building. On (date), the owner's request was approved, and the repairs will begin soon.

This is a notice of non-displacement. You will not be required to move permanently as a result of the rehabilitation. This notice guarantees you the following:

1. You will be able to lease and occupy your present apartment [or another suitable, decent, safe and sanitary apartment in the same building/complex] upon completion of the rehabilitation. Your monthly rent will remain until after construction is completed. If increased after construction is done, your new rent and estimated average utility costs will not exceed local fair market rents for your community. Of course, you must comply with all the other reasonable terms and conditions of your lease.

2. If you must move temporarily so that the repairs can be completed, you will be reimbursed for all of your extra expenses, including the cost of moving to and from the temporarily occupied unit and any additional housing costs. The temporary unit will be decent, safe and sanitary, and all other conditions of the temporary move will be reasonable.

Since you will have the opportunity to occupy a newly rehabilitated apartment, I urge you not to move. (If you do elect to move for your own reasons, you will not receive any relocation assistance.) We will make every effort to accommodate your needs. Because Federal assistance is involved, you are protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

If you have any questions, please contact (name), (title), at (phone #), (address). Remember; do not move before we have a chance to discuss your eligibility for assistance. This letter is important to you and should be retained.

Sincerely,

(name and title)

APPENDIX C

DISCLOSURE TO OCCUPANT OF TEMPORARY RELOCATION BENEFITS

Top to be completed at time of loan application submittal or Home Visit

Property Address: _____

__ Rental Unit __Owner-Occupied Unit

The Economic Development Specialist working on behalf of the City of El Centro has explained the temporary relocation services and benefits available under the current rehabilitation program relocation plan.

I/we have been advised that the City/ of El Centro Economic Development Specialist will inform me if I need to be temporarily relocated and will assist me with scheduling any necessary moves and answer any questions about assistance as needed.

Acknowledged:

_____ _____ _____ _____

Occupant Signature Date Occupant Signature Date

Complete this at time of acceptance of Work Write Up with initials by occupant

The Economic Development Specialist for the City of El Centro has explained the Rehabilitation Scope of Work for our house and I/we agree that it will:

____ Not require I/we to be relocated. **(If initialed then STOP here and sign bottom.)**

____ Yes, I/we need to be temporarily relocated. **(Complete rest of form if initialed.)**

Start date and duration of relocation:

____ Starting on or about _____we will move for all or part of the rehabilitation project.

____ Approximate length of temporary relocation: _____Number of days.

For temporary relocation, I/We elect to (check all that apply):

____ Relocate with friends and family.

____ Relocate into a suitable temporary housing unit identified by rehab specialist.

____ Relocate furnishings only into a temporary storage unit.

____ I/We have been told what our relocation benefits are and elect **Not** to be reimbursed for any eligible relocation expenses.

____ I/We have been told what our relocation benefits are and want to be reimbursed for: _____

_____

By signing, occupant(s) acknowledge receipt of copy of this form:

_____ _____ _____ _____

Occupant Signature Date Occupant Signature Date

ATTACHMENT F

LOAN SERVICING POLICIES AND PROCEDURES FOR THE CITY OF EL CENTRO

The City of El Centro, hereafter called "Sponsor," has adopted these policies and procedures in order to preserve its financial interest in properties, whose "Borrowers" have been assisted with public funds. The Sponsor will to the greatest extent possible follow these policies and procedures, but each loan will be evaluated and handled on a case-by-case basis. The Sponsor has formulated this document to comply with state and federal regulations regarding the use of these public funds and any property restrictions which are associated with them.

The policies and procedures are broken down into the follow areas: 1) making required monthly payments or voluntary payments on a loan's principal and interest; 2) required payment of property taxes and insurance; 3) required Request for Notice of Default on all second mortgages; 4) loans with annual occupancy restrictions and certifications 5) required noticing and limitations on any changes in title or use of property; 6) required noticing and process for requesting a subordination during a refinance; 7) processing of foreclosure in case of default on the loan.

1. Loan Repayments:

The Sponsor will collect monthly payments from those borrowers who are obligated to do so under Notes which are amortized promissory notes. Late fees will be charged for payments received after the assigned monthly date.

For Notes which are deferred payment loans, the Sponsor must accept voluntary payments on the loan. Loan payments will be credited to principal. The Borrower may repay the loan balance at any time with no penalty.

2. Payment of Property Taxes and Insurance:

As part of keeping the loan from going into default, Borrower must maintain property insurance coverage naming the Sponsor as loss payee. Except for HOME-funded loans, if Borrower fails to maintain the necessary insurance, the Sponsor may take out force placed insurance to cover the property while the Borrower puts a new insurance policy in place. All costs for installing the necessary insurance will be added to the loan balance at time of installation of Borrower's new insurance.

When a property is located in a 100-year floodplain, the Borrower will be required to carry the necessary flood insurance. A certificate of insurance for flood and for standard property insurance naming the City as a lender's loss payee will be required at close of escrow. The Sponsor will verify the insurance on an annual basis.

Property taxes must be kept current during the term of the loan. If the Borrower fails to maintain payment of property taxes, then the Sponsor may pay the taxes current and add the

balance of the tax payment plus any penalties to the balance of the loan (not permissible when funded with HOME). Wherever possible, the Sponsor encourages Borrower to have impound accounts set up with their first mortgagee wherein they pay their taxes and insurance as part of their monthly mortgage payment.

3. Required Request for Notice of Default:

When the Borrower's loan is in second position behind an existing first mortgage, it is the Sponsor's policy to prepare and record a "Request for Notice of Default" for each senior lien in front of Sponsor's loan. This document requires any senior lienholder listed in the notice to notify the Sponsor of initiation of a foreclosure action. The Sponsor will then have time to contact the Borrower and assist them in bringing the first loan current. The Sponsor can also monitor the foreclosure process and go through the necessary analysis to determine if the loan can be made whole or preserved. When the Sponsor is in a third position and receives notification of foreclosure from only one senior lienholder, it is in their best interest to contact any other senior lienholders regarding the status of their loans.

4. Annual Occupancy Restrictions and Certifications:

On owner-occupant loans the Sponsor may require that Borrowers submit utility bills and/or other documentation annually to prove occupancy during the term of the loan. For CDBG, some loans may have income and housing cost evaluations, which require a household to document that they are not able to make repayments, typically every five years. These loan terms are incorporated in the original note and deed of trust. On HOME-funded loans, annual occupancy verification will occur between February 1st and 15th of each year for the term of the loan.

5. Required Noticing and Restrictions on Any Changes of Title or Occupancy:

In all cases where there is a change in title or occupancy or use, the Borrower must notify the Sponsor in writing of any change. Sponsor and Borrower will work together to ensure the property is kept in compliance with the original Program terms and conditions such that it remains available as an affordable home for low-income families. These types of changes are typical when Borrowers do estate planning (adding a relative to title) or if a Borrower dies and property is transferred to heirs or when the property is sold or transferred as part of a business transaction. In some cases, the Borrower may move and turn the property into a rental unit without notifying the Sponsor. Changes in title or occupancy must be in keeping with the objective of benefit to low-income households (below 80 percent of AMI).

Change from owner-occupant to owner-occupant occurs at a sale. When a new owner-occupant is not low-income, the loan is not assumable and the loan balance is immediately due and payable. If the new owner-occupant qualifies as low-income, the purchaser may either pay the loan in full or assume all loan repayment obligations of the original owner-occupant, subject to the approval of the Sponsor's Loan Committee (depends on the HCD program).

If a transfer of the property occurs through inheritance, the heir (as owner-occupant) may be provided the opportunity to assume the loan at an interest rate based on household size and household income, provided the heir is income eligible. If the heir intends to occupy the property and is not low-income, the balance of the loan is due and payable. If the heir intends to act as an owner-investor, the balance of the loan may be converted to an owner/investor interest rate and loan term and a rent limitation agreement is signed and recorded on title. All such changes are subject to the review and approval of the Sponsor's Loan Committee.

Change from owner-occupant to owner-investor occurs when an owner-occupant decides to move out and rent the assisted property, or if the property is sold to an investor. If the owner converts any assisted unit from owner-occupied to rental, the loan is due in full.

Conversion to use other than residential use is not allowable where the full use of the property is changed from residential to commercial or other. In some cases, Borrowers may request that the Sponsor allow for a partial conversion where some of the residence is used for a business but the household still resides in the property. Partial conversions can be allowed if it is reviewed and approved by any and all agencies required by local statute. If the use of the property is converted to a fully non-residential use, the loan balance is due and payable.

6. Requests for Subordinations:

When a Borrower wishes to refinance the property, they must request a subordination request to the Sponsor. The Sponsor will subordinate their loan only when there is no "cash out" as part of the refinance. Cash out means there are no additional charges on the transaction above loan and escrow closing fees. There can be no third-party debt payoffs or additional encumbrance on the property above traditional refinance transaction costs. Furthermore, the refinance should lower the housing cost of the household with a lower interest rate and the total indebtedness on the property should not exceed the current market value.

Upon receiving the proper documentation from the refinance lender, the request will be considered by the loan committee for review and approval. Upon approval, the escrow company will provide the proper subordination document for execution and recordation by the Sponsor.

7. Process for Loan Foreclosure:

Upon any condition of loan default: 1) non-payment; 2) lack of insurance or property tax payment; 3) change in title or use without approval; or 4) default on senior loans, the Sponsor will send out a letter to the Borrower notifying them of the default situation. If the default situation continues, the Sponsor may start a formal process of foreclosure.

When a senior lienholder starts a foreclosure process and the Sponsor is notified via a Request for Notice of Default, the Sponsor, who is the junior lienholder, may cancel the foreclosure proceedings by "reinstating" the senior lienholder. The reinstatement amount or payoff amount must be obtained by contacting the senior lienholder. This amount will

include all delinquent payments, late charges and fees to date. Sponsor must confer with Borrower to determine if, upon paying the senior lienholder current, the Borrower can provide future payments. If this is the case, then the Sponsor may cure the foreclosure and add the costs to the balance of the loan with a Notice of Additional Advance on the existing note. HOME funds may not be used for this purpose, however.

If the Sponsor determines, based on information on the reinstatement amount and status of Borrower, that bringing the loan current will not preserve the loan, then staff must determine if it is cost effective to protect their position by paying off the senior lienholder in total and restructure the debt such that the unit is made affordable to the Borrower. If the Sponsor does not have sufficient funds to pay the senior lienholder in full, then they may choose to cure the senior lienholder and foreclose on the property themselves. As long as there is sufficient value in the property, the Sponsor can afford to pay for the foreclosure process and pay off the senior lienholder and retain some or all of their investment.

If the Sponsor decides to reinstate, the senior lienholder will accept the amount to reinstate the loan up until five (5) days prior to the set "foreclosure sale date." This "foreclosure sale date" usually occurs about four (4) to six (6) months from the date of recording of the "Notice of Default." If the Sponsor fails to reinstate the senior lienholder before five (5) days prior to the foreclosure sale date, the senior lienholder would then require a full pay off of the balance, plus costs, to cancel foreclosure. If the Sponsor determines the reinstatement and maintenance of the property not to be cost effective and allows the senior lienholder to complete foreclosure, the Sponsor's lien may be eliminated due to insufficient sales proceeds.

Sponsor as Senior Lienholder

When the Sponsor is first position as a senior lienholder, active collection efforts will begin on any loan that is 31 or more days in arrears. Attempts will be made to assist the homeowner in bringing and keeping the loan current. These attempts will be conveyed in an increasingly urgent manner until loan payments have reached 90 days in arrears, at which time the Sponsor may consider foreclosure. Sponsor’s staff will consider the following factors before initiating foreclosure:

1) Can the loan be cured and can the rates and terms be adjusted to allow for affordable payments such that foreclosure is not necessary?

2) Can the Borrower refinance with a private lender and pay off the Sponsor?

3) Can the Borrower sell the property and pay off the Sponsor?

4) Does the balance warrant foreclosure? (If the balance is under $5,000, the expense to foreclose may not be worth pursuing.)

5) Will the sales price of home "as is" cover the principal balance owing, necessary advances, (maintain hazard insurance, maintain or bring current delinquent property taxes, monthly yard maintenance, periodic inspections of property to prevent vandalism, etc.) foreclosure, and marketing costs?

If the balance is substantial and all of the above factors have been considered, the Sponsor may opt to initiate foreclosure. The Borrower must receive, by certified mail, a thirty-day notification of foreclosure initiation. This notification must include the exact amount of funds to be remitted to the Sponsor to prevent foreclosure (such as funds to bring a delinquent BMIR current or pay off a DPL).

At the end of thirty days, the Sponsor should contact a reputable foreclosure service or local title company to prepare and record foreclosure documents and make all necessary notifications to the owner and junior lienholders. The service will advise the Sponsor of all required documentation to initiate foreclosure (Note and Deed of Trust usually) and funds required from the owner to cancel foreclosure proceedings. The service will keep the Sponsor informed of the progress of the foreclosure proceedings.

When the process is completed, and the property has "reverted to the beneficiary" at the foreclosure sale, the Sponsor could sell the home themselves under a homebuyer program or use it for an affordable rental property managed by a local housing authority or use it for transitional housing facility or other eligible use. The Sponsor could contract with a local real estate broker to list and sell the home and use those funds for Program income-eligible uses.

ATTACHMENT G

CITY OF EL CENTRO RECIPIENT'S FORECLOSURE POLICY

Sponsor As Junior Lienholder

It is the City of El Centro's (Sponsor's) policy to prepare and record a "Request for Notice" on all junior liens (any lien after the first position) placed on properties financed by a loan.

This document requires any senior lienholder to notify the Sponsor of initiation (recordation of a "Notice of Default") of a foreclosure only. This is to alert the junior lienholder that they are to monitor the foreclosure with the senior lienholder. When the Sponsor is in a third position and receives notification of foreclosure from only one senior lienholder, it would be in their best interest to contact both senior lienholders regarding the status of their loans.

The junior lienholder may cancel the foreclosure proceedings by "reinstating" the senior lienholder. The reinstatement amount must be obtained by contacting the senior lienholder. This amount will include all delinquent payments, late charges, advances (hazard insurance premiums, property taxes, property protection costs, etc.), and foreclosure costs (fees for legal counsel, recordings, certified mail, etc.)

Once the Sponsor has the information on the reinstatement amount, staff must then determine if it is cost effective to protect their position by reinstating the senior lienholder, keeping them current by submitting a monthly payment thereafter, foreclosing on the property possibly resulting in owning the property at the end of foreclosure, protecting the property against vandalism, and paying marketing costs (readying the home for marketing, paying for yard maintenance, paying a real estate broker a sales commission).

If the Sponsor decides to reinstate, the senior lienholder will accept the amount to reinstate the loan up until five (5) days prior to the set "foreclosure sale date." This "foreclosure sale date" usually occurs about four (4) to six (6) months from the date of recording of the "Notice of Default." If the Sponsor fails to reinstate the senior lienholder before five (5) days prior to the foreclosure sale date, the senior lienholder would then require a full pay off of the balance, plus costs, to cancel foreclosure. If the Sponsor determines the reinstatement and maintenance of the property not to be cost effective and allows the senior lienholder to complete foreclosure, the Sponsor's lien may be eliminated due to insufficient sales proceeds.

Sponsor As Senior Lienholder

When the Sponsor is in a first position, or the senior lienholder, active collection efforts will begin on any loan that is 31 or more days in arrears. Attempts will be made to assist the homeowner in bringing and keeping the loan current. These attempts will be conveyed in an increasingly urgent manner until loan payments have reached 90 days in arrears, at which

time the Sponsor may consider foreclosure. Sponsor staff will consider the following factors before initiating foreclosure:

- Can the loan be cured (brought current or paid off) by the owner without foreclosure?

- Can the owner refinance with a commercial lender and pay off the Sponsor?

- Can the owner sell the property and pay off the Sponsor?

- Does the balance warrant foreclosure? (If the balance is under $5,000, the expense to foreclose may not be worth pursuing.)

- Will the sales price of home "as is" cover the principal balance owing, necessary advances, (maintain hazard insurance, maintain or bring current delinquent property taxes, monthly yard maintenance, periodic inspections of property to prevent vandalism, etc.) foreclosure, and marketing costs?

If the balance is substantial and all of the above factors have been considered, the Sponsor may opt to initiate foreclosure. The owner must receive, by certified mail, a thirty-day notification of foreclosure initiation. This notification must include the exact amount of funds to be remitted to the Sponsor to prevent foreclosure (such as, funds to bring a delinquent BMIR current or pay off a DPL).

At the end of thirty days, the Sponsor should contact a reputable foreclosure service or local title company to prepare and record foreclosure documents and make all necessary notifications to the owner and junior lienholders. The service will advise the Sponsor of all required documentation to initiate foreclosure (Note and Deed of Trust usually) and funds required from the owner to cancel foreclosure proceedings. The service will keep the Sponsor informed of the progress of the foreclosure proceedings. When the process is completed, and the property has "reverted to the beneficiary" at the foreclosure sale, the Sponsor would then contact a real estate broker to market the home.

ATTACHMENT H

CITY OF EL CENTRO

COMMUNITY SERVICES DEPARTMENT

1ST TIME HOME BUYER/OWNER OCCUPIED REHAB PROGRAM

Annual Certification of Residency

2025

«Borrower_Name» «CoBorrower_Name» «Street» «City», «State» «Zip_Code»	Loan Number: «Account «M_2nd_Loan» «M_3rd_Loan» Principal Loan Balance as of 1/1/2025: $«Principal_Balance» «M_2nd_Bala «M_3rd_Balance»

One of the requirements of your loan with the City of El Centro is that you provide proof of residency on an annual basis. Please complete the following information, sign and return along with a copy of the items listed below in the enclosed self-addressed stamped envelope. If copies are needed of the documents requested, please stop by our office and we will gladly make the copies for you. If you have any questions and/or to report any changes/transfers in ownership/residency, please do not hesitate to call us at (760) 337- 4543.

Please provide current copies of the following documents no later than April 7, 2025:

1. Imperial Irrigation District Electric Bill
2. City of El Centro Water Bill
3. Homeowners Insurance Policy
4. 2024-2025 property tax bill

Certification will be returned if all required documents are not attached. Failure to submit this information may result in the City of El Centro requesting the payoff of said loan(s).

Are your property taxes current? Yes___ No___

Names of all members of household as of the date of this verification and relationship to Homeowner.

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

As participant(s) in the City of El Centro's Housing Programs, I/We certify that the person(s) listed above have resided at the above address since _____.

Have any improvements been made to the residence in excess of $5,000? Yes___ No___

Please type or print Name of Participant(s)/Buyer(s) of Record:

_____

_____

Print First Name Print Last Name

_____

_____

Signature Date

_____

_____

Main Phone Number Additional Phone Number

_____

Email

CITY OF EL CENTRO

COMMUNITY SERVICES DEPARTMENT

1ST TIME HOME BUYER/OWNER OCCUPIED REHAB PROGRAM

Annual Certification of Residency

2025

«Borrower_Name» «CoBorrower_Name» «Street» «City», «State» «Zip_Code»	Número del Préstamo: «Account «M_2nd_Loan» «M_3rd_Loan»
	Saldo del Préstamo a Partir del 1/1/202 $«Principal_Balance» «M_2nd_Balanc «M_3rd_Balance»

Uno de los requisitos de su préstamo es proveer a la Ciudad del Centro verificación de residencia. Por favor complete la siguiente información, firme y regrese este documento con una copia de los artículos listados y regrese en el sobre que se encuentra adjunto. Si necesita copia de los documentos solicitados, por favor traiga a nuestra oficina los originales y con gusto le haremos una copia. Por favor informe cualquier cambio/transferencia de propiedad o residencia. Si tiene alguna pregunta, por favor comuníquese al (760) 337- 4543.

De los siguientes documentos, por favor proporcione los más recientes a más tardar el 7 de abril del 2025:

1. Factura de luz (Imperial Irrigation District)
2. Factura del agua (City of El Centro)
3. Póliza de seguro de su casa
4. Factura de impuestos sobre la propiedad de 2024-2025

La certificación se le regresará si no contiene todos los documentos requeridos. El hecho de no presentar esta información puede resultar en la Ciudad de El Centro solicitando el pago de dicho préstamo(s).

¿Están actualizados los impuestos sobre la propiedad? Si___ No___

Nombres de todos los miembros del hogar a partir de la fecha de esta verificación y relación con el propietario de la vivienda.

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

Como participantes en los programas de viviendas de la Ciudad de El Centro, Yo/Nosotros certifico/certificamos que la(s) persona(s) nombrada(s) en la parte superior han vivido en el domicilio arriba mencionado desde _____.

¿Se han hechos mejoramientos en su vivienda con un costo en exceso de $5,000? Si___ No___

Nombre del participante:

Nombre Apellido

Firma Fecha

Número de teléfono principal Número de teléfono adicional

Correo electrónico

ATTACHMENT I

LEAD-BASED PAINT
VISUAL ASSESSMENT, NOTICE OF PRESUMPTION, AND HAZARD REDUCTION FORM

Section 1: Background Information			
Property Address:			No LBP found or LBP exempt ☐
Select one:	Visual Assessment ☐	Presumption ☐	Hazard Reduction ☐
Section 2: Visual Assessment. Fill out Sections 1, 2, and 6. If paint stabilization is performed, also fill out Sections 4 and 5 after the work is completed.			
Visual Assessment Date:		Report Date:	
Check if no deteriorated paint found ☐			
Attachment A: Summary where deteriorated paint was found. For multi-family housing, list at least the housing unit numbers and common areas and building components (including type of room or space, and the material underneath the paint).			
Section 3: Notice of Presumption. Fill out Sections 1, 3, 5, and 6. Provide to occupant w/in 15 days of presumption.			
Date of Presumption Notice:			
Lead-based paint is presumed to be present ☐ and/or Lead-based paint ***hazards*** are presumed to be present ☐			
Attachment B: Summary of Presumption: For multi-family housing, list at least the housing unit numbers and common areas, bare soil locations, dust-lead location, and or building components (including type of room or space, and the materials underneath the paint) of lead-based paint and/or hazards presumed to be present.			
Section 4: Notice of Lead-Based Paint Hazard Reduction Activity. Fill out Sections 1, 4, 5, and 6. Provide to occupant w/in 15 days after work completed.			
Date of Hazard Reduction Notice:			
Initial Hazard Reduction Notice? Yes ☐ No ☐		Start & Completion Dates:	
If "No", dates of previous Hazard Reduction Activity Notices:			
Attachment C: Activity locations and types. For multi-family housing, list at least the housing unit numbers and common areas (for multifamily housing), bare soil locations, dust–lead locations, and/or building components (including type of room or space, and the material underneath the paint), and the types of lead-based paint hazard reduction activities performed at the location listed.			
Attachment D: Location of building components with lead-based paint remaining in the rooms, spaces or areas where activities were conducted.			
Attachment E: Attach clearance report(s), using DHS form 8552 (and 8551 for abatement activities)			
Section 5: Resident Receipt of Notice for Presumption or Lead-Based Paint Hazard Reduction Activity and Acknowledgement of Receipt of pamphlet *Protection Your Family from Lead in Your Home.*			
Printed Name:		Signature:	Date:
Section 6: Contact Information	Organization:		
Contact Name:		Contact Signature:	
Date:	Address:		Phone:

Discussion and any necessary action regarding the approval of bid documents for the Veterans Wall Phase II Project.

CITY MANAGER'S RECOMMENDATION:

Approve Bid Documents for the Veterans Wall Phase 2 and authorize the Community Services Department to send project out to bid.

FISCAL IMPACT:

The estimated total cost for the Veterans Wall Phase II project is $690,000. Current available funding includes $525,000 in Park Impact Fees. Once a bid is awarded, City Council will identify and allocate the remaining funds necessary to fully fund the project.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

Recreation & Lifelong Learning
City Beautification, Engagement & Civic Pride

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

The due diligence process will be completed after bid opening.

BACKGROUND:

This project represents the second phase of improvements to the Veterans Memorial located within Bucklin Park, including repairs and upgrades to the adjacent pond retaining wall. Bucklin Park, one of the City’s oldest and most heavily used parks, was originally constructed in the 1960s. In recent years, the Community Services Department has prioritized reinvestment in the park through a series of capital improvements funded.

The Veterans Memorial Wall was originally installed in 2016 and features engraved names honoring the service of local Veterans. The initial engraving wall buildout was completed in 2022, at which time the City began discussions regarding a future expansion; however, no funding was allocated at that time. In 2025, a funding source was identified and the City proceeded with design work for Phase II.

During design development, a portion of the pond retaining wall adjacent to the Veterans Memorial failed in June 2025. To address both needs comprehensively and efficiently, the project scope was expanded to include reconstruction of the retaining wall alongside the Veterans Memorial Wall expansion.

DISCUSSION:

Phase II of the Veterans Memorial Improvements Project focuses on preserving and enhancing the memorial area at Bucklin Park by addressing aging infrastructure and

upgrading the surrounding site. The project includes the demolition and replacement of the failed retaining wall adjacent to the pond, which must be reconstructed to restore stability and proper function. Work also includes grading, new structural support and drainage improvements, as well as new hardscape, landscaping, site lighting, furnishings, and related electrical upgrades. These improvements collectively ensure the long-term safety, accessibility, and durability of the Veterans Memorial area.

CONCLUSION:

It is Staff's recommendation that city council approve the Bid Documents and authorize staff to send the project out to bid.

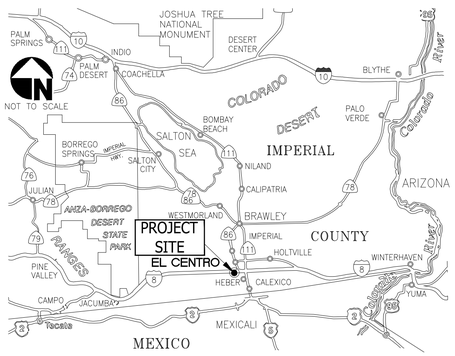
ATTACHMENTS:

1. City of El Centro Bucklin Park Imps_10 22 2025
2. Veteran's memorial Bid Document JAN 2026

BUCKLIN PARK IMPROVEMENTS

PONDS RETAINING WALL REPLACEMENT AND SITE IMPROVEMENTS AT VETERANS MEMORIAL
EL CENTRO, CA

VICINITY MAP



DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THE PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CENTRO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

CARLOS BELTRAN, P.E.
DYNAMIC CONSULTING ENGINEERS, INC
2415 IMPERIAL BUSINESS PARK DR. SUITE B
IMPERIAL, CA 92251
(760) 545-0162

REGISTERED PROFESSIONAL ENGINEER — CARLOS L. BELTRAN — C 69121 — EXP 6-30-26 — CIVIL — STATE OF CALIFORNIA

_____ _____
DATE

NOTE TO CONTRACTOR

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

ENGINEER'S NOTE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.

NOTE:
ANY REFERENCES TO SPECIFIC MANUFACTURERS OR MODELS ARE FOR DESCRIPTIVE PURPOSES ONLY. CONTRACTORS ARE ALLOWED TO PROVIDE APPROVED EQUAL MATERIALS OR PRODUCTS SUBJECT TO ENGINEER'S APPROVAL.

PROJECT INFORMATION

PROJECT OWNER
CITY OF EL CENTRO
1275 MAIN STREET
EL CENTRO, CA 92243
PHONE: 760-337-5182
EMAIL: Acampos@cityofelcentro.org

ENGINEER
DYNAMIC CONSULTING ENGINEERS, INC.
2415 IMPERIAL BUSINESS PARK DR, SUITE B
IMPERIAL, CA 92251
TEL. (760) 545-0162
FAX. (760) 545-0163

AGENCY CONTACTS

CITY OF EL CENTRO

PUBLIC WORK DEPARTMENT
ABRAHAM CAMPOS, PE
1275 MAIN STREET
EL CENTRO, CA 92243
PHONE: 760-337-5182
EMAIL: Acampos@cityofelcentro.org

COMMUNITY SERVICES DIRECTOR
ADRIANA C. NAVA, AICP
1249 W. MAIN STREET
EL CENTRO, CA 92243
PHONE: 760-337-4543
EMAIL: anava@cityofelcentro.org

IMPERIAL IRRIGATION
ENERGY DEPARTMENT
333 E. BARIONI BLVD.
IMPERIAL, CA 92251
PHONE: 760-339-9280
FAX: 760-339-9471

GAS COMPANY
ENRIQUE CUEVAS
602 E. ROSS ROAD, SC8054
EL CENTRO, CA 92243-1515
PHONE: 760-370-5812
FAX: 760-352-5721

TELEPHONE
AT&T
CARLOS SOTO
760-554-7214
EMAIL: cs6198@att.com

CITY COUNCIL

SONIA CARTER	MAYOR
JOHN "MARTY" ELLET	MAYOR PRO-TEM
SYLVIA MARROQUIN	COUNCIL MEMBER
CLAUDIA CAMARENA	COUNCIL MEMBER
MIKE CRANKSHAW	COUNCIL MEMBER

SHEET INDEX

1. TITLE SHEET, VICINITY MAP AND GENERAL NOTES
2. EXISTING SITE PAN AND DEMOLITION PLAN
3. IMPROVEMENTS PLAN
4. DETAILS

STREET IMPROVEMENT GENERAL NOTES

1. CITY OF EL CENTRO ENCROACHMENT PERMIT CONDITIONS AND PROVISIONS SHALL TAKE PRECEDENCE OVER THE APPROVED PLANS AND SPECIFICATIONS FOR ANY CONFLICTS.

2. THE STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH CITY OF EL CENTRO STANDARDS (OR CALTRANS IF IN STATE ROW) AND AS APPROVED BY THE PUBLIC WORKS DIRECTOR (OR CALTRANS).

3. APPROVAL OF THESE IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.

4. ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, CONNECTED AND TESTED PRIOR TO CONSTRUCTION OF BERM, CURB, CROSS-GUTTER AND PAVING.

5. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY SHOWN HEREON AND ANY OTHER WHICH IS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

6. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.

7. UTILITIES COORDINATION

NO LESS THAN 3 WORKING DAYS PRIOR TO ANY EXCAVATION OR TRENCHING, EACH CONTRACTOR DOING SUCH WORK SHALL CONTACT THE FOLLOWING AGENCIES SO THAT EXISTING UNDERGROUND UTILITIES MAY BE LOCATED. THE AGENCY MAY REQUIRE AN INSPECTOR TO BE PRESENT.

1. CITY OF EL CENTRO GENERAL SERVICES DEPARTMENT (760) 337-4505 (WATER, SEWER AND GENERAL SERVICES)
2. IRRIGATION DISTRICT (POWER) (760) 339-9280
3. IRRIGATION DISTRICT (WATER) (760) 339-9263
4. PACIFIC BELL (800) 422-4133
5. THE GAS CO. (800) 422-4133/(800) 227-2600
6. CABLE COMPANY TO BE DETERMINED

EXISTING UTILITIES

BEFORE EXCAVATING FOR THIS CONTRACT, VERIFY LOCATION OF UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS ONLY AND MAY NOT REFLECT ALL EXISTING UTILITIES. LOCATION OF ALL EXISTING UTILITIES SHALL BE CONFIRMED BY FIELD MEASUREMENTS BY CONTRACTOR PRIOR TO CONSTRUCTION OF WORK.

CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOW HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

ACCURATE VERIFICATION AS TO SIZE, LOCATION AND DEPTH OF EXISTING UNDERGROUND SERVICES SHALL BE THE CONTRACTORS RESPONSIBILITY. THE CONTRACTOR SHALL NOTIFY THE SOUTHERN CALIFORNIA GAS COMPANY, PACIFIC BELL, TELEPHONE COMPANY, IMPERIAL IRRIGATION DISTRICT AND ANY OTHER AFFECTED UTILITY AGENCIES PRIOR TO STARTING HIS WORK NEAR SUCH UTILITY FACILITIES AND SHALL COORDINATE HIS WORK WITH UTILITY REPRESENTATIVES. FOR LOCATION OF UNDERGROUND UTILITIES AND APPURTENANCES, CONTACT "UNDERGROUND SERVICE ALERT" AT 811.

8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS AND BEAR THE COST OF RELOCATIONS, IF NEEDED.

9. CONSTRUCT A PUBLIC STREET LIGHT SYSTEM CONFORMING TO APPROPRIATE STANDARDS AND STREET LIGHT SPECIFICATIONS. POWER SOURCES AND RUNS SHALL BE SHOWN ON THE "AS-BUILT" IMPROVEMENT DRAWINGS. ALL POWER SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT OF WAY OR EASEMENT.

10. NO PAVING SHALL BE DONE UNTIL EXISTING POWER POLES ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.

11. PRIVATE ROAD IMPROVEMENTS SHOWN HEREON ARE FOR INFORMATION ONLY. CITY OF EL CENTRO OFFICIALS SIGNATURE HEREON DOES NOT CONSTITUTE APPROVAL OR RESPONSIBILITY OF ANY KIND FOR THE DESIGN OR CONSTRUCTION OF THESE PRIVATE IMPROVEMENTS.

12. ALL SIGNS TO BE ALUMINUM WITH 3M HIGH INTENSITY TYPE REFLECTIVE FACE OR EQUIVALENT.

13. CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY STRIPING, PAVEMENT MARKERS, OR LEGENDS OBLITERATED BY THE CONSTRUCTION OF THIS PROJECT.

14. THE CONTRACTOR SHALL DO ALL NEW STRIPING AND SANDBLASTING OF REDUNDANT STRIPING.

15. THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AN ENCROACHMENT PERMIT FROM THE CITY OF EL CENTRO FOR ANY EXCAVATION OR CONSTRUCTION WITHIN CITY OF EL CENTRO ROAD RIGHT-OF-WAY. FOR INSPECTIONS, 48 HOUR MINIMUM NOTICE IS REQUIRED. ADDITIONALLY, UNDERGROUND SERVICE ALERT (USA) MUST BE CALLED TWO WORKING DAYS BEFORE THE CONTRACTOR MAY EXCAVATE. THEY'RE CONTACT NUMBER (800) 227-2600. ALL WORK AND MATERIALS ARE SUBJECT TO THE INSPECTION AND APPROVAL FROM THE CITY OF EL CENTRO DEPARTMENT OF PUBLIC WORKS OR THEIR REPRESENTATIVE.

16. NO REVISIONS OF ANY KIND SHALL BE MADE TO THESE PLANS WITHOUT THE PRIOR WRITTEN APPROVAL OF BOTH THE CITY OF EL CENTRO ENGINEER (OR HIS REPRESENTATIVE) AND THE ENGINEER OF RECORD. A REPRODUCIBLE AS-BUILT PLAN SET WILL BE PROVIDED TO THE PUBLIC WORKS DEPARTMENT AS A CONDITION OF SUBSTANTIAL CONSTRUCTION COMPLETION AND PRIOR TO ACCEPTANCE.

17. ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS, THE CITY OF EL CENTRO DEPARTMENT OF PUBLIC WORKS STANDARDS AND ENCROACHMENT PERMIT CONDITIONS, ANY REFERENCED STANDARDS AND SPECIFICATIONS AND THE SPECIFICATIONS & THE REQUIREMENTS OF THE AGENCIES REFERRED TO HEREIN. ALL WORK SHOWN OR INDICATED BY THESE PLANS SHALL BE COMPLETED IN ACCORDANCE WITH THE STANDARDS, POLICIES AND REGULATIONS OF CITY OF EL CENTRO; WHERE, OR IF, CONFLICTS OCCUR, THEN THE CITY OF EL CENTRO REQUIREMENTS SHALL GOVERN.

18. UNLESS SPECIFICALLY INDICATED OTHERWISE METHODS EMPLOYED AND MATERIAL USED IN THE CONSTRUCTION OF ALL OFFSITE IMPROVEMENTS SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THE "STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED MAY 2006". ALL WORK IS SUBJECT TO INSPECTION AND APPROVAL AS REQUIRED.

19. IF NECESSARY IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN EXCAVATION PERMIT FROM THE STATE OF CALIFORNIA DIVISION OF SAFETY AND TO ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS AND STANDARDS.

20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A GENERAL CONSTRUCTION ACTIVITY STORM WATER PERMIT FROM THE STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER QUALITY, CONTACT "STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER QUALITY, ATTENTION: STORM WATER PERMIT UNIT, P.O. BOX 1977, SACRAMENTO, CALIFORNIA, 95812.

21. CONSTRUCTION PROJECTS DISTURBING MORE THAN ONE ACRE MUST OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. OWNER/DEVELOPERS ARE REQUIRED TO FILE A NOTICE OF INTENT (NOI) WITH THE STATE WATER RESOURCES CONTROL BOARD, PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND MONITORING PLAN FOR THE SITE.

22. EXISTING STORM DRAIN PIPES/CULVERTS WHETHER TO BE CONNECTED TO, EXTENDED, ADJUSTED, DRAINED TO, OR JUST IN PROJECT VICINITY SHALL BE REPAIRED AND/OR CLEANED TO MAKE THEM FUNCTIONAL AND ACCEPTABLE AS DIRECTED BY THE CITY.

23. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT WORK AREA TRAFFIC CONTROL HANDBOOK OR AS DIRECTED BY THE CITY OF EL CENTRO ENGINEER.

24. ANY EXISTING SURVEY MONUMENTS OR CITY OF EL CENTRO RECOGNIZED BENCHMARKS SHALL BE PROTECTED BY THE CONTRACTOR. SHOULD ANY SUCH MONUMENTS OR BENCHMARKS BE REMOVED, DAMAGED, OBLITERATED OR ALTERED BY THE CONTRACTORS OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER RESETTING OF THE SAME AS PER THE SUBDIVISION MAP ACT, THE PROFESSIONAL LAND SURVEYORS ACT AND TO THE SATISFACTION OF THE CITY OF EL CENTRO CITY ENGINEER/GENERAL SERVICES DIRECTOR. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER.

25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A PRE-CONSTRUCTION CORNER RECORD CARD AND THE CERTIFICATE OF MONUMENT PRESERVATION (FORM ED-006) AND BE SIGNED BY A LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION ACTIVITIES.

26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A POST-CONSTRUCTION CORNER RECORD CARD AND THE CERTIFICATE OF MONUMENT PRESERVATION (FORM ED-006) AND BE SIGNED BY A LICENSED LAND SURVEYOR AFTER CONSTRUCTION ACTIVITIES.

27. THE NOTES LISTED ABOVE ARE A MINIMUM LIST. THIS DOES NOT RELIEVE THE CONTRACTOR FROM COMPILING WITH ADDITIONAL NOTES THAT MAY BE REQUIRED FOR THE PROJECT.

ABBREVIATIONS

AGG.	AGGREGATE	MIN	MINIMUM
APPROX.	APPROXIMATE	N	NORTH
Asph.	ASPHALT	N/O	NORTH OF
B.M.	BENCHMARK	N.T.S.	NOT TO SCALE
℄ OR CL	CENTERLINE	OHE	OVER HEAD ELECTRIC
CLR	CLEARANCE	PROP.	PROPOSED
CONC.	CONCRETE	R/W OR ROW	RIGHT-OF-WAY
E	EAST	RD	ROAD
E/O	EAST OF	STA.	STATION
E.P.	EDGE OF PAVEMENT	S	SEWER
EL. OR ELEV.	ELEVATION	SD	STORM DRAIN
EX. OR EXIST.	EXISTING	T.P.	TOP OF PAVEMENT
F.L.	FLOW LINE	THK.	THICK
F.S.	FINISH SURFACE	TYP	TYPICAL
L.F.	LINEAL FEET	W	WATER
MAX	MAXIMUM	W/O	WEST OF
←	DIRECTION OF FLOW		

SYMBOLS

ITEM NO.	ITEM	SYMBOL
1	STREET R/W LINE	
2	STREET C/L	
3	CABLE TV	CABLE
4	DRAIN (FIELD)	D
5	EX. EDGE OF ASPHALT	
6	PROP. EDGE OF ASPHALT	
7	EX. ASPHALT CONCRETE	
8	PROP. ASPHALT CONCRETE	
9	EDGE OF DIRT	
10	CONCRETE SECTION	
11	ROAD STRIPING	
12	CONTOURS - MAJOR	980
13	CONTOURS - MINOR	
14	CONTROL	△ N-17
15	SPOT ELEVATION	× 961.44
16	BENCHMARK (SEE DESCRIPTION)	
17	BORROW PIT ELEVATIONS	967.06±
18	PROPOSED BORROW PIT	
19	LIMIT OF RECONSTRUCTION	

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APPROVED FOR CONSTRUCTION:

ABRAHAM CAMPOS, P.E. No. 70281
CITY ENGINEER

DATE

SEAL: REGISTERED PROFESSIONAL ENGINEER — ABRAHAM CAMPOS — No. 70281 — Exp. 9-30-26 — CIVIL — STATE OF CALIFORNIA

ENGINEER OF WORK:

CARLOS BELTRAN, P.E. No. 69121

DATE

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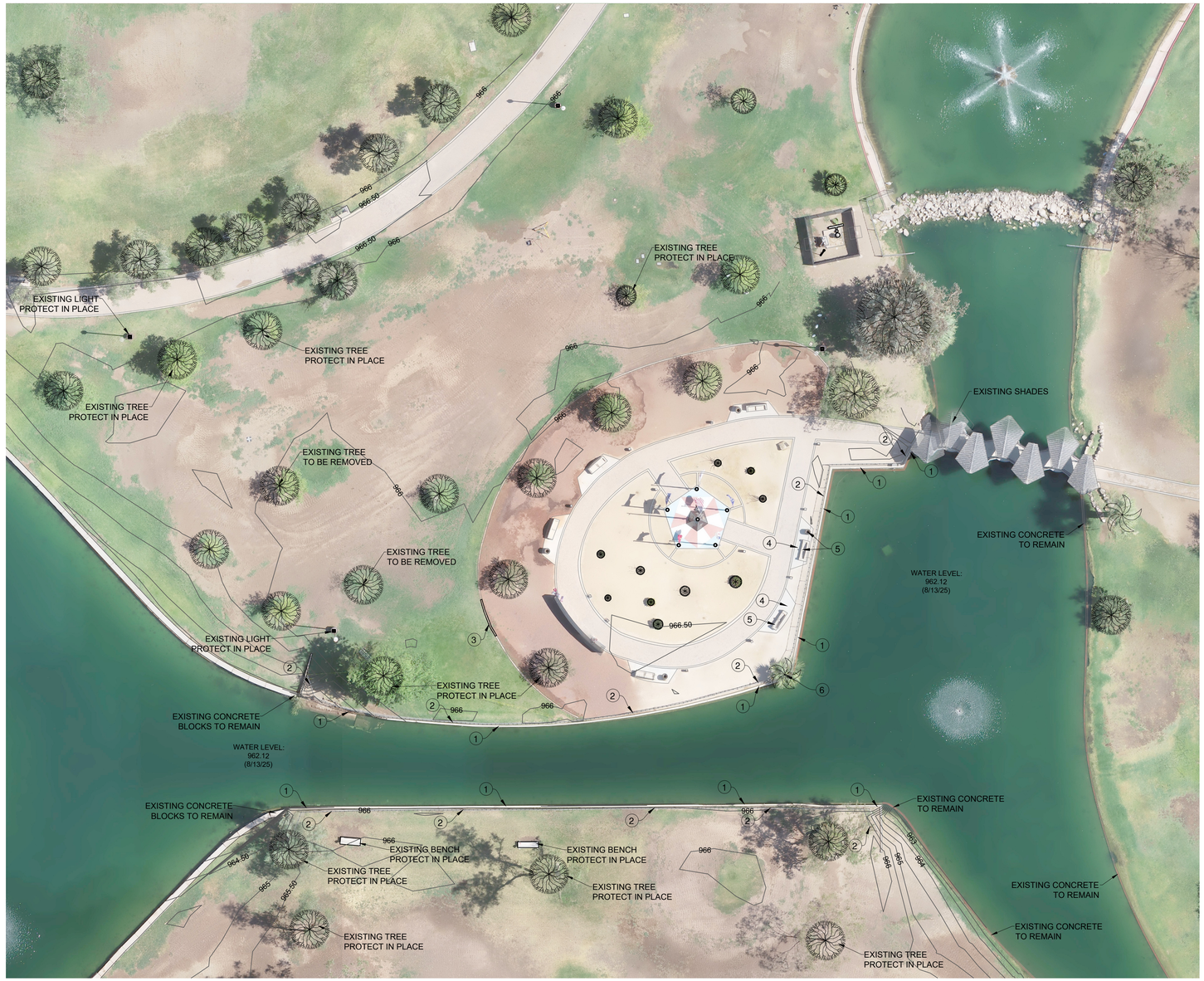
DRAWN BY: DB
CHECK BY: CB
DATE: 10/22/25
PROJECT:
FILE NAME:
LAST REVISED:

PROJECT DESCRIPTION:
BUCKLIN PARK IMPROVEMENTS IN THE CITY OF EL CENTRO

SHEET TITLE:
TITLE SHEET
VICINITY MAP AND
GENERAL NOTES

SHEET:
1
OF
4



DEMOLITION NOTES:

1. REMOVE AND DISPOSE EXISTING REINFORCED MASONRY CONCRETE WALL AND EXISTING REINFORCED CONCRETE FOOTING.
2. REMOVE AND DISPOSE EXISTING CHAIN LINK FENCE INCLUDING CONCRETE FOOTINGS.
3. REMOVE EXISTING CONCRETE CURB.
4. REMOVE AND DISPOSE EXISTING REINFORCED CONCRETE SLAB AND REPLACE WITH NEW CONCRETE SLAB.
5. SALVAGE AND RELOCATE EXISTING CONCRETE BENCH AND TRASH RECEPTACLE.
6. EXISTING PALM TREE TO BE REMOVED AND REPLANTED AT A DIFFERENT LOCATION SPECIFIED BY THE CITY OF EL CENTRO.

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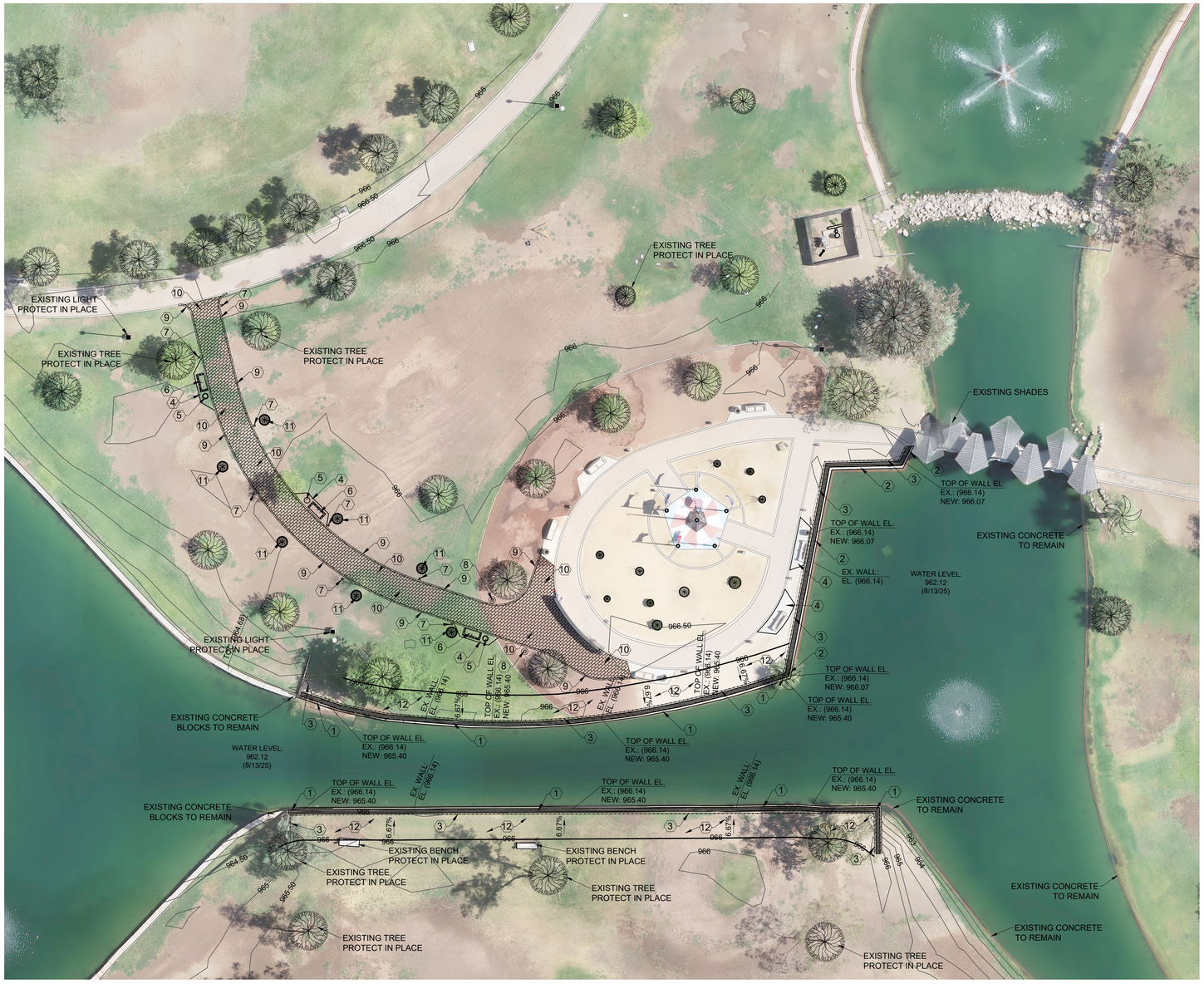
PROJECT DESCRIPTION:
BUCKLIN PARK IMPROVEMENTS IN THE CITY OF EL CENTRO

SHEET TITLE:
EXISTING SITE PLAN AND DEMOLITION PLAN

SHEET: 2 OF 4



CONSTRUCTION NOTES:

1. INSTALL 3-FT HEIGHT RETAINING BLOCK WALL WITH ALLAN BLOCK 12"D X 8"H X 16"W AB STONE BORREGO COLOR (12° SETBACK) OR APPROVED EQUAL. SEE DETAIL 1 ON SHEET 4.
CONTRACTOR TO SUBMIT SHOP DRAWING OF MATERIALS FOR CITY REVIEW AND APPROVAL
2. INSTALL 3' - 8" HEIGHT RETAINING BLOCK WALL WITH ALLAN BLOCK 12"D X 8"H X 16"W AB STONE BORREGO COLOR (12° SETBACK) OR APPROVED EQUAL. SEE DETAIL 2 ON SHEET 4.
CONTRACTOR TO SUBMIT SHOP DRAWING OF MATERIALS FOR CITY REVIEW AND APPROVAL
3. FURNISH AND INSTALL NEW 3-FT HEIGHT CHAIN LINK FENCE BLACK COATED. SEE DETAIL 1 ON SHEET 4. CONTRACTOR TO SUBMIT SHOP DRAWING OF MATERIALS FOR CITY REVIEW AND APPROVAL
4. INSTALL NEW CONCRETE SLAB. SEE DETAILS 4 AND 6 ON SHEET 4
5. FURNISH AND INSTALL NEW 36 GAL. 36" HEIGHT HEAVY DUTY PRECAST CONCRETE TRASH RECEPTACLE. TAN COLOR/MATCH EXISTING. CONTRACTOR TO SUBMIT SHOP DRAWING FOR CITY REVIEW AND APPROVAL. SEE DETAIL 6.
6. FURNISH AND INSTALL 7 FT. PRECAST CONCRETE PARK BENCH. BELSON OUTDOOR PRODUCT MODEL TF5065 OR APPROVED EQUAL. TAN COLOR/MATCH EXISTING. CONTRACTOR TO SUBMIT SHOP DRAWING FOR CITY REVIEW AND APPROVAL. SEE DETAILS 5 AND 6 ON SHEET 4.
7. FURNISH AND INSTALL LED LIGHTED BOLLARD SEA SIDE IMPACT MODEL SSF-8S-SL OR APPROVED EQUAL. CONTRACTOR TO SUBMIT SHOP DRAWING FOR CITY REVIEW AND APPROVAL.
8. FURNISH AND INSTALL FLOOD LIGHT WITH SINGLE LED AREA LIGHT . CONTRACTOR TO SUBMIT SHOP DRAWING FOR CITY REVIEW AND APPROVAL. FLOOD LIGHTS TO FACE EXISTING MEMORIAL WALL. SEE DETAIL 7 ON SHEET 4.
9. INSTALL 6" CONCRETE CURB PER DETAIL 3, SEE SHEET 4.
10. FURNISH AND INSTALL 8" x 4" x 2" RECTANGLE RED/CHARCOAL CONCRETE PAVER OR APPROVED EQUAL. MATCH EXISTING PAVERS AND PATTERN. SEE DETAIL 3 ON SHEET 4.
11. FURNISH AND INSTALL 15 GAL. TREE
12. GRADE AREA TO NEW ELEVATIONS. REPLANT GRASS AND REPLACE/REINSTALL REMOVED DECOMPOSE GRANITE (DG). MATCH EXISTING DG COLOR.



ALLAN BLOCK RETAINING WALL BORREGO COLOR

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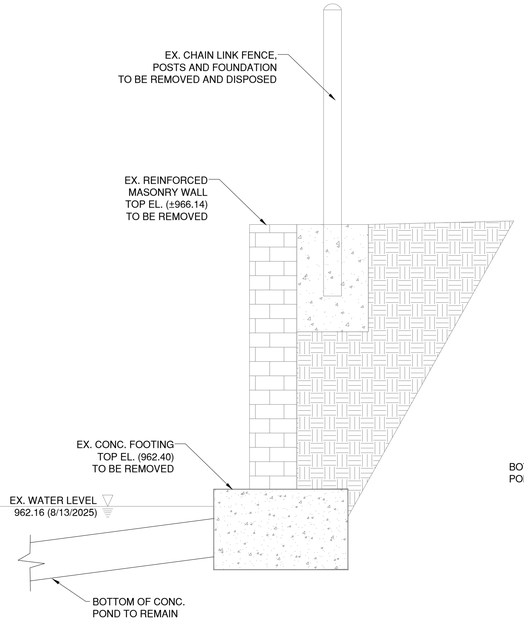
FILE NAME:
LAST REVISED:

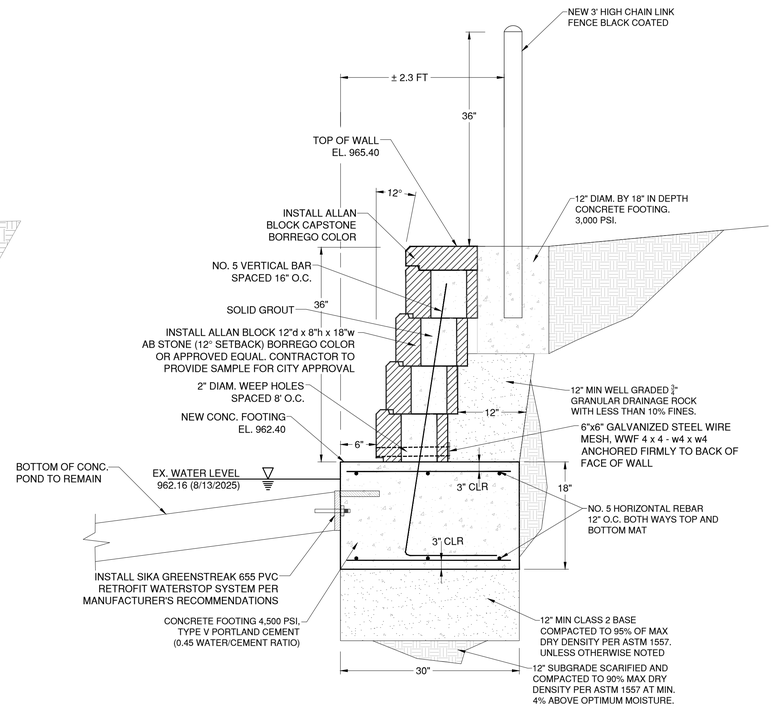
PROJECT DESCRIPTION: BUCKLIN PARK IMPROVEMENTS IN THE CITY OF EL CENTRO

SHEET TITLE: IMPROVEMENTS PLAN

SHEET: 3 OF 4

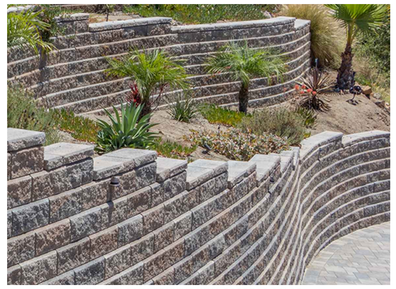


EXISTING RETAINING WALL TO BE DEMOLISHED



NOT TO SCALE

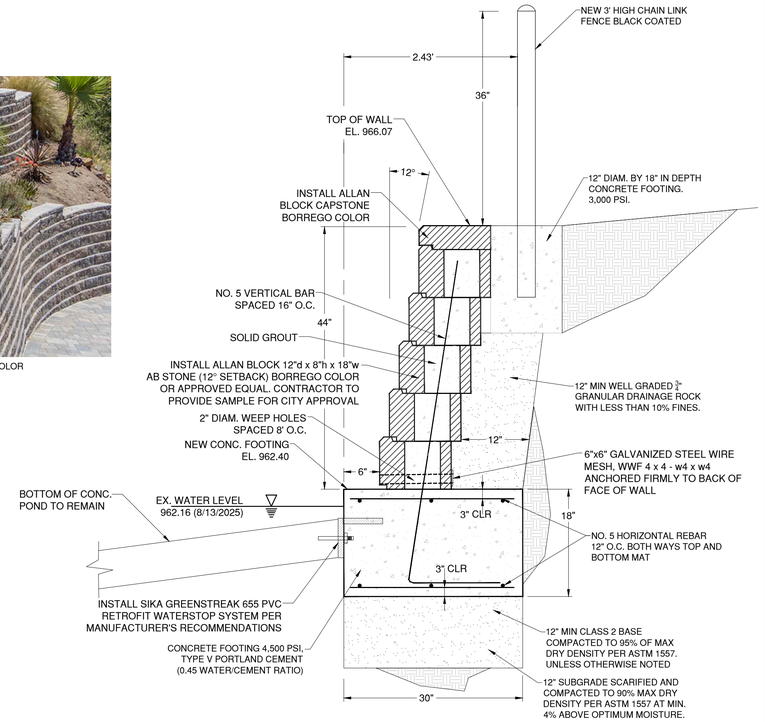
1 3-FT HEIGHT RETAINING WALL DETAIL (12° SETBACK)



ALLAN BLOCK RETAINING WALL BORREGO COLOR

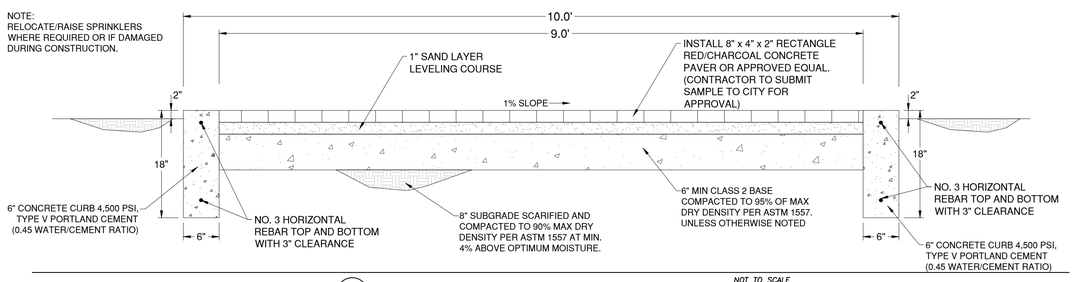


ALLAN BLOCK RETAINING WALL BORREGO COLOR



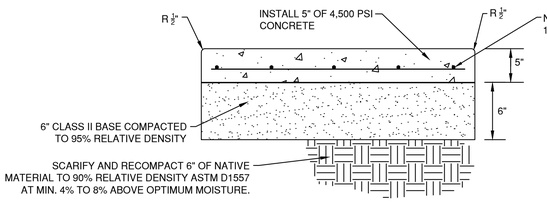
NOT TO SCALE

2 3' - 8" HEIGHT RETAINING WALL DETAIL (12° SETBACK)



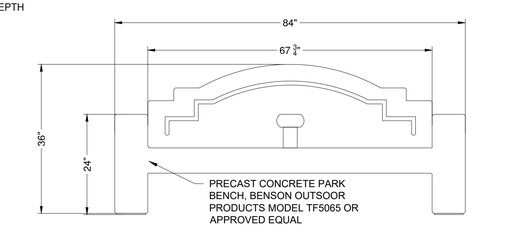
NOT TO SCALE

3 NEW PAVER WALKWAY DETAIL



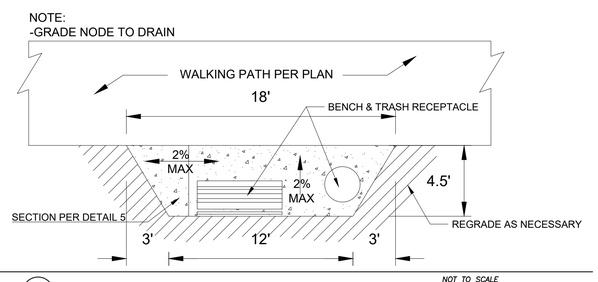
NOT TO SCALE

4 CONCRETE SECTION AT BENCHES



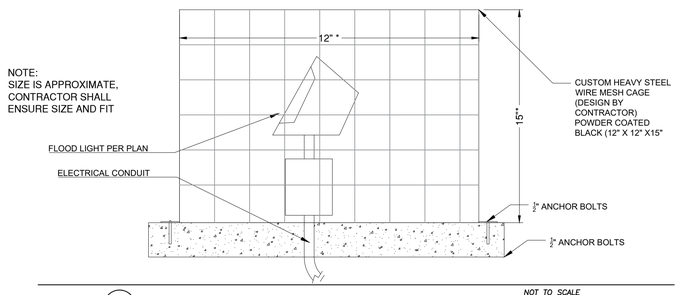
NOT TO SCALE

5 PARK BENCH DETAIL



NOT TO SCALE

6 TYPICAL BENCH AND TRASH RECEPTACLE LAYOUT



NOT TO SCALE

7 FLOOD LIGHT PROTECTION

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CITY ENGINEER

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PROJECT:
FILE NAME:
LAST REVISED:

PROJECT DESCRIPTION:
BUCKLIN PARK IMPROVEMENTS IN THE CITY OF EL CENTRO

SHEET TITLE:
DETAILS

SHEET:
4
OF
4

City of El Centro

Veteran's Memorial Phase 2 Project

PROJECT MANUAL

JANUARY 2026

CITY OF EL CENTRO
STATE OF CALIFORNIA

VETERAN'S MEMORIAL PARK PHASE 2 PROJECT
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State Prevailing Wages	Appendix B
Plans	Appendix C

Commented [ON1]: All these items are not in Buena vista Bid template
Should this remain?

INVITATION FOR BIDS

1. GENERAL INFORMATION

The City of El Centro ("the City") is inviting bids for the Veteran's Memorial Park Phase 2 Project located at Bucklin's Park, parcel number 053-515-003, El Centro, California.

2. SCOPE OF WORK

The work to be performed under this Contract consists of furnishing all labor, materials, equipment, and incidentals necessary to improve the existing Veterans Memorial Monument located at Bucklin Park, Parcel Number 052-515-003, for the City of El Centro, California, in accordance with the approved plans, specifications, and contract documents.

The project generally includes, but is not limited to, demolition of existing improvements; removal and replacement of existing retaining walls, including associated concrete footings; installation of concrete flatwork, curbs, and concrete pavers; installation of site amenities including benches and trash receptacles; electrical and lighting improvements; landscaping and irrigation adjustments; grading; and all related appurtenant work required to complete the project as shown on the plans and specifications.

The Contractor shall be responsible for coordinating all trades, sequencing the work, maintaining site safety, protecting existing improvements to remain, and restoring disturbed areas to a complete and finished condition.

3. PROJECT SCHEDULE

To be completed within one hundred twenty (120) calendar days after the issuance of a Notice to Proceed. All days set out in this Bid Packet are calendar days unless otherwise specified.

Commented [ON2]: How many days shall we input?

4. PROPOSAL REQUIREMENTS

SEALED PROPOSALS will be accepted at the Office of the City Clerk, City Hall, 1275 Main Street, El Centro, California until **2:00 PM** local time on **March 3rd 2026,** at which time all proposals will be publicly opened and read aloud.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his/her address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form. No emailed bids will be accepted.

Questions may be submitted until [10 days before bid opening] via email to onegrete@cityofelcentro.org. Any responses will be posted as an addenda to the bid documents. No oral responses will be given.

Commented [ON3]: Keeping same day, email?

Bid Solicitation Date	**01/28/2026**
Bid Opening Date	**03/03/2026**
Pre-Bid Meeting Date	**02/10/2026**
Q&A Due Date	**02/20/2026**
Estimated Award Date	**03/24/2026**

PLANS & SPECIFICATIONS:

Copies of plans and specifications (bid book) may be obtained at Planetbids.com via the City of El Centro website www.cityofelcentro.org.

Bidders are also responsible for checking the City's website at **www.cityofelcentro.org** for any addenda that may be posted.

MANDATORY PRE-BID MEETING: Bidders are required to attend a pre-bid meeting which will be conducted by the City's Construction Manager at **10 a.m. on February 10th, 2025.** The meeting will be held at the City's Community Services Department Conference Room located at **1249 Main Street in El Centro**. The object of the meeting is to acquaint bidders with the site conditions and mandatory bidding requirements

Commented [ON4]: What's the date?

No bid will be received unless it is made on the prescribed bid form furnished by the city. Each bid must be accompanied by a guaranty of cash, certified check, cashier's check or bid bond made payable to the City of El Centro for an amount equal to at least ten percent (10%) of the bid. Such guaranty will be forfeited should the bidder to whom the contract is awarded fail to enter the contract. All guaranties are to be returned after the contract is awarded.

In addition to the required documents listed on page 4, the bid may be considered incomplete and be disqualified if any of the following information is not provided.

1. On the bid form(s), the unit price items must be written in figures and total contract price must be written in words and figures. The words and figures shall appear on the blank spaces provided.

2. On pages 23-24 the Subcontractor's Listing shall be completed. If no subcontractor will be used, indicate an "X" mark on the space provided for "No subcontractor."

The contractor shall possess a **Class A** license at the time this contract is awarded.

Commented [ON5]: Is B okay?

State Prevailing Wage Rates:

The salary and wage for any classification shall be the current applicable State of California wage rates.

In accordance with the provisions of Labor Code §§1770 to 1781 as duly enacted by the State of California, the City Council has ascertained the general prevailing rate of wages applicable to the work to be done as those shown in the specifications of the work. Information on the current state prevailing wages can be obtained by contacting the State of California, Department of Industrial Relations, Division of Labor Statistics and Research, 45 Fremont Street, Suite 1160, San Francisco, California, 94105, (415) 972-8628 or from the California Department of Industrial Relations' internet website at http://www.dir.ca.gov.

All bids are to be compared on the basis of the Engineer estimate of the quantities of work to be done. A bid will only be accepted from a contractor who is licensed in accordance with the provisions of Chapter 9, Division 3, of the Business and Professions Code of the State of California as amended.

Liquidated damages:

As set out in Section XVI of the Construction Services Agreement, CONTRACTOR shall pay to the CITY the sum of Five Hundred ($500.00) for each and every calendar day of delay beyond the Contract Time, or beyond any completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule, or beyond the time indicated in the Project Schedule for any individual Contract activity.

Contractor and Subcontractor Registration with Department of Industrial Relations.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Public Contract Code §4104, or engage in the performance of any contract for public work, as that term is defined in Division 2, Part 7, Chapter 1 of the Labor Code, unless currently registered and qualified to perform public work pursuant to Labor Code §1725.5. It is not a violation of Labor Code §1771.1 for an unregistered contractor to submit a bid that is authorized by Business and Professions Code §7029.1 or by Public Contract Code §§ 10164 or 20103.5, provided the contractor is registered to perform public work pursuant to Labor Code §1725.5 at the time the contract is awarded. A bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor's and all subcontractor's current registration to perform public work pursuant to Labor Code §1725.5.

Commented [ON6]: All this public code requirements remain the same?

AWARD BASIS: The contract will be awarded based on the lowest responsive and responsible base bid as shown in the bid proposal form. See bid proposal form for further clarification.

Special attention of all prospective bidders is called to "Proposal Requirements and General Conditions" annexed to the blank form of the proposal for full directions as to bidding, etc.

If bidder is a corporate entity and is awarded the contract, prior to execution of the contract, the contractor shall submit satisfactory, documentary proof that the person(s) executing said contract on the behalf of said corporation has authority to do so.

Pursuant to California Public Contract Code §22300, the Contractor has the option of substituting securities for any money that is withheld by the City. Refer to section 1-23 of the General Conditions for further information.

CITY'S RIGHTS RESERVED: The City reserves the right to reject any or all bids, to waive any informality in a bid, and to make awards in the interest of the City.

DATE: _____ CITY OF EL CENTRO, CALIFORNIA

_____
Norma ,, City Clerk

END OF INVITATIONS FOR BIDS

REQUIRED DOCUMENTS

Commented [ON7]: All requirements remain the same?

The following is a list of documents to be submitted as part of the bid packet. Proposals not containing the following documents could be considered incomplete and are subject to rejection.

- Proposal/Bid Form
- Bid Bond
- Proposal Agreement
- Workers' Compensation Certificate
- Drug/Alcohol Testing Requirements
- Noncollusion Affidavit
- Subcontractor's Listing
- Corporate Certification Partnership Information

PROPOSAL REQUIREMENTS

1. Examination of Plans, Specifications, Special Provisions and Site of Work: The bidder is required to examine carefully the site of work contemplated and it will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of work to be performed and materials to be furnished and as to the requirements of the specifications, special provisions and the contract. It is mutually agreed that submission of a proposal shall be considered prima facie evidence that the bidder has made such examination.

2. Bid Form: All proposals must be made on the bid forms to be obtained from the Community Services Department at 1249 West Main Street, El Centro, CA. All bids must give the prices proposed both in writing and figures and must be signed by the bidder with bidders' business address.

   If the bid is made by an individual, the individual's name and post office address must be shown. If made by a firm or partnership, then the name and post office address of each member of the firm or partnership must be shown. If made by a corporation, then the bid must show the name of the State under the laws of which the corporation is chartered and the name, titles and business addresses of the President, Secretary and Treasurer. A certification by the legal representative of the firm must be included in the bid.

3. Rejection of Bid Containing Alterations, Erasures or Irregularities: Proposals may be rejected if they show any alterations of form, additions not called for, conditional or alternative bids, incomplete bids, erasures or irregularities of any kind.

4. The Bid may be withdrawn upon request by the bidder without prejudice prior to, but not after the time fixed for opening of bids provided that the request is in writing, has been executed by the bidder or the bidders duly authorized representative and is filed with the City Clerk.

   4.1 Omissions and Discrepancies: If the bidder finds discrepancies in or omissions on the drawings, or other contract documents or if bidder is in doubt as to their meaning, the bidder must at once notify the Director of Community Services who may send a written instruction to all bidders. Discrepancies or omissions raised after the award of bid are not a basis for relief of the bidder.

   4.2 Interpretations and Addenda: No oral interpretations shall be made to any bidder as to the meaning of any of the contract documents, or be effective to modify any of the provisions of the contract documents. Every request for an interpretation shall be made in writing and addressed and forwarded to the Community Services Director.

   4.3 The City reserves the right to reject any or all bids.

5. Bidder's Guaranty: All bids shall be presented under sealed cover and shall be accompanied by cash, cashier's check, certified check, or bid bond made payable to the City of El Centro for an amount equal to at least ten percent (10%) of the amount of said bid, and no bid shall be considered unless such cash, cashier's check, certified check or bid bond is enclosed therewith.

   5.1 Return of Bid Guaranty: Within ten (10) days after the award of the contract, the City Council will return the bid guaranties accompanying the bids, which are not to be considered in making the award. All other bid guaranties will be held until the contract has been finally

executed, after which they will be returned to the respective bidders whose bids they accompany.

5.2 Execution of Contract: The contract and contract documents shall be signed by the successful bidder and returned together with the contract bonds, within ten (10) days, not including Sundays, after the bidder has received notice the contract has been awarded. No bid shall be considered binding upon the City until the execution of the contract. Failure to execute the contract and file acceptable bonds as provided herein within ten (10) days, not including Sundays, after the bidder has received notice that the contract has been awarded, shall be just cause for the annulment of the award and the forfeiture of the proposal guaranty.

5.3 Sureties: The successful bidder shall also promptly secure with a responsible corporate surety or corporate sureties satisfactory bonds conditioned upon faithful performance by the said bidder of all the requirements under the contract and upon the payment of claims of any material men and laborers thereunder.

6. Award of Contract: The award of the contract, if it is awarded, will be to the lowest responsive and responsible bidder whose bid complies with all the requirements prescribed. The lowest bid shall be the lowest base bid price on the base contract and those additive or deductive items that are specifically identified in the bid solicitation as being used for the purpose of determining the lowest bid price. The award, if made, will be made within sixty (60) calendar days after the opening of the proposals. All bids will be compared on the basis of the Engineer estimate of quantities of work to be done.

7. Projects financed in whole or in part with State or Federal funds shall be subject to inspection at all times by the Director of Public Works or his agents.

8. Removal of Defective and Unauthorized Work: All work which is defective in its construction or deficient in any of the requirements of these specifications, special provisions or plans shall be remedied or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed for such correction. Any work done beyond the lines and grades shown on the plans or established by the Community Services Director, or any extra work done without written authority will be considered as unauthorized and will not be paid for.

9. Upon failure on the part of the Contractor to comply with any order of the Community Services Director made under these provisions, the Community Services Director shall be the authority to cause defective work to be removed and to deduct the costs thereof from any monies due or to become due to the Contractor.

10. Final Inspection: Whenever the work provided and contemplated by the contract shall have been satisfactorily completed and the final clean up performed, the Community Services Director will make the final inspection at the site.

11. Amount of Bonds: The faithful performance bond shall be in the sum of not less than one hundred percent (100%) of the contract price.

The bond for material men and laborers shall be in an amount equal to not less than one hundred percent (100%) of the contract price. The form of bond required is attached to the form of contract below.

Payment and performance bonds shall be executed by a California-admitted surety insurer with a minimum A. M. Best Company rating of A+, Class VII.

Whenever any surety or sureties on any such bond, or on any bonds required by law for the protection of the claims of laborers and material men, become insufficient or the City Council has cause to believe such surety or sureties have become insufficient, a demand in writing may be made of the Contractor for such further bond or bonds or additional surety, not exceeding that originally required, as is considered necessary, considering the extent of the work remaining to be done. Thereafter, no payment shall be made upon such contract to the contractor or any assignee of the contractor until such further bond or bonds or additional surety has been furnished.

12. Compliance with Laws and Regulations: No proposal for work will be accepted from a contractor who is not licensed in accordance with the law under the provisions of Chapter 9 of Division III, of the Business and Professions Code of the State of California, as amended. The contractor awarded the contract shall also submit the Contractor's Certification of Qualifications for License Classification contained in these contract documents along with the submission of the executed contract and acceptable sureties. All bids submitted and all contracts awarded hereunder must be submitted, filed, made and executed in accordance with all applicable laws of the State of California and of the United States of America which relate to bids and contracts of the nature referred to herein, whether such laws are expressly referred to herein or not.

13. PREVAILING WAGES: In accordance with the provisions of Labor Code §§1770 to 1781, the City Council of the City of El Centro has adopted the latest publication of the General Prevailing Wage Rates entitled, "State of California, Department of Transportation, Equipment Rental Rates and General Prevailing Wage Rates."

14. Filing of Bid Protests: By submitting a Bid, each Bidder hereby agrees and understands that the Bidder must comply with these protest procedures and exhaust all administrative remedies set forth herein prior to the initiation of any type of related legal action. With the express written Contract of the City and Bidder, and subject to the requirements of applicable law, this protest procedure can also be used to resolve issues surrounding the City's determination of a Bidder as not responsible. The following terms as used in this Section shall have the following meanings:

"Protest" shall mean a written objection by an interested party or affected party to (i) the requirements or specifications contained in the Notice to Bidders or any portion of the documents accompanying that notice; or (ii) a proposed award recommendation protest.

A. Solicitation Phase Protest. The purpose of the solicitation is to obtain competitive Bids from Bidders. Any Bidder who has submitted a bid and who believes that a free and open competition has not taken place or that a particular specification or requirement is impractical, unduly restrictive, or ambiguous may advise the City of its concerns by submitting a detailed Solicitation Protest Statement in accordance with the requirements set forth below in this Section A. The Protest does not replace the requirement to report irregularities in the bid documents.

(1) Contents and Requirements

A solicitation protest must be submitted to the contact named in the bid documents by personal delivery or email by close of business at least fifteen (15) calendar days prior to the Bid due date, and must contain all of the following to be considered:

a) The name, address, and telephone number of the protestor; and

b) The Project Name and Project Number; and

c) A detailed statement setting forth the grounds for protest, which shall include all the factual and legal documentation in support of the protest in sufficient detail to establish the merits of the protest; and

d) The desired resolution to the protest.

If the submitted protest does not comply with the requirements set forth herein, then it will not be considered for evaluation and will be returned to the protestor. Any grounds for protest not raised are waived. The protest may not be amended after filing. The protest is a public document.

(2) Evaluation and Determination

No hearing will be held on the protest. City's Community Services Director, or designee, will review the protest and any supporting material and conduct an investigation of the facts. He/she may, but need not, request other Bidders to submit statements or arguments regarding the protest and may discuss the protest with the protestor.

The Community Services Director or designee shall issue a final written decision regarding any solicitation protest to each Bidder prior to Bid opening. The written decision will cite any actions that will or will not be taken in response to the protest. That decision shall be final, and there shall be no further administrative recourse.

B. Protest of Award

(1) Contents and Requirements

Following the opening of the Bids any unsuccessful Bidder, may protest City's proposed award of the Contract by submitting a protest to the Community Services Director or designee no later than close of business on the on the fifth business day. That protest must be submitted in a timely manner, signed by the protesting Bidder, must and contain all of the following to be considered:

a) The name, address and telephone number of the protestor; and

b) The Project Name and Project Number; and

c) The City action or recommendation that is being protested;

d) A detailed statement setting forth every ground, reason, legal authority and facts in support of the protest, including all documents and evidence including specific references to parts of the bid documents; and

e) A clear statement of the relief request.

A protest does not comply with the requirements set forth herein will be returned to the protestor. The protest shall not be amended after filing. Any grounds for protest not raised are waived. The protest is a public document.

Award Protest Statements are public documents. City will notify the affected parties when a protest has been submitted, and will provide copies of the protest to the affected parties as soon as is reasonably practical.

(2) Evaluation and Determination

The affected parties may file responsive statements in support of or in opposition to the protest within three (3) business days after the receipt of the protest from City. The Community Services Director, or designee, shall review the facts and all submittals relative to the protest and shall issue a written decision setting forth the basis for such decision. The written decision will be issued to the protestor and to all affected parties.

Unless otherwise required by law, no hearing shall be provided. In the event a hearing is conducted, the Community Services Director or designee, shall issue written notice to the protestor and affected parties identifying the date and time for the hearing, along with rules concerning the hearing.

C. Delay in Award

Execution of any proposed contract shall be delayed pending the resolution of the protest unless one or more of the following conditions is present:

1. The items or services being procured are urgently required;

2. Delivery or performance will be unduly delayed by failure to make award promptly; or

3. Failure to make prompt award will otherwise cause undue harm to City.

D. No Limitation on Remedies

Nothing contained herein shall be construed to act as a limitation on City's choice of remedies or confer any right upon any interested party or affected party to a remedy.

E. Basis for Choice of Remedy

In determining the appropriate remedy, the City shall consider all the circumstances surrounding the notice of bids and/or award, including, but not limited to:

1. The seriousness of any deficiency found to exist in the contracting process;

2. The effect of the action on the competitive process;
3. Any urgency surrounding the requirement to enter into a contract; and

4. The effect that implementing the remedy will have on the AGENCY.

F. Remedies

If the City determines that the award or proposed award was not made in accordance with applicable statutes, regulations, policies and/or procedures, the City, in its sole discretion, may grant any of the following remedies or any other remedy it deems appropriate:

1. Prior to award, City may issue a new solicitation, make a new selection/award recommendation, or award the contract consistent with applicable statutes, regulations, policies and procedures;

2. In its sole discretion, take no further action; or

3. Take any other action that is permitted by law to promote compliance.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

END OF PROPOSAL REQUIREMENTS

PROPOSAL BID FORM

TO THE CITY OF EL CENTRO:

The undersigned hereby declares that he/she has carefully examined the location of the proposed work that he/she has examined the plans and specifications and read the accompanying instructions to bidders and hereby proposes to furnish all material except owner furnished materials, and labor and do all work required to complete the said work in accordance with said plans and specifications and special provisions for the unit prices set forth in the following schedule. The bidder shall furnish prices for all items shown in the proposal.

ITEM NO.	APPROXIMATE QUANTITY	UNIT	ITEM W/ UNIT PRICE (WRITTEN IN WORDS)	PRICE (NUMBERS ONLY)	TOTAL (NUMBERS ONLY)
1.	1	LS	Mobilization, Bonds, General Liability Insurance, Workman's Compensation Insurance, Vehicle Insurance, Taxes, Permits, and Miscellaneous Fees		
2.	1	LS	Remove and Dispose Existing Chain Link Fence including Posts and Footings (Approximately 490 ft)		
3.	1	LS	Remove and Dispose Existing Concrete Masonry Reinforced Retaining Wall and Concrete Footing (Approximately 490 ft)		
4.	1	LS	Remove and Dispose Existing Concrete Curb at Existing Paver Area (Approximately 14 ft).		
5.	1	LS	Remove and Relocate Existing Concrete Bench and Trash Receptacle.		
6.	2	EA	Remove Existing Tree		
7.	120	CY	Remove and Dispose Existing Material for New Concrete Paver Walkway and for New Grading around New Wall, Including Landscaping Grass and Underneath Material.		

8.	1	LS	Remove and Dispose Existing Reinforced Concrete Slabs Used for Concrete Benches and Trash Receptacles at Existing Memorial		
9.	170	SY	Retaining Wall Subgrade Preparation. 12 inch Subgrade Scarification and Compaction per Detail 1 on Sheet 4.		
10.	490	LF	Install Retaining Wall Concrete Footing with Reinforcing Bars. Include 12" Class II Base and Water Stops		
11.	385	LF	Furnish and Install 3-ft Height Retaining Wall (12 Degree Setback) Allan Block AB Stone 12"d x 8"h x 18"w Borrego Color or Approved Equal, Per Detail 1 on Sheet 4.		
12.	105	LF	Furnish and Install 3'-8" Height Retaining Wall (12 Degree Setback) Allan Block AB Stone 12"d x 8"h x 18"w Borrego Color or Approved Equal, Per Detail 2 on Sheet 4.		
13.	490	FT	Furnish and Install 3 ft Height Chain Link Fence Including Posts and Footings		
14.	5	EA	Install Concrete Slab per Details 4 and 6 on Sheet 4. Include Rebars and Class II Base.		
15.	3	EA	Furnish and Install 36 Gal. 36" Height Trash Receptacles		
16.	3	EA	Furnish and Install 7-ft Concrete Park Bench		

17.	8	EA	Furnish and Install LED Lighted Bollard. Include Electrical Conduits and Wiring.		
18.	2	EA	Furnish and Install Flood Light with Single LED Area Light. Include Electrical Conduits and Wiring. Include Concrete Slab per Detail 7 on Sheet 4.		
19.	400	LF	Install 6 Inch Concrete Curb Per Detail 3 on Sheet 4.		
20.	250	SY	Subgrade Preparation for Concrete Pavers. Include 8 inch Subgrade Scarification and Compaction per Detail 3 on Sheet 4.		
21.	2,200	SY	Furnish and Install Rectangle Concrete Pavers per Detail 3 on Sheet 4. Include Sand Layer Leveling Course and Class II Base.		
22.	7	EA	Furnish and Install 15 Gal. Tree		
23.	1	LS	Grade Area to New Elevations Around New Concrete Block Wall. Replant New Grass. Remove Conflicting Irrigation Lines at New Concrete Paver Area and Reinstall New Irrigation Lines for new Tress and Grass Area.		

VETERAN'S MEMORIAL PARK PHASE 2 PROJECT / El Centro, CA

For the total sum of:

_____ Dollars

($_____), hereinafter called Base Bid Price

Note: The Bidder shall include in the Bid Price all labor, materials, equipment, and work necessary to complete the project in accordance with the plans, specifications, and contract documents, whether or not specifically itemized in the Bid Schedule.

AWARD BASIS: The contract will be awarded based on the lowest responsive and responsible Base Bid Price as shown on Proposal Bid Form.

1.00 – The undersigned hereby acknowledges the receipt of the following addendum:

None_____; No. 1_____; No. 2_____; No. 3_____; No. 4 _____; No. 5_____

2.00 – The undersign hereby certifies that this proposal/bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation.

3.00 – The undersigned hereby accepts on the behalf of his firm all provisions and requirements of the contract documents, including but not limited to those related to time of completion and liquidated damages.

4.00 – The undersigned hereby certifies that they are authorized representative of the firm on whose behalf this proposal/bid is submitted and that they are acting at the direction and with the required approval of said firm, which is identified as follows:

Name of firm:

_____

Address of firm: _____

Telephone Number: (____) _____ Fax Number: (____) _____

Contractor's License Number: _____ Type: _____

Signed: _____ Date: _____

END OF PROPOSAL/BID FORM

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT _____, hereinafter called Principal, and _____, hereinafter called Surety, are jointly and severally held and firmly bound unto the City of El Centro, hereinafter called Owner, in the penal sum of _____ dollars ($_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal is herewith submitting a bid for the work entitled "Veteran's Memorial Park Phase 2 Project."

Commented [ON8]: Is the project Name accurate?

NOW, THEREFORE, the condition of this obligation is such that if Principal is awarded a contract for the work, and if Principal within the time specified in the bid enters into, executes and delivers to owner an agreement in the form provided herewith, and if Principal within the time specified in the bid gives to the owner the performance bond and the payment bond on the forms provided herewith, then this obligation shall be void. If, however, Principal shall fail or refuse to furnish, execute and deliver to owner said agreement in the time stated in the bid or should fail or refuse to furnish performance bond and payment bond in the time stated in the bid, then Principal and Surety shall forfeit to Owner the penal sum hereof.

AND, IT IS HEREBY DECLARED AND AGREED that Surety shall be liable under this obligation as Principal, and that nothing of any kind of nature whatsoever that will not discharge, Principal shall operate as a release of liability of Surety.

IN WITNESS WHEREOF, we have hereunto set our hands and sealed this _____day of _____, 202___.

BY: _____

BY: _____

Insurance companies A.M. Best Company identifying number: _____

END OF BID BOND

PROPOSAL AGREEMENT

The undersigned agrees that this bid may not be withdrawn within a period of ninety (90) days from the opening thereof, and further agrees that in case of default in executing the required contract with necessary bonds with the ten (10) days, not including Sunday, after having received notice that the contract is ready for signature, the proceeds of the check or bond accompanying his/her bid shall become the property of the City of El Centro, California.

The certified or cashier's check, cash deposit or bid bond accompanying this proposal is in the amount of ten percent (10%) or more of the aggregate amount of this bid.

The undersigned is licensed in accordance with the Laws of the State of California.

License Number: _____ Class: _____

Registration Number:

_____
Company

_____
Business Address

_____
Telephone Number

_____
Fax Number

_____ _____
Signature Bidder Date

END OF PROPOSAL

CITY OF EL CENTRO
CONSTRUCTION SERVICES AGREEMENT

This CONSTRUCTION SERVICES AGREEMENT Agreement'), is made and effective _____ _____2025, by and between the City of El Centro, a municipal corporation ("CITY"), and , a California Corporation/_____ ("CONTRACTOR"). In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

I. SCOPE OF WORK

A. CONTRACTOR shall provide all labor, materials, equipment, and services required to perform the Work as indicated in the Construction Plans and incorporated herein by this reference. Furthermore, CONTRACTOR shall perform the Work in accordance with the Payment Schedule outlined in Sections 1-23, 1-24, 1-25 and 1-26 of the General Conditions and incorporated herein by this reference.

B. All services and equipment shall be provided at the times and places designated by the CITY.

C. All days set out here are calendar days unless otherwise specified.

II. TIME FOR PROJECT COMPLETION

All of CONTRACTOR's work on the Project shall be completed within durations established for the individual activities as set forth in the Project Schedule attached hereto as **Exhibit B**. All work shall commence within ten (10) calendar days after receiving a written Notice to Proceed from the CITY. The Project shall be completed within 120 calendar days from the date of commencement of work, unless earlier terminated or extended as provided in Article 12.

Commented [BM9]: I do not see an Exhibit B

Commented [BM10R9]: But I'd suggest you make Public Contract Code Section 22300 Exhibit B.

Commented [ON11R9]: EXHIBIT B IS NOW INCLUDED IN THE DOCUMENT

III. Ill. THE CONTRACT SUM

Notwithstanding any provisions of this Agreement to the contrary, CITY and CONTRACTOR mutually agree that CITY's maximum cumulative payment obligation hereunder (including, but not limited to all obligations for CONTRACTOR's costs and profit), shall be ___ _____ dollars ($) for the Scope of Work which shall include all amounts payable to CONTRACTOR for its labor, subcontracts, leases! materials, equipment, the deliverables, and costs arising from CONTRACTOR's performance of this Agreement. CONTRACTOR exceeds the maximum cumulative amount at its own risk and expense.

IV. PROGRESS PAYMENTS

a. For CONTRACTOR's full and complete performance of its obligations under this Agreement, and subject to the maximum cumulative payment obligation provisions set forth in Article 6 below, CITY shall pay CONTRACTOR in accordance with Sections 1-23, 1-24, 1-25 and 1-26 of the General Conditions.

b. CONTRACTOR shall submit invoices monthly during the term of this Agreement, based on the cost for services performed prior to the Invoice date. Invoices shall contain the following:

- Serial identification of progress bills: i.e., Progress Bill No. 1 for the first invoice, etc.
- The beginning and ending dates of the billing period
- A task summary containing the original contract amount, the amount of prior billings, the total due the current period, the balance available under the Agreement and the percentage of completion
- At CITY's option, for each work item in each task, a copy of the applicable time entries or time sheets shall be submitted showing the name of the person doing the work, the hours spent by each person, and/ or a

brief description of the work

- The CONTRACTOR's signature

c. **Monthly Payment** CITY shall make payments based on invoices received for services satisfactorily performed and may retain 5% of such amount.

Notwithstanding, Public Contract Code Section 22300 permits the substitution of securities for any monies withheld by a public Agency to ensure performance under a contract, at the request and expense of the CONTRACTOR until completion of the term of the contract. The provisions of Exhibit "B," attached and incorporated, govern such substitution.

d. **Final Payment** CITY shall pay the last 5% of the total sum due pursuant to this Agreement within thirty -five (35) days after written acceptance of all satisfactory work under this Agreement (which may be indicated by a Notice of Completion) or as otherwise agreed with the Contractor.

e. **Contractor Claims** Any Contractor claims under this Agreement are subject to the provisions of Public Contract Code Section 9204, attached and incorporated here as Exhibit "A".

V. INDEMNITY. DEFENSE AND HOLD HARMLESS AGREEMENT

CONTRACTOR shall indemnify, defend with legal counsel approved by CITY, and hold harmless CITY, its officers, officials, employees and volunteers from and against all liability, loss, damage, expense, cost (including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with CONTRACTOR's negligence, recklessness or willful misconduct in the performance of work hereunder or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which is caused by the sole or active negligence or willful misconduct of the CITY. Should conflict of interest principles preclude a single legal counsel from representing both CITY and CONTRACTOR, or should CITY otherwise find CONTRACTOR's legal counsel unacceptable, then CONTRACTOR shall reimburse the CITY its costs of defense, including without limitation reasonable legal counsels' fees, expert fees and all other costs and fees of litigation. The CONTRACTOR shall promptly pay any final judgment rendered against the CITY (and its officers, officials, employees and volunteers) with respect to claims determined by a trier of fact to have been the result of the CONTRACTOR's negligent, reckless or wrongful performance. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this Agreement.

CONTRACTOR obligations under this section apply regardless of whether or not such claim, charge, damage, demand, action, proceeding, loss, stop notice, cost, expense, judgment, civil fine or penalty, or liability was caused in part or contributed to by an indemnitee. However, without affecting the rights of CITY under any provision of this agreement, CONTRACTOR shall not be required to indemnify and hold harmless CITY for liability attributable to the active negligence of CITY, provided such active negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction. In instances where CITY is shown to have been actively negligent and where CITY active negligence accounts for only a percentage of the liability involved, the obligation of CONTRACTOR will be for that entire portion or percentage of liability not attributable to the active negligence of CITY.

VI. PREVAILING WAGES

In accordance with the provisions of Labor Code §§1770 to 1781 as duly enacted by the State of California, the City Council has ascertained the general prevailing rate of wages applicable to the work to be done as those shown in the specifications of the work. Information on the current state prevailing wages can be obtained by contacting the State of California, Department of Industrial Relations, Division of Labor Statistics and Research, 45 Fremont Street, Suite 1160, San Francisco, California, 94105, (415) 972-8628 or from the California Department of Industrial Relations' internet website at http://www.dir.ca.gov.

California wage rates for this Project shall be in accordance with the "General Wage Determination Made by the Director of Industrial Relations Pursuant To California Labor Code, Part 7, Chapter 1, Article 2, Sections 1770, 1773 and 1773.1, for Riverside County. Wage rates shall conform to those posted at the CITY offices and the Project site. Statutory provisions for penalties for failure to pay prevailing wages or to comply with State wage and hour laws will be enforced.

The following Labor Code sections are hereby referenced and made a part of this Agreement:

1. Section 1773.8 - Travel and Subsistence Pay
2. Section 1774 - Prevailing Wage Requirement
3. Section 1775 - Penalty for Failure to Comply with Prevailing Wage Rates
4. Section 1776 - Payroll Records (as applicable)
5. Section 1777.4 - Apprenticeship Requirements
6. Section 1777.5 -Apprenticeship Requirements
7. Sections 1810 and 1811 - Working Hour Restrictions
8. Section 1813 - Penalty for Failure to Pay Overtime
9. Section 1815- Overtime Rate Requirement

VII. RECORD AUDIT

Under California Government Code, Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars ($10,000), any records or documents of both the CITY and the CONTRACTOR shall be subject to examination, audit, and/or copying at any time during regular business hours by the Auditor General for a period of three (3)

years after final payment, upon oral or written request of the CITY.

VIII. CERTIFICATIONS

At the time of commencing work and throughout the Project duration, CONTRACTOR shall be in possession of a valid California State Contractor's License with the following classifications: [Class A or B License]

Furthermore, CONTRACTOR shall ensure that any subcontractor working on the Project possesses at the time of commencing work and throughout the Project duration, a Contractor's License, issued by the State of California, which is current and in good standing.

If CONTRACTOR is a corporation, the undersigned hereby represents and warrants that the corporation is duly incorporated and in good standing in the State of California, and that _____ _____ whose title is _____, is authorized to act for and bind the corporation.

IX. BONDING REQUIREMENTS

CONTRACTOR shall deliver to the CITY two fully executed, identical counterparts of the Performance Bond and Payment (Labor and Materials) Bond. Each bond shall be for one hundred percent (100%) of the Contract Price. The surety insurer shall be admitted to transact surety business in the State of California, in accordance with Code of Civil Procedure section 995.120. Personal sureties and unregistered surety companies are unacceptable. Failure to furnish a bond within the time requirements may result in the forfeiture of the Bid Guarantee at the sole discretion of City.

X. CONTRACTOR'S FAILURE TO PROCURE COMPLETION OF PROJECT

In the event CONTRACTOR fails to furnish tools, equipment, or labor in the necessary quantity or quality, or fails to prosecute the work or any part thereof contemplated by this Agreement in a diligent and workmanlike manner, and if the CONTRACTOR for a period of three (3) calendar days after receipt of written demand from CITY or its designated representative to do so, fails to furnish tools, equipment, or labor in the necessary quantity or quality, and to prosecute its work and all parts thereof in a diligent and workmanlike manner, or after commencing to do so within said three (3) calendar days, fails to continue to do so; then the CITY may exclude the CITY from the premises, or any portion thereof, and take possession of said premises or any portion thereof, together with all material and equipment thereon, and may complete the work contemplated by this Agreement or any portion of said work, either by furnishing the tools, equipment, labor or material necessary, or by letting the unfinished portion of said work, or the portion taken over by the CITY to another contractor or by a combination of such methods. In any event, the procuring of the completion of said work, or the portion thereof taken over by the CITY, shall be a charge against the CONTRACTOR, and may be deducted from any money due or becoming due to CONTRACTOR from the CITY, or the CONTRACTOR shall pay the CITY the amount of said charge, or the portion thereof unsatisfied. The sureties, provided for under this Agreement shall become liable for payment should CONTRACTOR fail to pay in full any said cost incurred by the CITY.

XI. INSURANCE

Prior to the beginning of and throughout the duration of the Work, CONTRACTOR and its subcontractors shall maintain insurance in conformance with the requirements set forth below. CONTRACTOR will use existing coverage to comply with these requirements. If that existing coverage does not meet the

requirements set forth herein, CONTRACTOR agrees to amend, supplement or endorse the existing coverage to do so.

CONTRACTOR shall not allow any subcontractor to commence work on any subcontract until CONTRACTOR has obtained all insurance required herein for the subcontractor(s) and provided evidence thereof to DISRICT. Verification of the required insurance shall be submitted and made part of this Agreement prior to execution. All insurance coverage and limits provided by CONTRACTOR and available or applicable under this Agreement are intended to apply to the full extent of the policies. Nothing contained in this Agreement limits the application of such insurance coverage.

CONTRACTOR acknowledges that the insurance coverage and policy limits set forth in this section constitute the minimum amount of coverage required. Any insurance proceeds available to CONTRACTOR or its subcontractors in excess of the limits and coverage identified in this Agreement and which is applicable to a given loss, claim or demand, will be equally available to CITY.

a. CONTRACTOR shall provide the following types and amounts of insurance:

Without limiting CONTRACTOR's indemnification of CITY, and prior to commencement of Work, CONTRACTOR shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to CITY.

General liability insurance CONTRACTOR shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office form CG 00 01, in an amount not less than $1,000,000 per occurrence, $2,000,000 general aggregate, for bodily injury, personal injury, and property damage, and a $2,000,000 completed operations aggregate. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance CONTRACTOR shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the CONTRACTOR arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Workers' compensation insurance CONTRACTOR shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least $1,000,000) for CONTRACTOR's employees in accordance with the laws of the State of California, Section 3700 of the Labor Code. In addition, CONTRACTOR shall require each subcontractor to similarly maintain Workers' Compensation Insurance and Employer's Liability Insurance in accordance with the laws of the State of California, Section 3700 for all of the subcontractor's employees.

CONTRACTOR shall submit to CITY, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of CITY, its officers, agents, employees and volunteers.

Other provisions or requirements

a. Proof of insurance CONTRACTOR shall provide endorsed certificates of insurance to CITY as evidence of the insurance

coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsements must be approved by CITY's risk manager prior to commencement of performance. Current certification of insurance shall be kept on file with CITY at all times during the term of this contract. CITY reserves the right to require complete, certified copies of all required insurance policies, at any time.

b. **Duration of coverage** CONTRACTOR shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Work hereunder by CONTRACTOR,

his agents, representatives, employees or subcontractors. CONTRACTOR must maintain general liability and umbrella or excess liability insurance for as long as there is a statutory exposure to completed operations claims. CITY and its officers, officials, employees, and agents shall continue as additional insureds under such policies.

c. **Primary/noncontributing** Coverage provided by CONTRACTOR shall be primary and any insurance or self-insurance procured or maintained by CITY shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non- contributory basis for the benefit of CITY before the CITY's own insurance or self-insurance shall be called upon to protect it as a named insured.

d. **CITY's rights of enforcement** In the event any policy of insurance required under this Agreement does not comply with these requirements or is canceled and not replaced, CITY has the right but not the duty to obtain the insurance it deems necessary and any premium paid by CITY will be promptly reimbursed by CONTRACTOR or CITY will withhold amounts sufficient to pay premium from CONTRACTOR payments. In the alternative, CITY may cancel this Agreement.

e. **Acceptable insurers** All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the CITY's risk manager.

f. **Waiver of subrogation** All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against CITY, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow CONTRACTOR or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. CONTRACTOR hereby waives its own right of recovery against CITY, and shall require similar written express waivers and insurance clauses from each of its sub consultants.

g. **Enforcement of contract provisions (non estoppel).** CONTRACTOR acknowledges and agrees that any actual or alleged failure on the part of the CITY to inform CONTRACTOR of non-compliance with any requirement imposes no additional obligations on the CITY nor does it waive any rights hereunder.

h. **Requirements not limiting.** Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the CONTRACTOR maintains higher limits than the minimums shown above, the CITY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the CITY.

i. **Notice of cancellation.** CONTRACTOR agrees to oblige its insurance agent or broker and insurers to provide to CITY with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

j. **Additional insured status.** General liability policies shall provide or be endorsed to provide that CITY and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies. This provision shall also apply to any excess/umbrella liability policies.

k. **Prohibition of undisclosed coverage limitations.** None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to CITY and approved of in writing.

l. **Separation of insureds.** A severability of interests provision must apply for all additional insureds ensuring that CONTRACTOR's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

m. **Pass through clause.** CONTRACTOR agrees to ensure that its sub consultants, subcontractors, and any other party involved with the project who is brought onto or involved in the project by CONTRACTOR, provide the same minimum insurance coverage and endorsements required of CONTRACTOR. CONTRACTOR agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. CONTRACTOR agrees that upon request, all agreements with consultants, subcontractors, and others engaged in the project will be submitted to CITY for review.

n. **CITY's right to revise requirements.** The CITY reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the CONTRACTOR a ninety (90) day advance written notice of such change. If such change results in substantial additional cost to the CONTRACTOR, the CITY and CONTRACTOR may renegotiate CONTRACTOR's compensation.

o. **Self-insured retentions.** Any self-insured retentions must be declared to and approved by CITY. CITY reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by CITY.

p. **Timely notice of claims.** CONTRACTOR shall give CITY prompt and timely notice of claims made or suits instituted that arise out of or result from CONTRACTOR's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

q. **Additional insurance.** CONTRACTOR shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the Work.

r. **Claims-made limitations.** The following provisions shall apply if any of the required policies are written on a claims-made basis:

i. The retroactive Date of the policy must be shown and must be before the date of the Agreement or the beginning of the contracted work.

ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement or the work.

iii. If coverage is canceled or not renewed and it is not replaced with another claims-made policy form with a Retroactive Date that precedes the date of this Agreement, CONSULTANT must provide extended reporting coverage for a minimum of five (5) years after completion of the Agreement or the work. The CITY shall have the right to exercise, at the CONSULTANT'S sole cost and expense, any extended reporting provisions of the policy, if the CONSULTANT cancels or does not renew the coverage.

iv. A copy of the claim reporting requirements must be submitted to the CITY prior to the commencement of any work under this Agreement.

XII. REGISTRATION REQUIREMENTS

Pursuant to Section 1771.1(a) of the Labor Code, CONTRACTOR must be registered with the Department of Industrial Relations (DIR) of the State of California in order to be eligible to work on public works projects. CONTRACTOR must ensure registration with the DIR that is active and in good standing.

No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

If CONTRACTOR is not required to register with the Department of Industrial Relations due to the Small Project Exemption, Effective July 1, 2017, CONTRACTOR is still required to maintain certified payroll records on a continuous basisl and provide them to the Labor Commissioner.s Office upon request. Certified payroll records will be provided by CONTRACTOR to CITY upon request.

XIII. PROVISIONS REQUIRED BY LAW

Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to be inserted herein and the Agreement shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not currently inserted! then upon application of either party the Agreement shall forthwith be physically amended to make such insertion or correction. No waiver of any term or condition of this Agreement shall be a continuing waiver thereof.

Clayton and Cartwright Acts: The CONTRACTOR and any and all subcontractors offer and agree to assign to the CITY all rights, title and interest in and to all causes of action they may have under Section 4 of the Clayton Act (15 USC Section 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Profession Code) arising from purchases of goods, services or materials pursuant to the public works contract or any subcontract.

Trenching: For any jobs involving trenching more than four (4) feet deep, the CONTRACTOR shall notify the CITY of hazardous materials, subsurface or latent physical site conditions different from those indicated in information about the site made available to bidders, as well as unusual site conditions and the CITY shall investigate those as required by Public Contracts Code Section 7104

XIV. SUBSURFACE HAZARDOUS MATERIALS

A In the event trenches or other excavations extend deeper than four (4) feet below the surface, the CONTRACTOR shall promptly, and before the following conditions are disturbed, notify the CITY in writing of any:

1. Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code that is required to be removed to a Class I, Class 11 or Class 111 disposal site in accordance with the provisions of existing law.
2. Subsurface or latent physical conditions at the site differing from those indicated.
3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the Work or the character provided for in the CONTRACT.

B. Upon receipt of said notification the CITY will investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the CONTRACTOR's cost of or the time required for performance of any part of the work, the CITY will issue a change order under the procedures described in the General Conditions.

C. In the event that a dispute arises between the CITY and the CONTRACTOR whether the conditions materially differ, or involve hazardous waste or cause a decrease or increase in the CONTRACTOR's cost of or time required

for performance of any part of the work, the CONTRACTOR shall not be excused from any scheduled completion date provided for by the Agreement, but shall proceed with all work to be performed under the Agreement. The CONTRACTOR shall retain any and all rights provided either by Agreement or by law that pertain to the resolution of disputes and protests between the contracting parties

XV. LIQUIDATED DAMAGES

Pursuant to Government Code Section 53069.85, if work is not completed within the contract time or in strict accordance with the Project Schedule, it is understood, acknowledged and agreed that the CITY will suffer damage. It is therefore agreed that the CONTRACTOR shall pay to the CITY the sum of Five Hundred Dollars ($500.00) for each and every calendar day of delay beyond the Contract Time, or beyond any completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule, or beyond the time indicated in the Project Schedule for any individual Contract activity.

CONTRACTOR expressly understands, acknowledges and agrees that such liquidated damages can and shall be imposed if the CONTRACTOR does not meet each and every aspect of any activity schedule, completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule. If the CITY accepts work or makes any payment under this Agreement after a default by reason of delays, the acceptance of such work and/or payment(s) shall in no respect constitute a waiver or modification of any provisions regarding Contract Time, a completion schedule, the Project Schedule or the accrual of liquidated damages. In the event the same is not paid, the CONTRACTOR further agrees that the CITY may deduct the amount thereof from any money due or that may become due the CONTRACTOR under the Agreement. This Article does not exclude recovery of damages under provisions of the Contract Documents, and is expressly in addition to the CITY's ability to seek other damages.

XVI. COMPONENT PARTS OF THE CONTRACT

a. The complete Agreement shall consist of the following component parts, to-wit: This Agreement; Amendments or Change Orders, if any; Addenda, if any; the solicitation and the accepted CONTRACTOR's bid proposal, dated , 2023, including all required attached documents; each of the component parts of the "PARKS DIVISION YARD IMPROVEMENTS PROJECT", dated . 2023; and any and all attachments to this Agreement.

This instrument and the other documents mentioned above in this Article 1 constitute the complete and exclusive statement of the term(s) and condition(s) of the Agreement between CITY and CONTRACTOR and it supersedes all prior representations, understandings, and communications. The invalidity in whole or in part of any term or condition of this Agreement shall not affect the validity of other term(s) or condition(s).

b. In the event of any discrepancy between or among the portions of the Agreement Documents, the following shall take precedence: (a) Change Orders/ Amendments/ Modifications;
(b) this Agreement; (c) the accepted CONTRACTOR's bid/proposal; (d) Addenda, if any; and (e) the solicitation, dated _____,2023.

c. CITY's failure to insist in any one or more instances upon CONTRACTOR's performance of any term(s) or condition(s) of this Agreement shall not be construed as a waiver or relinquishment of CITY's right to such performance or to future performance of such term(s) or condition(s) and CONTRACTOR's obligation in respect thereto shall continue in full force and effect. Changes to any portion of this Agreement shall not be binding upon CITY except when specifically authorized by signed written amendment to this Agreement issued in accordance with the provisions of this Agreement.

d. All days set out here shall be calendar days unless otherwise specified.

XVII. ENTIRE CONTRACT

This Contract constitutes the entire contract of the parties. No other Contracts or contracts, whether oral or written, pertaining to the work to be performed, exist between the parties. This Contract can be modified only by an amendment in writing, signed by both parties. No waiver of any term or condition of this Agreement shall be a continued waiver thereof.

*(Si*gnatures on next page)

CONTRACTOR	**CITY** City of El Centro
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

ATTACHMENTS:

Non-collusion Affidavit
Faithful Performance Bond
Labor and Materials Bond

FAITHFUL PERFORMANCE BOND

Whereas, CITY OF EL CENTRO, State of California, and _____ (hereinafter designated as "Principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated ____, 2022, and identified as project ____, is hereby referred to and made a part hereof; and

Whereas, said Principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement.

Now, therefore, we, the Principal and ____, as surety, are held and firmly bound unto the CITY OF EL CENTRO (hereinafter called ("City"), in the penal sum of _____ dollars ($____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above-bounded Principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in the said agreement and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless CITY OF EL CENTRO, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

In witness whereof, this instrument has been duly executed by the principal and surety above named, on ____, 2020.

_____
Principal

By: _____

_____
Surety

By: _____
Its Attorney-in-Fact

END OF FAITHFUL PERFORMANCE BOND

LABOR AND MATERIALS BOND

Whereas, the CITY OF EL CENTRO, State of California, and ____ (hereinafter designated as "the Principal") have entered into an agreement whereby the principal agrees to install and complete certain designated public improvements, which agreement, dated ____, 2022, and identified as project ____, is hereby referred to and made a part hereof; and

Whereas, under the terms of the agreement, the Principal is required before entering upon the performance of the work, to file a good and sufficient payment bond with the City of El Centro to secure the claims to which reference is made in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code.

Now, therefore, the Principal and the undersigned as corporate surety and admitted surety insurer, are held firmly bound unto the City of El Centro ("City") and all contractors, subcontractors, laborers, material suppliers, and other persons employed in the performance of the agreement and referred to in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code in the sum of _____ dollars ($____), for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to this work or labor, that the surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing this obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

The surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the agreement or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

In witness whereof, this instrument has been duly executed by the principal and surety above named, on ____, 2022.

_____	_____
Principal	Surety
By: _____	By: _____
	Its Attorney-in-Fact

END OF LABOR AND MATERIALS BOND

WORKERS' COMPENSATION INSURANCE CERTIFICATE

The Contractor shall execute the following form as required by Labor Code §§1860 and 1861:

> I am aware of the provisions of section 3700 of the Labor Code, which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions before commencing the performance of the work of this contract.

_____ _____

Date Contractor's Name

_____

Contractor's Signature

_____

Title

ATTEST:

By _____

Signature

_____

Title

END OF WORKERS' COMPENSATION INSURANCE CERTIFICATE

DRUG/ALCOHOL TESTING REQUIREMENTS

The Contractor shall execute the following form as required by the Federal Drug and Alcohol, section 49 CFR Part 382.

I agree to comply with the provisions of Federal Omnibus Transportation Employee Testing Act of 1991, and that I will administer a program of alcohol and drug testing of all commercial vehicle operators, as required by Federal Regulations.

Contractor certifies compliance with the City of El Centro's Drug and Alcohol Free Workplace Policy as a condition of the State Drug-Free Workplace Act of 1990 (Government Code section 8350 *et seq*.) and the Federal Drug Free Workplace Act of 1988 (41 U.S.C.A. section 701 *et seq*.) In addition, Contractor agrees to submit a copy of its own drug free workplace policy.

Dated_____

_____
Contractor's Name

_____
Contractor's Signature

_____
Title

END OF DRUG/ALCOHOL TESTING REQUIREMENTS

SUBCONTRACTORS LISTING

The Bidder shall list below the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of one percent (.005%) of the prime contractor's total bid. The Bidder shall also list below the portion of the work which will be done by each subcontractor under this Contract. The prime contractor shall list only one subcontractor for each portion of the WORK. **If the Bidder does NOT intend to use ANY subcontractors, then state "NONE" in the first block.**

The Bidder's attention is directed to the provisions of the section entitled "Subcontract Limitations" of the Supplementary General Conditions, which stipulates the percent of the WORK to be performed with the Bidders' own forces. **Failure to comply with this requirement will render the Bid non-responsive and may cause its rejection**.

PORTION OF WORK	NAME/State Contractor License No/DIR Registration No	PLACE OF BUSINESS ADDRESS/TELEPHONE No.

* ☐ No subcontractor will be used for this project.

*Indicate ☒ if no subcontractor will be used.

END OF SUBCONTRACTORS LISTING

NON-COLLUSION DECLARATION FOR CORPORATION

The undersigned declares:
I am the _____ of _____, the party making the foregoing bid.
The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.
Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.
I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____[date], at _____[city], _____ _____[state].”

END OF NONCOLLUSION DECLARATION FOR CORPORATION

CORPORATE CERTIFICATION OR PARTNERSHIP INFORMATION

Name of Corporation or Partnership _____

State of Incorporation _____

List names and addresses of each partner, or titles, names and business addresses of President, Secretary and Treasurer.

_____

_____

_____

Date_____ Contractor_____

Signature_____ Title_____

ATTEST:

_____
Signature by

_____
Title

END OF CORPORATE CERTIFICATION

CONTRACTOR'S CERTIFICATION OF QUALIFICATION FOR LICENSE CLASSIFICATION

After award of the contract, the Contractor, whether an individual, co-partnership, limited partnership, corporation, or any other combination or organization, shall execute the following form:

1. If an individual, I hereby certify that I am, or my responsible managing employee _____ (insert name) is, qualified for the license classification called for in these contract documents.

2. If a co-partnership or limited partnership, the general partner hereby certifies that the general partner _____ (insert name), or responsible managing employee _____ (insert name), is qualified for the license classification called for in these contract documents.

3. If a corporation, or any other combination or organization, the responsible managing officer _____ (insert name), or a responsible managing employee _____ (insert name), is qualified for the license classification called for in these contract documents.

If the individual who qualifies the Contractor for the license classification called for in these contract documents changes during the progress of the work, then Contractor shall, within seven (7) days of any such change, notify the Director of Public Works in writing of such change, including the name, license number and status of the individual.

For the purpose of this Certification, a responsible managing employee shall mean an individual who is a bona fide employee of the Contractor and is actively engaged in the classification of work for which that individual is the qualifying person on behalf of the Contractor under California law.

DATED:_____ CONTRACTOR:_____

SIGNATURE:_____ TITLE:_____

ATTEST:

SIGNATURE BY:_____

TITLE:_____

GENERAL CONDITIONS

Commented [ON12]: WOULD ALL THIS SECTIONS APPLY?

1-01 DEFINITIONS.

a) The word “City” shall mean the City of El Centro, California.

b) The term “City Council” shall mean the City Council of the City of El Centro.

c) The word “Contractor” shall mean the party of the second part entering into the contract with the City for the performance of work required by these specifications, and legal representatives of said party, or agent appointed to act for said party in the performance of the work. Said party is referred to throughout the contract documents as if of the singular number and the masculine gender.

d) The term “Day” shall mean calendar days unless otherwise provided.

e) The term “Director of Community Services” shall mean the City of El Centro Community Services Director, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

f) The word GREENBOOK shall mean the Standard Specifications for Public Works Construction contained in the latest Edition, as written and promulgated by the Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association and the Southern California District of the Associated General Contractors of California. Copies of these Standard Specifications are available from the publisher, Building News, Incorporated, 990 Park Center Drive, Suite E, Vista, CA 92081 (760) 734-1113.

1-02 CONTRACT DOCUMENTS

The Notice of Inviting Bids, the Instructions to Bidders, the Proposal, the Specifications, and the Drawings, together with the Agreement and all documents referenced there, constitute the Contract. These Contract documents are complimentary, and what is called for in any one (1) shall be as binding as if called for in all. The intention of the documents is to require a complete and finished piece of work. The Contractor at its sole cost and expense shall perform all labor and services and shall furnish all materials, tools, equipment, and facilities necessary for the proper execution of the work, with the exception of such items as are definitely set forth in the specifications or the drawings to be furnished by the City. Anything shown in the drawings and not in the specifications or in the specifications and not in the drawings shall be performed by the Contractor as though shown in both the drawings and the specifications.

Commented [BM13]: Please try to make these gender changes.

1-03 AUTHORITY OF THE COMMUNITY SERVICES DIRECTOR

The Community Services Director shall give all orders and directions contemplated under the contract; shall determine the adequacy of the Contractor’s methods, plans, and appurtenances; shall determine in all cases the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for; shall determine all questions in relation to said work and the construction thereof; and shall decide in all cases every question, which may arise relative to the fulfillment of this contract on the part of the Contractor. Should any discrepancy appear or any misunderstandings arise as to the import of anything contained in the specifications or drawings, the matter shall be referred to the Community Services Director, who shall decide the same in accordance with the true intent and meaning as construed by that Director, and that decision shall be binding on the Contractor. Any differences or conflicts which may arise between the Contractor and other contractors of the City in regard to their work shall be adjusted and determined by the Community Services Director.

1-04 ACCESS TO WORK

The Community Services Director, their assistants, inspectors, agents, and other employees shall at all times and for any purposes have access to the work and the premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefor.

1-05 LINES AND GRADES

All distances and measurements are given and will be made in horizontal plane. Grades are given from the top stakes, or nails, unless otherwise noted on the plans.

Three consecutive points shown in the same rate of slope must be used in common, in order to detect any variation from a straight grade, and in case any such discrepancy exists, it must be reported to the Community Services Director. If such a discrepancy is not reported to the Community Services Director, the Contractor shall be responsible for any error in the finished work.

Services Assistance Notice: The Contractor shall give at least twenty-four (24) hours' notice in writing when he will require the services of the Community Services Director for laying out any portion of the work. The Contractor shall furnish the Community Services Director such facilities and labor necessary for marking and maintaining points and lines as he may require. Labor furnished by the Contractor for such purposes will be paid for as extra work.

The Contractor will preserve all stakes and points set for lines, grades or measurements of the work in their proper places until authorized to remove them by the Community Services Director. All expenses incurred in replacing stakes that have been removed without proper authority shall be paid by the Contractor.

1-06 LEGAL ADDRESS OF CONTRACTOR

The address given in the Contractor's proposal on which the contract is founded is hereby designated as the place to which all notices, letters, and other communications to the Contractor shall be mailed or delivered. The mailing to or delivering at the above-named place of any notice, letters, or other communication to the Contractor shall be deemed sufficient service thereof upon the Contractor. The date of said service shall be the date of such mailing or delivery. Such address may be changed at any time by a written notice signed by the Contractor and delivered to the Community Services Director.

1-07 CONTRACTOR'S RESPONSIBILITIES

(a) The Contractor shall be responsible for safe, efficient, and adequate methods and equipment during the progress of the work so as to secure the safety of the workers, the quality of work required and the required rate of progress.

(b) The Contractor shall bear all losses resulting to it on account of the amount of character of the work, or from any unforeseen obstructions or difficulties, which may be encountered, on account of the weather, floods, or other causes.

(c) The Contractor shall assume the defense of and indemnify and save harmless the City and its officers and agents from all claims of any kind arising from his own negligence or that of its agents in the performance of the contract.

(d) The Contractor shall be responsible for any materials furnished him and for the care of all work until its completion and final acceptance, and shall at its own expense replace damaged or lost material and repair damaged parts of the work, or the same may be done at its expense by the City.

(e) During the progress of the work the Contractor shall keep the premises occupied by it in a neat and clean condition, and free from any unsightly accumulation of rubbish, unused material, concrete forms, and other equipment and materials belonging to him or used under its direction during

construction, and in the event of its failure to do so, the same may be removed by the City at the expense of the Contractor.

(f) Traffic Control. The Contractor shall be responsible for maintaining traffic control at all times under the guidelines of the California Manual on Uniform Traffic Control Devices ("California MUTCD"). Contractor shall submit two (2) traffic control plans in a minimum of **two (2) business weeks** for pre-approval by the Director of Public Works before starting construction work.

1-08 CONTRACTOR TO FURNISH INFORMATION

(a) Before proceeding with the erection of the construction plant, and other temporary structures, the Contractor shall furnish the Community Services Director with information and drawings of all such structures as may be required.

(b) Drawings and prints in such detail as may be required, or articles, machinery, or fabricated materials entering into permanent construction which are by these specifications required to be furnished by the Contractor and of which detailed drawings are not furnished by the City shall be submitted by the Contractor for approval and shall become the property of the City. Such approval shall not, however, operate to waive or modify any provision or requirement contained in these specifications.

1-09 EXAMINATION OF WORK

Bidders must examine the location, physical conditions and surrounding of the proposed work and judge for themselves the nature of the excavations to be made and the work to be done.

The Contract documents for the work show conditions as they are supposed or believed by the Engineer to exist, but it is not intended or to be inferred that the conditions as shown therein constitute a representation or warranty, express or implied, by the City or any of it officers or employees, that such conditions are actually existent, nor shall the Contractor be relieved of the liability under his contract, nor shall the City or any of its officers or employees be liable for any loss sustained by the Contractor as a result of any variance between conditions shown in the Contract Documents and the actual conditions revealed during the progress of the work or otherwise.

1-10 PLANS AND DRAWINGS

All authorized alterations affecting the requirements and information given on the approved plans shall be in writing. No changes shall be made of any plan or drawing after the same has been approved by the Community Services Director, accept by direction of the Community Services Director.

Deviations from the approved plans, as may be required by the exigencies of construction, will be determined in all cases by the Community Services Director and authorized in writing.

Working drawings or plans for any structure not included in the plans furnished by the Community Services Director shall be approved by the Community Services Director before any work involving these plans shall be performed, unless approval is waived in writing by the Community Services Director.

It is mutually agreed, however, that approval by the Community Services Director of the Contractor's working plans does not relieve the Contractor of any responsibility for accuracy of dimensions and details, and that the Contractor shall conform to the approved plans and specifications.

1-11 PERSONAL ATTENTION

The Contractor shall give his personal attention constantly to the faithful prosecution of the work, and shall be present, either in person or by a duly authorized and competent representative, on the site of the work, continually during its progress, to receive directions or instructions from the Community Services Director.

Whenever the Contractor is not present on any part of the work where it may be desired to give directions, orders may be given by the Community Services Director, and shall be received and obeyed by the superintendent or foreman who may have charge of the particular part of the work in reference to which orders are given.

1-12 PROTESTS

All protests and disputes after award of the contract are subject to the provisions of Public Contract Code Section 9204 as attached and incorporated.

1-13 RIGHT-OF-WAY

The right-of-way for the work to be constructed will be provided by the City. The Contractor shall make his own arrangements and pay all expenses for additional area required by him outside of the limits of the right-of-way, unless otherwise provided in the special conditions.

1-14 TIME AND ORDER OF WORK

(a) The Contractor shall at all times employ such force, plant, materials and tools as will be sufficient, in the opinion of the Community Services Director, to complete the work or any separable portions thereof in accordance with a progress schedule and within the time limit fixed by the contract. If the Contractor should fail to employ sufficient force, plant, materials and tools or to maintain adequate progress he may, after such failure, be required to increase its progress at any point or points or to modify his plans and procedures in such manners and to such extent as the Community Services Director may direct, any extension of such shall not relieve the Contractor from the necessity of maintaining the required progress. In case of an extension by the Community Services Director of the time for the completion of the contract, as hereinafter provided a revised schedule of progress may be prescribed in accordance with such extension of time.

(b) The time in which the various portions and the whole of the contract are to be performed and the work is to be completed is of the essence of the contract.

1-15 ASSIGNMENT FORBIDDEN

The Contractor shall not assign, transfer, convey, or otherwise dispose of this contract, or of his right, title or interest in or to the same or any part thereof, without the previous consent in writing of the Community Services Director and he shall not assign, by power of attorney or otherwise, any of the monies to become due and payable under the contract unless by and with the like consent signified in like manner. If the Contractor shall, without such previous written consent, assign, transfer, convey or otherwise dispose of the contract or of his right, title or interest therein, or of any of the monies to become due under the contract, to any other person, company or other corporation, the contract may at the option of the City be terminated and revoked, and the City shall thereupon be relieved and discharged from any and all liability and obligations growing out of the same to the Contractor, and to his assignee or transferee.

No right under the contract, nor any right to any money to become due hereunder, shall be asserted against the City in law or equity by reason of any so-called assignment of the contract, or any part thereof, or by reason of the assignment of any monies to become due hereunder, unless authorized as aforesaid by the written consent of the Community Services Director.

1-16 SUBLETTING

The Contractor shall give his personal attention of the fulfillment of the contract and shall keep the work under his control. Subcontractors will not be recognized as such, and all persons engaged in the work of construction will be considered as employees of the Contractor, and their work shall be subject to the provisions of the contract and specifications. Where a portion of the work sublet by the Contractor is not

being prosecuted in a manner satisfactory to the Community Services Director, the subcontractor shall be removed immediately on the recommendation of the Community Services Director and shall not again be employed on the work.

1-17 SUSPENSION OF CONTRACT

(a) If the work to be done under the contract shall be abandoned by the Contractor, or if the Contractor shall make a general assignment for the benefit of his creditors or be adjudicated a bankrupt, or if a receiver of his property or business is appointed by a court of competent jurisdiction, or if this contract shall be assigned by him otherwise than hereinbefore specified, or if at any time the Community Services Director shall be of the opinion that the performance of the contract is unnecessarily or unreasonably delayed, or that the Contractor is willfully violating any of the conditions or covenants of the contract, or of the specifications, or is executing the same in bad faith or not in the time named in the contract for its completion, or within the time to which the completion of the contract may have been extended as hereinbefore provided, the Community Services Director, acting on behalf of the City, may, by written notice, instruct the Contractor to discontinue all work or any part thereof under this contract.

(b) When such written notice is served upon the Contractor as provided in section 1-06, he shall immediately discontinue the work or such part thereof as is covered by the notice and shall not resume the same except by written instructions from the Director of Public Works. In any such case, the City may take charge of the work and complete it by a new contract or by force account. In so doing, the City may take possession of and use any of the materials, plant, tools, equipment, supplies and property of every kind provided by the Contractor for the purposes of his work. The City may procure other materials and provide labor for the completion of same, or contract therefore and charge the expense of completion by either method to the Contractor. These charges shall be deducted from such monies as may be due or may at any time hereafter become due the Contractor under and by virtue of this contract or any part thereof. In case such expense shall exceed the amount which would have been due the Contractor under the contract if the same had been completed by him, he shall pay the amount of such excess to the City; and in case such expense shall be less than the amount which would have been payable under this contract if the same had been completed by the Contractor, he shall have no claim to the difference except to such extent as may be necessary, in the opinion of the Community Services Director, to reimburse the Contractor or the Contractor's sureties for any expense, properly incurred for plant, equipment, materials, supplies and labor devoted to the prosecution of the work of which the City shall have received the benefit and which shall not have been otherwise paid for by the City. In computing such expense so far as it shall be deducted from the depreciated value thereof at the time taken over by the City and the difference shall be considered as an expense. Evidence of such expense satisfactory to the Community Services Director, shall be required, and all necessary estimates and appraisements shall be made by him.

When any particular part of the work is being carried on for the City by contract or otherwise, under the provisions of this section, the Contractor shall continue the remainder of the work in conformity with the terms of his contract, and in such manner as in nowise to hinder or interfere with the persons or workers employed, as above provided, by the City, by contract or otherwise to do any part of the work or to complete the same under the provisions of this section.

1-18 SUSPENSION OF WORK – EXTENSION OF TIME - NO EXTRA COMPENSATION

(a) The Community Services Director shall have the authority to suspend the work wholly or in part, for such period as he may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work or for such time as he may deem necessary due to the failure on the part of the Contractor to carry out orders given or to perform any provisions of the work. The Contractor shall immediately obey such order of the Community Services Director.

(b) Applications for extension of time must be made promptly in writing, stating cause. No delay shall be made the basis in any application for extension of time, unless such delay and the cause thereof shall have been called to the attention of the Community Services Director in writing within the ten (10) days from the beginning of such delay. Applications for extension of time shall be addressed to the Community Services Director.

(c) Permitting the Contractor to continue and finish the work, or any part of it, after the date to which the time fixed for its completion may have been extended, shall in nowise operate as a waiver on the part of the City or any of its rights under this contract.

(d) The Contractor shall receive no compensation on account of any suspension of the work either in whole or in part or for any delay or hindrance herein mentioned except as provided in the Detail Specifications or as otherwise required by law..

1-19 FAILURE TO COMPLETE ON TIME AND LIQUIDATED DAMAGES

(a) The Contractor shall pay for each and every day, including Sundays and legal holidays that they shall be in default in completing the whole work to be done under this contract, the sum named in the Special Provisions, which sum is by the execution of the Agreement mutually agreed upon as liquidated damages which the City will suffer by reason of such default. The City shall have the right to deduct the amount of such damages from any monies due or to become due the Contractor under this contract.

(b) It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the time specified, the City Council shall have the right to extend the time for completion or not, as may seem best to serve the interest of the City; and if it decides to extend the time limit for the completion of the contract, it shall further have the right to charge to the Contractor, his heirs, assigns or sureties and to deduct from the final payment for the work, all or any part, as it may deem proper of the actual cost of engineering, inspection, superintendence and other overhead expenses which are directly chargeable to the contract and which accrue during the period of such extension, except that the cost of final surveys and preparation of final estimate shall not be included in such charges.

(c) The Contractor shall not be assessed with liquidated damages nor the cost of engineering and inspection during any delay in the completion of the work caused by the acts of God or of the public enemy, acts of the City, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather or delays of subcontractors due to such causes; provided, that the Contractor shall within ten (10) days from the beginning of any such delay notify the Community Services Director in writing of the causes of delay, who shall ascertain the facts and the extent of delay, and his findings of the facts thereon shall be final and conclusive.

1-20 CHANGES

(a) If either the Community Services Director or the Contractor on account of conditions which develop during the progress of the work finds it impracticable to comply strictly with these specifications, the Community Services Director may prescribe a modification of requirements of methods of work. For such purposes, the Community Services Director may at any time during the life of the contract, by written order make such changes as he shall find necessary in the design, line, grade, form, location, dimensions, plan or material of any part of the work or equipment hereinafter specified, or in the quantity or character of the work or equipment to be furnished. If such changes increase or diminish the quantity or amount of work to be done, they shall not constitute the basis for a claim for damages or anticipated profits on the work that may be dispensed with; provided, that if such changes or alterations render useless, any work already done or materials already furnished or

used in the work, the Community Services Director shall make reasonable allowance therefore, which action shall be binding upon both parties.

(b) In the event of increasing or decreasing of work, the total amount of work actually done or materials or equipment furnished shall be paid for according to the unit price established for such work under the contract, wherever such unit price has been established. In the event no prices are named in the contract to cover such changes or alteration, the cost of such changes shall be covered as hereinafter provided for extra work.

(c) The City reserves the right to increase or decrease the quantity of any item or portion of work or to omit portions of the work as may be deemed necessary or expedient by the Community Services Director.

1-21 EXTRA WORK

(a) If during the performance of the contract, it shall, in the opinion of the Community Services Director, become necessary or desirable for proper completion of the contract to order work done or materials or equipment furnished which in the opinion of the Community Services Director are not susceptible of classification under the bid items, the Contractor shall do and perform such work and furnish such materials and equipment as extra work, as hereinafter provided. All extra work shall be ordered in writing before it is started. No extra work shall be paid for unless ordered in writing.

(b) Extra work will ordinarily be paid for at a lump sum or unit price agreed upon in writing by the Community Services Director and the Contractor before the extra work shall be ordered.

(c) Whenever in the judgment of the Community Services Director extra work or extra material, as the case may be, is not of like character to and is not susceptible of classification under the bid items of the contract as specified, and it is impracticable because of the nature of the work, or for any other reason to fix the price before the extra work order shall be issued, extra work and material, when furnished by the Contractor, shall be paid for at actual necessary cost of materials, supplies, labor (including foremen's wages), Workers' Compensation insurance, contributions made to the State as required by the provisions of the Unemployment Insurance Act, Chapter 352, Statutes of 1935, as amended, taxes paid to the Federal government as required by The Social Security Act, approved August 14, 1935, as amended and the reasonable value of the use of equipment for the actual time it is used, all as determined by the Director of Public Works, plus fifteen percent (15%) to cover the following:

Profit
General Expenses
All insurance except Workers' Compensation insurance
Excise taxes
Property taxes
Bond premiums
License and inspection fees imposed by any governmental authority
Any and all other items of expense not specifically mentioned under this subsection (c) herein

The Community Services Director determination and certification of said actual necessary cost shall be binding and conclusive on the Contractor, and the Community Services Director shall be deemed the arbiter to determine the cost of such work.

(d) If any work or materials be ordered under this section on a cost-plus basis, the Contractor shall, at the times directed during the performing of the work or the furnishing of the materials, render to the Community Services Director, written reports in prescribed form, showing all items that may

enter into the cost, the quantity and the character of each such material, from whom purchased and the net amount paid or to be paid therefore, and such other information as directed. If required, the Contractor shall produce any books, vouchers, other records, or memoranda, which will assist the Community Services Director in determining the true, necessary cost of the work and materials to be paid for.

(e) Any extra work performed hereunder shall be subject to all the provisions of the contract and the Contractor's sureties shall be bound with reference thereto as under the original contract.

1-22 COST BREAKDOWN

Within ten (10) days after commencing work, the Contractor shall submit, to the Community Services Director, a cost breakdown in duplicate of all unit and lump sum prices under the contract. The breakdown, as approved, may be used by the Community Services Director to verify the fair value of the work for progress payments.

Commented [ON14]: Shall this remain the same?

1-23 PROGRESS ESTIMATES

The Community Services Director, shall on or about the fifth (5th) day of each calendar month, except as provided in section 1-23, make in writing and certify an estimate such as in her/his opinion shall be just and fair, of the amount and value of the work done by the Contractor and of the amount and value of all acceptable materials furnished and delivered by the Contractor to the site and not used up to that time in the performance of the contract. To the figure thus arrived at, shall be added any amounts due the Contractor for extra work and the amount of any approved claims for extra cost to the date of the progress estimate.

A deduction of five percent (5%) shall be made from the estimated value of the work done and fifty percent (50%) of the value of the materials so estimated to have been furnished and delivered and unused, and from the remainder there shall be further deducted any amounts due the City from the Contractor for supplies or materials furnished or services rendered and any The other amounts that may be due the City under the terms of the contract. From the balance thus determined shall be deducted the amount of all previous payments and the remainder shall constitute the progress estimate for that month.

Such progress estimates shall not be required to be made by strict measurement, but they may be made by measurement or by estimation, or partly by one method or partly by the other, and it shall be sufficient if they are approximate only.

Pursuant to Public Contract Code §22300, the Contractor has the option of substituting securities for any money that is withheld under this section.

1-24 PROGRESS ESTIMATES MAY BE WITHHELD

The progress estimates provided for in section 1-23 hereof may at any time be withheld or reduced if, in the opinion of the Community Services Director, the Contractor is not diligently and efficiently endeavoring to comply with the intent of the contract, or if the Contractor shall fail to pay his labor and material bills as they become due.

1-25 PROGRESS PAYMENTS

(a) Upon each progress estimate being made and certified in writing, the City shall, within fifteen (15) days after the date of such estimates, except as set forth in subsection (b) hereof, pay to the Contractor the amount stated in such estimates to be due the Contractor; provided, however, that the City may at all times reserve and retain from such progress payments, in addition to the retained percentage and other amounts above mentioned to be deducted in computing the progress

estimated, any sum or sums which by the terms hereof, or of any law of the State of California, it is or may be authorized or required to reserve or retain; and provided further, that no progress estimate or progress payment shall constitute an acceptance of the work or any portion thereof. The percentage deducted as above set forth shall become due and payable with and as a part of the final payment to be made as hereinafter provided.

(b) In the event the contract or any part thereof shall be suspended as provided in section 1-17, the retained percentage as provided in section 1-23, shall become the sole and absolute property of the City to the extent necessary to repay to the City any excess in the cost of the work above the contract price. After issuance of notice to discontinue work, no payments upon progress estimates or otherwise shall thereafter be made the Contractor for the work covered by said notice until completion of the work.

1-26 FINAL ESTIMATE AND PAYMENT

(a) Whenever in the opinion of the Community Services Director the Contractor shall have completely performed the contract on his part, the Community Services Director will submit to the Contractor a written statement of the final quantities of contract items for inclusion in the final estimate. The Contractor will be expected to submit his written approval of said proposed final quantities within five (5) days of receipt of the Community Services Director's statement, or in the event the Contractor disagrees with such written statement, shall within said period of five (5) days file a written statement of all claims, which he intends to present.

(b) Upon receipt from the Contractor of written approval of the final quantities or such written statement of his claims, the Community Services Director shall make in writing and certify to the City Clerk an estimate in which he shall state, from actual measurements, the whole amount of work done by the Contractor and also the value of such work under and according to the terms of the contract. **Within ten (10) days after the date of receipt of the aforesaid approval or state of claims, the Community Services Director shall cause to be filed, on behalf of the City, in the Office of the Imperial County Recorder, a Notice of Completion of the work herein agreed to be done by the Contractor.** On the expiration of thirty-five (35) days after the filing of such notice of completion of the work, the City shall pay to the Contractor the amount remaining after deducting from the amount of value stated in the first mentioned estimate all prior payments to the Contractor and all amounts to be kept and retained under the provisions of the contract.

Commented [ON15]: How many days?

(c) All prior estimates upon which partial payments have been made shall be subject to correction in the final estimate. The final estimate and payments made thereunder shall be final and conclusive upon the Contractor.

1-27 RECOVERY OF DAMAGES

The making of an estimate and payment in accordance therewith shall not preclude the City from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with the specifications.

1-28 FINAL PAYMENT TERMINATES LIABILITY

The acceptance by the Contractor of the final payment aforesaid shall be a release to the City and its agents from all claim and liability to the Contractor for anything done or furnished for or relating to the work or for any act or neglect of the City or of any person relating to or affecting the work except the claim against the City for the remainder, if any, of the amount kept or retained as provided in section 1-31.

1-29 NO PERSONAL LIABILITY

No agent of the City shall be personally responsible for any liability arising under the contract. No claims shall be made or filed and neither the City nor any of its agents shall be liable for or held to pay any money, except as specifically provided in the contract.

1-30 MONIES MAY BE RETAINED

The City may keep any monies which would otherwise be payable at any time hereunder and apply the same, or so much as may be necessary therefore, to the payment of any expense, losses or damages as determined by the Community Services Director incurred by the City for which the Contractor is liable under the contract.

1-31 UNPAID CLAIMS

If, upon or before the completion of the work herein agreed to be performed or at any time prior to the expiration of the period within such claims of liens may be filed for the record as prescribed by Civil Code §§ 9350 *et seq*,, any person or persons claiming to have performed any labor or furnished any material, supplies or services toward the performance or completion of this contract, or that they have agreed to do so, shall file with the City a verified statement of such claim, stating in general terms the kind of labor and materials and the name of the person to or for whom the same was done or furnished, or both, together with a statement that the same has not been paid or if any person or persons shall bring against the City or against any agent or agents thereof any action to enforce such claim, the City shall until the discharges thereof withhold from the monies under its control so much of said monies due or to become due the Contractor under this contract as shall be sufficient to satisfy and discharge the amount in such notice or under such action claimed to be due, together with the costs thereof; provided that if the City shall in its discretion permit the Contractor to file such additional bonds as is authorized by Civil Code §9364, in a penal sum equal to one hundred twenty-five percent (125%) times the amount of said claim, said monies shall not thereafter be withheld on account of such claim.

1-32 ADDITIONAL SURETY

If during the continuance of the contract, any of the sureties upon the faithful performance bond in the opinion of the Community Services Director are/or become insufficient, he may require additional sufficient sureties which the Contractor shall furnish, to the satisfaction of the Community Services Director, within fifteen (15) days after notice and in default thereof the contract may be suspended and the work completed as provided in section 1-17 hereof.

Commented [ON16]: How many days?

1-33 PREVAILING RATE OF PER DIEM WAGES

The City has ascertained the general prevailing rate of per diem wages in the locality in which the work is to be performed for each craft or type of worker or mechanic needed to execute the contract and has specified same in the Notice of Inviting Bids which is attached hereto and made a part of the contract. The Contractor shall forfeit as a penalty to the City of not more than fifty dollars ($50) for each laborer, worker or mechanics employed for each calendar day or portion thereof, such laborer, worker or mechanic is paid less than the required rates for any work done under the contract by him or by any subcontractor under him in violation of the provisions of the California Labor Code.

1-34 PAYMENT OF WAGES

The issuance as payment for wages of any evidence of indebtedness is prohibited unless the same is negotiable and payable on demand without discount. Wages must be paid at least semimonthly on regular pay days established in advance, and shall include all amounts for labor or services performed by employees of every description as required under the provisions of the California Labor Code.

1-35 EIGHT (8) HOUR LAW

The Contractor shall comply with all applicable provisions of Labor Code §§1810 to 1816, inclusive, relating to working hours. The time of service of any laborer, worker or mechanic employed on the work shall be limited and restricted to eight (8) hours during any one (1) calendar day, except in cases of an extraordinary emergency caused by fire, flood or danger to life or property and the Contractor shall forfeit as a penalty to the City of twenty-five dollars ($25) for each such laborer, worker or mechanic employed in the execution of this contract by him or any subcontractor under him for each calendar day during which such laborer, worker or mechanic is required or permitted to labor more than eight (8) hours in violation of the provisions of the California Labor Code.

1-36 OVERTIME - NO EXTRA COMPENSATION

Overtime work (i.e., work in excess of eight (8) hours in any one (1) calendar day or work performed on a Sunday or other legal holiday) shall not entitle the Contractor to any compensation for any contract item in addition to that set forth in the contract for the kind of work performed even though such overtime or legal holiday work may be required under emergency conditions, and may be ordered by the Community Services Director in writing. In case of extra work ordered by the Community Services Director under the provisions of section 1-21 hereof, no additional payment will be made to the Contractor because of the payment by him of overtime or legal holiday rates for such work, unless the use of overtime or legal holiday work in connection with such extra work is specifically ordered in writing by the Community Services Director and then only to such extent as extra payment is regularly being made by the Contractor to his men for overtime or legal holiday work of a similar nature in the same locality.

1-37 CHARACTER OF WORKERS

None but skilled workers shall be employed on work requiring special qualifications. When required in writing by the Community Services Director, the Contractor or any subcontractor shall discharge any person who is in the opinion of the Community Services Director, incompetent, unfaithful, disorderly or otherwise unsatisfactory and shall not again employ such discharged person on the work except with the consent of the Community Services Director. Such discharge shall not be the basis of any claim for compensation or damage against the City or any of its officers.

1-38 SAMPLES AND TESTS

At the option of the Community Services Director, the source of supply of each of the materials shall be approved by the Community Services Director before delivery is started and before such material is used in the work. Representative preliminary samples of the character and quality prescribed shall be submitted by the Contractor or producer of all materials to be used in the work for testing or examination as desired by the Community Services Director.

All tests of materials furnished by the Contractor shall be made in accordance with commonly recognized standards of national organizations, and such special methods and tests are prescribed in these specifications.

The Contractor shall furnish such samples of materials as are requested by the Community Services Director, without charge. No material shall be used until it has been approved by the Community Services Director. Samples will be secured and tested whenever necessary to determine the quality of material.

1-39 INSPECTION

The Director of Public Works shall at all times have access to the work during construction, and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship and character of materials used and employed in the work.

Whenever the Contractor varies the period, which work is carried on each day, he shall give due notice to the Community Services Director, so that proper inspection may be provided. Any work done in the absence of the Community Services Director will be subject to rejection. The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill the contract as prescribed. Defective work shall be made good and unsuitable materials may be rejected notwithstanding the fact that such defective work and unsuitable materials have been previously overlooked by the Community Services Director and accepted or estimated for payment.

1-40 DEFECTIVE WORK OR MATERIALS – WARRANTIES, GUARANTEES AND INSTRUCTION SHEETS

(a) If the work, or any part thereof, shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defects without compensation in a manner satisfactory to the Community Services Director, and the cost of any excess material furnished by the City shall be borne by the Contractor.

(b) All materials not conforming to the requirements of these specifications shall be considered as defective and all such material whether in place or not shall be rejected and shall be removed immediately from the site of the work unless otherwise permitted by the Community Services Director. No rejected material, the defects of which have been subsequently corrected shall be used until approved in writing by the Community Services Director.

(c) Upon failure on the part of the Contractor to comply with any order of the Community Services Director made under the provisions of this article, the Community Services Director shall have authority to remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

(d) The work shall be warranted by the Contractor against defective materials and workmanship for a period of one (1) year. The warranty period shall start on the date the work was completed as determined by the Engineer.

(e) The warranty period for specific items covered under manufacturers' or suppliers' warranties shall commence on the date they are placed into service at the direction of or as approved by the Engineer in writing.

(f) All warranties, express or implied, from subcontractors, manufacturers or suppliers, of any tier, for the materials furnished and work performed shall be assigned, in writing, to the City, and any such warranties shall be delivered to the Engineer prior to acceptance of the Contractor's performance of the contract.

(g) The Contractor shall replace or repair defective materials and workmanship in a manner satisfactory to the Engineer, after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such replacement or repairs within the time specified in the notice, the City may perform the replacement or repairs at the Contractor's expense. If the Contractor fails to reimburse the City for the actual costs, the Contractor's Surety shall be liable for the cost thereof.

1-41 USE OF COMPLETED PORTIONS

The City may at any time during progress of the work, after written notice to the Contractor, take over and place in service any completed portions of the work which are ready for service, although the entire work of the contract is not fully completed and notwithstanding the time for completion of the entire work or such portions which may not be expired. In case, the City shall issue certificates of acceptance for such portions of the work but such taking possession thereof shall not be deemed an acceptance of any other portion of the work, nor of any incomplete portions, nor of any work not completed in accordance with the contract documents.

1-42 PROPERTY RIGHTS IN MATERIALS

Nothing in this contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil or after payment has been made for the value of unused material delivered to the site of the work as provided for in section 1-23 hereof. All such materials attached or affixed or unused shall become the property of the City.

1-43 TITLE TO MATERIALS FOUND ON THE WORK

The right to the use of all soil, stone, gravel, sand and all other materials and equipment developed or obtained in the excavation or other operations by the Contractor or any subcontractor or any of their employees and the right to use and/or dispose of the same are hereby expressly reserved in the City and neither the Contractor, nor any subcontractor nor any of their employees shall have any right, title or interest in or to any part thereof nor shall they, nor any of them, assert or make any claim thereto. The Contractor shall be permitted to use in the work, without charge, any such materials, which meet the requirements of these specifications.

1-44 ENFORCEMENT OF ORDER

The Contractor shall be responsible for maintaining good order at the site where work is performed under this contract and to that end shall employ such watchmen or other persons as may be required. Unauthorized persons shall be excluded from the site of the work. The Contractor shall not sell, nor shall he permit or suffer the introduction or use of intoxicating liquors or narcotics upon the works embraced in these specifications or upon any of the grounds occupied or controlled by him in connection with such works.

1-45 PATENTS AND COPYRIGHTS

The Contractor shall hold and save the City, it officers, agents and employees harmless from liability of any nature and kind including costs and expenses for or on account of any copyrighted or copyrighted composition, secret process, patented or un patented invention, article or appliance manufactured, furnished or used by him in the performance of this contract, including their use by the City, unless otherwise specifically set forth in the contract.

1-46 LAWS AND REGULATIONS

(a) The Contractor shall keep himself fully informed of all Federal and State laws, County and City ordinances and regulations which in any manner affect those engaged or employed on the work or the materials used in the work or in any way affecting the conduct of the work. If any discrepancy or inconsistency should be discovered in this contract, or in the drawings or specifications herein referred to in relation to any such law, ordinance or regulation, he shall forthwith report the same in writing to the Community Services Director. He shall, at all times, observe and comply with and shall cause all his agents and employees to observe and comply with all such applicable laws, ordinances and regulations in effect or which may become effective before completion of this contract. He shall protect and indemnify the City and its officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance or regulation whether by himself or by his employees.

(b) Except as otherwise explicitly provided elsewhere in these specifications, all permits and licenses necessary to the prosecution of the work shall be secured by the Contractor at his own expense, and he shall pay all taxes properly assessed against his equipment or property used or required in connection with the work.

(c) All Federal laws and regulations now imposed by competent authority and relating to any materials required to be furnished under these specifications and work required to be done hereunder shall be deemed to be and hereby are made controlling and part of these specifications.

1-47 SALES AND/OR USE TAXES

Except as may be otherwise provided herein, all sales and/or use taxes assessed by Federal, State or local authorities on materials used or furnished by the Contractor in performing the work hereunder shall be paid by the Contractor.

1-48 RESPONSIBILITY FOR DAMAGE

(a) Indemnity Agreement

In addition and complementary to any other indemnification provided for the project, and except for the gross negligence or willful misconduct of an Indemnitee (as hereinafter defined), the Contractor hereby assumes liability for and agrees to defend (at Indemnitees' option), indemnify, protect and hold harmless the City and its project consultants, engineers, officers, agents, and employees ("Indemnitees") from and against any and all claims, charges, damages, demands, actions, proceedings, losses, stop notices, costs, expenses (including counsel fees), judgments, civil fines and penalties, liabilities of any kind or nature whatsoever, which may be sustained or suffered by or secured against the Indemnitees arising out of or encountered in connection with this Agreement or the performance of the work including, but not limited to, death of or bodily or personal injury to persons or damage to property, including property owned by or under the care and custody of the City, and for civil fines and penalties, that may arise from or be caused, in whole or in part, by any negligent or other act or omission of the Contractor, its officers, agents, employees or subcontractors including, but not limited to, liability arising from:

1. Any dangerous, hazardous, unsafe or defective condition of, in or on the premises, of any nature whatsoever, which may exist by reason of any act, omission, neglect, or any use of occupation of the premises by the Contractor, its officers, agents, employees, or subcontractors;
2. Any operation conducted upon or any use or occupation of the premises by the Contractor, its officers, agents, employees, or subcontractors under or pursuant to the provisions of this contract or otherwise;
3. Any act, omission or negligence of the Contractor, its officers, agents, employees, or subcontractors.
4. Any failure of the Contractor, its officers, agents or employees to comply with any of the terms or conditions of this contract or any applicable Federal, State, regional or municipal law, ordinance, rule or regulation; and
5. The conditions, operations, uses, occupations, acts, omissions or negligence referred to in sub-subsections (1), (2), (3), and (4), existing or conducted upon or arising from the use or occupation by the Contractor on any other premises in the care, custody and control of the City.

The Contractor also agrees to indemnify the City and pay for all damage or loss suffered by the City including but not limited to damage to or loss of the City's property, to the extent not insured by the City and loss of the City's revenue from any source, caused by or arising out of the conditions, operations, uses, occupations, acts, omissions or negligence referred to in sub-subsections (1), (2), (3), (4), and (5).

The Contractor's obligations under this section apply regardless of whether or not such claim, charge, damage, demand, action, proceeding, loss, stop notice, cost, expense, judgment, civil fine or penalty, or liability was caused in part or contributed to by an Indemnitee. However, without affecting the rights of the City under any provision of this Agreement, the Contractor shall not be required to indemnify and hold harmless the City for liability attributable to the active negligence of the City, provided such active

negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction. In instances where the City is shown to have been actively negligent and where the City's active negligence accounts for only a percentage of the liability involved, the obligation of the Contractor will be for that entire portion or percentage of liability not attributable to the active negligence of the City.

The Contractor agrees to obtain executed indemnity agreements with provisions identical to those set forth here in this section from each and every subcontractor or any other person or entity involved by, for, with or on behalf of the Contractor in the performance of this Agreement. In the event the Contractor fails to obtain such indemnity obligations from others as required here, the Contractor agrees to be fully responsible according to the terms of this section.

Failure of the City to monitor compliance with these requirements imposes no additional obligations on the City and will in no way act as a waiver of any rights hereunder. This obligation to indemnify and defend the City as set forth here is binding on the successors, assigns or heirs of the Contractor and shall survive the termination of this Agreement or this section.

This Indemnity shall survive termination of the Agreement of Final Payment hereunder. This Indemnity is in addition to any other rights or remedies that the Indemnitees may have under the law or under any other contract documents or agreements. In the event of any claim or demand made against any party which is entitled to be indemnified hereunder, the City may, in its sole discretion, reserve, retain or apply any monies to the Contractor under this Agreement for the purpose of resolving such claims; provided, however, the City may release such funds if the Contractor provides the City with reasonable assurance of protection of the Indemnitees' interests. The City shall, in its sole discretion, determine whether such assurances or reasonable.

(b) Insurance Requirements are set out in the Construction Agreement.

1. The Contractor agrees to ensure that subcontractors, and any other party involved with the project that is brought onto or involved in the project by the Contractor, provide the same minimum insurance coverage required of the Contractor. The Contractor agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. The Contractor agrees that upon request, all agreements with subcontractors and others engaged in the project will be submitted to the City for review.

2. The Contractor agrees that all layers of third party liability coverage required herein, primary, umbrella and excess, will have the same starting and expiration date. The Contractor agrees further that all other third party coverages required herein will likewise have concurrent starting and ending dates.

3. For purposes of applying insurance coverage only, all contracts pertaining to the project will be deemed to be executed when finalized and any activity commences in furtherance of performance under this Agreement.

4. The Contractor acknowledges and agrees that any actual or alleged failure on the part of the City to inform the Contractor of non-compliance with any insurance requirement in no way imposes any additional obligations on the City nor does it waive any rights hereunder in this or any other regard.

5. The Contractor will renew the required coverage annually as long as the City, or its employees or agents face an exposure from operations of any type pursuant to this Agreement. This obligation applies whether or not this Agreement is canceled or terminated for any reason. The insurance shall include but not be limited to products and completed operations and

discontinued operations, where applicable. Termination of this obligation is not effective until the City executes a written statement to that effect.

6. Requirements of specific coverage features are not intended as limitations on other requirements or as a waiver of any coverage normally provided by any given policy. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue, and is not intended by any party or insured to be all inclusive.

7. Any provision in any of the construction documents dealing with the insurance coverage provided pursuant to these requirements is subordinate to and superseded by the requirements contained herein. These insurance requirements are intended to be separate and distinct from any other provision in this agreement and are intended by the parties here to be interpreted as such.

8. All liability coverage provided according to these requirements must be endorsed to provide a separate aggregate limit for the project that is the subject of this agreement and evidencing products and completed operations coverage for not less than two (2) years after issuance of a final certificate of occupancy by all appropriate government agencies or acceptance of the completed work by the City.

9. The Contractor agrees to be responsible for ensuring that no contract used by any party involved in any way with the project reserves the right to charge the City or the Contractor for the cost of additional insurance coverage required by this Agreement. Any such provisions are to be deleted with reference to the City. It is not the intent of the City to reimburse any third party for the cost of complying with these requirements. There shall be no recourse against the City for payment of premiums or other amounts with respect thereto.

1-49 TRESPASS

The Contractor shall be responsible for all damage or injury, which may be caused on any property by trespass of the Contractor's employees in the course of their employment whether the said trespass was committed with or without the consent or knowledge of the Contractor.

1-50 SAFETY, SANITARY AND MEDICAL REQUIREMENTS

The Contractor and his subcontractors, if any, and employees shall promptly and fully carry out the existing safety, sanitary and medical requirements as may from time to time be prescribed by the City or by County or State Health Departments to the end that proper work shall be done and the safety and health of the employees and of the community may be observed and safeguarded. In case such regulations and orders are not observed by the Contractor they may be enforced by the Community Services Director at the Contractor's expense.

1-51 PROTECTION AND CLEAN UP

The Contractor shall protect and care for all work until completion and acceptance thereof. Before the Contractor makes application for the acceptance of the work, all rubbish, excess earth and rock or surplus materials shall be removed leaving the site in a neat, orderly and presentable condition.

1-52 LABOR DISCRIMINATION

No discrimination shall be made in the employment of persons upon Public Works because of the race, color, religious creed, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age or sexual orientation of such persons except as provided in Government Code §12940, and every contractor for

Public Works violating Labor Code §1735 is subject to all penalties imposed for a violation of Chapter 1, of Part 7, of Division 2 of the California Labor Code.

1-53 APPRENTICES

Attention is directed to the provisions of Labor Code §§1777.5 and 1777.6 concerning the employment apprentices by the Contractor or any subcontractor under him. The Contractor and any subcontractor under him shall comply with the requirements of said sections in the employment of apprentices.

Information relative to Apprenticeship Standards Wage Schedules and other requirements may be obtained from the Director of Industrial Relations, Ex Officio the Administrator of Apprenticeship - San Francisco, California or from the Division of Apprenticeship Standards and its branch offices.

1-54 PRECONSTRUCTION CONFERENCE

Before the start of construction, the Community Services Director will arrange to meet with the Contractor to discuss the requirements on such matters as project supervision, on-site inspections, progress, schedules and reports, payment(s) to Contractor(s), safety and other items pertinent to the project. At this conference, all parties should be prepared to discuss any anticipated problems.

1-55 SUBCONTRACTING LISTING

(a) Any person making a bid or offer to perform the work described in this contract shall in his bid or offer set forth:

1. The name and location of the place of business of each subcontractor who will perform work of labor or render service to the Contractor in or about the construction of the work or improvement or a subcontractor licensed by the State of California, who, under the subcontract to the Contractor, especially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent (.005%) of the Contractor's total bid.

    1. The portion of the work, which will be done by each such subcontractor under this contract. The Contractor shall list only one subcontractor for each such portion as is defined by the Contractor in his bid.

    2. His State registration number

(b) No Contractor whose bid is accepted shall, without the consent of the City either:

1. Substitute any person as subcontractor in place of the subcontractor designated in the original bid.

2. Permit any subcontractor to be assigned or transferred or allow it to be performed by any other than the original subcontractor listed in the bid.

3. Sublet or subcontract any portion of the work in excess of one-half of one percent (.005%) of the Contractor's bid as to which his original bid did not designate a subcontractor.

(c) Subletting or subcontracting any portion of the work as to which no subcontractor was designated in the original bid shall be permitted only in case of public emergency or necessity, and then only after a finding reduced to writing as public record of the awarding authority setting forth the facts constituting such emergency or necessity.

END OF GENERAL CONDITIONS

SUPPLEMENTARY GENERAL CONDITIONS (STATE)
CALIFORNIA STATE REQUIREMENTS- These prevail over conflicting provisions of the General Conditions

1. State Wage Determinations:

a) As required by Labor Code §§1770 *et seq*., the Contractor shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of such prevailing rate of per diem wages are on file at the office of the City, which copies shall be made available to any interested party on request. The Contractor shall post a copy of such determination at each job site.

b) In accordance with Labor Code §1775, the Contractor shall, as a penalty to the City, forfeit not more than two hundred dollars ($200) for each calendar day or portion thereof, for each worker paid less than the prevailing rates as determined by the Director for the work or craft in which the worker is employed for any public work done under the contract by him or her or by any subcontractor under him or her.

2. Workers' Compensation:

a) In accordance with the provisions of Labor Coded §3700, the Contractor shall secure the payment of compensation to his employees.

b) Prior to beginning work under the Contract, the Contractor shall sign and file with the City the following certification:

> "I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the WORK of this Contract."

c) Notwithstanding the foregoing provisions, before the Contract is executed on behalf of the City, a bidder to whom a contract has been awarded shall furnish satisfactory evidence that it has secured in the manner required and provided by law the payment of Workers' Compensation.

3. Apprentices on Public Works: The Contractor shall comply with all applicable provisions of Labor Code §1777.5 relating to employment of apprentices on public works.

4. Working Hours: The Contractor shall comply with all applicable provisions of Labor Code §§1810 to 1815, inclusive, relating to working hours. The Contractor shall, as a penalty to the City, forfeit twenty-five dollars ($25) for each worker employed in the execution of the Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one (1) calendar week, unless such worker receives compensation for all hours worked in excess of eight (8) hours at not less than one and one-half (1.5) times the basic rate of pay.

5. Contractor Not Responsible For Damage Resulting From Certain Acts of God:
As provided in Public Contract Code §7105, the Contractor shall not be responsible for the cost of repairing or restoring damage to the work which damage is determined to have been proximately caused by an act of God, in excess of five percent (5%) of the contracted amount, provided, that the work damaged was built in accordance with accepted and applicable building standards and the plans and specifications of the City. The Contractor shall obtain insurance to indemnify the City for any damage to the Work caused by an act of God if the insurance premium is a separate bid item in the bidding schedule for the work. For purposes of this section, the term "acts of God" shall include only the following occurrences or conditions and effects: earthquakes in excess of a magnitude of three and one-half (3.5) on the Richter Scale and tidal waves.

6. Notice of Completion: In accordance with Civil Code §§9204 and 9208, within fifteen (15) days after date of acceptance of the work by the City's governing body, the City will file, in the County Recorder's office, a Notice of Completion of the work.

7. Unpaid Claims: If, at any time prior to the expiration of the period for service of a stop payment notice, there is served upon the City a stop payment notice as provided in Civil Code §§9350 *et seq*., the City shall, until the discharge thereof, withhold from the monies under its control so much of said monies due or to become due to the Contractor under this Contract as shall be sufficient to answer the claim stated in such stop payment notice and to provide for the reasonable cost of any litigation thereunder; provided, that if the construction manager shall, in its discretion, permit the Contractor to file with the City the bond referred to in Civil Code §9364, said monies shall not thereafter be withheld on account of such stop payment notice.

8. Concrete Forms, Falsework, and Shoring: The Contractor shall comply fully with the requirements of section 1717 of the Construction Safety Orders, State of California, Department of Industrial Relations, regarding the design of concrete forms, falsework and shoring, and the inspection of same prior to placement of concrete. Where the said section 1717 requires the services of a civil engineer registered in the State of California to approve design calculations and working drawings of the falsework or shoring system, or to inspect such system prior to placement of concrete, the Contractor shall employ a registered civil engineer for these purposes, and all costs therefore shall be included in the price named in the Contract for completion of the work as set forth in the Contract Documents.

9. Retainage From Monthly Payments: Pursuant to Public Contract Code §22300, the Contractor may substitute securities for any money withheld by the City to insure performance under the Contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the City or with a State or Federally chartered bank as the escrow agent, who shall return such securities to the Contractor upon satisfactory completion of the Contract. Deposit of securities with an escrow agent shall be subject to a written agreement between the escrow agent and the City which provides that no portion of the securities shall be paid to the Contractor until the City has certified to the escrow agent, in writing, that the Contract has been satisfactorily completed. The City will not certify that the Contract has been satisfactorily completed until at least thirty (30) days after filing by the City of a Notice of Completion. Securities eligible for investment under Public Contract Code §22300 shall be limited to those listed in Government Code §16430 and to bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the City.

10. Public Works Contracts; Assignment to Awarding Body: In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under section 4 of the Clayton Act (15 U.S.C. sec. 15) or under the Cartwright Act (Chapter 2 (commencing with section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgement by the parties.

11. Payroll Records; Retention; Inspection; Noncompliance Penalties; Rules and Regulations: (a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.
(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:
(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.
(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(c) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars ($100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

12. Cultural Resources: The Contractor's attention is directed to the provisions of the Clean Water Grant Program Bulletin 76A which augments the National Historic Preservation Act of 1966 (16 U.S.C. 470) as specified under section 01560, "Temporary Environmental Controls" of the General Requirements.

13. Protection of Workers In Trench Excavations: As required by Labor Code §6705 and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall submit for acceptance by the City or by a registered civil or structural engineer, employed by the City, to whom authority to accept has been delegated, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation, of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor, and all costs therefore shall be included in the price named in the Contract for completion of the work as set forth in the Contract Documents. Nothing in this section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this section shall be construed to impose tort liability on the City, the Construction Manager, the Design Consultant or any of their officers, agents, representatives, or employees.

14. Travel and Subsistence Pay:
a) As required by Labor Code §1773.1, the Contractor shall pay travel and subsistence payments to each worker needed to execute the work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this section.

b) To establish such travel and subsistence payments, the representative of any craft, classification or type of worker needed to execute the contracts shall file with the Department of Industrial Relations fully executed copies of collective bargaining agreements for the particular craft, classification or type of work involved. Such agreements shall be filed within ten (10) days after their execution and thereafter shall establish such travel and subsistence payments whenever filed thirty (30) days prior to the call for bids.

15. Removal, Relocation or Protection to Existing Utilities:

a) In accordance with the provisions of Government Code §4215, any contract to which a public agency as defined in Government Code §4401 is a party, the public agency shall assume the responsibility, between the parties to the contract, for the timely removal, relocation, or protection of existing main or trunkline utility facilities located on the site of any construction project that is a subject of the contract, if such utilities are not identified by the public agency in the plans and specifications made a part of the invitation for bids. The agency will compensate Contractor for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, and removing or relocating such utility facilities not indicated in the plans and specifications with reasonable accuracy and for equipment on the project necessarily idled during such work.

b) The Contractor shall not be assessed liquidated damages for delay in completion of the project, when such delay was caused by the failure of the public agency or the city of the utility to provide for removal or relocation of such utility facilities.

c) Nothing herein shall be deemed to require the public agency to indicate the presence of existing service laterals or appurtenances when the presence of such utilities on the site of the construction project can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of construction; provided, however, nothing herein shall relieve the public agency from identifying main or trunklines in the plans and specifications.

d) If the Contractor while performing the contract discovers utility facilities not identified by the public

agency in the contract plans or specifications, he shall immediately notify the public agency and utility in writing.

e) The public utility, where they are the City, shall have the sole discretion to perform such repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

16. Contractor License Requirements: In accordance with Business and Professions Code §7028.15, a licensed contractor shall not submit a bid to a public agency unless his or her contractor's license number appears clearly on the bid, and the license expiration date is stated. Any bid not containing this information, or a bid containing information which is subsequently proven false, shall be considered nonresponsive and shall be rejected by the public agency.

17. Prohibiting Work by Certain Contractors: Pursuant to the provisions in Labor Code §§1777.1 and 1777.7, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site at: http://www.dir.ca.gov/DLSE/Debar.html.

END OF CALIFORNIA STATE REQUIREMENTS
END OF SUPPLEMENTARY GENERAL CONDITIONS

TECHNICAL SPECIFICATIONS

1. GENERAL

The Technical Specifications for this project shall be the Standard Specifications for Public Works Construction, "The Greenbook" (SSPWC) and Caltrans standard specifications.

2. MOBILIZATION

Mobilization shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the Project site for all other work and operations that must be performed or costs incurred before beginning work on the various Contract items on the Project site. Mobilization shall include, but not be limited to, the following items, all as required for the proper performance and completion of the Work:

1. Obtaining all permits, licenses, insurance, and bonds. Providing copies to the Construction Manager;
2. Moving onto the Jobsite all of the Contractor's material and equipment as required;
3. Developing construction water supply;
4. Providing restroom facilities;
5. Providing potable water facilities as specified. This includes a means by which all on-site Contractor, Subcontractor, or supplier personnel can wash their hands with soap. It also includes providing potable drinking water to the construction personnel at the project site;
6. Submitting all required Subcontractor insurance certificates, bonds, and contract agreements with subcontractors;
7. Paying Taxes and Freight;
8. Posting all CAL/OSHA required notices and establishment of safety programs;
9. Having the Contractor's representative at the Jobsite full time;
10. Furnishing of Construction Schedule, Contract Price Breakdown (Schedule of Values), Submittal Documents, and Submittal Schedules;
11. Preparing and providing As-Built drawings;
12. Attending Project meetings;
13. Complying with the Air Pollution Control District Permit Requirements and paying the associated fees;
14. Providing Project Signs (Contractor's Identity Sign and Project Identity Sign);
15. Paying other miscellaneous fees.

All costs incurred for the mobilization and the associated work shall be included in the Bid Item for the Mobilization cost and no additional compensation shall be provided therefor.

3. SUBBASE PREPARATION

The native material beneath P.C.C. concrete and paver walkways infrastructure including but not limited to

P.C.C. slabs, curbs and retaining walls shall be excavated to ±0.05 feet of design subbase grade. The design subbase grade shall be field verified and approved by the Construction Manager prior to the placement of granular sand fill, or Class 2 Base. The

Construction Manager shall determine the number and location of points to check for the subbase grade elevation compliance.

4. SUBGRADE PREPARATION

The Class 2 Base beneath all concrete infrastructure and pavers shall be placed to within ±0.02 feet of design subgrade prior to the placement of P.C.C. concrete or pavers. The Construction Manager shall field verify the subbase elevations in the field prior to the placement of Class 2 Base material. Placement of P.C.C. concrete or pavers shall not be allowed until the Construction Manager has approved the subgrade design grade.

5. SAND

Clean granular sand free of clay, shale and deleterious material shall be delivered to the site and placed as noted on the plans. Sand shall be compacted to 90 percent of maximum density at optimum water content per ASTM D-1557 unless otherwise noted on the plans. The material shall conform to a sand equivalent of 30 or greater. The maximum amount of material passing the number 200 sieve shall be 6 percent. The sand shall conform to the following gradation percentages:

SIEVE SIZE	PERCENT PASSING
3/8"	100
NO. 4	98-90
NO. 8	90-75
NO. 10	75-60
NO. 16	60-50
NO. 30	50-38
NO. 40	38-29
NO. 50	29-19
NO. 100	19-7
NO. 200	6-0

The Contractor shall supply a five gallon sample of sand material to the material testing laboratory within four (4) days after the Notice to Proceed is issued. The gradation, sand equivalent and maximum density of the sand material shall be determined. The test results shall be forwarded to the Construction Manager. The cost of testing shall be incurred by the Contractor. The gradation of the granular sand shall be determined and the test results forwarded to the Construction Manager prior to the delivery of the granular sand material to the construction site. Prior to the placement of sand the native subbase grade shall be checked and approved by the Construction Manager.

6. **CLASS 2 BASE**

The Class 2 Base material shall conform to Caltrans Section 26, latest edition, for ¾-inch maximum base material. The gradation requirements are as follows:

SIZE	PERCENT PASSING
1 IN/25.00MM	100
¾ IN/19.00MM	87-100
#4/4.75MM	30-65
#30/600MM	5-35
#200/75.00MM	0-12

The sand equivalent shall be 25 or greater. An angular aggregate is to be used. Class 2 Base material shall be compacted to 95 percent of maximum density according to ASTM D-1557, unless otherwise noted on the plans or details. The tolerance for the Class 2 Base between design subgrade elevation and actual subgrade elevation as constructed in the field shall be plus or minus 0.02 feet as referenced from the design subgrade. Prior to the placement of Class 2 Base the native subbase grade shall be checked and approved by the Construction Manager. The native subbase grade shall be within plus or minus 0.05 feet of subbase design grade prior to the placement of Class 2 Base.

The Contractor shall supply a five gallon sample of the Class 2 Base to the material testing laboratory within four
(4) days of the Notice to Proceed. The material shall be delivered to the testing laboratory to determine the maximum density, gradation, R-value, sand equivalent and durability index of the Class 2 Base. A copy of the test results shall be forwarded to the Construction Manager by the geotechnical consultant for review. The gradation of the Class 2 Base shall be determined and the test results forwarded to the Construction Manager for approval prior to the delivery of the Class 2 Base material to the construction site. Class 2 Base utilizing recycled materials shall not be allowed.

7. **P.C.C. CONCRETE**

P.C.C. concrete, utilized for but not limited to, foundations, curbs and concrete slabs and all other concrete infrastructure shall contain a minimum of 6.0 sacks per cubic yard of concrete (4,500 psi) Type V Portland Cement with a maximum water/cement ratio of 0.45 (by weight).

A concrete mix design is to be submitted to the Construction Manager within five (5) days after the issuance of the Notice to Proceed. New formwork shall be utilized in the construction of every concrete facility. The formwork shall be true to line and grade. The subcontractor shall notify the Construction Manager 72 hours prior to the required inspection. Exposed surfaces of concrete areas shall receive a double trowel finish. A total of one (1) set of cylinders and one (1) slump test shall be required for every 50 cubic yards of concrete, except that a minimum of one (1) set of cylinders and slump test shall be required each day twenty (20) or more yards of concrete are placed at a project site. The maximum allowable slump shall be 4 inches. A set of cylinders shall be composed of three (3) cylinders. The first cylinder of a set shall be tested after seven (7) days curing. The second cylinder of a set shall be tested after 28 days curing. The third cylinder shall be held in reserve and tested if directed by the Construction Manager. The test results will be forwarded to the Construction Manager for review. The Construction Manager shall receive a concrete vendor slip for each truck load of concrete delivered to the project site.

Prior to the placement of concrete, the subgrade depth shall be inspected to ensure that the full depth of concrete, as noted on the plans, is attained. Excess fill material shall be removed as required by the Construction Manager. The form boards shall be checked for the proper elevation. Compaction tests on the subgrade shall have achieved the density requirements specified. The Construction Manager shall then allow the placement of concrete.

The concrete shall be screeded and floated. All edges shall be struck with a concrete edger. Weakened plane joints shall be established at right angles to the sidewalk edge as illustrated on the Plans. The weakened plane joints shall be 3/8 inch in width and 3/4 inch in depth.

After the concrete surface has been floated and cured adequately, it shall receive a double trowel finish. The troweling shall be accomplished by hand with a steel trowel. The surface of the concrete shall receive a light broom finish after the surface is double troweled. The surface of the concrete shall be smooth and true to grade. Tolerance for the concrete surface shall be 1/8 inch in 10 lineal feet with maximum high and low variance not occurring in less than 20 feet. The Contractor shall maintain the concrete surface moist or wet for a 24-hour period after the concrete is placed and finished troweled. Placement of burlap bags or used carpet over the concrete surface and a continuous application of water over the concrete surface will be required for a 24-hour period. The concrete surfaces shall be cleaned of all dirt and residue prior to the placement of the concrete sealer.

Concrete shall not be placed after 10:00 a.m. on Fridays.

8. RETAINING WALL SYSTEM

PART 1 - GENERAL

Work includes furnishing and installing concrete block retaining wall units to the lines and grades designated on the construction drawings and as specified herein.

P.C.C. concrete, utilized for retaining wall foundations shall contain a minimum of 6.0 sacks per cubic yard of concrete (4,500 psi) Type V Portland Cement with a maximum water/cement ratio of 0.45 (by weight).

Delivery, Storage, and Handling

- Contractor shall check the materials upon delivery to assure proper material has been received.
- Contractor shall prevent excessive mud, cementitious material, and like construction debris from coming in contact with the materials.
- Contractor shall protect the materials from damage. Damaged material shall not be incorporated in the project (ASTM C1372).

Contractor Requirements

Contractors shall be trained and certified by local manufacturer or equivalent accredited organization.

- Contractors shall provide a list of projects they have completed with similar retaining wall materials.

Commented [ON17]: Should we keep this?

PART 2 - MATERIALS

Modular Wall Units

- Wall units shall be Allan Block Retaining Wall units or approved equal as produced by a licensed manufacturer.
- Wall units shall have minimum 28-day compressive strength of 3000 psi (20.7 MPa) in accordance with ASTM C1372. The concrete units shall have adequate freeze-thaw protection with an average absorption rate in accordance with ASTM C1372 or an average absorption rate of 7.5 lb./ft³ (120 kg/m³) for northern climates and 10 lb./ft³ (160 kg/m³) for southern climates.
- Exterior dimensions shall be uniform and consistent. Maximum dimensional deviations on the height of any two units shall be 0.125 in. (3 mm).
- Wall units hollow cores to be filled with solid grout
- Exterior face shall be textured. Color as specified on plans.

Wall Rock

- Material must be well-graded compactable aggregate, 0.25 in. to 1.5 in.,

(6 mm - 38 mm) with no more than 10% passing the #200 sieve. (ASTM D422)

PART 3 – WALL CONSTRUCTION

Excavation

- Contractor shall excavate to the lines and grades shown on the construction drawings. Contractor shall use caution not to over-excavate beyond the lines shown, or to disturb the base elevations beyond those shown.
- Contractor shall verify locations of existing structures and utilities prior to excavation. Contractor shall ensure all surrounding structures are protected from the effects of wall excavation.

Foundation Soil Preparation

- Foundation soil shall be defined as any soils located beneath the retaining wall.
- Foundation soil shall be excavated as dimensioned on the plans and compacted to a minimum of 95% of Standard Proctor (ASTM D698) prior to placement of the base material.
- Foundation soil shall be examined by the on-site soils engineer to ensure that the actual foundation soil strength meets or exceeds assumed design strength. Soil not meeting the required strength shall be removed and replaced with acceptable material.

Class II Base Material

- Class II Base material shall be placed as shown on the construction drawing. Top of base shall be located to allow bottom wall units to be buried to proper depths as per wall heights and specifications.
- Class II Base shall be compacted at 95% (ASTM 1557) to provide a level hard surface on which to place the first course of blocks. The base shall be constructed to ensure proper wall embedment and the final elevation shown on the plans.
- Class II Base material shall be a 12 in. minimum depth.

Unit Installation

- Install units in accordance with the manufacturer's instructions and recommendations for the specific concrete retaining wall unit, and as specified herein.
- Ensure that units are in full contact with base. Proper care shall be taken to develop straight lines and smooth curves on base course as per wall layout.
- Fill all cores and cavities and a minimum of 12 in. behind the base course with wall rock. Use infill soils behind the wall rock and approved

soils in front of the base course to firmly lock in place. Check again for level and alignment. Use a plate compactor to consolidate the area behind the base course. All excess material shall be swept from top of units.

- Install next course of wall units on top of base course. Position blocks to be offset from seams of blocks below. Perfect "running bond" is not essential, but a 3 in. (75 mm) minimum offset is recommended. Check each block for proper alignment and level. Fill all cavities in and around wall units and to a minimum of 12 in. (300 mm) depth behind block with wall rock. Block, wall rock and infill soil placed in uniform lifts not exceeding 8 in. (200 mm). Compaction requirements for all soils in areas in, around and behind the reinforced mass shall be compacted to 95% of maximum Standard Proctor dry density (ASTM D698) with a moisture content control of +1% to -3% of optimum.
- The consolidation zone shall be defined as 3 ft (0.9 m) behind the wall. Compaction within the consolidation zone shall be accomplished by using a hand operated plate compactor and shall begin by running the plate compactor directly on the block and then compacting in parallel paths from the wall face until the entire consolidation zone has been compacted. A minimum of two passes of the plate compactor are required with maximum lifts of 8 in. (200 mm). Expansive or fine-grained soils may require additional compaction passes and/or specific compaction equipment such as a sheepsfoot roller. Maximum lifts of 4 in. (100 mm) may be required to achieve adequate compaction within the consolidation zone. Employ methods using lightweight compaction equipment that will not disrupt the stability or batter of the wall. Final compaction requirements in the consolidation zone shall be established by the engineer of record.
- Install each subsequent course in like manner. Repeat procedure to the extent of wall height. Individual course height may vary due to allowable block manufacturing tolerances per ATSM C1372. Contractor must verify wall height, if noted as being critical, prior to completion of construction to ensure the elevation of the top of the wall or the controlling elevation matches desired plan elevation, if noted as critical. Contractor must follow this method for single walls or walls that branch off into a terraced orientation.

END OF TECHNICAL SPECIFICATIONS

SPECIAL PROVISIONS

1. ORDER OF WORK

Prior to commencement of any work on the project, a preconstruction conference will be held for the purpose of review and discussion of progress schedule and construction procedures. At the discretion of the Community Services Director, periodic meetings involving project personnel (Contractor, utility and others) will be held for the purpose of coordinating project activities.

2. STARTING AND COMPLETION OF WORK

The work called for in these contract documents shall commence within (10) calendar days after that date set out in the **Notice to Proceed** issued by the City, and shall be diligently pursued to completion within (120) calendar days of said date.

3. FAILURE TO COMPLETE ON TIME AND LIQUIDATED DAMAGES

(See General Conditions 1-19) It is agreed by the parties to the contract that in case all work called for under the contract is not completed before or upon the expiration of the time limits set forth in these Special Provisions, damages will be sustained by the City and that it will be impracticable to determine the actual damage by which the City will sustain in the event of and by reason of such delay and it is therefore agreed that the Contractor will pay to the City the sum of five hundred dollars ($500) per day for each and every day of delay beyond the time prescribed to complete the work.

4. MAINTAINING TRAFFIC

The Contractor shall maintain two-way traffic in the work area in accordance with the “Manual of Traffic Controls for Construction and Maintenance Work Zones” and the MUTCD, 1990 Edition or as modified, available through the State of California, Department of Transportation, 1900 Royal Oaks Drive, Sacramento, California 95815.

Personal vehicles of the Contractor’s employees shall not be parked on the traveled way at any time, including any section closed to public traffic.

5. PERMIT FEES

. The General Contractor shall be responsible for paying all permit fees to the City.

6. CONSTRUCTION SIGN

The Contractor shall provide a four (4) foot tall by eight (8) foot wide construction sign to be visible to the public and maintained in good order for the duration of construction. Artwork for the sign shall be provided to the Contractor by the City.

STATE LABOR STANDARDS PROVISIONS

State prevailing wage rates shall apply when the State wage rate is higher than the Federal wage rate. The Contractor and all subcontractors are subject to the application of Labor Code §§1720 *et seq*. which detail the regulations and procedures governing the payment of State prevailing wages.

The Contractor and all subcontractors are subject to the provisions of Labor Code §3700 which requires that every employer be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of the code.

The Contractor and all subcontractors are subject to the provisions of Labor Code §§1810 through 1814 which provide that the maximum hours a worker is to be employed is limited to eight (8) hours a day and forty (40) hours a week and the Contractor or subcontractor shall forfeit, as a penalty, twenty-five dollars ($25) for each worker employed in the execution of the Contract for each calendar day during which a worker is required or permitted to labor more than eight (8) hours in any calendar day or more than forty (40) hours in any calendar week and is not paid overtime.

Labor Code §1815 requires that notwithstanding the provisions of Labor Code §§1810 through 1814, employees of the Contractor who work in excess of eight (8) hours per day and forty (40) hours per week shall be compensated for all hours worked in excess of eight (8) hours per day at not less than one and one-half (l.5) times the basic rate of pay.

CERTIFICATION OF UNDERSTANDING
AND AUTHORIZATION

PROJECT NAME: **CITY OF El Centro, Veteran's Memorial Park Phase 2 Project**

This is to certify that the principals, and the authorized payroll officer, below, have read understand the minutes of the pre-construction conference, the Federal Labor Standards clauses pertaining to the subject project and the U.S. Department of Labor Wage Determinations CA and the State of California Labor Standards and Wage Determinations IMP and others.

The following person(s) is designated as the payroll officer for the undersigned and is authorized to sign the **"Statement of Compliance"** which will accompany our weekly Certified Payroll Reports for this project:

_____Payroll Officer
(Print Name)

_____Payroll Officer
(Signature)

_____
(Contractor / Subcontractor)

_____
(Print Name)

_____
(Signature)

_____
(Title)

_____
(Date)

EXHIBIT B

PUBLIC CONTRACT CODE - PCC
DIVISION 2. GENERAL PROVISIONS [1100 - 22355]
(Division 2 enacted by Stats. 1981, Ch. 306.)

PART 5. WITHHELD CONTRACT FUNDS [22300- 22300.]
(Part 5 added by Stats. 1988, Ch. 1408, Sec. 11.)

22300.
(a) For purposes of this section, "contractor" includes, but is not limited to, a contractor performing a public works contract, as defined in Section 1101, and any person or entity that would qualify as a contractor under Section 6106.5.

(b) Provisions shall be included in any invitation for bid and in any contract documents to permit the substitution of securities for any moneys withheld by a public agency to ensure performance under a contract; however, substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmers Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 U.S.C. Sec. 1921 et seq.), and where federal regulations or policies, or both, do not allow the substitution of securities. At the request and expense of the contractor, securities equivalent to the amount withheld shall be deposited with the public agency, or with a state or federally chartered bank in this state as the escrow agent, who shall then pay those moneys to the contractor. Upon satisfactory completion of the contract, the securities shall be returned to the contractor.

(c) Alternatively, the contractor may request and the owner shall make payment of retentions earned directly to the escrow agent at the expense of the contractor. At the expense of the contractor, the contractor may direct the investment of the payments into securities and the contractor shall receive the interest earned on the investments upon the same terms provided for in this section for securities deposited by the contractor. Upon satisfactory completion of the contract, the contractor shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from the owner, pursuant to the terms of this section.

(d) Securities eligible for investment under this section shall include those listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the contractor and the public agency.

The contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

Failure to include these provisions in bid and contract documents shall void any provisions for performance retentions in a public agency contract.

For purposes of this section, the term "public agency" shall include, but shall not be limited to, chartered cities.

(e) (1) Any contractor who elects to receive interest on moneys withheld in retention by a public agency shall, at the request of any subcontractor, make that option available to the subcontractor regarding any moneys withheld in retention by

the contractor from the subcontractor. If the contractor elects to receive interest on any moneys withheld in retention by a public agency, then the subcontractor shall receive the identical rate of interest received by the contractor on any retention moneys withheld from the subcontractor by the contractor, less any actual pro rata costs associated with administering and calculating that interest. In the event that the interest rate is a fluctuating rate, the rate for the subcontractor shall be determined by calculating the interest rate paid during the time that retentions were withheld from the subcontractor. If the contractor elects to substitute securities in lieu of retention, then, by mutual consent of the contractor and subcontractor, the subcontractor may substitute securities in exchange for the release of moneys held in retention by the contractor.

(2) This subdivision shall apply only to those subcontractors performing more than five percent of the contractor's total bid.

(3) No contractor shall require any subcontractor to waive any provision of this section.

(f) The Legislature hereby declares that the provisions of this section are of statewide concern and are necessary to encourage full participation by contractors and subcontractors in public contract procedures.

(g) The escrow agreement used hereunder shall be null, void, and unenforceable unless it is substantially similar to the following form:

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION	
This Escrow Agreement is made and entered into by and between	
	whose address is
	hereinafter called "Owner,"
	whose address is
	hereinafter called "Contractor" and
	whose address is
	hereinafter called "Escrow Agent."

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for _____ in the amount of _____ dated _____ (hereinafter referred to as the

"Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of _____, and shall designate the Contractor as the beneficial owner.

(2) The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

(3) When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

(7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

(8) Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:	On behalf of Contractor:
Title	Title
Name	Name
Signature	Signature
Address	Address
On behalf of Escrow Agent:	
Title	
Name	
Signature	
Address	

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

Owner	Contractor
Title	Title
Name	Name
Signature	Signature

(Amended by Stats. 2022, Ch. 427, Sec. 21. (SB 1489) Effective January 1, 2023.)

PAYROLL FORMS

STATE

PREVAILING WAGE

RATES

CONSTRUCTION PLANS

Resolution Declaring Emergency - WWTP Bar Screen Failure

CITY MANAGER'S RECOMMENDATION:
Adopt Resolution No. 26- , RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO DECLARING THE NEED FOR AND AUTHORIZING THE EMERGENCY REPAIR OF THE WASTEWATER TREATMENT PLANT BAR SCREEN

FISCAL IMPACT:
No impact to the General Fund. Project to be funded by the wastewater enterprise working capital. The estimated cost is about $800,000.00.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:
Environmental Sustainability & Infrastructure

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:
NA

BACKGROUND:
The first piece of equipment that receives incoming sewer flow at the WWTP is a mechanical trash bar screen. The purpose of the screen is to remove inorganic materials (plastics, debris, etc.) from the wastewater stream before it enters the treatment process and to divert these materials for disposal at a landfill.

DISCUSSION:
The trash bar screen has corroded beyond repair and requires replacement. The cost of the replacement equipment is approximately $400,000, and the labor to remove and replace the equipment—along with the required concrete repairs—is estimated at an additional $400,000. The total estimated cost of the repair is $800,000.

Currently, the plant is operating using manual methods for this process. Immediate replacement of the equipment is necessary to protect public health and safety and to prevent violations of State wastewater permit requirements.

CONCLUSION:
Adopt Resolution No. 26- , Resolution of the City Council of the City of El Centro declaring the need for and authorizing the emergency repair of the Wastewater Treatment Plant Bar Screen.

ATTACHMENTS:
1. Resolution 26-

RESOLUTION NO. 26-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL CENTRO DECLARING THE NEED FOR AND AUTHORIZING THE EMERGENCY REPAIR OF THE WASTEWATER TREATMENT PLANT BAR SCREEN

WHEREAS, the wastewater treatment plant trash bar screen recently and suddenly failed due to deteriorated metals at the channel due to the corrosive environment; and

WHEREAS, without the screen, the Wastewater Treatment Plant is currently operating via temporary manual measures; and

WHEREAS, it is necessary to repair or replace the failed trash bar screen to maintain compliance with the provisions of state law; and

WHEREAS, Public Contract Code Section 22050 provides that in the case of an emergency, with the authorization of the City Manager, a city may proceed to make emergency repairs without bids and in compliance with other public works requirements; and

WHEREAS, the City Council finds that the repair of the trash bar screen at the El Centro Wastewater Treatment Plant constitutes an emergency as defined in Public Contract Code Section 22050 and confirms that action may be taken without bidding, and in compliance with other processes, to protect the sewer system and public health and safety; and

WHEREAS, the City Council shall review this emergency authorization at each regular meeting until such time as the City Manager reports the repair is complete; and

WHEREAS, the anticipated cost of the repair is $800,000, which will be funded from the sewer enterprise fund.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL CENTRO, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. The Recitals set out above are true and correct.

2. The City Council confirms that the City Manager is authorized to take any and all necessary action to repair the trash bar screen at the Wastewater Treatment Plant.

3. The City Manager is further directed to place a report and review of such action on upcoming regular meeting agendas until the replacement has been completed.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of El Centro, California held on day of , 2026.

CITY OF EL CENTRO

By _____
Michael Crankshaw, Mayor

ATTEST:

By _____
Norma Wyles, City Clerk

APPROVED AS TO FORM:
Office of the City Attorney

By_____
Joanna Hoff, City Attorney

STATE OF CALIFORNIA)
COUNTY OF IMPERIAL) ss
CITY OF EL CENTRO)

I, Norma Wyles, City Clerk of the City of El Centro, California do hereby certify that the foregoing Resolution No. 26- was duly and regularly adopted at a regular meeting of the City Council of the City of El Centro, California, held on the day of , 2026, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

By_____
Norma Wyles, City Clerk

Adoption of the City's Water Master Plan and Sewer Master Plan

CITY MANAGER'S RECOMMENDATION:
Adopt the Water Master Plan and Sewer Master Plan as presented, and authorize staff to utilize the plans as guiding documents for future capital improvement planning, budgeting, grant applications, and coordination with the City's water and sewer rate study.

FISCAL IMPACT:
NA. This is a planning document only.

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:
Environmental Sustainability & Infrastructure

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:
NA

BACKGROUND:
The City's existing Water and Sewer Master Plans were last comprehensively updated more than 17 years ago. Since that time, the City has experienced changes in regulatory requirements, infrastructure condition, system operations, and long-term capital needs. In addition, several major system investments have been made, including the construction of a new Water Treatment Plant, while other portions of the systems have continued to age beyond their intended useful life.

To address these changes and provide a modern planning framework, the City Council authorized the retention of Dudek at its July 31, 2024, meeting to prepare updated Water and Sewer Master Plans. The master plans are intended to serve as long-range planning documents that assess the current condition and capacity of the City's utility systems, evaluate future needs based on anticipated growth, and identify capital improvement projects necessary to maintain system reliability, protect public health, and ensure regulatory compliance.

The master planning effort represents the City's first comprehensive utility system evaluation in nearly two decades and is closely coordinated with the City's ongoing water and sewer rate study to ensure that recommended improvements are financially sustainable.

DISCUSSION:
Master Plan Goals and Approach

The primary goal of the Water and Sewer Master Plans is to provide the City with a clear, data-driven roadmap to guide system reinvestment and long-term decision-making. Key objectives of the effort included:

- Confirming the current condition and performance of the water distribution and sewer collection systems
- Evaluating system capacity under existing and projected future demands
- Identifying critical infrastructure deficiencies and operational risks
- Developing prioritized capital improvement recommendations
- Coordinating infrastructure needs with the City's rate study and financial planning

The master plans were developed using system modeling, field condition assessments, review of historical data, and coordination with City staff.

General System Overview

Water System

The City's water system includes approximately 157 miles of water pipeline, eight storage reservoirs, two booster pump stations, and a City-owned Water Treatment Plant with a rated capacity of 21 million gallons per day. Water supply is delivered via the All-American Canal. While the new Water Treatment Plant is in good condition overall, portions of the distribution system, pump stations, and storage facilities include assets that are several decades old and approaching or exceeding their useful life.

Sewer System

The sewer system consists of approximately 123 miles of gravity sewer pipeline, 15 lift stations, and a City-owned Wastewater Treatment Plant rated at 8 million gallons per day. Much of the sewer infrastructure is more than 50 years old, with some deep pipelines and lift stations presenting ongoing maintenance, safety, and reliability challenges.

Key Findings – Water System

The Water Master Plan identified several key issues affecting system reliability and service levels, including:

- Aging pump station infrastructure, particularly at the former Water Treatment Plant site, where mechanical, electrical, and structural components have exceeded their useful life
- Reservoirs and pump stations generally in fair condition, requiring planned rehabilitation or replacement within the next 10 years
- Portions of the water distribution system with pipelines that have exceeded or are nearing the end of their useful life
- Limited redundancy in some newer development areas served by single supply lines
- Inability to meet current fire flow requirements in certain locations without system improvements

To address these issues, the plan recommends a combination of pump station upgrades, reservoir rehabilitation, pipeline replacement and upsizing, and system redundancy improvements.

Key Findings – Sewer System

The Sewer Master Plan found that while most sewer pipelines meet hydraulic capacity criteria, significant condition-related deficiencies exist throughout the system, including:

- Lift stations with structural, electrical, and safety deficiencies that affect reliability and compliance with modern standards
- Aging sewer pipelines and manholes experiencing deterioration from hydrogen sulfide (H_2S) exposure, requiring lining and rehabilitation
- Wastewater Treatment Plant components with failing concrete, corroded equipment, and outdated processes
- Primary clarifiers operating over capacity during wet weather conditions
- Digesters dating back to the 1950s that require major maintenance and rehabilitation

The largest overall need identified in the sewer system is investment in Wastewater Treatment Plant rehabilitation and lift station improvements to ensure long-term operational reliability.

Capital Improvement Program (CIP) and Financial Coordination

Based on the findings, the master plans recommend a 20-year Capital Improvement Program totaling approximately $169.6 million, consisting of:
- Approximately $76.9 million for water system improvements
- Approximately $92.7 million for sewer system improvements

Projects are prioritized and phased, with the highest-risk and highest-need improvements targeted within the first five years. The master plans are intended to directly inform the City's capital budgeting and are being coordinated with the City's water and sewer rate study to align infrastructure needs with long-term financial planning.

CEQA
Adoption of the Water Master Plan and Sewer Master Plan is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15262 (Feasibility and Planning Studies), as the plans are long-range planning documents and do not approve or authorize any specific projects. Any individual projects identified in the master plans will be subject to separate CEQA review prior to approval or construction.

CONCLUSION:
Adopt the Water Master Plan and Sewer Master Plan as presented, and authorize staff to utilize the plans as guiding documents for future capital improvement planning, budgeting, grant applications, and coordination with the City's water and sewer rate study.

ATTACHMENTS:
1. Sewer Master Plan FINAL
2. Water Master Plan FINAL

Sewer Master Plan Update

City of El Centro

JANUARY 2026

Prepared for:

CITY OF EL CENTRO PUBLIC WORKS
Serving our community by sustaining and improving life

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ABS	Acrylonitrile butadiene styrene
Ac	Acre
ADF	Average daily flow
ADWF	Average dry weather flow
ATS	Automatic transfer switch
AWWF	Average wet weather flow
CCTV	Closed circuit television
CDBG	Community Development Block Grant
CIP	Capital Improvement Program
CIPP	Cured in place pipe
City	City of El Centro
CIWQS	California Integrated Water Quality System
COG	Council of Governments
CWSRF	Clean Water State Revolving Fund
d/D	Depth to diameter ratio
DU or du	Dwelling unit(s)
DU/acre	Dwelling units per acre
EA or ea	Each
EPA	U.S. Environmental Protection Agency
ES	Executive Summary
FM	Flow monitor
GIS	Geographic Information System
GPD or gpd	Gallons per day
gpd/acre	Gallons per day per acre
gpd/DU	Gallons per day per dwelling unit
GPM or gpm	Gallons per minute
HCD	Department of Housing and Community Development
HDPE	High density polyethylene
HDR	High density residential
HP	Horsepower
HUD	Department of Housing & Urban Development
HVAC	Heating, ventilation, and air conditioning
i.e.	That is
I&I	Inflow and infiltration
IBank	California Infrastructure and Economic Development Bank
ISRF	Infrastructure State Revolving Fund
KGRA	Known Geothermal Resource Area
LDR	Low density residential
LED	Light-emitting diode
LF	Lineal feet

Acronym/Abbreviation	Definition
LS	Lift station
LVSP	Lithium Valley Specific Plan
MCC	Motor control center
MDR	Medium density residential
MG	Million gallons
MGD	Million gallons per day
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
No.	Number
PACP	Pipeline Assessment Certification Program
PDWF	Peak dry weather flow
PF	Peaking factor
PLC	Programmable Logic Controller
PMF	Peak monthly flow
PVC	Polyvinyl chloride
PWWF	Peak wet weather flow
RDII	Rainfall dependent inflow and infiltration
RG	Rain gauge
RHNA	Regional Housing Needs Allocation
RR	Rural residential
RTU	Remote Terminal Unit
SCADA	Supervisory Control and Data Acquisition
SCAG	Southern California Association of Government's
SSMP	Sewer System Management Plan
SWRCB	California State Water Resources Control Board
TDH	Total dynamic head
TDS	Total dissolved solids
UNK	Unknown
UV	Ultraviolet
UWMP	Urban Water Management Plan
VCP	Vitrified clay pipe
VFD	Variable frequency drive
WDR	Waste Discharge Requirements
WIFIA	Water Infrastructure Finance and Innovation Act
WW	Wastewater
WWTP	Wastewater treatment plant

Executive Summary

The Executive Summary provides highlights from the 2025 Sewer Master Plan Update for the City of El Centro by summarizing the key findings and recommendations from each section of the report. The Executive Summary is organized into the following:

- Key Project Objectives
- Service Area and System Overview
- Future Flow Projections
- Collection System Hydraulic Model Development and Calibration
- Collection System Capacity Analysis
- Collection System Condition Assessment
- Capital Improvement Program (CIP) Recommendations

ES-1 Key Project Objectives

A comprehensive study of the City's sewer system was last completed in March 2008 and published as the 2008 Sewer Master Plan. The 2025 Update achieves the following key objectives:

1. **Data Review and Gap Analysis:** Assess available data pertaining to the existing sewer system and identify deficiencies within the City's sewer GIS database.
2. **Field Survey:** Conduct a rim and invert elevation survey of approximately 100 strategically selected manholes located along trunk sewer mains (12-inch diameter or greater) for greater confidence in the modeled capacity analysis results.
3. **Model Development:** Construct a new hydraulic model of the trunk system using GIS and field survey data.
4. **Flow Monitoring:** Perform sewer flow monitoring at nine (9) locations to identify flow patterns for creation of land use based sewer flow generation patterns, applying existing sewer inflows into the model and system calibration.
5. **Generation Factors:** Develop unit sewer generation factors for common land use types within the City.
6. **Flow Projections:** Update dry weather flow projections to reflect current and anticipated future conditions within the service area.
7. **Model Calibration:** Calibrate the trunk sewer model to within 10% or better accuracy.
8. **Capacity Evaluation:** Analyze the capacity of the modeled trunk system under peak dry and wet weather flow conditions for Existing (2025), Near-Term (2035) and Ultimate (2045) scenarios.
9. **Condition Assessment:** Conduct a condition assessment of selected gravity mains and field inspection of all 15 lift stations and the wastewater treatment plant.
10. **Lift Station Optimization:** Assess the feasibility of decommissioning any of the existing lift stations and redirecting tributary flows to the gravity system.
11. **Capital Improvement Plan Development:** Identify and prioritize capital improvement projects to address capacity and condition- and age-related deficiencies identified throughout the collection system.

12. **Cost Estimation:** Prepare planning-level engineer's cost opinions for each recommended project and integrate into a multi-year CIP for implementation by the City.

ES-2 Service Area and System Overview

The City of El Centro is the largest in Imperial Valley, covering approximately 11 square miles and supporting a population of 44,000. The City's sewer collection system features 123 miles of gravity main, with a significant portion over 50 years old and some brick sewers dating back to the early 20th century. The system also includes 15 lift stations, three of which are slated for abandonment within the next five years.

All sewer flow generated within the City's service area is treated at a single wastewater treatment plant, which has a permitted capacity of 8.0 MGD and discharges to the Salton Sea. The City's existing sewer collection system is depicted in Figure ES.1.

ES-3 Future Flow Projections

Flow monitoring data from March 2025 was used to estimate existing dry weather flows throughout the City's collection system. Future system flows were developed based on projected population growth and planned developments.

Population Summary: The City's current estimated population is 44,230, according to the U.S. Census Bureau. Population projections from the Southern California Association of Governments (SCAG) and the City's Urban Water Management Plan (UWMP) suggest a steady growth rate of 1.1% annually, with the population expected to reach 58,753 by 2045. However, SCAG's Regional Housing Needs Allocation (RHNA) process anticipates the need for 3,442 new housing units by 2029, which could accelerate population growth to 57,360 by 2030 or a 26% increase from 2020. While zoning is in place to support this growth, City staff do not expect full development of these units by 2029 due to historically slow growth trends.

Existing Dry Weather Flows: The 2025 flow monitoring data provides partial estimates of current dry weather flows. The data, in combination with influent flow data from the City's wastewater treatment plant, indicates an average dry weather flow (ADWF) of 3.52 MGD across the system. This data helps establish a baseline for understanding the system's capacity and planning future improvements.

Future Dry Weather Flows: Two future scenarios, Near-Term (2035) and Ultimate (2045), were developed based on the Existing (2025) scenario. The Near-Term scenario includes known planned developments, projecting an additional 0.60 MGD in ADWF. The Ultimate scenario was created by applying a system-wide multiplier based on population growth to the Near-Term, resulting in a total ADWF of 4.58 MGD by 2045. These projections help the City plan for sewer system improvements to accommodate future demand.

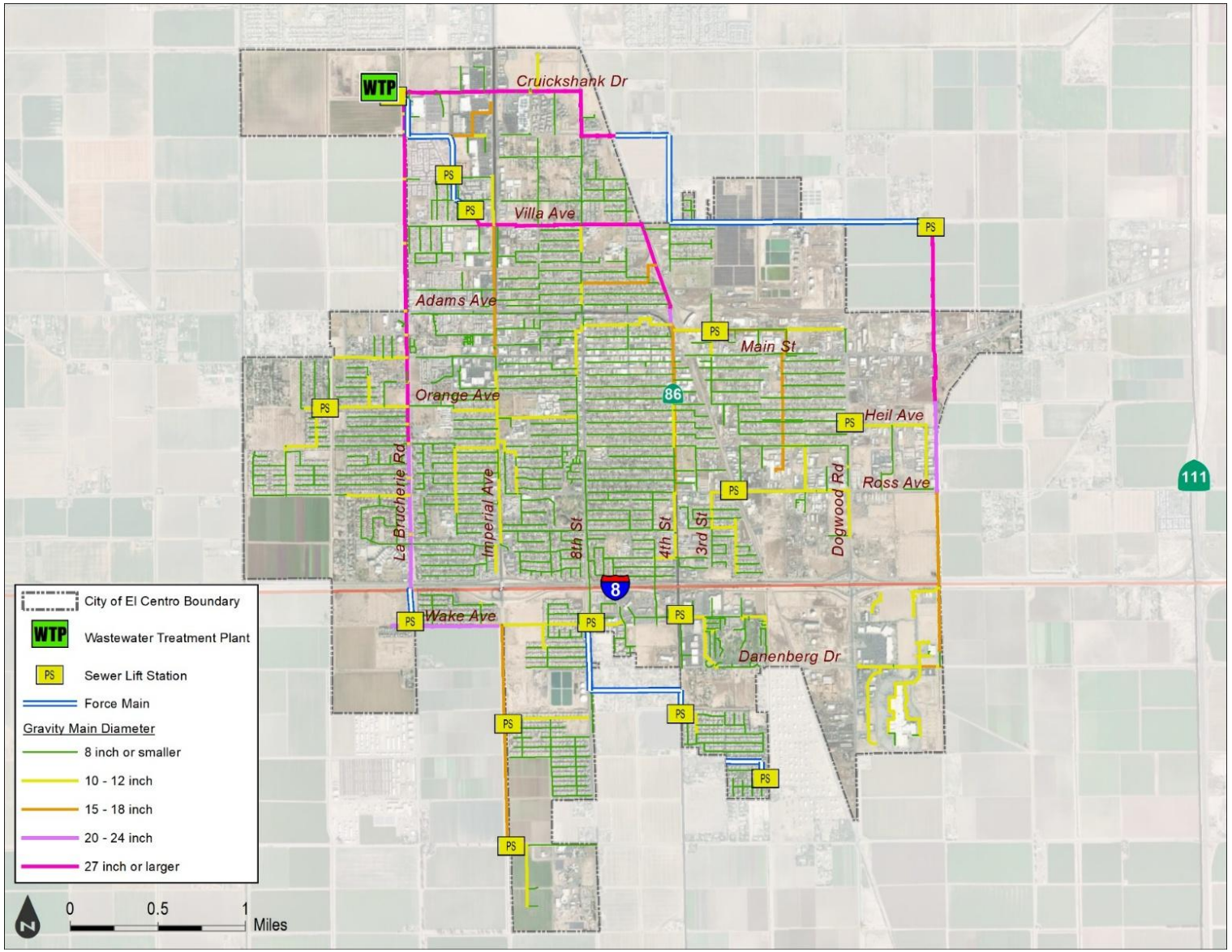

Figure ES.1 Sewer Collection System

ES-4 Hydraulic Model Development and Calibration

A new hydraulic model of the City's existing trunk sewer system was constructed using data from a 2025 field survey of 100 representative manholes, which provided current invert elevations and pipe diameters. Flow monitoring and treatment plant influent flow data were used to calibrate the newly created model to existing dry and wet weather flow conditions, forming the basis for future model scenarios and capacity analysis.

2025 Flow Monitoring Program: A temporary flow monitoring program was implemented in 2025, featuring nine strategically placed flow monitors to measure sewer flows within designated sewersheds. The data collected from these monitors was used to develop unique dry weather hourly time patterns for each sewershed, reflecting typical daily variations in sewer flow. This flow monitoring data was used to calibrate the Existing dry weather scenario of the hydraulic model.

Model Network Generation: The trunk sewer model network was developed using a combination of the existing sewer GIS data, field survey information, and as-built record drawings. Invert elevations were collected for approximately 100 manholes, with interpolations made for intermediate manholes.

Flow Allocation and Calibration: Dry weather flows were allocated to the model based on average measured flows from the 2025 flow monitoring program. Eight (8) of the nine sewersheds were calibrated using weekday flows, while FM 09 (a predominately industrial and commercial sewershed) was calibrated using weekend flows. The model was calibrated once both average and peak dry weather flows were within 10% of the measured values. An Existing wet weather scenario was developed and calibrated using a defect flow pattern and allocations developed to simulate the average and peak wet weather flows recorded during a significant historical wet weather event.

ES-5 Collection System Capacity Analysis

The capacity of the City's modeled trunk sewer system was evaluated under both dry and wet weather flow conditions in the Existing, Near-Term, and Ultimate planning scenarios. The capacity analysis results are used to identify potential deficiencies within the existing collection system based on recommended deficiency criteria reviewed and accepted by the City.

Design and Deficiency Criteria: Design and deficiency criteria for the gravity mains, lift stations, and force mains in the City's collection system were reviewed and finalized with City staff prior to adoption The chapter establishes design criteria for sewer pipelines, including minimum diameters, velocities, and Manning's roughness coefficient. These criteria ensure that new and existing pipelines can handle peak dry weather flows (PDWF) and allow for potential wet weather flows. The criteria also include a maximum depth-to-diameter ratio (d/D) to prevent pipelines from flowing full, which could increase the risk of sanitary sewer spills.

Dry Weather Capacity Analysis: The capacity of the City's modeled trunk system was analyzed in the Existing, Near-Term, and Ultimate dry weather flow scenarios. The results of the analysis indicate that no modeled trunk mains are anticipated to exceed the City's deficiency criteria in any planning scenario under dry weather flow conditions.

Wet Weather Capacity Analysis: The capacity of the City's modeled trunk system was also analyzed in the Existing, Near-Term, and Ultimate wet weather flow scenarios. Modeled capacity analysis results indicate that potential deficiencies may result from the outsized influence of defect flow entering the system at specific sewersheds within the service area.

ES-6 Collection System Condition Assessment

Condition assessment was performed on the City's existing lift stations, selected gravity mains, manholes, and the wastewater treatment plant.

Lift Station Condition Assessment: Condition assessment was performed on the City's 15 active lift stations. Of the 15 lift stations, nine were determined to require a comprehensive site visit and field investigation due to age or criticality. The remaining six received a visual wet well inspection only.

Gravity Main Condition Assessment: Closed Circuit Television (CCTV) inspection reports for 40 gravity main segments, totaling approximately 1.7 miles, were reviewed to determine an appropriate rehabilitation or repair method intended to address observed structural and other physical defects. The methodology involved reviewing CCTV reports, recording defects, and identifying suitable repair methods.

Manhole Condition Assessment: The City performed field inspections on manholes in Imperial Avenue between Danenburg Avenue to McCabe Road. All manholes were found by the City to need significant rehabilitation. Based on discussions with City staff, the manhole rehabilitation method recommended included a combination of mortar repair with corrosion resistant geopolymer mortar and cured-in-place (CIP) PVC composite manhole liners (CIPM liner) for all 11 manholes

Wastewater Treatment Plant Condition Assessment: A comprehensive site investigation of the City's wastewater treatment plant was completed. The assessment identified potential improvements for the influent distribution structure, the primary clarifiers, and the sludge digesters at the City's treatment plant.

ES-7 CIP Project Recommendations

Capital Improvement Program (CIP) project recommendations and planning level engineer's cost opinions include recommended pipeline improvement projects to address both capacity and condition deficiencies in the City's sewer collection network. Two capacity-related projects are recommended, including an I&I study. Two condition-related projects are recommended to correct structural deficiencies found in sewer pipelines.

Additionally, separate condition assessment technical memorandums were developed for the City's lift stations and wastewater treatment plant. Twenty lift station and 8 treatment plant improvement projects were recommended based on the findings presented in the technical memorandums. Additional long-term studies, including a cybersecurity vulnerability assessment, are recommended

The sewer CIP projects and estimated costs are presented in **Table ES-1**. All cost estimates are based on an Engineering News Record (ENR) Construction Cost Index (CCI) of 15,993.96 for September 2025, with a 4% annual escalation factor applied to reflect fiscal year cost projections.

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Table ES.1. 20-Year Sewer CIP Projects Cost Summary

Improvement Type	Total Project Cost ($1,000)	Project Cost ($1,000)																			
		Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Pipeline Rehab	$ 14,740	$ 74	$ 311	$ -	$ -	$ 424	$ 1,021	$ 1,062	$ 1,105	$ 1,149	$ 1,195	$ 1,540	$ 1,602	$ 1,666	$ 1,732	$ 1,801	$ 1,873	$ 1,948	$ 2,026	$ 2,107	$ 2,192
System Capacity	$ 4,315	$ -	$ -	$ -	$ 273	$ 284	$ 523	$ 4,522	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Manholes	$ 3,778	$ 129	$ 177	$ 184	$ 192	$ 199	$ 254	$ 264	$ 274	$ 285	$ 297	$ 308	$ 321	$ 334	$ 347	$ 361	$ 375	$ 390	$ 406	$ 422	$ 439
Lift Stations	$ 27,412	$ -	$ 779	$ 4,964	$ 2,618	$ 2,791	$ 2,650	$ 3,129	$ 5,102	$ 10,889	$ 240	$ 1,476	$ 467	$ 804	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WWTP	$ 41,054	$ 2,079	$ 7,235	$ 5,195	$ 3,299	$ 2,908	$ 6,174	$ 6,552	$ 4,433	$ 832	$ 3,342	$ 3,476	$ 3,615	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Projects	$ 1,354	$ 205	$ 213	$ 416	$ 231	$ 240	$ 251	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Totals:	$ 92,653	$ 2,487	$ 8,715	$ 10,759	$ 6,613	$ 6,846	$ 10,873	$ 15,529	$ 10,914	$ 13,155	$ 5,074	$ 6,800	$ 6,005	$ 2,804	$ 2,079	$ 2,162	$ 2,248	$ 2,338	$ 2,432	$ 2,529	$ 2,631

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1 Introduction

The following section summarizes the objectives of the 2025 Sewer Master Plan Update (2025 Update) for the City of El Centro (City). The section includes an overview of the City's previous master planning efforts and existing sewer service area to provide context for the evaluation and recommendations provided in the 2025 Update. The section also outlines the structure of the report with a brief description of each section as a guide for understanding the development and findings of the 2025 Update.

1.1 Project Objectives and Overview

The 2025 Update analyzes the capacity and condition of the City's collection system and culminates in a new CIP schedule intended to meet existing and future development needs. Since adoption of the last sewer master plan in 2008, development and population growth within the City's service area have progressed at a slower pace than originally projected, resulting in certain sewer facilities operating consistently below their design capacities. Additionally, several key assets, including lift stations and critical components of the wastewater treatment plant, are approaching the end of their service life and will soon require replacement or significant rehabilitation. Public Works staff have cited these considerations as the primary motives for completion of the 2025 Update.

The 2025 Update achieves the following key objectives:

1. **Data Review and Gap Analysis:** Assess available data pertaining to the existing sewer system and identify deficiencies within the City's sewer GIS database.
2. **Field Survey:** Conduct a rim and invert elevation survey of approximately 100 strategically selected manholes located along trunk sewer mains (12-inch diameter or greater) for greater confidence in the modeled capacity analysis results.
3. **Model Development:** Construct a new hydraulic model of the trunk system using GIS and field survey data.
4. **Flow Monitoring:** Perform sewer flow monitoring at nine (9) locations to identify flow patterns for creation of land use based sewer flow generation patterns, applying existing sewer inflows into the model and system calibration.
5. **Generation Factors:** Develop unit sewer generation factors for common land use types within the City.
6. **Flow Projections:** Update dry weather flow projections to reflect current and anticipated future conditions within the service area.
7. **Model Calibration:** Calibrate the trunk sewer model to within 10% or better accuracy.
8. **Capacity Evaluation:** Analyze the capacity of the modeled trunk system under peak dry and wet weather flow conditions for Existing (2025), Near-Term (2035) and Ultimate (2045) scenarios.
9. **Condition Assessment:** Conduct a condition assessment of selected gravity mains and field inspection of all 15 lift stations and the wastewater treatment plant.
10. **Lift Station Optimization:** Assess the feasibility of decommissioning any of the existing lift stations and redirecting tributary flows to the gravity system.
11. **Capital Improvement Plan Development:** Identify and prioritize capital improvement projects to address capacity and condition-related deficiencies identified throughout the collection system.

12. **Cost Estimation:** Prepare planning-level engineer's cost opinions for each recommended project and integrate into a multi-year CIP for implementation by the City.

1.2 Previous Master Plan

The 2008 Sewer Master Plan included a hydraulic model of the City's trunk system, developed using H2OMap Sewer Suite 8.0 by MWHSoft. The model was calibrated to dry weather flow monitoring data collected in March 2007. However, the model was not available for use or reference during preparation of the 2025 Update.

The 2008 Sewer Master Plan assessed the trunk system's capacity under Existing (2008), 2015, and Build-Out peak dry and wet weather flow conditions. Build-Out was defined as complete development of the City's existing Sphere of Influence (SOI). Peak wet weather flow was estimated as the highest recorded influent flow to the wastewater treatment plant over a six-year period (January 2001 to December 2006). The results of the capacity analysis indicated that a total of approximately one mile of the City's trunk system is deficient in all scenarios. Additional capacity and lift station deficiencies would need to be addressed at Build-Out.

To address the identified deficiencies, the 2008 Sewer Master Plan recommended a series of improvement projects, including:

- **Five pipeline capacity improvement projects** to be completed prior to Build-Out, consisting of approximately 5,030 linear feet (LF) of gravity main replacement (ranging from 8-inch to 18-inch diameter) and 1,900 LF of new 6-inch force main.
- **One additional pipeline project** and **three lift station upgrades** to be implemented at Build-Out.
- **Ten improvement projects** targeting existing wastewater treatment plant processes and facilities.

The estimated costs of the improvement projects in 2008 were as follows:

- **Gravity main replacements:** $2.86 million
- **Force main extension:** $0.37 million
- **Lift station upgrades:** $15.7 million
- **Treatment plant upgrades:** $6.81 million

As summarized in **Table 1.1,** by the time of the 2025 Update, the City had completed seven of the recommended projects from the 2008 Sewer Master Plan. The completed projects included two lift station (Alder Canal – Villa Ave and Lift Station No. 3) and five treatment plant upgrades.

Table 1.1. 2008 Sewer Master Plan CIP Status – 2025 Update

Project Description	Location	Length (LF)	2025 Status
Upsize existing 12-inch gravity main to 15-inch	Imperial Ave from Holt Ave to Main St	1,848	Not Completed
Upsize existing 14-inch gravity main to 18-inch	4th St from Brighton Ave to State St	926	Not Completed
Upsize existing 8-inch and 10-inch gravity main to 12-inch	3rd St from State St to Commercial Ave	1,125	Not Completed

Table 1.1. 2008 Sewer Master Plan CIP Status – 2025 Update

Project Description	Location	Length (LF)	2025 Status
Upsize existing 6-inch gravity main to 8-inch	8th St from Westwind Dr to Ross Ave	1,132	Not Completed
New 6-inch force main extension and pump upgrades	From Dogwood Rd to Fairfield Ave between Holt and Heil Ave / Heil and Dogwood LS	1,900	Not Completed
Upsize existing 8-inch gravity main to 12-inch (at Build Out)	Plank Drive from Ross Ave to Hamilton Ave	1,306	Not Completed
Upgrade and replace pumps and wet wells (at Build Out)	Alder Canal – Villa Ave LS	—	Completed
Upgrade and replace pumps and wet wells (at Build Out)	Lift Station No. 3	—	Completed
Construction of new Northern lift station (at Build Out)	Dogwood Rd and Cruickshank Rd	—	Not Completed
Preliminary Treatment (Headworks and Grit Removal)	Wastewater Treatment Plant	—	Completed
Primary Clarifier Concrete Crack Repair (2 Clarifiers)	Wastewater Treatment Plant	—	Completed
Aeration Basin Aerator Platform Demolition (Basins 1 - 6)	Wastewater Treatment Plant	—	Not Completed
Aeration Basin Ceramic Disk Replacement - (Basins 1 - 4 with 663 disks)	Wastewater Treatment Plant	—	Ongoing
Aeration Basin Ceramic Disk Replacement - (Basins 5 - 6 with 810 disks)	Wastewater Treatment Plant	—	Ongoing
Aeration Basin Stainless Steel Gate Replacement	Wastewater Treatment Plant	—	Completed
Aeration Basin Concrete Spall Repair	Wastewater Treatment Plant	—	Ongoing
Aeration Basin South Walkway Replacement	Wastewater Treatment Plant	—	Completed
Boiler/Heat Exchanger	Wastewater Treatment Plant	—	Completed
Plant Water Pump Station	Wastewater Treatment Plant	—	Not Completed

1.3 Service Area Overview

The City of El Centro was incorporated in 1908 and is located approximately 120 miles east of San Diego, 250 miles west of Phoenix, and 10 miles north of the United States–Mexico border. With a population of 44,000, El Centro is the most populous city in the Imperial Valley and serves as the county seat of Imperial County. El Centro is primarily accessible via State Routes 86 and 111 and Interstate 8. **Figure 1.1** presents a regional map highlighting the City's location in southern California and Imperial County.

El Centro encompasses an area of 11 square miles and lies entirely below sea level, with an average elevation of -42 feet. The City is surrounded by thousands of acres of agricultural land that support robust crop production

throughout the Imperial Valley. Over the past four decades, government services and commercial trade have emerged as the City's leading employment sectors. Agriculture continues to play a vital role in the local economy, with crop production generating over $2 billion of gross value in 2023 for Imperial County (Source: 2023 Imperial County Agricultural Crop & Livestock Report).

El Centro's sewer collection system and wastewater treatment plant are operated and maintained by the City's Public Works Department. The collection system includes approximately 123 miles of gravity pipeline, 15 sewer lift stations, and five miles of force main. The sewer service area and collection system are depicted in **Figure 1.2**.

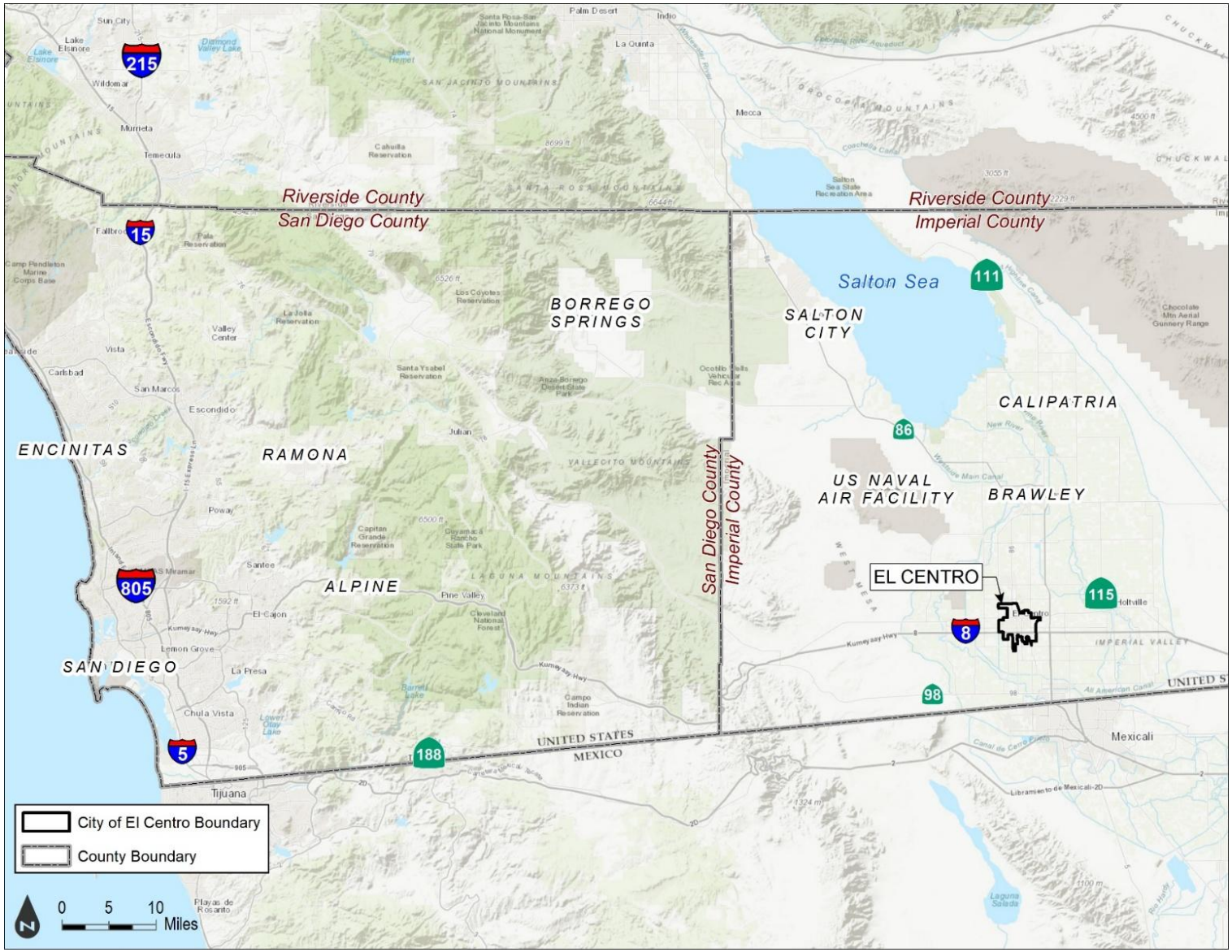

Figure 1.1 Regional Map

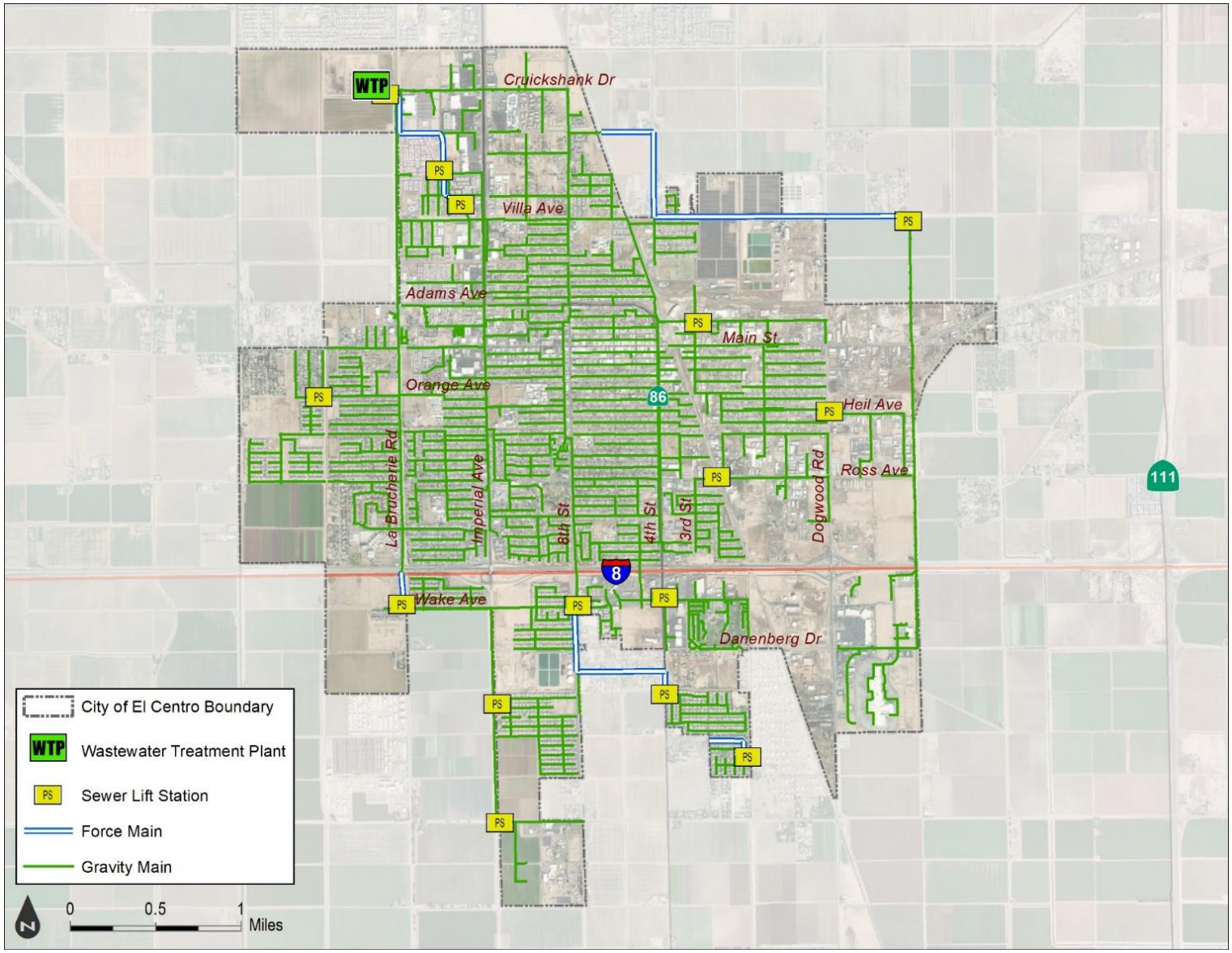

Figure 1.2 Sewer Service Area and Collection System

El Centro has a hot desert climate characterized by long, hot summers and mild winters. The average annual low and high temperatures are approximately 59°F and 88°F, respectively. The City receives an average of 2.85 inches of rainfall per year, with most precipitation occurring between December and February. While generally arid, El Centro is occasionally subject to intense thunderstorms resulting from the remnants of tropical storms or hurricanes traveling across the surrounding desert. Notable recent storm events include Tropical Storm Kay in September 2022 and Hurricane Hilary in August 2023, both of which brought above-average rainfall to the area.

Figure 1.3 presents the monthly climate normals (i.e., average of data collected over 30 years) recorded at the El Centro Naval Air Facility, located approximately seven miles northwest of the City center (Source: U.S. Climate Data, https://www.usclimatedata.com/climate/el-centro/california/united-states/usca0332).

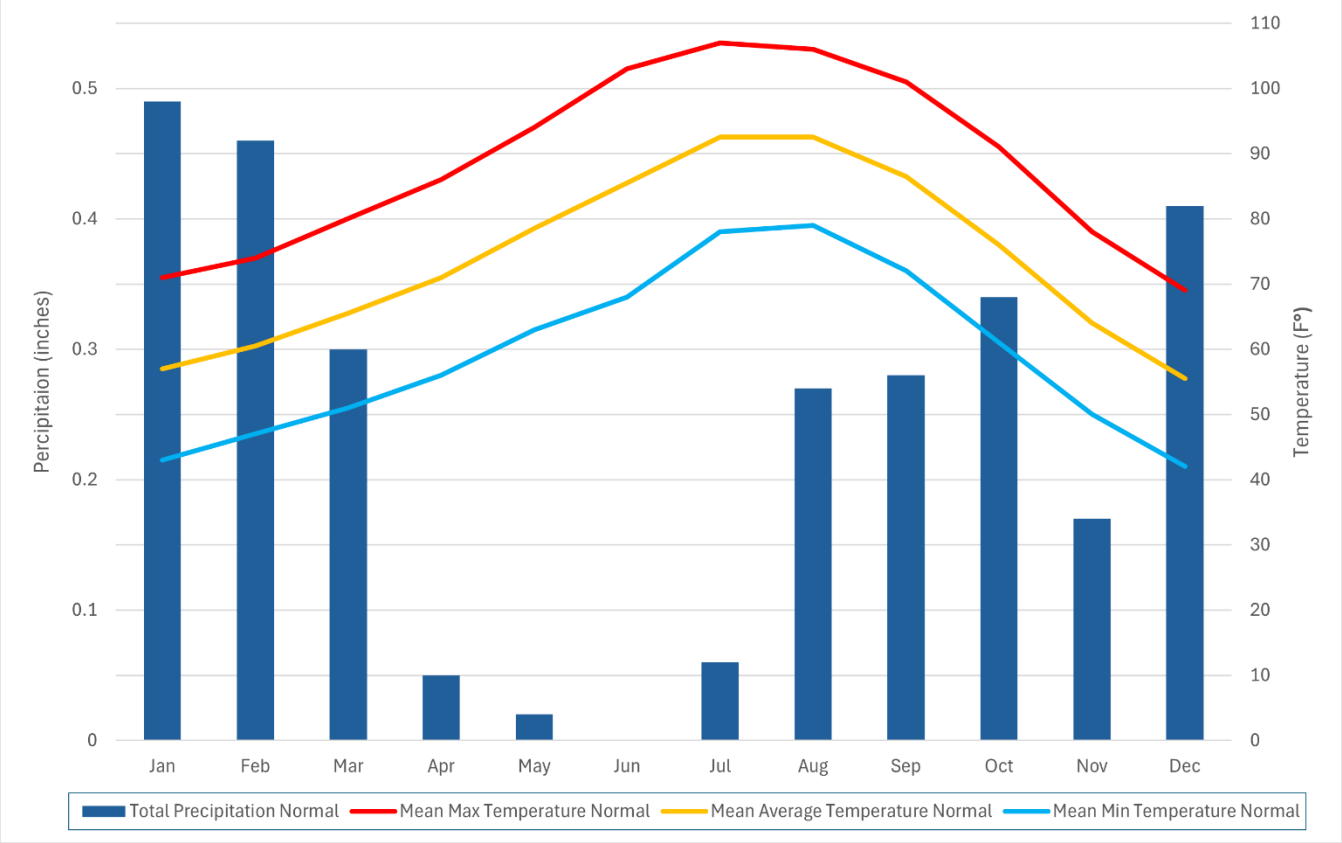

Figure 1.3 El Centro Monthly Climate Normals (1981-2010)

1.4 Report Organization

The 2025 Update is organized into the following sections:

- **Section 1 – Introduction** provides an overview of the background, scope, and objectives of the 2025 Update. Includes a summary of key characteristics of the City's sewer collection system and service area.
- **Section 2 – Existing System Summary** describes the components of the City's existing sewer system, including gravity mains, diversion manholes, lift stations, force mains, and the wastewater treatment plant. Includes a summary of the current distribution of land use types within the City.

- **Section 3 – Existing and Future Dry Weather Flows** estimates current dry weather flows and projected future flows based on known development activity. Describes the development of unit sewer generation factors for major land use types
- **Section 4 – Sewer Model Development and Calibration** summarizes the flow monitoring program, manhole field survey, development of a new trunk sewer model, allocation of existing dry and wet weather flows, and model calibration results.
- **Section 5 – Collection System Capacity Analysis** presents the results of the capacity analysis for the modeled trunk system under existing, near-term, and ultimate dry and wet weather flow conditions. Evaluates the feasibility of consolidating, decommissioning, or otherwise optimizing the performance of certain lift stations as identified by Public Works staff.
- **Section 6 – Collection System Condition Assessment and Improvements** summarizes the methodology and results of the condition assessment performed on the City's gravity mains, lift stations, and wastewater treatment plant.
- **Section 7 – Capital Improvement Program** provides a prioritized list of recommended improvement projects intended to address identified capacity and condition deficiencies. Includes planning-level cost opinions and a multi-year implementation schedule.

The following documents are included as Appendices to this report:

- ***Appendix A*** Sewer Lift Station Condition Assessment Technical Memorandum
- ***Appendix B*** Wastewater Treatment Plan Condition Assessment Technical Memorandum
- ***Appendix C*** Planned Near-Term Developments Table
- ***Appendix D*** City of El Centro Temporary Sewer Flow Metering Report
- ***Appendix E*** Dry Weather Model Calibration Results
- ***Appendix F*** Pipeline Condition Assessment Data & Recommendations Log
- ***Appendix G*** City of El Centro Staffing Plan Technical Memorandum
- ***Appendix H*** Detailed Engineer's Opinion of Probable Costs for Recommended CIP Projects

2 Existing System Summary

The following Existing System Summary section summarizes existing features of the City's sewer collection system. The section describes major components of the collection system, including gravity mains, diversion manholes, lift stations and associated force mains, and the wastewater treatment plant.

A comprehensive understanding of the City's existing sewer system is essential for capacity evaluation, condition assessment, and CIP development. In characterizing key elements of the collection system, the Existing System Summary provides a basis for subsequent analyses and empowers the City to make well-informed decisions regarding system improvements or modifications.

2.1 Gravity Mains

The City's existing sewer collection system includes approximately 123 miles of gravity pipeline, with diameters ranging from 4-inch to 36-inch as summarized in **Table 2.1**. Approximately 73% of the collection system is 8-inch or smaller in diameter.

Approximately 74% of all gravity mains in the City's system are constructed of vitrified clay pipe (VCP), while the remaining pipelines are composed of polyvinyl chloride (PVC), brick, or other materials.

Pipeline installation years range from 1931 to 2020, with approximately half of the system estimated to be over 50 years old as summarized in **Table 2.2**. Installation year information is missing from the City's GIS database for approximately one-third of the collection system, including segments identified as brick material through inspection videos recorded in January 2025. The City's brick pipelines likely date back to the early 20th century, a period in which brick was commonly used to construct sewer pipelines prior to the adoption of modern building methods.

Figure 2.1 depicts the existing gravity mains in the City's collection system, classified by diameter.

Table 2.1. Gravity Main Summary by Diameter and Material[1]

Diameter (inch)	Length of Pipe (LF)				% of Total
	VCP	PVC	Other[2]	Subtotals	
4	1,856	611	330	2,797	0.4%
6	14,771	7,531	–	22,302	3.4%
8	356,967	92,714	–	449,681	69.2%
10	10,721	7,235	–	17,956	2.8%
12	39,607	31,329	–	70,936	10.9%
14	3,882	-	–	3,882	0.6%
15	15,923	613	–	16,536	2.5%
18	7,570	8,964	131	16,666	2.5%
20	–	17	–	17	0.0%
21	–	473	–	473	0.1%
22	423	–	–	423	0.1%
24	4,332	5,556	–	9,889	1.5%

Table 2.1. Gravity Main Summary by Diameter and Material[1]

Diameter (inch)	Length of Pipe (LF)				% of Total
	VCP	PVC	Other[2]	Subtotals	
27	20,435	5,580	—	26,015	4.0%
30	4,080	—	—	4,080	0.6%
36	126	8,117	—	8,244	1.3%
Subtotals	*482,346*	*167,091*	*461*	**Total**	**649,897**
% of Total	**74.2%**	**25.7%**	**0.1%**		

Notes:
1 **Source:** City of El Centro sewer GIS database provided by City of El Centro Public Works staff in September 2024.
2 "Other" pipeline materials include cast iron, Acrylonitrile butadiene styrene (ABS), brick, and those not defined in the City's GIS database. No pipe segments were identified as brick in the GIS database, but Public Works staff believe brick pipelines exist within Villa Ave. Additionally, inspection videos from January 2025 show brick pipelines within Adams Ave and 4th St.

Table 2.2. Gravity Main Summary by Installation Year[1]

Installation Year	Length of Pipe (LF)	% of Total
Unknown[2]	231,669	35.6%
1931-1939	15,726	2.4%
1940-1949	3,330	0.5%
1950-1959	49,024	7.5%
1960-1969	41,405	6.4%
1970-1979	62,317	9.6%
1980-1989	75,377	11.6%
1990-1999	40,763	6.3%
2000-2009	121,048	18.6%
2010-2020	9,240	1.4%
Total	**649,897**	**100.0%**

Notes:
1 **Source:** City of El Centro sewer GIS database provided by City Public Works staff in September 2024.
2 Any gravity main in the GIS database missing installation year data was assumed to be more than fifty years old (i.e., constructed prior to 1975). Brick pipelines are assumed to have been constructed between 1931 and 1939.

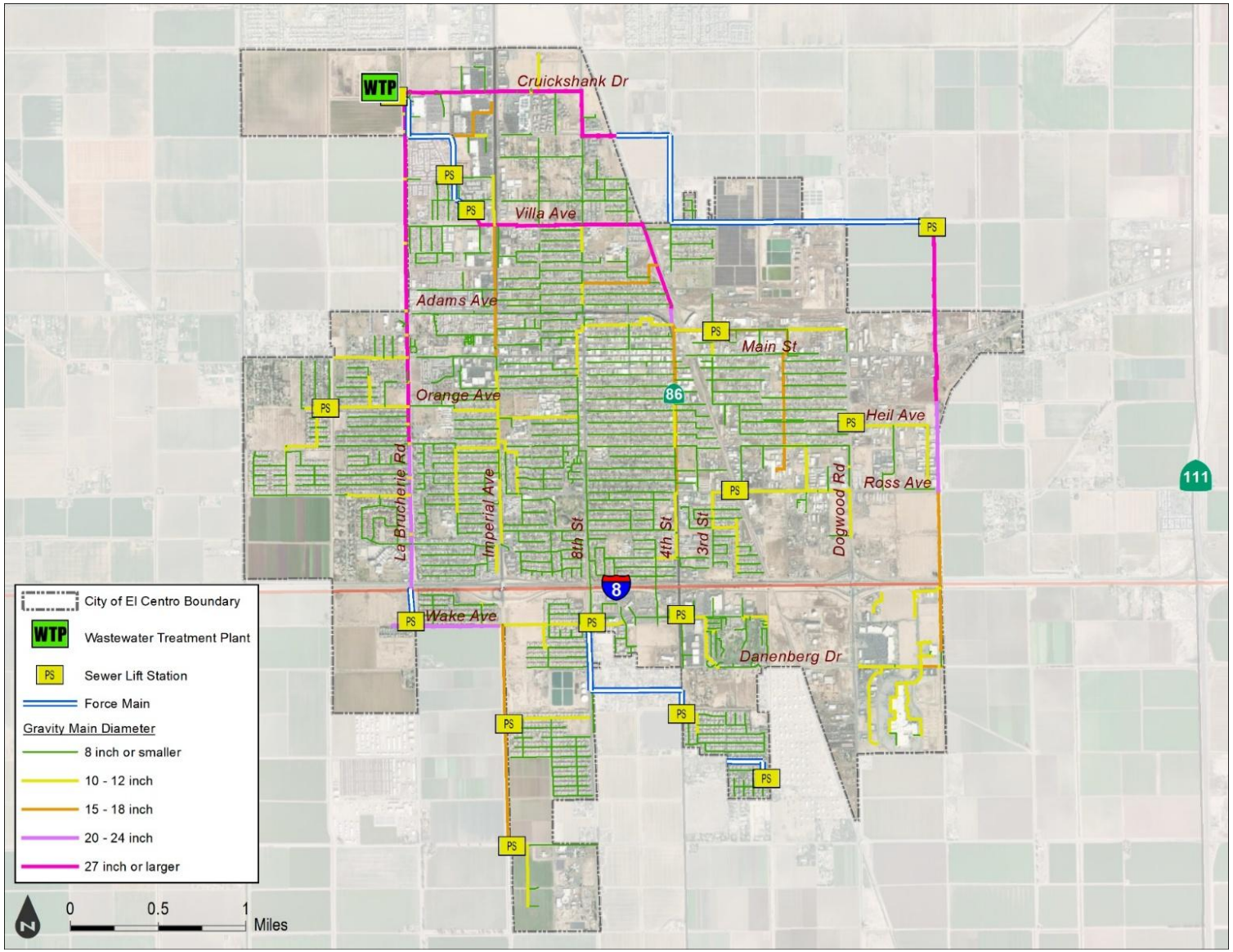

Figure 2.1 Existing Gravity Mains by Diameter

2.2 Inverted Siphons

An inverted siphon is a pipeline designed to cross underneath existing features such as storm drain channels, bodies of water (e.g., streams or creeks), utility lines, or other overlying structures. Inverted siphons are designed to operate below the hydraulic grade line and therefore always flowing full or under pressure.

Inverted siphons are typically classified as either single or double barrel systems. A double barrel siphon consists of two parallel pipelines, usually of identical diameter. In a double barrel siphon, one pipeline serves as the primary conveyance line while the second functions as a backup, available for use in the event of maintenance or failure of the primary line.

According to Public Works staff, the City's existing sewer collection system does not contain any inverted siphons.

2.3 Diversion Manholes

Diversion manholes are specialized structures within a collection system that direct sewer flow through two or more outlet pipes oriented in different directions. Diversion manholes often incorporate stoplogs to intentionally block one outlet and divert flow into a preferred downstream route. In some configurations, a weir is installed at the upstream invert of the secondary (overflow) pipe to prioritize flow through the primary outlet. During periods of elevated flow such as a significant wet weather event, water may rise above the weir and enter the overflow pipe, thereby relieving potential capacity constraints in the main line.

The accurate representation of flow through diversion manholes is essential during capacity evaluation of the City's sewer system. Four diversion manholes were identified within the existing collection system, as summarized in Table 2.3 and shown in Figures 2.2 and 2.3. All four were surveyed in March 2025 and incorporated into the trunk sewer model as detailed in Section 4.2.1.

Table 2.3. Existing Diversion Manholes in Trunk Sewer Model[1]

City Manhole ID	Location	DS Invert Elevation Difference (ft)	Main Invert Elevation (ft)	Main Invert Diameter (inch) and Cardinal Direction	Overflow Invert Elevation (ft)	Overflow Invert Diameter (inch) and Cardinal Direction
22-14-136	W Commercial Ave and N 4th St	4.6	42.20	18, West	46.80	18, Northwest
22-15-114	W Commercial Ave & N 3rd St	0.14	44.67	10, West	44.81	8, Southwest
19-14-126	Ross Ave & S 4th St	2.80	51.80	8, North	54.60	8, East
20-13-102	Holt Ave & Alley west of 8th St	0.23	53.24	12, West	53.47	8, North

Notes:

1 The invert elevations in this table were adjusted by +100 ft to account for the negative invert elevations present throughout the City's collection system. For example, an invert elevation of 42.16 ft in this table corresponds to an invert elevation of -57.84 ft when measured in the field.

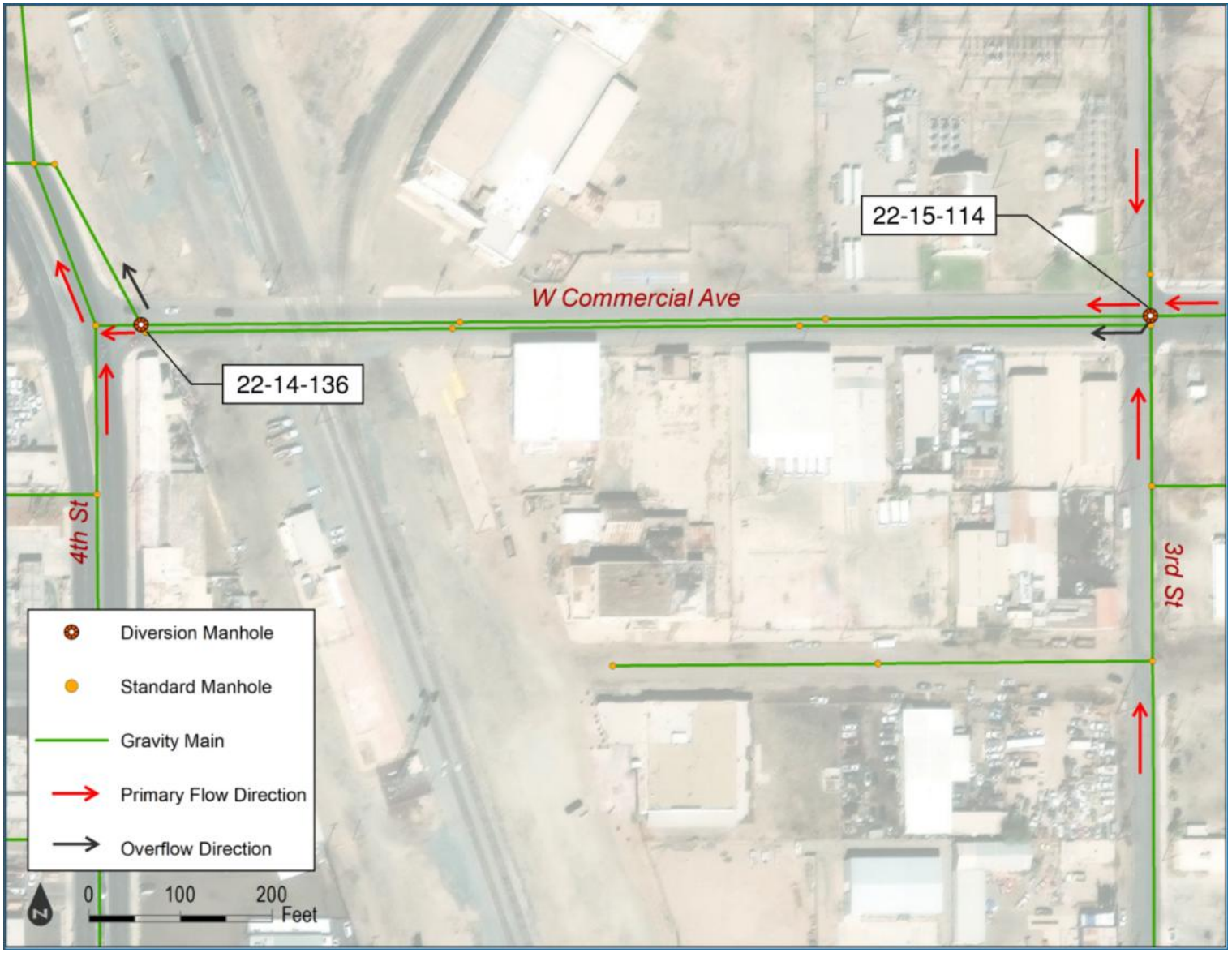

Figure 2.2 Existing Modeled Diversion Manholes

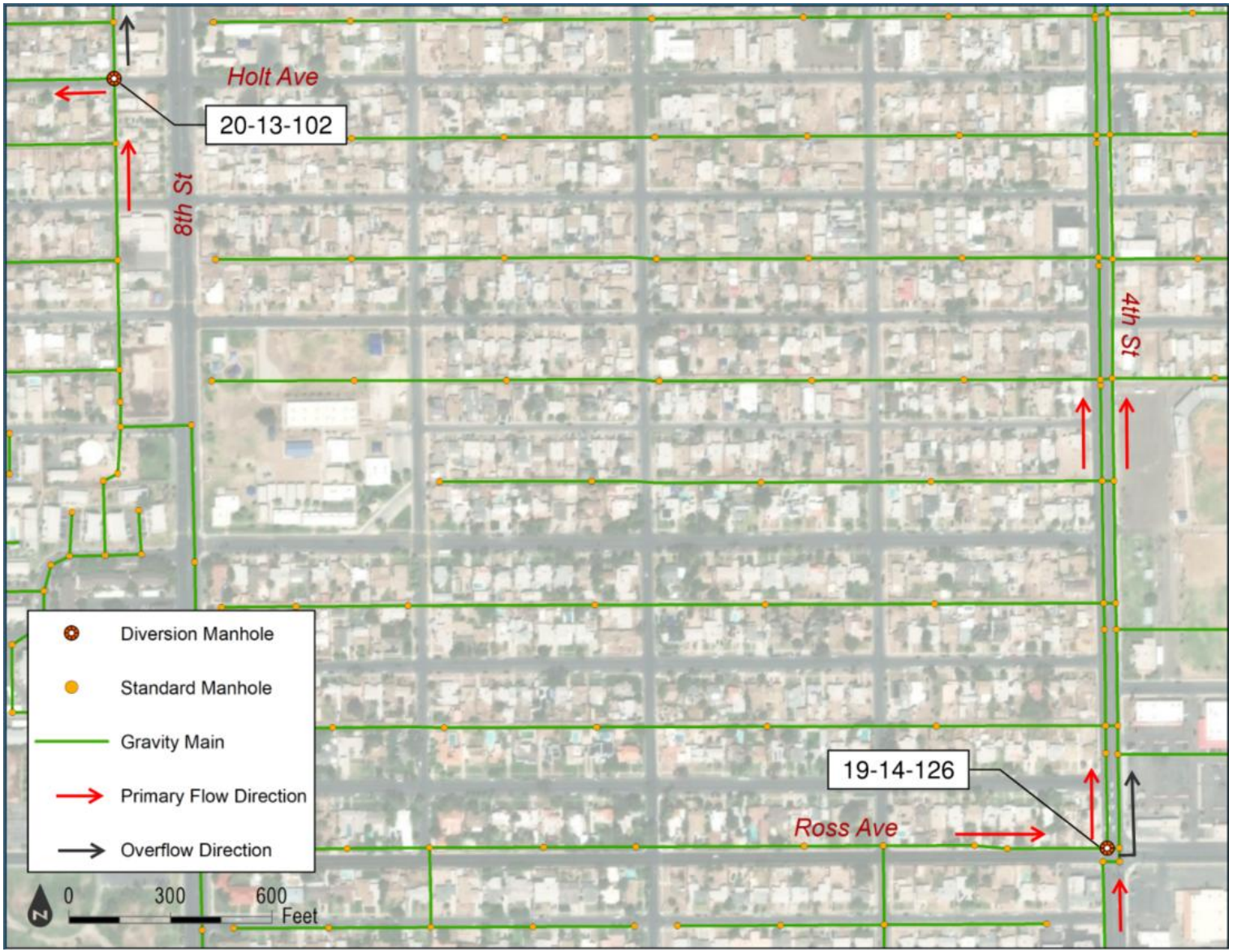

Figure 2.3 Existing Modeled Diversion Manholes - Continued

2.4 Sewer Lift Stations and Force Mains

The City operates and maintains 15 sewer lift stations within its collection system, as summarized in **Table 2.4** and depicted in **Figure 2.4**.

The 2025 Update includes field inspection and condition assessment of each active lift station in the City's service area. Nine of the 15 lift stations received comprehensive site investigations due to their age or critical role within the sewer system. The remaining six stations received visual inspections of the wet wells only.

During the inspection process, Public Works staff indicated that the 4th and Wake, Legacy, and Countryside lift stations are scheduled to be abandoned within the next five years. Flow currently tributary to these stations will be redirected via gravity pipeline to the new Southern Lift Station, located at the intersection of W Danenberg Dr and Farnsworth Ln. Although the City approved construction plans for the Southern Lift Station in April 2024, construction had not commenced at the time of the 2025 Update.

Detailed descriptions of the condition assessment performed at each lift station, including site layouts, hydraulic and pump characteristics, inspection results, and recommended improvements, are documented in a separate technical memorandum included in **Appendix A**.

Due to limitations in force main inspection techniques, the 2025 Update does not include an assessment of the physical condition of the force mains associated with each lift station. Instead, a desktop hydraulic evaluation of each force main based on existing diameter, flow rate, and allowable velocity is presented in Section 5.

Table 2.4. Existing Sewer Lift Station and Force Main Summary

Name	Location	Number of Pumps	Installation Year[1]	Design Capacity[2] (gpm/ ft TDH)	Force Main Diameter (inch)	Force Main Length (ft)/ Material
Lift Station No. 3	2255 N La Brucherie Rd (El Centro WWTP)	3	2006	3,000 / 37	24	400 / DI
Gios	Southeast corner of Gio's Mobile Home Estates, west of N Waterman Ave	2	2016	250 / 20	4	Unknown
Main	1587 W Pico Ave	3	2007	2,535 / 39	30	6000 / PVC
Countryside	East of Hwy 86, approximately 120 ft north of Willow Bend Dr	2	2002	550 / 45	6	429/ HDPE; PVC
Legacy (Southern Countryside)	Valor Ln between Farnsworth Ln and Rubert Franks Dr	2	2011	250 / 20	6	1,925 / PVC
Alder Canal – Villa Ave	Southeast corner of E Villa Rd and Villa Ln	2	2005	Unknown	20	12,235 / PVC
3rd and Ross	W Ross Ave between 2nd St and S 3rd St	2	2016 – 2017	325 / 27	4	225 / ABS
4th and Wake	Northeast corner of Wake Ave and S 4th St	2	1985	200 / UNK	4	335 / PVC
8th and Wake	Northeast corner of Wake Ave and S 8th St	2	2006	200 / 35	6	140 / PVC
Lift Station No. 2	Northwest corner of Wake Ave and S La Brucherie Rd	2	2016	850 / 30	12	980 / PVC
Orange Ave	W Orange Ave between Lotus Ave and Haskell Rd	2	2005	400 / 46	4	60 / PVC
Lift Station No. 1	W McCabe Rd, approximately 200 ft east of Date Drain	2	1975	400 / 14.6	6	180 / PVC
Buena Vista	Imperial Ave, approximately 140 ft south of Manuel Ortiz Ave	2	2006	369 / 27	8	130 / PVC
Eastside	Southeast corner of W Commercial Ave and N 3rd St	3	2007	1,132 / 26	10	70 / PVC
Heil and Dogwood	Northeast corner of E Heil Ave and S Dogwood Rd	2	1998	250 / 25	6	175 / PVC

Notes:

1 Installation Year refers to the latest known year that pumps were installed or replaced at each lift station, per Sewer Lift Station Condition Assessment Draft Technical Memorandum dated June 2025.

2 Design Capacity is defined as the pumping capacity of each lift station with its largest pump out of service. For example, the pump design capacity of Lift Station No. 3 is 3,000 gpm at 37 ft TDH (Total Dynamic Head).

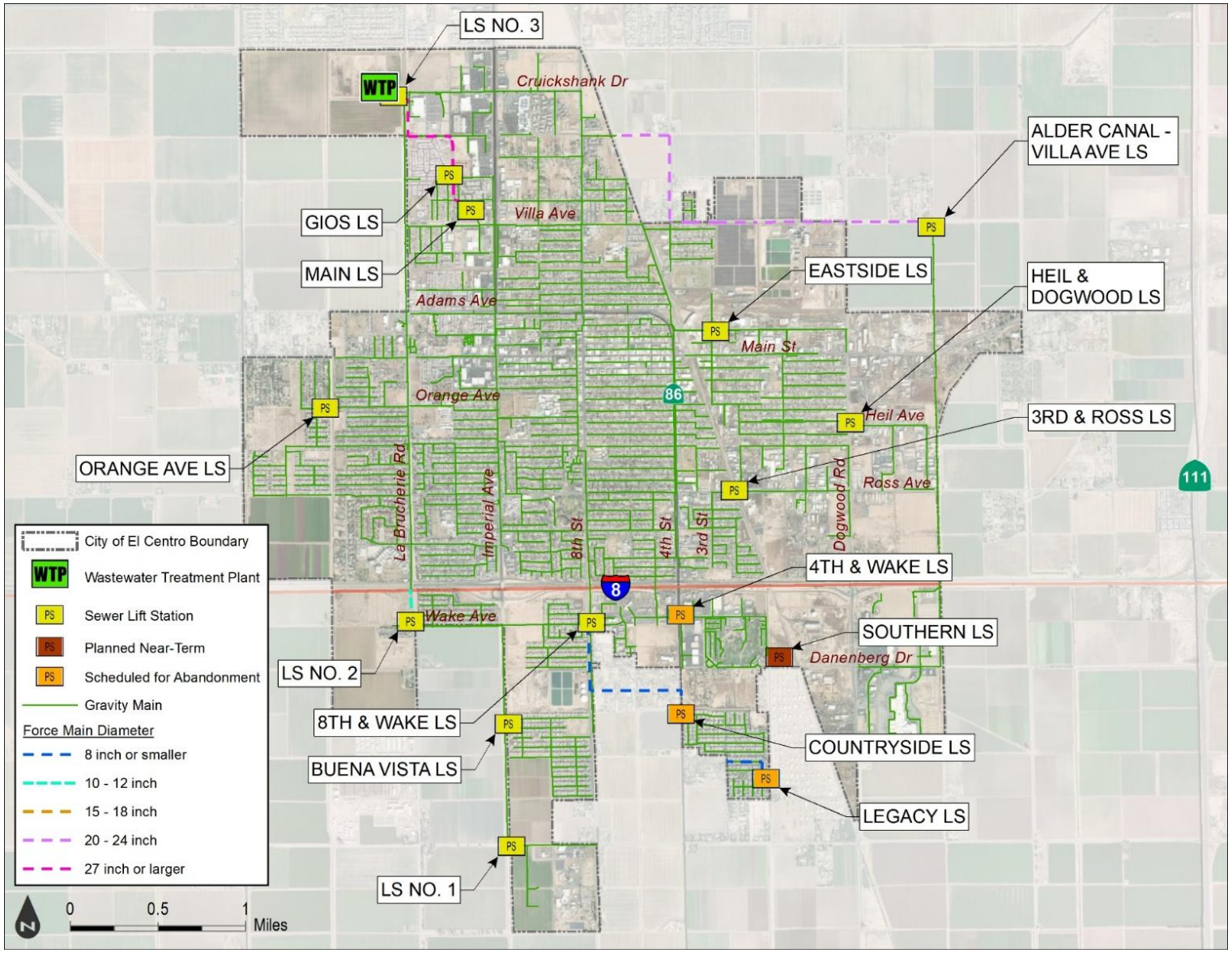

Figure 2.4 Existing and Planned Near-Term Sewer Lift Stations and Force Mains

2.5 Wastewater Treatment Plant

All sewer flow generated within the City's service area is conveyed to the El Centro Wastewater Treatment Plant (WWTP), located at 2255 N La Brucherie Road in the northwest corner of the City. The treatment plant is a conventional primary and secondary treatment plant with ultraviolet (UV) disinfection facilities. Wastewater treated at the plant is discharged into the Central Drain, which ultimately flows into an outfall at the Salton Sea located approximately 50 miles northwest of the City. Currently, the City's treatment plant is not equipped to produce recycled water.

The 2025 Update includes a comprehensive site visit, condition assessment, and capacity evaluation of the wastewater treatment plant. Field observations, evaluation methodology, and recommended improvements for the treatment plant are documented in a separate technical memorandum included in **Appendix B.**

The plant is permitted to treat up to 8.0 MGD over any 30-day reporting period. In March 2025, the average influent flow was recorded at 3.52 MGD, with a peak hourly flow of 4.93 MGD occurring on the evening of March 10, 2025. However, the historical peak wet weather flow observed by Public Works staff at the treatment plant was 9.0 MGD during one hour of a significant wet weather event. As detailed in **Appendix B**, the primary clarifiers do not have adequate capacity to meet the observed peak wet weather flow of 9.0 MGD.

Figure 2.5 presents an overview of the existing plant and associated treatment facilities.



Figure 2.5 Existing Wastewater Treatment Plant Site Overview

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3 Existing and Future Dry Weather Flows

The following section summarizes the current and projected sewer flows within the City's service area based on population, land use, and planned future developments. The section presents unit sewer flow generation factors for individual land use types, which serve as the basis for estimating future dry weather flows from planned developments.

The accurate representation of existing and future dry weather flows is critical for capacity evaluation of the sewer collection system under various planning scenarios. By relating flow projections to forecasted population growth and development, the Existing and Future Dry Weather Flows section will support the City in aligning future system improvements to anticipated service needs throughout the collection system.

3.1 Existing Flow Summary

Hourly influent flow data collected at the wastewater treatment plant in March 2025 indicates the existing average dry weather flow (ADWF) is approximately 3.52 MGD. **Figure 3.1** depicts the daily average influent flow to the treatment plant from March 1 through March 31, 2025. Average influent flow is approximately 5% higher on weekdays than on weekends.

For comparison, the average influent flow to the treatment plant as reported in the 2008 Sewer Master Plan was 3.65 MGD, based on data collected in March 2007. In nearly 20 years, the total flow generated within the City's sewer service area has decreased by only 3.4%. The relatively stable overall flow rate suggests the City has experienced little to no population growth since 2007, or that the impact of any growth on the sewer system has been offset by regional and statewide water conservation efforts.

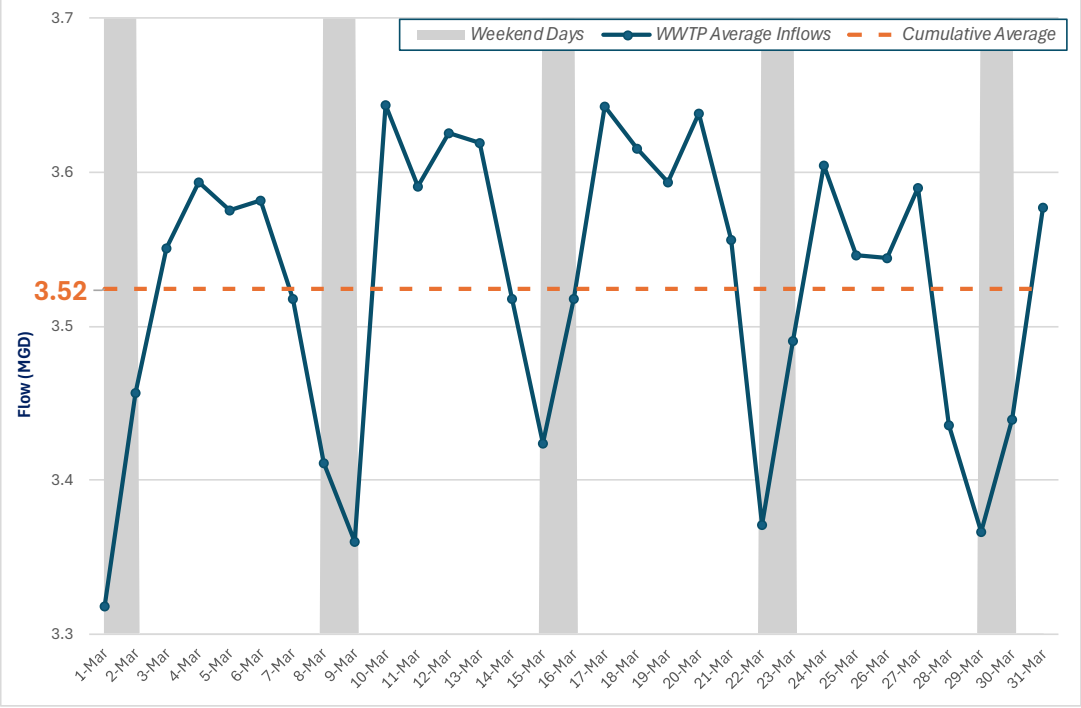


Figure 3.1 Average Influent Dry Weather Flow to Wastewater Treatment Plant (March 2025)

3.1.1 Existing Land Use Summary

Residential land use accounts for nearly half of the City's total area, with low-density residential being the predominant land use type. The density of each residential land use type, expressed in dwelling units per acre, is defined in Section 3.3.1.

Commercial and industrial land use each comprise approximately 20% of the City's total area. Including Public Facilities, non-residential land use types make up more than half of the service area. The prevalence of non-residential land use, especially in the eastern portion of the City, may contribute to the higher sewer flows observed at the treatment plant during the traditional work week.

Table 3.1 and Figure 3.2 summarize the existing distribution of land use types within the City, based on 2020 data obtained from the Southern California Association of Governments' (SCAG) online database.

Table 3.1. Land Use Summary

Land Use Type	Area (Acres)	% of Total City Area
Rural Residential (RR)	111	1.8%
Low Density Residential (LDR)	2,228	35.1%
Medium Density Residential (MDR)	248	3.9%
High Density Residential (HDR)	433	6.8%
Civic[1]	60	0.9%
Commercial (includes Downtown, General, and Tourist Commercial)	1,246	19.6%
Industrial (includes General and Planned Industrial)	1,242	19.6%
Public Facility[2]	782	12.3%
Totals	**6,349**	**100%**

Notes:

1 Civic land use is defined as local government offices, state and federal facilities, professional offices, financial institutions, and other businesses located within the City's civic center along Main St.

2 Public Facility land use is defined as all land owned by the City, Imperial Irrigation District, or El Centro Regional Medical Center. This land use category also includes public school districts, police and fire stations, parks and recreation facilities, and water and sewer facilities (e.g., treatment plants).

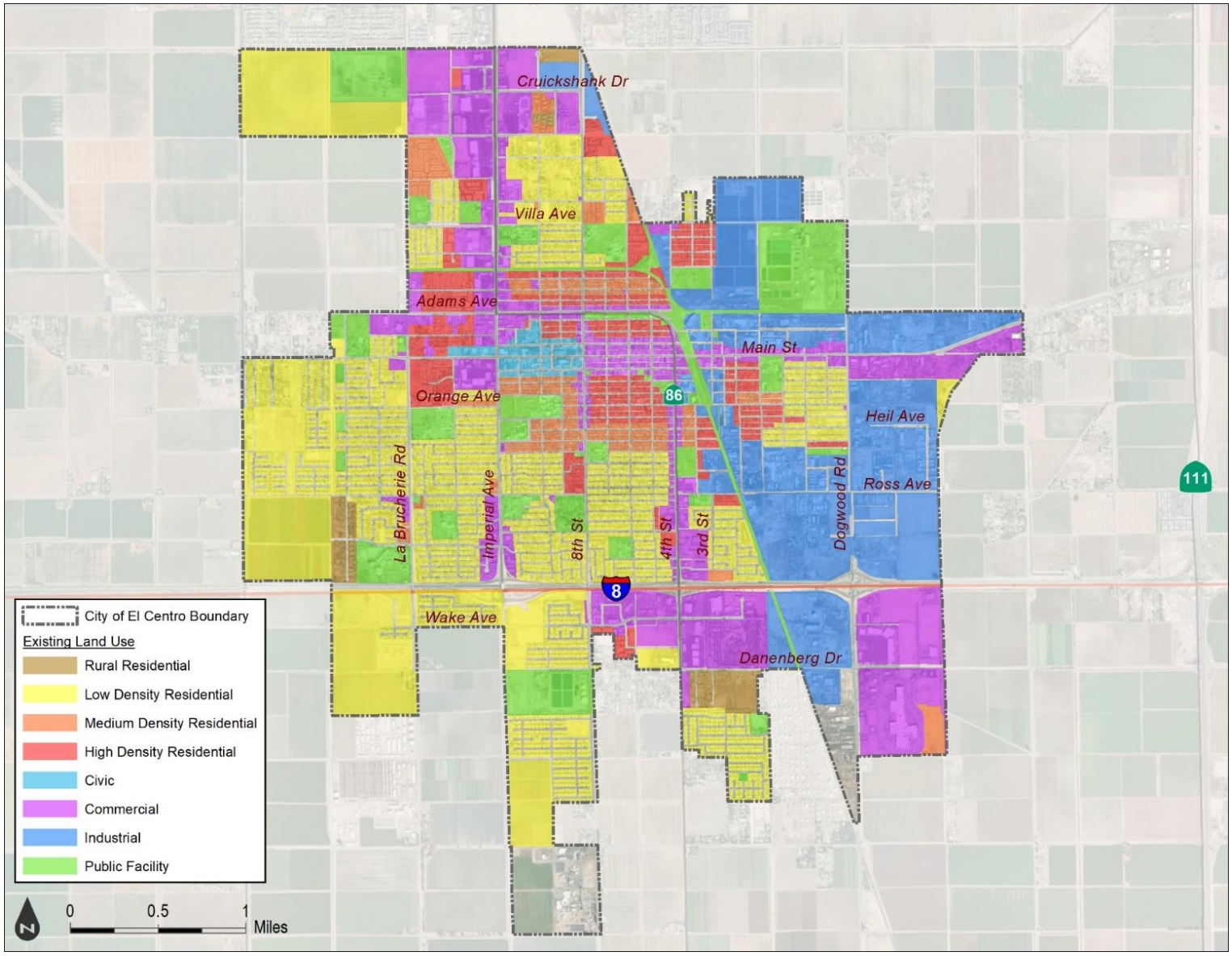


Figure 3.2 Existing Land Use Summary

3.2 Population and Planned Developments Summary

Projected population growth and planned development data are the primary resources used to estimate future dry weather flows within the City's sewer service area. The following summarizes the forecasted population of the City through the planning horizon covered by the 2025 Update (Ultimate or 2045) and all known future developments based on information provided by the City's Planning and Zoning Division.

3.2.1 Population Summary

The following summarizes the City's existing population as well as anticipated population growth through 2045.

3.2.1.1 Existing Population

According to the City's 2020 Urban Water Management Plan (UWMP) completed in May 2021, the population of the City was 45,657 in 2020. The 2020 UWMP also documented SCAG's population projections for the City from 2025 through 2045. SCAG estimated that the City's population in 2025 will be 48,208, or a 5.6% increase from 2020.

SCAG's projected population of 48,208 in 2025 is higher than the City's estimated population of 44,230 according to the U.S. Census Bureau at the time of writing the 2025 Update (Source: https://www.census.gov/quickfacts/fact/table/elcentrocitycalifornia/PST045223).

3.2.1.2 Projected Population

According to SCAG's population projections as documented in the 2020 UWMP, the City's population will increase 28.7% over a 25-year period, from 45,657 in 2020 to 58,753 in 2045. SCAG's projections result in an average population growth rate of approximately 1.1% per year.

To derive more accurate population estimates for the 2025 Update, the City's current population of 44,230 in 2025 was used as the basis for projections up to 2045. Anticipated growth rates from Table 3-1 of the 2020 UWMP were used to calculate revised estimates for the population of the City at each five-year interval (e.g., 2030, 2035, 2040, etc.).

Table 3.2 summarizes the City's anticipated population from 2025 to 2045 in five-year increments, assuming the current population of 44,230 in 2025 and growth rates from the 2020 UWMP.

Table 3.2. Existing and Projected Population Estimates[1]

Year	2025	2030	2035	2040	2045
Population	44,230	46,570	48,642	51,273	53,903

Notes:
1 Five-year growth rates calculated using population estimates in Table 3-1 of the City of El Centro 2020 Urban Water Management Plan (UWMP) dated May 2021.

Under California law, local governments are required to plan for adequate development of housing units to accommodate projected population growth across the state. The California Department of Housing and Community

Development (HCD) determines the regional housing need for each Council of Governments (COG). SCAG is a COG encompassing six counties and 191 cities in southern California, including the City of El Centro.

SCAG allocates housing planning goals to each city through the Regional Housing Needs Allocation (RHNA) process, as authorized by the California Government Code. According to SCAG's estimates, the City must identify adequate vacant and non-vacant sites to support the development of 3,442 new dwelling units by 2029.

If all 3,442 units are constructed and occupied by 2029, with an average household size of 3.4 persons per unit (Source: Section V of SCAG's Pre-Certified Local Housing Data for El Centro, April 2021), the City's population is anticipated to increase to approximately 57,360 in 2030 based on a population of 45,657 in 2020. The population increase represents a projected growth rate of approximately 26% between 2020 and 2030, more than double the rate estimated in the 2020 UWMP for the same period.

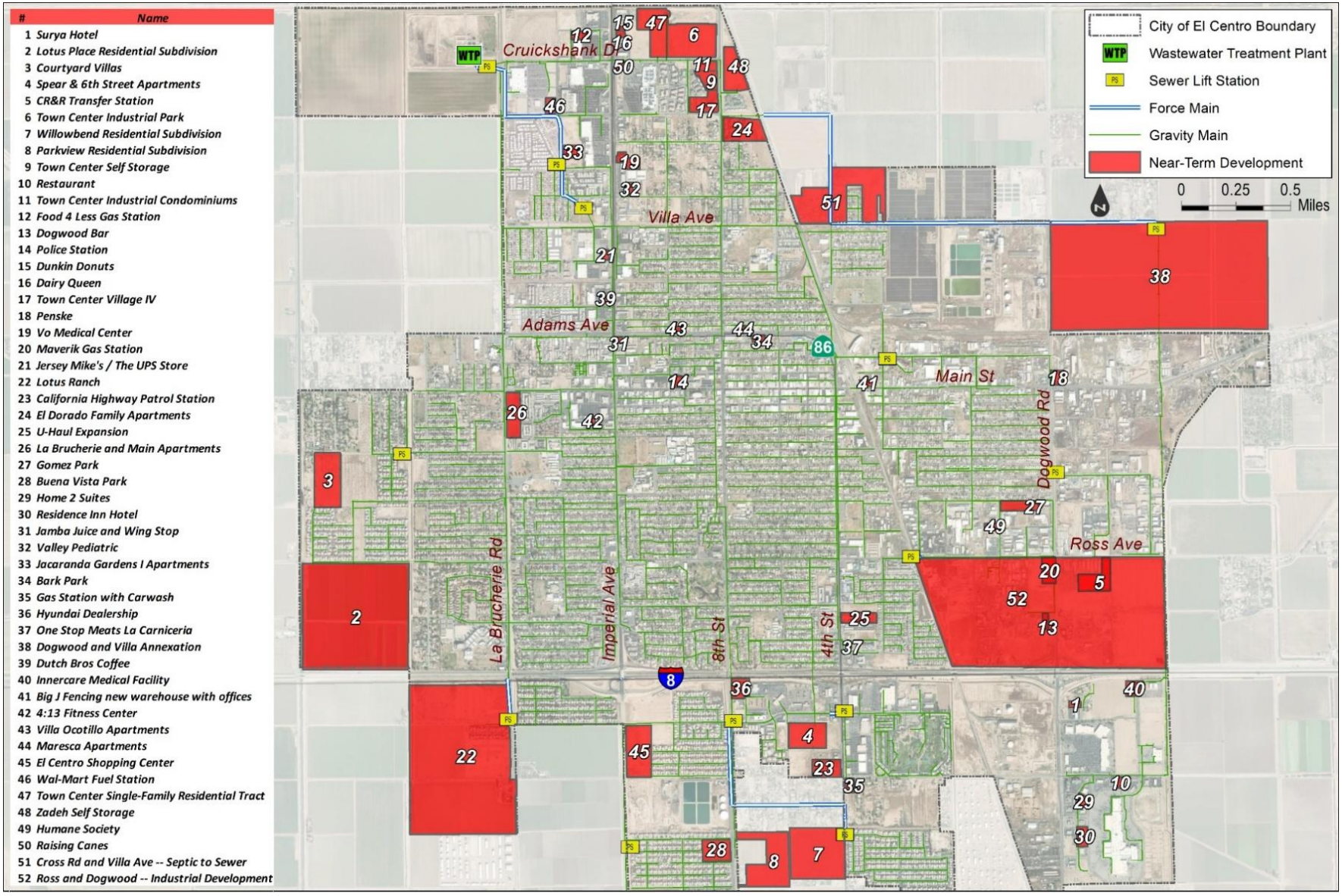
However, the RHNA process does not require all dwelling units to be constructed and fully occupied by 2029. Rather, each city must complete any necessary zoning changes to allow for residential development should the local housing demand increase. The City has already designated zoning to support development of its allocated units.

3.2.2 Near-Term (2035) Developments

According to data provided by the City's Planning and Zoning Division, 52 developments are expected to complete construction and contribute additional sewer flows to the City's collection system by 2035 (i.e., Near-Term). Based on planning documents filed with the City, the 52 near-term developments include:

- Seven low or medium density residential subdivisions (i.e., tract developments), totaling 1,675 new single family residential dwelling units
- Six high-medium or high density residential developments (i.e., multi-family or apartment buildings), totaling 827 new dwelling units
- One state-funded septic to sewer conversion project in the vicinity of Villa Ave and Cross Rd, resulting in 32 existing low density residential units connecting to the gravity collection system
- Twenty-eight commercial developments, including restaurants, self-storage facilities, medical offices, and hotels
- Three industrial developments, including development of approximately 500 acres in the Ross and Dogwood Area.
- Two public or institutional facilities, including a new police station and highway patrol station
- Three public parks with public restrooms
- Annexation of Dogwood and Villa site, assumed to be developed up to 50% by 2035 with the remaining 50% developed by 2045. Development is dependent on the progression of the Lithium Valley Specific Plan (refer to Section 3.2.3 for additional information).

Details for each of the 52 planned near-term developments are tabulated in **Appendix C**. **Figure 3.3** depicts the approximate location of each near-term development.



#	Name
1	Surya Hotel
2	Lotus Place Residential Subdivision
3	Courtyard Villas
4	Spear & 6th Street Apartments
5	CR&R Transfer Station
6	Town Center Industrial Park
7	Willowbend Residential Subdivision
8	Parkview Residential Subdivision
9	Town Center Self Storage
10	Restaurant
11	Town Center Industrial Condominiums
12	Food 4 Less Gas Station
13	Dogwood Bar
14	Police Station
15	Dunkin Donuts
16	Dairy Queen
17	Town Center Village IV
18	Penske
19	Vo Medical Center
20	Maverik Gas Station
21	Jersey Mike's / The UPS Store
22	Lotus Ranch
23	California Highway Patrol Station
24	El Dorado Family Apartments
25	U-Haul Expansion
26	La Brucherie and Main Apartments
27	Gomez Park
28	Buena Vista Park
29	Home 2 Suites
30	Residence Inn Hotel
31	Jamba Juice and Wing Stop
32	Valley Pediatric
33	Jacaranda Gardens I Apartments
34	Bark Park
35	Gas Station with Carwash
36	Hyundai Dealership
37	One Stop Meats La Carniceria
38	Dogwood and Villa Annexation
39	Dutch Bros Coffee
40	Innercare Medical Facility
41	Big J Fencing new warehouse with offices
42	4:13 Fitness Center
43	Villa Ocotillo Apartments
44	Maresca Apartments
45	El Centro Shopping Center
46	Wal-Mart Fuel Station
47	Town Center Single-Family Residential Tract
48	Zadeh Self Storage
49	Humane Society
50	Raising Canes
51	Cross Rd and Villa Ave -- Septic to Sewer
52	Ross and Dogwood -- Industrial Development

Figure 3.3 Planned Near-Term Developments

3.2.3 Ultimate (2045) Developments

At the time of the 2025 Update, no known developments were anticipated to complete construction after 2035 and prior to 2045 (i.e., Ultimate). The only exception is the partial annexation of Dogwood and Villa as described in Section 3.2.2. However, the City may experience additional growth following implementation of the Lithium Valley Specific Plan (LVSP). In February 2025, Imperial County prepared a draft of the LVSP defining future land use and zoning changes to support the county in its efforts to capitalize on the vast lithium deposits identified within the Salton Sea Known Geothermal Resource Area (KGRA).

The timing and extent of county-wide development as presented in the LVSP and subsequent impact on the City's service area are not yet clearly defined. In addition, there is a likelihood that the overall specific plan will not move forward as planned. Public Works staff anticipate a 1% rate of growth per year between 2035 and 2045, for an overall growth rate of 10% between Near-Term and Ultimate. The assumed 10% growth rate is consistent with the City's projected population increase of 5,735 people from 53,018 in 2035 to 58,753 in 2045, or a 10.8% increase.

3.3 Future Flow Summary

Two future dry weather flow scenarios, Near-Term (2035) and Ultimate (2045), were developed in the trunk sewer model as part of the 2025 Update. The Near-Term scenario is based on information (e.g., proposed number of dwelling units, land use type, etc.) concerning planned developments that are anticipated to finish construction and require sewer service by 2035. The Ultimate scenario uses the City's projected population growth to estimate an overall increase in sewer flows throughout the collection system by 2045.

The following summarizes the methodology used to develop the Near-Term (2035) and Ultimate (2045) dry weather flow scenarios.

3.3.1 Unit Sewer Flow Generation Factors

Unit sewer flow generation factors for each land use type in the City's service area were developed based on 2025 flow monitoring data, unit water demand factors from the 2025 Water Master Plan Update (under separate cover), and potential future state water conservation requirements.

The unit generation factors summarized in **Table 3.3** are used to allocate existing dry weather flows throughout the City's trunk sewer model and estimate the ADWF generated by planned developments as described in Section 3.3.2. The dry weather flow allocation process is described in Section 4.

Table 3.3. Unit Sewer Flow Generation Factors by Land Use Type

Land Use Type	Unit Generation Factor		
	gpd/DU	DU/acre	gpd/acre
High Density Residential	120	20	2,400
Medium Density Residential	175	10	1,750
Low Density Residential[1]	175	4	700
Community Commercial	—	—	1,200
General Commercial	—	—	1,200

Table 3.3. Unit Sewer Flow Generation Factors by Land Use Type

Land Use Type	Unit Generation Factor		
	gpd/DU	DU/acre	gpd/acre
Tourist Commercial	—	—	1,200
Downtown Commercial	—	—	1,200
General Industrial	—	—	200
Planned Industrial	—	—	400
Public Facility / Civic	—	—	800
Public Park	—	—	175

Notes:
[1] Low Density Residential includes parcels categorized as Rural Residential.

3.3.2 Near-Term (2035) Scenario Flow Projections

Unit sewer factors were used to estimate the ADWF generated by each near-term development listed in **Appendix C**. **Table 3.4** summarizes the anticipated increase in ADWF due to the 52 developments, based on their proposed land use types. The calculated ADWF of each planned development was applied to the nearest modeled manhole in the trunk sewer model to develop the Near-Term dry weather flow scenario.

Table 3.4. Estimated ADWF from Planned Near-Term Developments

Proposed Land Use Type	ADWF (MGD)
Low or Medium Density Residential	0.30
High Density Residential	0.11
Commercial	0.05
Industrial	0.13
Other (e.g., Public Facility)	0.01
Total Increase in ADWF from Near-Term Developments	**0.60**

Assuming all 52 developments are constructed and connected to the City's collection system by 2035, the total ADWF in the Near-Term scenario is estimated at 4.13 MGD.

3.3.3 Ultimate (2045) Scenario Flow Projections

The City's projected population growth rate between 2035 and 2045 was used to determine a global multiplier intended to represent the increase in sewer flows in the Ultimate dry weather scenario. The change in dry weather flow from the Near-Term to the Ultimate scenario can be represented as an increase of approximately 10.8%. A global multiplier of 1.108 was applied to dry weather flows in the Near-Term scenario to create the Ultimate scenario and simulate overall densification throughout the City, as outlined below:

Ultimate Scenario ADWF = Population Multiplier x Near-Term Scenario ADWF

Ultimate Scenario ADWF = 1.108 x 4.13 MGD

The total ADWF in the Ultimate scenario is estimated to be 4.58 MGD. Should implementation of the LVSP accelerate within the next 5-10 years, it is recommended that the 2025 Update be revised to incorporate any significant new developments within the City's service area. Public Works staff anticipate that development related to the LVSP will occur primarily in the northeast region of the City, with residential developments intended to support new employment opportunities generated by the KGRA to be constructed first.

3.4 Existing and Future Dry Weather Flow Summary

Table 3.5 summarizes the estimated ADWF generated within the City's collection system for the Existing (2025) as well as the anticipated Near-Term (2035) and Ultimate (2045) dry weather flow scenarios.

Table 3.5. Existing and Future ADWF Summary

Planning Scenario (Year)	Projected ADWF Increase (MGD)	Total Estimated ADWF (MGD)
Existing (2025)	—	3.52
Near-Term (2035)	0.60	4.12
Ultimate (2045)	0.45	4.57

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4 Sewer Model Development and Calibration

The following section summarizes the creation and calibration of a new trunk sewer model to represent the majority of flow through the City's collection system. The section includes a description of the sewer flow monitoring program, manhole survey, and additional data collection efforts necessary for development of an accurate hydraulic model.

Once calibrated to existing dry and wet weather flow conditions, the trunk sewer model can be used to approximate the range of plausible flows that may be observed throughout the system. The calibrated sewer model is used as the basis for development and capacity evaluation of future flow scenarios, including the Near-Term and Ultimate.

4.1 March 2025 Flow Monitoring Program

Data collected by flow monitors is used to develop unit generation factors when the upstream sewershed is of uniform land use, allocate flows within the sewershed, and ultimately calibrate the model to existing conditions as measured in the field.

A 10-year or greater storm is ideal for measuring wet weather flows through a collection system. Defect flow (rainfall derived inflow and infiltration or RDII) is characterized by comparing the observed wet weather flows to typical ADWF throughout the system. A 10-year storm has a 10% chance of occurring in any given year, resulting in the average time between storms of such size as 10 years. Most likely, a temporary flow monitoring program will not capture a 10-year or greater storm. Therefore, historical flow information collected by existing monitors or at the treatment plant is often the best source of data for estimating defect flow in a collection system.

For the 2025 Update, nine flow monitors were installed within gravity mains throughout the City's collection system. One rain gauge was installed on the roof of the Public Works building at 307 W Brighton Avenue. Data collection occurred over a two-week period, from March 6 through March 19, 2025.

A flow monitoring report is included in **Appendix D**. The report summarizes the equipment, installation process, observed site conditions, and hydrograph reports for each flow monitor.

4.1.1 Sewersheds and Flow Schematic

Eight of the nine flow monitors were installed at the same locations as those evaluated in the 2008 Sewer Master Plan. Flow monitoring sites remained consistent to compare changes in dry weather flow over time and replicate the trunk model developed in 2008. FM 09 was added for the 2025 Update to measure flows entering the Alder Canal – Villa Ave Lift Station. Public Works staff have long suspected that the gravity main upstream and force main downstream of the lift station are significantly oversized for the tributary dry weather flow.

Figure 4.1 depicts the locations of all nine flow monitors and the extents of their upstream sewersheds. The active modeled trunk mains in each sewershed are highlighted.

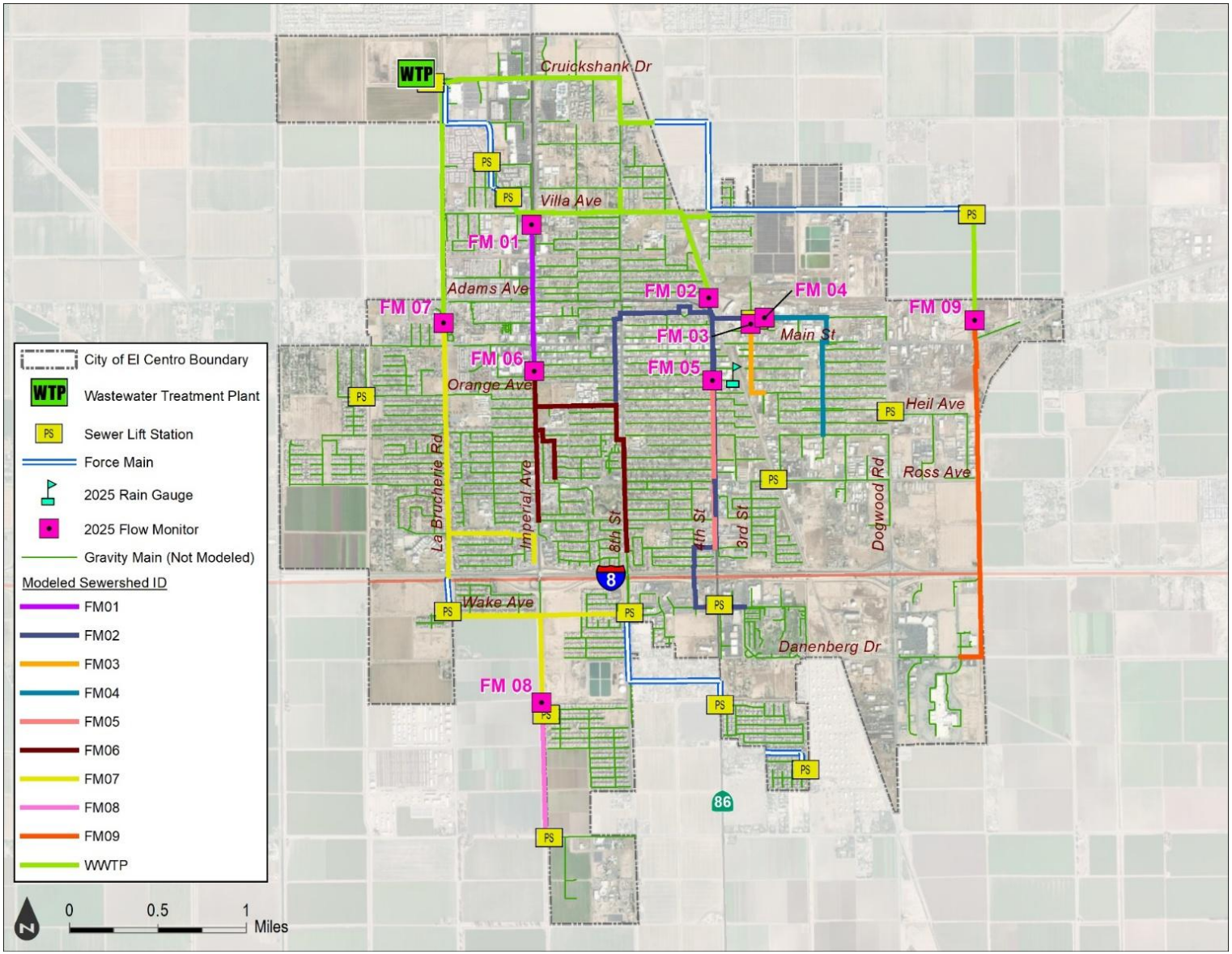

Figure 4.1 March 2025 Flow Monitor Locations and Sewersheds

The portion of the City's collection system from approximately Adams Ave or Villa Ave north to the wastewater treatment plant was not measured by any of the temporary flow monitors in March 2025. However, the flow generated in this area can be estimated as the difference between the influent flow to the treatment plant and the total flow measured by the downstream flow monitors (i.e., FM 01, FM 02, FM 07, and FM 09). Therefore, this area was designated as the "WWTP" sewershed since the treatment plant effectively serves as its permanent flow monitor.

Smaller sewersheds, such as FM 03 and FM 08, are expected to generate less flow than those located farther downstream that may collect flow from multiple upstream sewersheds in the system. The flow schematic in **Figure 4.2** illustrates how flows generated in one area of the City's collection system can be conveyed through various sewersheds, lift stations, or diversion manholes to reach the treatment plant. Where basins are arranged in series, the flow schematic can assist in validating the subtraction of upstream sewersheds to determine each individual sewershed's contribution to overall flow through the system.

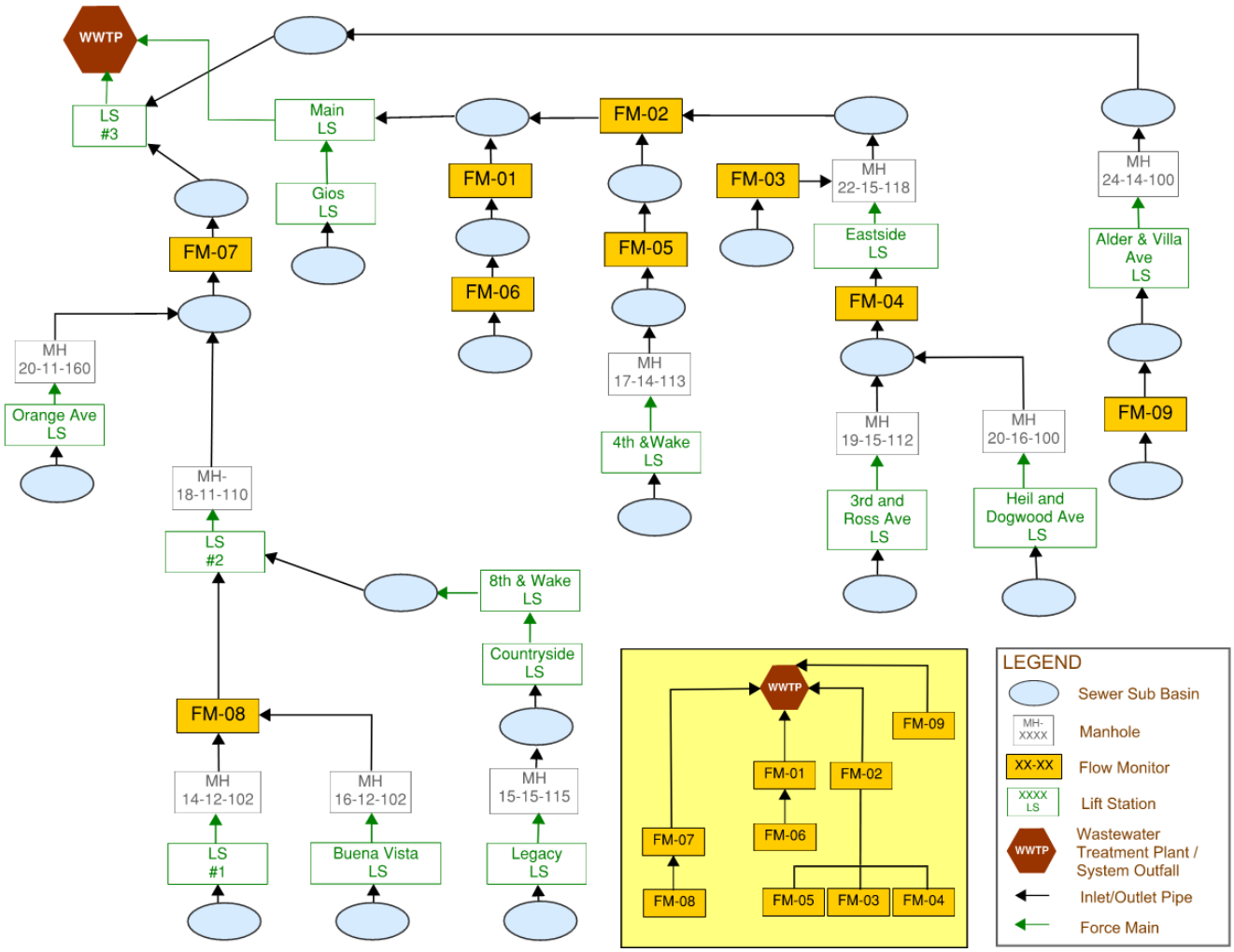

Figure 4.2 Existing System Flow Schematic

4.1.2 Flow Monitoring Results Summary

The following observations are based on review of the flow monitoring data collected in March 2025:

- FM 06 is downstream of the primary direction of flow of a diversion manhole located at W Holt Ave and the alley west of S 8th St. During a typical dry weather flow period, all flow through the diversion manhole is assumed to be conveyed west into the 12-inch gravity main in Holt Ave (and therefore measured by FM 06).
- Two gravity mains run parallel in S 4th St, from Ross Ave north to State St. FM 05 measures flow through the 14-inch main on the west (i.e., southbound) side of S 4th St. During a typical dry weather flow period, the only flow assumed to be measured by FM 05 are local flows generated by the residences west of S 4th St, south of State St, and north of Ross Ave.
- FM 02 is located downstream of FM 03, FM 04, FM 05, and the overflow of the diversion manhole at W Holt Ave and S 8th St. The average flow recorded by FM 02 was 0.86 MGD. Based on the unit sewer generation factors developed in Section 3 and average flows through FM 03, FM 04, and FM05, the average flow at FM 02 should be approximately double the measured value of 0.86 MGD.
- Influent flow to Main Lift Station and the wastewater treatment plant (both downstream of FM 02) correspond to the expectation for higher measured flow at FM 02. Therefore, data collected by the temporary flow monitor at FM 02 was not used to calibrate the FM 02 sewershed. Instead, influent flow to Main Lift Station in March 2025 was used to calibrate the upstream system based on the relationship depicted in Figure 4.2.

The rain gauge recorded two minor precipitation events during the 2-week flow monitoring period:

- The total rainfall depth as measured by the rain gauge was 0.5 inches across both wet weather events.
- The wet weather events occurred on March 11 and March 13, 2025. Each event corresponded to a one-year or lower frequency storm (Source: NOAA Atlas 14 Point Precipitation Frequency Estimates).

Since a 10-year storm did not occur during the flow monitoring period, historical influent flow data recorded at the wastewater treatment plant was used to calibrate the model to wet weather flow conditions as described in Section 4.4.

4.1.3 Dry Weather Time Patterns

March 2025 flow monitoring data was used to develop unique dry weather hourly time patterns for each sewershed. An hourly time pattern is a series of 24 multipliers, one for each hour of the day, that is applied to the average dry weather flow value to approximate the observed daily fluctuations in flow within a sewershed. The multiplier assigned to each hour is also known as a peaking factor. Hourly patterns are created by normalizing measured sewer flows over a 24-hour (diurnal) period, such that the average of all peaking factors is 1.0.

The highest peaking factor in an hourly pattern represents the peak dry weather flow measured at the outlet of the sewershed, as summarized by the following formula:

Peak Dry Weather Flow (PDWF) = Maximum Peaking Factor (PF) x Average Dry Weather Flow (ADWF)

As detailed in Section 4.3, the model calibration process involves the validation of both average and peak dry weather flows. The development of hourly patterns based on measured data facilitates the accurate representation of diurnal flow variations throughout the sewer model.

All but one (FM 09) of the nine flow monitors recorded higher ADWF on weekdays than weekends. PDWF recorded by FM 01 through FM 08 was approximately equal (within 3% difference) between weekdays and weekends, with peak flow occurring later in the day (i.e., after 7:00 PM) on weekdays. Therefore, most of the modeled trunk system was calibrated to weekday dry weather flow data. Only the FM 09 sewershed was calibrated to weekend dry weather flows.

Figure 4.3 depicts the diurnal dry weather patterns for FM 01 through FM 08 over a typical weekday. The weekend diurnal pattern for FM 09 is also included. Generally, smaller sewersheds exhibit a more significant peaking response (i.e., higher maximum peaking factor) due to the concentrated effect of fewer individual dischargers. The average weekday maximum peaking factor of FM 01 through FM 08 is 1.28.

The most significant sources of sewer flow in the FM 09 sewershed are the Imperial Valley Mall and The Plaza shopping center, both large commercial developments that are more heavily trafficked on weekends. The weekend maximum peaking factor of the FM 09 sewershed is 1.36.

The average of all weekday diurnal patterns for FM 01 through FM 08 was applied to the WWTP sewershed. Weekday patterns were used since most of the collection system exhibits higher flows on weekdays compared to weekends. The ADWF of the WWTP sewershed was calculated as the difference between the influent flow to the treatment plant and the sum of average flows measured at the upstream sewersheds.

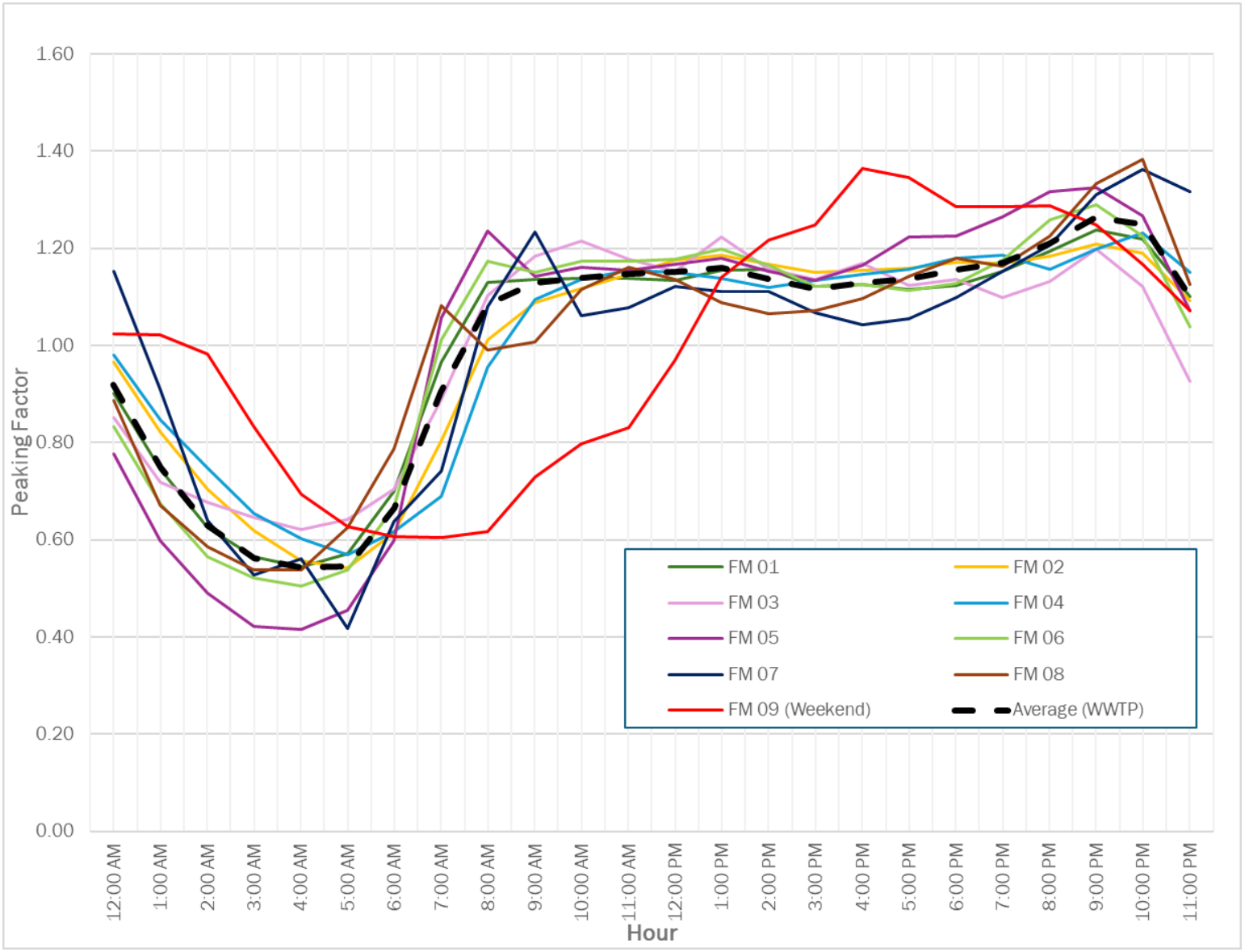

Figure 4.3 Existing Dry Weather Hourly Time Patterns (Weekday and Weekend)

4.2 Sewer Model Development

The principal tool used to analyze the capacity of a sewer collection system is a hydraulic model of the system. A sewer model is a digital representation of the physical collection network capable of simulating both dry and wet weather flow conditions across a range of planning scenarios (e.g., Existing, Near-Term, or Ultimate).

A new hydraulic model of the City's collection system was developed using Aquanuity's AquaTwin Sewer software. AquaTwin Sewer runs as an extension to ArcGIS Pro, facilitating the seamless integration of existing GIS data during development and analysis of a sewer model.

A trunk model was developed for the 2025 Update due to missing or unverified GIS data on crucial attributes of the City's collection system, including manhole invert elevations. The trunk model consists primarily of 12-inch or greater diameter sewer mains, in-line lift stations and associated force mains, and a single system outfall (i.e., wastewater treatment plant).

In general, larger diameter pipelines are more likely to experience capacity limitations as they convey flow from greater tributary areas. Therefore, a trunk model is an efficient means of representing the most important elements of a collection system for capacity analysis of the system. The following summarizes the data collected and used to create the trunk model.

4.2.1 Manhole Field Survey

According to Public Works staff, the City's sewer GIS database is generally accurate in terms of existing pipeline diameter and connectivity. However, approximately 15% of the manholes in the GIS database are missing rim and invert elevation data. Manholes populated with elevation data have not been field verified and are of low confidence, per Public Works staff.

A hydraulic sewer model requires accurate pipe slopes to calculate the capacity of each gravity main segment. Manhole invert elevations and the distance between manholes (i.e., pipe length) determine the slope of a gravity main. Therefore, any uncertainty in existing manhole invert elevation data may result in a lack of confidence in the modeled capacity results.

Based on discussions with Public Works staff, a field survey of existing manholes was deemed necessary to achieve confidence in the results of the 2025 Update. Given the significant cost associated with surveying every manhole in the system, it was determined that a survey of 100 manholes is adequate to develop a model of the primary trunk sewer pipelines that support the entire collection system. Such an abbreviated representation of the collection system is known as a skeletonized or trunk sewer model.

The 100 manhole survey was completed in March 2025 by a licensed surveyor, who collected rim and invert elevation data necessary for development of a trunk sewer model. Manholes were selected to maximize the modeled extents of each measured sewershed described in Section 4.1.1. Similarly, manholes along the trunk (i.e., 12-inch or greater) mains, at potential diversion sites, or at major street intersections with multiple sewer manholes were prioritized for survey to construct an accurate trunk sewer model. **Figure 4.4** depicts the locations of the surveyed manholes.

Since the City's service area lies entirely below sea level, all surveyed rim and invert elevations were adjusted by 100 ft to avoid the use of negative values throughout the trunk sewer model. For example, a manhole rim and invert elevation of -45 ft and -53 ft as surveyed in the field are converted to 55 ft and 47 ft respectively, for inclusion in the sewer model.

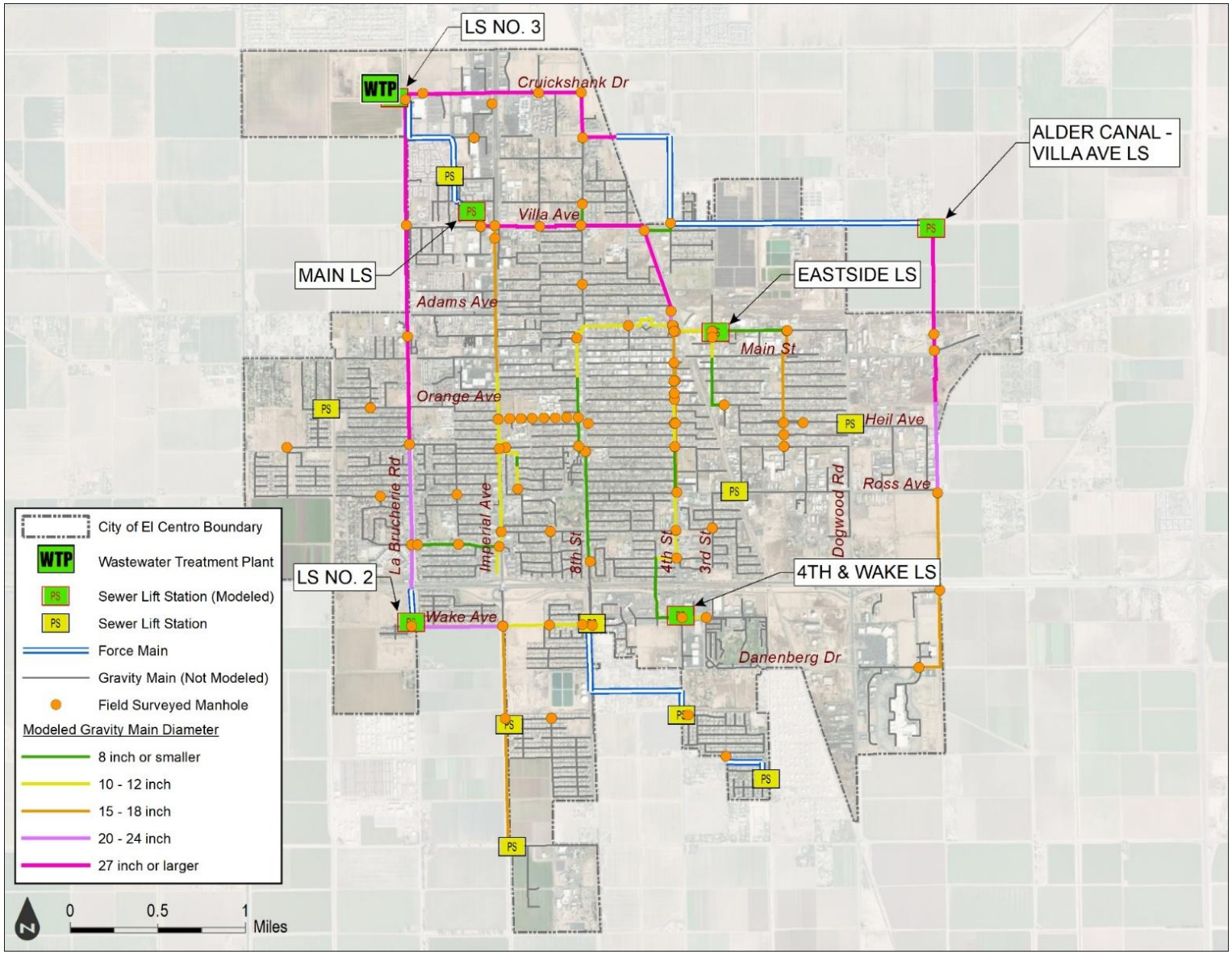

Figure 4.4 March 2025 Manhole Survey Locations

4.2.2 Trunk Model Network Generation

A trunk model of the City's sewer collection system was generated as follows:

- The City's sewer GIS network was imported into AquaTwin Sewer as the basis of the new trunk sewer model.
  - Most 10-inch and smaller collection mains, especially those located within residential neighborhoods or on the outskirts of the City, were deactivated in the sewer model (i.e., not included in existing or future capacity analysis).
- Invert elevations for existing manholes located between survey points were interpolated using AquaTwin Sewer's Calculate Inverts tool, which can assume a constant slope between two junctions (i.e., manholes) with known invert elevations.
  - Of the 123 miles of gravity main in the City's collection system, approximately 22 miles were included in the trunk sewer model.
- Six of the City's 15 existing lift stations were included in the sewer model due to their location within the trunk system. All flow through the collection system is conveyed through at least one if not several of these lift stations.
  - Wet well dimensions, influent gravity main invert elevations, pumping capacities, and other hydraulic characteristics for the six lift stations were obtained from **Appendix A** and incorporated into the trunk sewer model.

4.2.3 As-Built Record Drawing Updates

During development of the trunk sewer model, it was observed that several modifications or improvements to the collection network had not been incorporated into the City's GIS database. As summarized in **Table 4.1**, Public Works staff provided as-built record drawings or other documentation for each improvement project. Only improvements pertaining to the modeled trunk system are included, as they may affect the capacity analysis presented in Section 5.

Table 4.1. System Improvements Not in Sewer GIS – Updated in Trunk Sewer Model

As-Built Drawing Set	Location	Description – Per As-Builts	Install Year
10636	Wake Ave / Lift Station No. 2 Force Main	All flow going into the gravity mains at the Date Drain and Wake Ave intersection was sent West on Wake Ave and into LS 2	2016
10411, 10439	Holt Ave between 9th St Alley and at Imperial Ave	Re-route flows from 9th St West into Hold Ave, and from Holt Ave into the 12" sewer on Imperial Ave	1952
10407, 10477	Wake Ave between Imperial Ave and at La Brucherie	Re-route Imperial & Wake flows West to LS 2	1993
March 2025 Survey	Ocotillo Dr between La Brucherie Rd and Imperial Ave	Re-route flows on Ocotillo Dr East to the 12" sewer on Imperial Ave	N/A
Conversations with City	Main Lift Station Force Main	Removed abandoned force main coming from Main Lift Station into the Date	Approx. 1957

Table 4.1. System Improvements Not in Sewer GIS – Updated in Trunk Sewer Model

As-Built Drawing Set	Location	Description – Per As-Builts	Install Year
		Canal, and route all flows through the new force main into the treatment plant	
8/10/2009 Construction Plans	8th St and Fairfield Dr Pipeline Replacement Project	Upsize 6-in VCP line on 8th St, between Ross Ave and Southwind Dr with new 8-in PVC line, and relocate MHs	2009

4.3 Existing Dry Weather Flow Allocation

Following development of the trunk sewer model network, average dry weather flows were allocated to each modeled manhole to create the existing dry weather flow scenario as follows:

- Generate Thiessen polygons around the modeled manholes using ArcGIS Pro spatial analysis tools
  - Each Thiessen polygon is uniquely associated with only one modeled manhole.
  - Thiessen polygons are used to estimate the number of individual parcels that may contribute sewer flows to the trunk system at each modeled manhole.
- Assign each parcel a unit sewer generation factor corresponding to its existing land use type (per Table 3.2 in Section 3.2.1)
- Calculate and allocate the ADWF to each modeled manhole as the sum of the ADWF generated by all existing parcels within its respective Thiessen polygon. This process was automated using AquaTwin Sewer's Inflow Builder wizard.
- Assign each modeled manhole a diurnal dry weather pattern corresponding to the measured sewershed in which it resides.

The total dry weather flow assigned to each manhole was calculated based on unit sewer generation factors, existing land use, and area or dwelling units of the tributary parcels. Once ADWF and diurnal patterns were allocated throughout the trunk sewer model, the existing dry weather scenario was calibrated to measured flow data and used to develop wet weather and future flow scenarios.

4.3.1 Dry Weather Scenario Calibration Results

The existing dry weather flow scenario was calibrated by comparing the modeled average and peak flows through each sewershed to their measured counterparts and adjusting time patterns or ADWF allocations until the modeled and measured flow values are within 10% difference.

Table 4.2 presents the modeled average and peak dry weather flows and their measured equivalents for each sewershed identified in the 2025 Update. Most sewersheds were calibrated in the model to less than 5% difference of measured data.

Diurnal graphs of modeled and measured flows through each calibrated sewershed are included in **Appendix E.**

Table 4.2. Model Calibration Results – Existing (2025) Dry Weather Flow

Sewershed/ Flow Monitor ID	Average Dry Weather Flow			Peak Dry Weather Flow		
	Measured (MGD)	Modeled (MGD)	% Difference	Measured (MGD)	Modeled (MGD)	% Difference
FM 01	0.973	0.945	2.9%	1.205	1.163	3.5%
FM 02[1]	0.856	1.138	33.0%	1.034	1.465	41.6%
FM 03	0.091	0.089	2.2%	0.111	0.109	2.3%
FM 04	0.383	0.377	1.5%	0.472	0.464	1.6%
FM 05	0.199	0.203	2.4%	0.263	0.270	2.4%
FM 06	0.547	0.530	3.1%	0.706	0.682	3.5%
FM 07	0.762	0.780	2.3%	1.039	1.038	0.04%
FM 08	0.191	0.194	1.8%	0.264	0.268	1.3%
FM 09	0.259	0.248	4.2%	0.354	0.361	2.1%

Notes:
[1] FM 02 was calibrated to influent flow to Main Lift Station in March 2025. Data recorded by the temporary flow monitor at FM 02 was determined to be of unreliable quality for model calibration as detailed in Section 4.1.2.

4.4 Existing Wet Weather Flow Allocation

No significant wet weather event occurred in March 2025 during the flow monitoring program. Instead, historical daily influent flow data collected at the wastewater treatment plant was used to characterize the collection system's response to RDII and develop an existing wet weather flow scenario.

Figure 4.5 depicts the average monthly and peak daily influent flows recorded at the treatment plant from January 2015 through July 2025. Average monthly flow is the average flow observed entering the treatment plant each month (i.e., average of 30 or 31 days), while peak daily flow is the maximum influent flow recorded on a single day each month. The absolute peak daily flow occurred on September 9, 2022, and coincided with Tropical Storm Kay sweeping across the City's service area.

Table 4.3 summarizes the average and peak influent flow through the treatment plant from 2015 through 2025. The various flow designations are defined as follows:

- Average Annual Flow: Average influent flow recorded at the treatment plant each year (i.e., average of 365 days)
- Peak Monthly Flow: Average influent flow for the month with the highest observed flow each year (e.g., in 2022, the peak monthly flow is attributed to September 2022)
- Peak Daily Flow: Maximum influent flow recorded on a single day each year (typically occurs during the month with the peak monthly flow)
- Peak Month Factor (PMF): Ratio of the peak monthly flow to the average annual flow.
- Peak Day Factor (PDF): Ratio of the peak daily flow to the average annual flow.

The maximum PDF observed at the treatment plant over the past decade was 1.62 and occurred in September 2022. Therefore, the wet weather flow scenario in the trunk sewer model was based on peak influent flow data from September 2022.

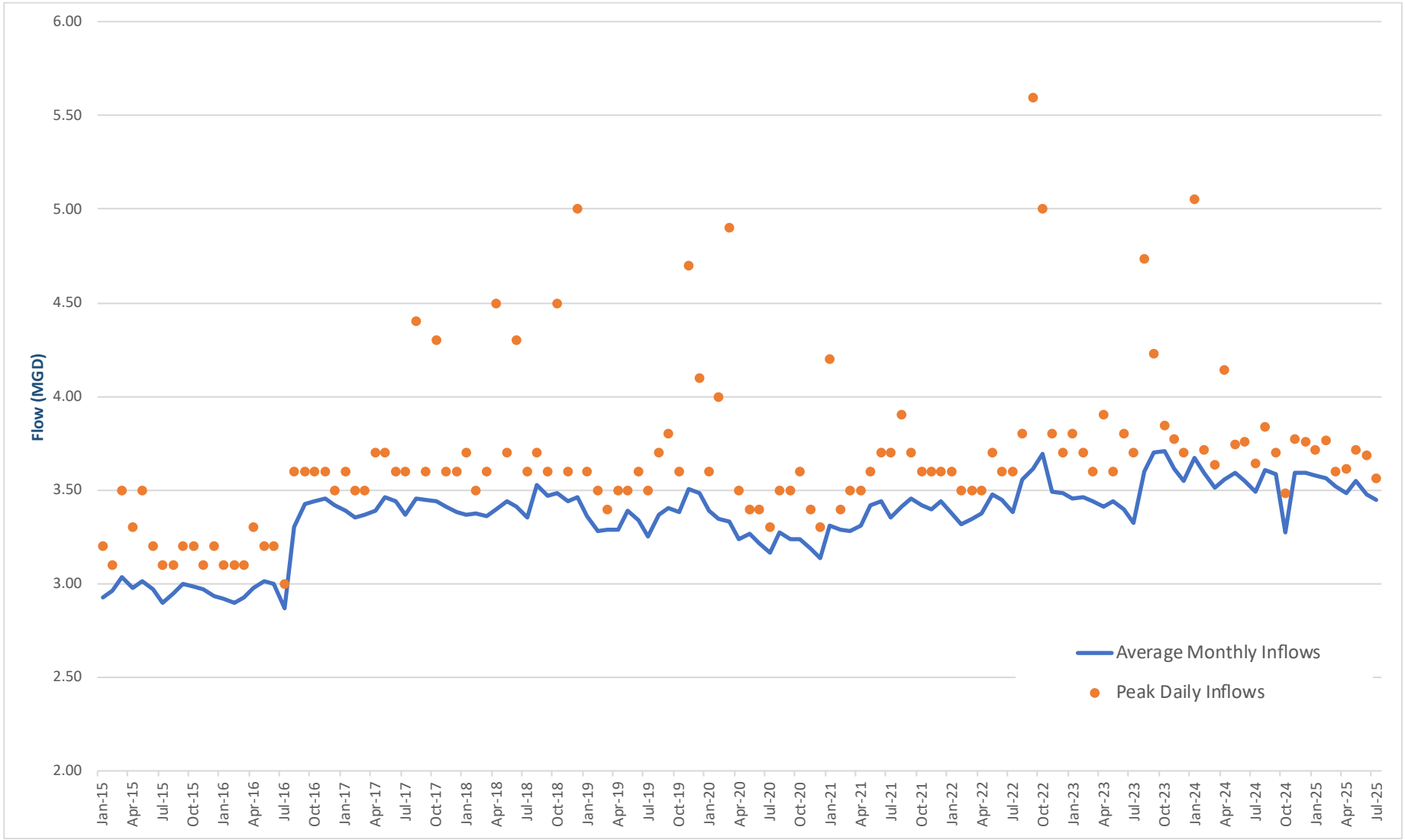

Figure 4.5 Average Monthly and Peak Daily Influent Flow to Wastewater Treatment Plant (January 2015 – July 2025)

Table 4.3. Annual Average and Peak Influent Flows to Plant (2015 – 2025)

Year	Average Annual Flow (MGD)	Peak Monthly Flow (MGD)	Peak Month Factor / PMF	Peak Daily Flow (MGD)	Peak Day Factor / PDF
2015	2.97	3.03	1.02	3.50	1.18
2016	3.14	3.46	1.10	3.60	1.15
2017	3.41	3.46	1.02	4.40	1.29
2018	3.42	3.53	1.03	5.00	1.46
2019	3.36	3.51	1.04	4.70	1.40
2020	3.25	3.39	1.04	4.90	1.51
2021	3.38	3.46	1.02	4.20	1.24
2022	3.46	3.69	1.07	5.60	1.62
2023	3.51	3.71	1.06	4.73	1.35
2024	3.55	3.67	1.03	5.05	1.42
2025	3.52	3.58	1.02	3.76	1.07
				Average PDF	**1.33**
				Maximum PDF (Year 2022)	**1.62**

Existing flow allocations from the dry weather scenario were inherited in the new wet weather scenario. In the wet weather scenario, defect flow or RDII was allocated throughout the modeled trunk system and estimated as the following:

Defect Flow = Average Wet Weather Flow (AWWF) - Average Dry Weather Flow (ADWF)

In the above, AWWF and ADWF are equivalent to the Peak Daily Flow and Average Annual Flow presented in Table 4.3, respectively. Using an AWWF of 5.60 MGD and ADWF of 3.46 MGD, the total defect flow estimated as entering the collection system in the September 2022 wet weather event is 2.14 MGD.

Following discussions with Public Works staff, the 2.14 MGD of defect flow was distributed in the following manner across the trunk sewer model:

- **0.85 MGD or 40% of the total defect flow** was allocated to the trunk system tributary to Eastside Lift Station (or FM 05 sewershed)
- **0.85 MGD or 40% of the total defect flow** was allocated to the trunk system tributary to Alder Canal – Villa Ave Lift Station (or FM 09 sewershed)
- **0.43 MGD or 20% of the total defect flow** was allocated to the remainder of the trunk system

The "40/40/20" defect flow allocation method is based on SCADA data at Lift Station No. 3 and Eastside Lift Station in September 2022. Eastside Lift Station recorded a significant increase in influent flow during the wet weather event relative to its average influent dry weather flow.

Similarly, Lift Station No. 3 also experienced a sudden influx of flow. The primary lift stations tributary to Lift Station No. 3 are Lift Station No. 2, Orange, and Alder Canal – Villa Ave Lift Station. SCADA data at Lift Station No. 2 and Orange Lift Station exhibited minimal variation between dry weather days and Tropical Storm Kay. Therefore, most

defect flow into Lift Station No. 3 was assumed to originate from the collection system upstream of Alder Canal – Villa Ave Lift Station.

Since the treatment plant only records influent flow daily (i.e., one data entry per day), hourly flow data was not readily available to generate a diurnal wet weather pattern for calibration of the trunk model to observed wet weather flow conditions. According to Public Works staff, the maximum instantaneous peak flow observed entering the treatment plant was approximately 9.0 MGD.

The following relationship was used to derive a maximum peaking factor for the September 2022 wet weather calibration event:

Peak Wet Weather Flow (PWWF) = Maximum Wet Weather Peaking Factor (WW PF) x Average Dry Weather Flow (ADWF)

Assuming a PWWF of 9.0 MGD and ADWF of approximately 3.46 MGD, the maximum wet weather peaking factor for the overall collection system is 2.6. **Figure 4.6** depicts the diurnal wet weather pattern applied uniformly to the defect flow allocated throughout the trunk model:

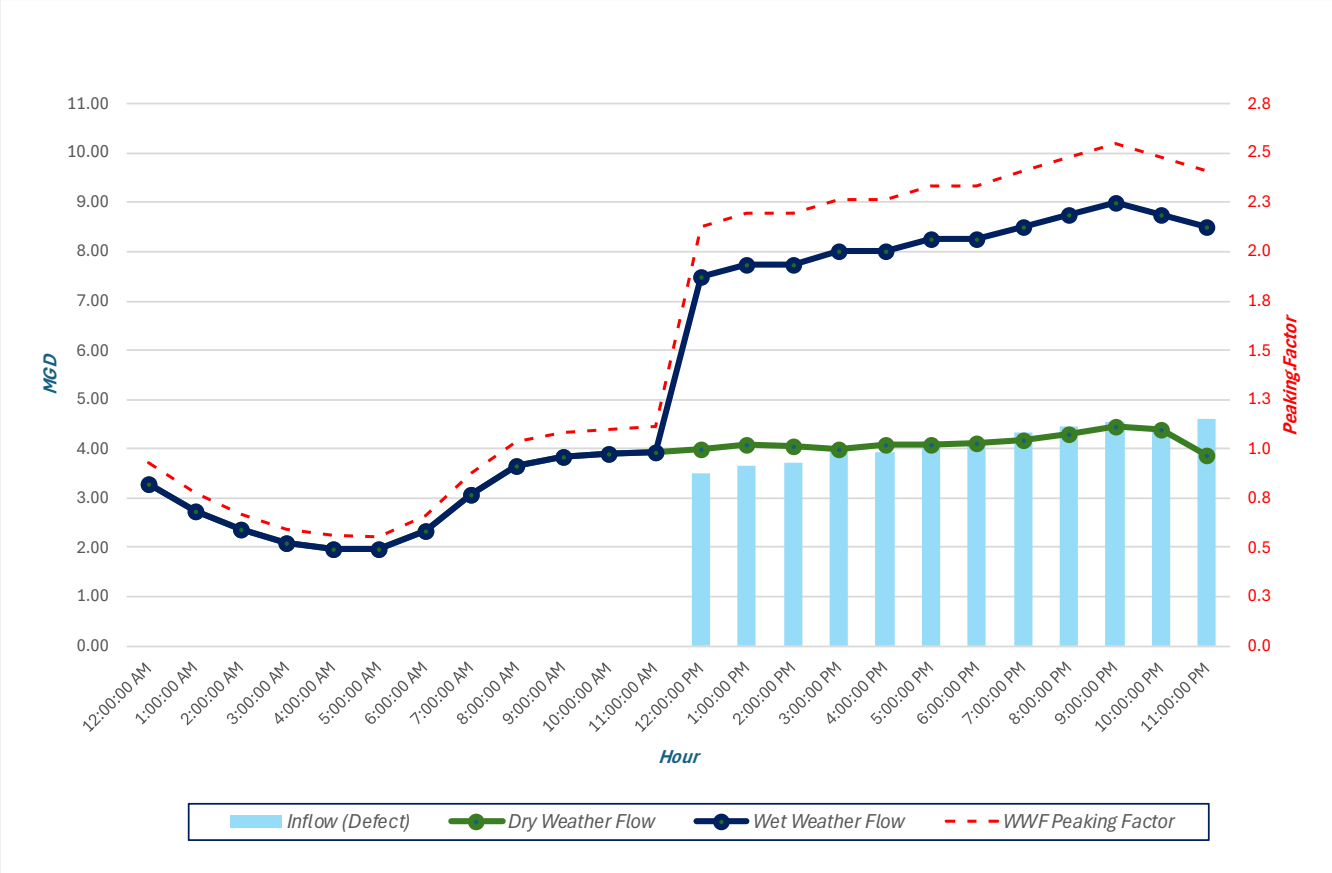

Figure 4.6 Diurnal Wet Weather Pattern for Defect Flow

4.4.1 Wet Weather Model Calibration Results

The existing wet weather flow scenario was calibrated by comparing the modeled average and peak flows into the treatment plant to their measured counterparts from September 2022 and adjusting the diurnal wet weather pattern until modeled and measured flow values are within 10% difference.

Table 4.4 presents the modeled average and peak wet weather flows and their measured equivalents recorded at the treatment plant.

Table 4.4. Model Calibration Results – Existing (September 2022) Wet Weather Flow

Outfall	Average Wet Weather Flow			Peak Wet Weather Flow		
	Measured (MGD)	Modeled (MGD)	% Difference	Measured (MGD)	Modeled (MGD)	% Difference
WWTP	5.60	5.64	0.70%	9.00	9.22	2.4%

5 Collection System Capacity Analysis

The following section summarizes the recommended design and deficiency criteria used to implement new sewer improvements and evaluate the capacity of the City's existing collection system. The section presents the capacity analysis results for the modeled trunk system in the Existing, Near-Term, and Ultimate planning scenarios under dry and wet weather flow conditions. Lastly, the section evaluates the pumping and storage capacity of each modeled lift station and analyzes the feasibility of removing any existing lift stations from service or optimizing their performance.

The results of the modeled capacity analysis are used to identify existing constraints and anticipate future areas of concern due to projected growth or development within the collection system. Each potential capacity deficiency is evaluated on an individual basis and may result in a recommended improvement project for incorporation into the City's CIP.

5.1 System Design Criteria

System design criteria are used to design and implement new facilities intended to improve the existing level of service or accommodate projected future flows within the collection system. Following discussions with Public Works staff, it was determined that no modifications need to be made to the recommended design criteria presented in the 2008 Sewer Master Plan.

5.1.1 Gravity Main Design Criteria

Table 5.1 summarizes the recommended gravity main design criteria from the 2008 Sewer Master Plan. The following criteria should be used to determine the diameter and other design parameters of proposed new gravity mains within the City's collection system.

Table 5.1. Recommended Design Criteria – Gravity Mains

General Criteria	Minimum Diameter	8 inch
	Minimum Velocity when Pipeline is Flowing Half Full	2.0 fps
	Minimum Velocity at PDWF for Inverted Siphons[1]	3.0 fps
	Manning's Roughness Coefficient "n"	0.013
Maximum d/D[2] at PDWF	Diameter < 12-inch	0.50
	Diameter ≥ 12-inch	0.75
Maximum d/D at PWWF	All Diameters	0.9

Notes:

1 According to Public Works staff, there are no siphons within the City's existing collection system. A recommended minimum velocity is provided should siphons be required during future improvement projects.

2 d/D refers to the ratio of water depth to pipeline diameter in a gravity main.

The capacity within a gravity sewer depends upon its pipeline diameter, roughness, allowable flow depth, and slope as determined by Manning's Equation:

$$\boldsymbol{Q = 1.486 \times A \times R^{2/3} \times S^{1/2} \times n^{-1}}$$

Where:

Q = Volumetric flow rate (cubic feet per second)

A = Cross-section area of flow (square feet)

R = Hydraulic radius (feet)

S = Pipe slope (feet per feet)

n = Manning's roughness coefficient

Where:

$R = A/P$

P = Wetted perimeter (feet)

The maximum depth over diameter ratio (d/D) of a pipeline can be derived using Manning's Equation and is the primary value used to evaluate the available capacity of an existing or proposed gravity main.

In general, gravity mains are not intended to flow full (i.e., maximum d/D of 1.0), as unoccupied space at the top of the pipe is required to accommodate sewer gases as well as a measure of inflow and infiltration (I&I) entering the system during wet weather events. In a standard sewer collection system, gravity mains that are constantly flowing at or near full capacity may be at increased risk of spills during a significant wet weather event.

The Manning's roughness coefficient ("n") of pipelines varies with material and age. A roughness coefficient of 0.013 is commonly used to evaluate existing pipeline capacity and assess future system needs. Studies have indicated that a roughness coefficient of 0.013 is a conservative estimate of the average friction factor of typical sewer gravity mains over their useful lifespan.

5.1.2 Lift Station and Force Main Design Criteria

Table 5.2 summarizes the recommended lift station and force main design criteria for the City's collection system. The force main design criteria are the same as those presented in the 2008 Sewer Master Plan. Low force main velocities can result in solids deposition within the pipeline and generate long-term maintenance issues for Public Works staff. Conversely, excessively high velocities can damage the force main through abrasion and prompt early replacement or rehabilitation of the pipeline.

The 2008 Sewer Master Plan recommended that lift stations be designed to accommodate peak wet weather flow with one standby pump. A standard lift station is equipped with at least two pump units, duty and standby. The design capacity of the standby pump should be the same as that of the largest duty pump unit.

Additional lift station design criteria introduced in the 2025 Update include a source of emergency backup power, provided via on-site generators or provisions for a portable generator connection. Lastly, the lift station wet well structure should have adequate capacity to store at least six hours of average dry weather flow during an emergency event. Emergency storage capacity is taken as the volume between the lag pump on level setting and high water level of the wet well.

Table 5.2. Recommended Design Criteria – Lift Stations & Force Mains

Lift Station Criteria	Minimum Number of Pumps	2
	Minimum Rated Capacity of Pump	Duty pump capable of handling peak flow
	Standby Pump Capacity	100% of the largest pump capacity
	Emergency Storage Capacity	6 hours of ADWF
	Emergency Backup Power	Required
Force Main Criteria	Minimum Diameter	6 inch
	Minimum Velocity	2.0 fps
	Maximum Velocity	8.0 fps
	Hazen-Williams Coefficient “C”	120

5.2 System Deficiency Criteria

While design criteria should be incorporated in the planning and construction of new sewer facilities, separate and distinct deficiency criteria are used to determine when existing infrastructure should be replaced with a larger diameter pipeline or higher capacity lift station to mitigate the risk of a spill or other service interruption. Such deficiency criteria are also referred to as “trigger” criteria because they result in a recommendation for an improvement project.

5.2.1 Gravity Main Deficiency Criteria

Table 5.3 summarizes the gravity main deficiency criteria used to evaluate the capacity of the City’s existing gravity collection system. Following discussions with Public Works staff, it was determined that a maximum d/D of 1.0 (i.e., pipe flowing full) will be used as the sole deficiency criteria when evaluating the capacity of existing gravity mains under both dry and wet weather flow conditions, regardless of pipeline diameter.

Within each model scenario, any existing gravity mains in the City’s trunk sewer model with a maximum d/D of 1.0 will be recommended for upsizing or an alternative improvement project (e.g., flow diversion, etc.).

Table 5.3. 2025 Update Deficiency Criteria – Gravity Mains

Maximum d/D at PDWF	All Diameters	1.0
Maximum d/D at PWWF	All Diameters	1.0

5.2.2 Lift Station and Force Main Deficiency Criteria

Table 5.4 summarizes the deficiency criteria used to evaluate the capacity of existing lift stations in the City's collection system. Deficiency criteria for force main velocity and lift station pumping capacity are identical to their design counterparts. However, the storage capacity and presence of emergency backup power at existing lift stations shall be evaluated on a case-by-case basis.

Certain lift stations may be constrained by the physical limitations of their existing site, which render a significant wet well expansion or on-site generator storage infeasible.

Table 5.4. 2025 Update Deficiency Criteria – Lift Stations & Force Mains

Lift Station Criteria	Minimum Rated Capacity of Pump	Duty pump capable of handling peak flow
	Standby Pump Capacity	100% of the largest pump capacity
	Emergency Storage Capacity	Case-by-case basis
	Emergency Backup Power	Case-by-case basis
Force Main Criteria	Minimum Velocity	2.0 fps
	Maximum Velocity	8.0 fps

5.3 Dry Weather Capacity Analysis

The following sections present the results of the capacity analysis on the trunk sewer model under Existing (2025), Near-Term (2035), and Ultimate (2045) dry weather flow conditions.

5.3.1 Existing (2025) Dry Weather Flow

The City's trunk sewer model was analyzed in the Existing dry weather flow scenario. Maximum d/D of all modeled gravity mains over a representative 24-hour period were compared to the deficiency criteria presented in Section 5.2.1.

As shown in **Figure 5.1**, no modeled gravity mains are anticipated to exceed the deficiency criteria under Existing dry weather flow conditions.

5.3.2 Near-Term (2035) Dry Weather Flow

The City's trunk sewer model was analyzed in the Near-Term dry weather flow scenario. In addition to the planned near-term developments defined in Section 3.2.2, the Near-Term scenario incorporates the City's planned abandonment of the 4th and Wake, Legacy, and Countryside lift stations and construction of the Southern lift station at the intersection of W Danenberg Dr and Farnsworth Ln. All dry weather flow tributary to the three soon-to-be abandoned lift stations was reallocated to the assumed gravity discharge manhole of the Southern lift station at E Danenberg Dr and S Dogwood Rd in the Near-Term scenario.

Maximum d/D of all modeled gravity mains over a representative 24-hour period were compared to the deficiency criteria presented in Section 5.2.1. As with the Existing scenario, no modeled gravity mains are anticipated to exceed the deficiency criteria under Near-Term dry weather flow conditions. **Figure 5.2** depicts the results of the capacity analysis in the Near-Term scenario.

5.3.3 Ultimate (2045) Dry Weather Flow

The City's trunk sewer model was analyzed in the Ultimate dry weather flow scenario. Maximum d/D of all modeled gravity mains over a representative 24-hour period were compared to the deficiency criteria presented in Section 5.2.1.

As with the Existing and Near-Term scenarios, no modeled gravity mains are anticipated to exceed the deficiency criteria under Ultimate dry weather flow conditions. The results of the capacity analysis closely resemble those shown in Figure 5.2.

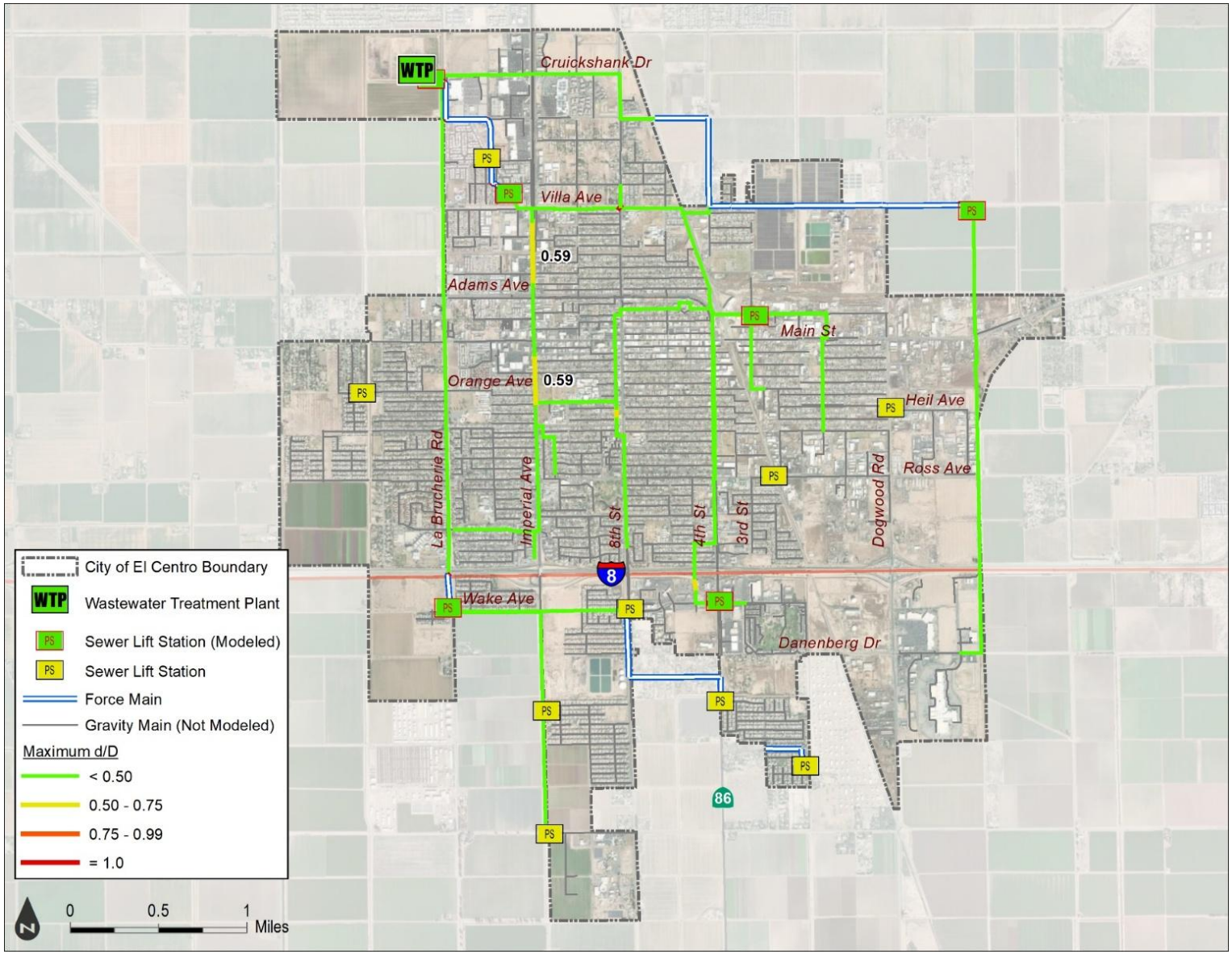

Figure 5.1 Existing (2025) Dry Weather Flow Capacity Analysis Results – Maximum Pipeline d/D

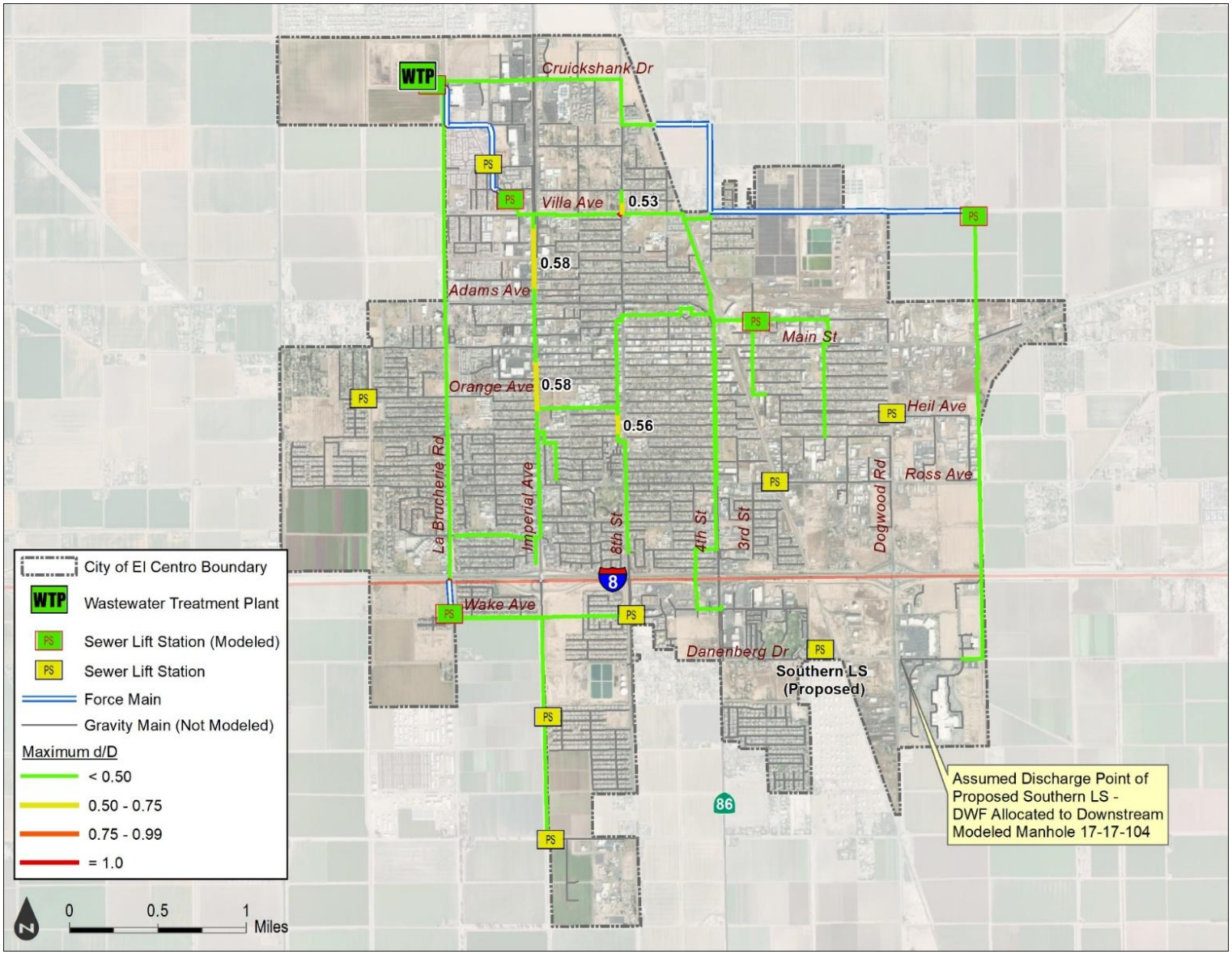

Figure 5.2 Near-Term (2035) Dry Weather Flow Capacity Analysis Results – Maximum Pipeline d/D

5.4 Wet Weather Capacity Analysis

The following sections present the results of the capacity analysis on the trunk sewer model under Existing (2025), Near-Term (2035), and Ultimate (2045) wet weather flow conditions.

5.4.1 Existing (2025) Wet Weather Flow

The City's trunk sewer model was analyzed in the Existing wet weather flow scenario. Maximum d/D of all modeled gravity mains over a representative 24-hour period were compared to the deficiency criteria presented in Section 5.2.1.

Table 5.5 summarizes the two potential capacity deficiencies identified under Existing peak wet weather flow conditions. The locations of the deficiencies are depicted in **Figure 5.3**.

Table 5.5. Existing (2025) System Pipeline Capacity Deficiencies – PWWF

Deficiency ID	Location	Ex. Diameter (inch)	Ex. Worst Condition	Length (LF)
EX-1	N 8th St at Villa Ave	8	Max d/D = 1.0	460
EX-2	Fairfield Dr from Hamilton Ave north to Commercial Ave; Commercial Ave from Fairfield Dr west to Eastside lift station	15; 18	Max d/D = 1.0	5,800
			Total	**6,260**

Deficiency EX-1 arises from backwater effects observed within the existing 8-inch main in N 8th St, which connects directly to the 27-inch trunk main in Villa Ave. The tributary area of the 8-inch main in N 8th St is limited, with no planned near-term developments upstream. Considering the depth of the trunk main in Villa Ave at N 8th St (i.e., at least 18.5 ft deep) and less than 6 inches of anticipated surcharge over the top of pipe crown in the 8-inch gravity main, EX-1 will not be recommended for upsizing in the 2025 Update.

Deficiency EX-2 results from the high defect flow allocated to the FM 04 sewershed during development of the wet weather scenario in Section 4.4. The FM 04 sewershed is tributary to the Eastside lift station, which recorded significantly elevated influent flow during the wet weather calibration event. Therefore, EX-2 may not be due to undersized pipelines but instead a higher than average rate of RDII throughout the Eastside lift station's tributary area. To address EX-2, an alternative to a traditional pipeline upsizing project is recommended and detailed in Section 7.1.

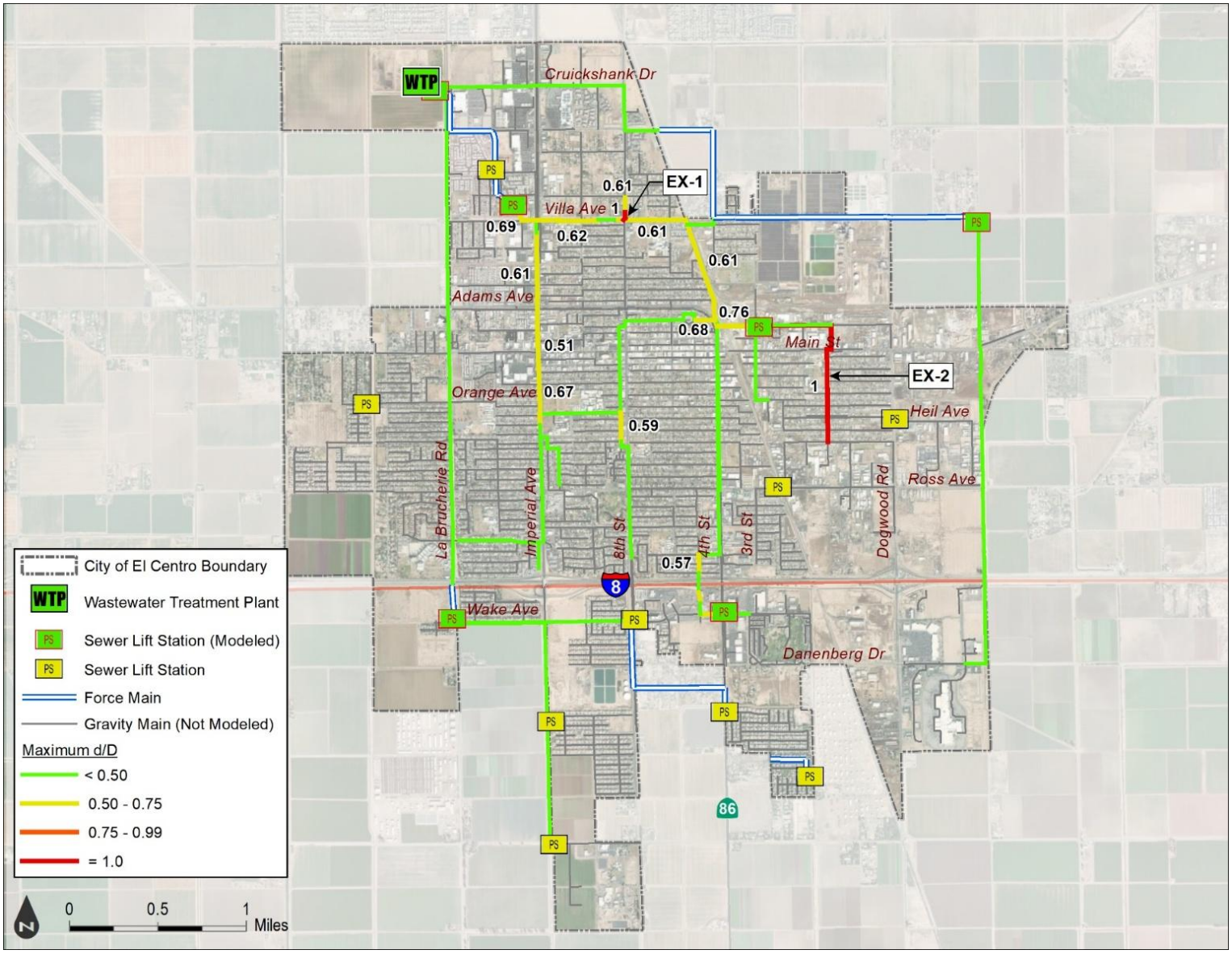

Figure 5.3 Existing (2025) Wet Weather Flow Capacity Analysis Results – Maximum Pipeline d/D

5.4.2 Near-Term (2035) Wet Weather Flow

The City's trunk sewer model was analyzed in the Near-Term wet weather flow scenario. Maximum d/D of all modeled gravity mains over a representative 24-hour period were compared to the deficiency criteria presented in Section 5.2.1.

As summarized in **Table 5.6** and depicted in **Figure 5.4**, the two potential capacity deficiencies identified in the Existing wet weather flow scenario are anticipated to persist in the Near-Term. The maximum d/D of modeled gravity mains in 4th St downstream of the abandoned 4th and Wake lift station are anticipated to improve following the redirection of tributary flow to the Southern lift station.

Table 5.6. Near-Term (2035) System Pipeline Capacity Deficiencies – PWWF

Deficiency ID	Location	Ex. Diameter (inch)	Ex. Worst Condition	Length (LF)
EX-1	N 8th St at Villa Ave	8	Max d/D = 1.0	460
EX-2	Fairfield Dr from Hamilton Ave north to Commercial Ave; Commercial Ave from Fairfield Dr west to Eastside lift station	15; 18	Max d/D = 1.0	5,800
			Total	**6,260**

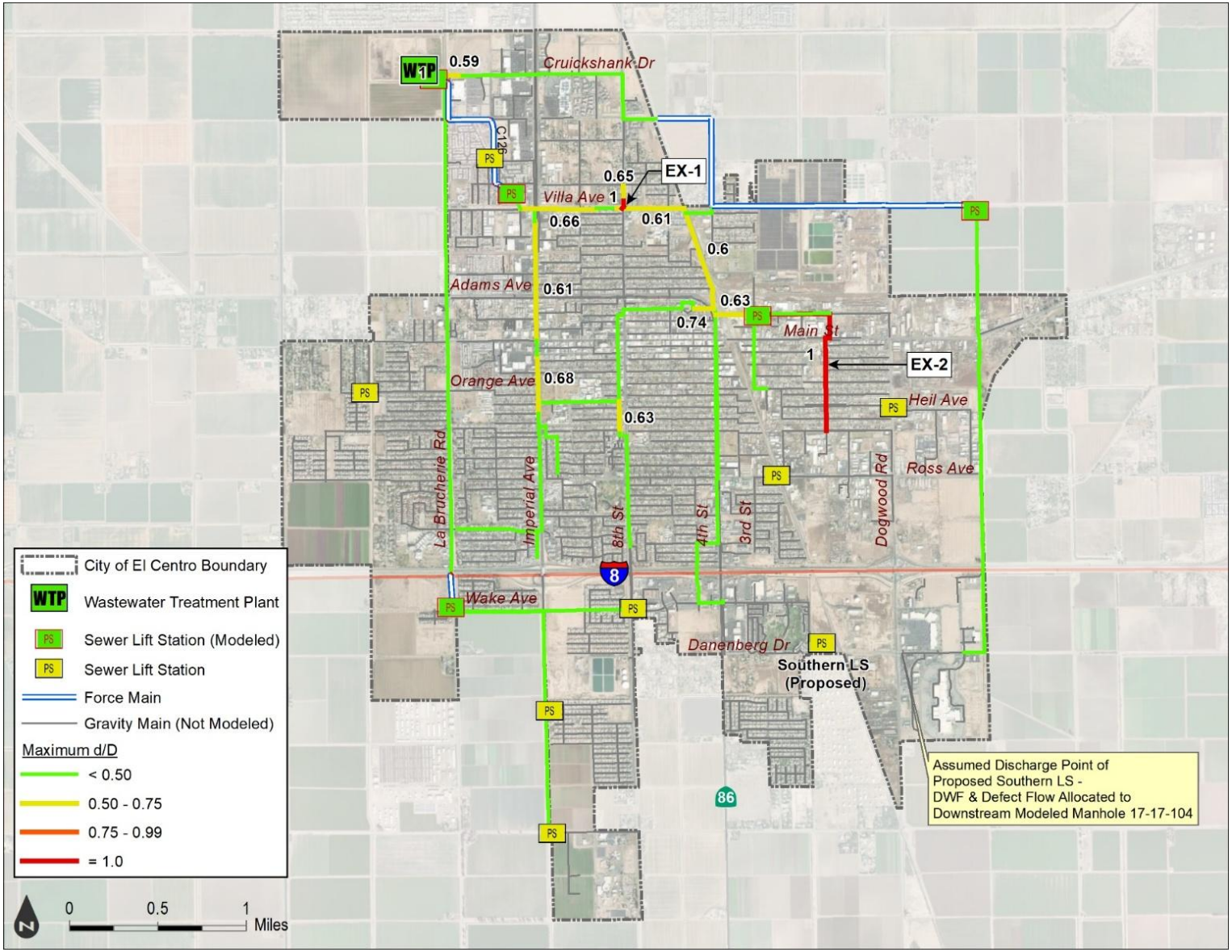

Figure 5.4 Near-Term (2035) Wet Weather Flow Capacity Analysis Results – Maximum Pipeline d/D

5.4.3 Ultimate (2045) Wet Weather Flow

The City's trunk sewer model was analyzed in the Ultimate wet weather flow scenario. Maximum d/D of all modeled gravity mains over a representative 24-hour period were compared to the deficiency criteria presented in Section 5.2.1.

As summarized in **Table 5.7** and depicted in **Figure 5.5**, the two potential capacity deficiencies identified in the Existing and Near-Term wet weather flow scenarios are anticipated to persist in the Ultimate system.

Table 5.7. Ultimate (2045) System Pipeline Capacity Deficiencies – PWWF

Deficiency ID	Location	Ex. Diameter (inch)	Ex. Worst Condition	Length (LF)
EX-1	N 8th St at Villa Ave	8	Max d/D = 1.0	460
EX-2	Fairfield Dr from Hamilton Ave north to Commercial Ave; Commercial Ave from Fairfield Dr west to Eastside lift station	15; 18	Max d/D = 1.0	5,800
			Total	**6,260**

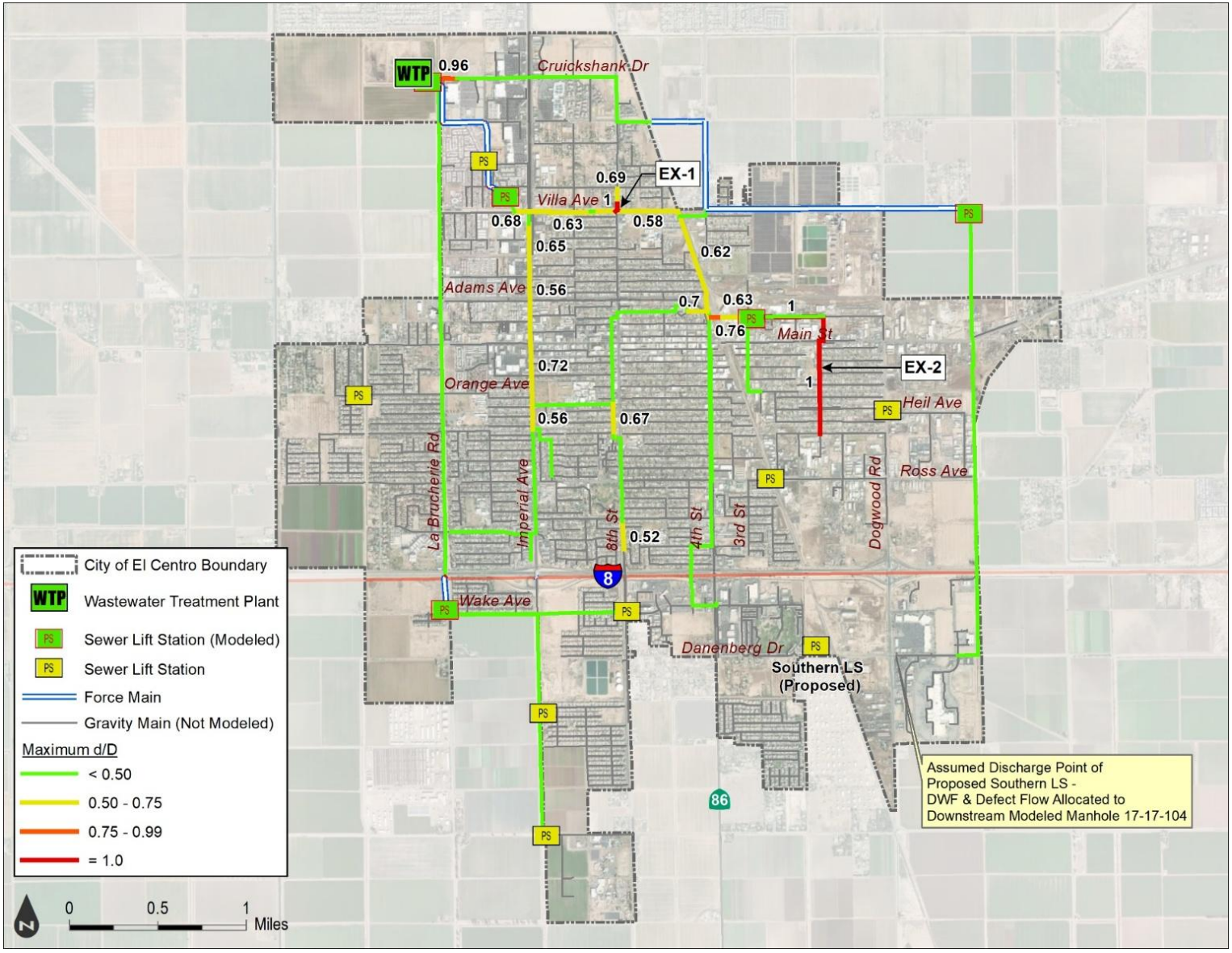

Figure 5.5 Ultimate (2045) Wet Weather Flow Capacity Analysis Results – Maximum Pipeline d/D

5.5 Lift Station and Force Main Capacity Analysis

Six of the City's existing 15 lift stations and their force mains were included in the trunk sewer model. A pumping capacity analysis was completed by comparing the firm capacity of each modeled lift station to its peak influent flow in the calibrated trunk model. The firm capacity of a lift station is its capacity with the largest pump taken out of service.

An emergency storage capacity analysis was also completed for each modeled lift station. The storage analysis results provide an estimate of the total time in hours that may elapse before the volume of sewage in the wet well exceeds the high water level during a power outage or other emergency event. During this time, Public Works staff can establish a source of emergency backup power for the impacted lift station via on-site or portable generators.

The storage analysis completed for each lift station does not include potential storage within the upstream gravity collection system. High water level settings were generally unavailable for the City's lift stations; therefore, the high water level of each lift station was assumed to be the invert elevation of the influent gravity main per as-built record drawings. The following terms are used when evaluating the emergency storage capacity of a lift station:

- **Total Wet Well Volume:** The volume (in MG) of the wet well assuming the height dimension is the difference between the high water level setting and the wet well floor elevation.
- **Operational Volume:** The volume (in MG) of the wet well assuming the heigh dimension is the difference between the lag pump on level setting and the wet well floor elevation.
- **Emergency Volume:** The difference between the Total Wet Well Volume and Operational Volume as defined above. Equivalent to the volume (in MG) of the wet well assuming the heigh dimension is the difference between the lag pump on and high water level settings.
- **Recommended Emergency Volume:** The volume (in MG) equivalent to six hours of modeled ADWF through each lift station.

5.5.1 Lift Station No. 3

Lift Station No. 3 is comprised of three 40 hp pumps and a 32 ft x 10 ft x 31.3 ft rectangular wet well. Two of the pumps are soft starts (converted from VFD), with the third pump remaining on VFD. **Tables 5.8 and 5.9** summarize the results of the pumping and emergency storage capacity analysis for Lift Station No. 3.

Table 5.8. Lift Station No. 3 Capacity Analysis – PWWF

Planning Scenario (Year)	Capacity (gpm)			Total Capacity (gpm / MGD)	Firm Capacity (gpm / MGD)	PWWF (MGD)	Deficient? (Yes/No)
	Pump 1	Pump 2	Pump 3				
Existing (2025)	3,000	3,000	3,000	9,000 / 13.0	6,000 / 8.64	3.93	No
Near-Term (2035)	3,000	3,000	3,000	9,000 / 13.0	6,000 / 8.64	4.46	No
Ultimate (2045)	3,000	3,000	3,000	9,000 / 13.0	6,000 / 8.64	4.63	No

All three pumps at Lift Station No. 3 have a design capacity of 3,000 gpm at 37 ft of TDH. Table 5.8 demonstrates that with any one pump out of service, Lift Station No. 3 has adequate firm capacity to pump the modeled peak influent flow under wet weather conditions in each planning scenario.

Modeled flow through the 24-inch force main achieves a velocity of 3.2 fps and 9.1 fps under Existing PDWF and Ultimate PWWF conditions, respectively. The anticipated force main velocity of 9.1 fps is slightly greater than 8.0 fps; however, no improvements are currently recommended due to the uncertainty of development associated with the Ultimate scenario.

Table 5.9. Lift Station No. 3 Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/ No)
Existing (2025)	0.012	0.016	0.00	1.65	0.41	0.41	0.00	Yes
Near-Term (2035)	0.012	0.016	0.00	2.31	0.58	0.58	0.00	Yes
Ultimate (2045)	0.012	0.016	0.00	2.61	0.65	0.65	0.00	Yes

The wet well's lag pump on level and high water level settings are 6.5 ft and 5 ft, respectively. Since the pump on level is greater than the high water level, there is assumed to be no emergency storage within the Lift Station No. 3 wet well. Table 5.9 demonstrates that in each planning scenario, the wet well does not contain any emergency storage for the modeled ADWF through Lift Station No. 3.

5.5.2 Main Lift Station

The Main Lift Station is comprised of three 50 hp VFD pumps and a 32 ft deep circular wet well with a diameter of 24 ft. **Tables 5.10 and 5.11** summarize the results of the pumping and emergency storage capacity analysis for Main Lift Station.

Table 5.10. Main Lift Station Capacity Analysis – PWWF

Planning Scenario (Year)	Capacity (gpm)			Total Capacity (gpm / MGD)	Firm Capacity (gpm / MGD)	PWWF (MGD)	Deficient? (Yes/No)
	Pump 1	Pump 2	Pump 3				
Existing (2025)	2,535	2,535	2,535	7,605 / 11.0	5,070 / 7.30	5.29	No
Near-Term (2035)	2,535	2,535	2,535	7,605 / 11.0	5,070 / 7.30	5.35	No
Ultimate (2045)	2,535	2,535	2,535	7,605 / 11.0	5,070 / 7.30	5.62	No

All three pumps at Main Lift Station have a design capacity of 2,535 gpm at 39 ft of TDH. Table 5.10 demonstrates that with any one pump out of service, Main Lift Station has adequate firm capacity to pump the modeled peak influent flow under wet weather conditions in each planning scenario.

Modeled flow through the 30-inch force main achieves a velocity of 1.6 fps and 2.5 fps under Existing PDWF and Ultimate PWWF conditions, respectively. The modeled force main velocity of 1.6 fps is slightly less than 2.0 fps; however, no improvements are recommended as influent flow to Main Lift Station will increase during a wet weather event and produce higher force main velocities.

Table 5.11. Main Lift Station Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/ No)
Existing (2025)	0.034	0.010	0.024	3.10	0.77	0.75	0.18	Yes
Near-Term (2035)	0.034	0.010	0.024	3.21	0.80	0.78	0.18	Yes
Ultimate (2045)	0.034	0.010	0.024	3.55	0.89	0.86	0.16	Yes

The wet well's lag pump on level and high water level settings are 3 ft and 10 ft, respectively. Table 5.11 demonstrates that in each planning scenario, the wet well contains approximately ten minutes or less of emergency storage for the modeled ADWF through Main Lift Station.

5.5.3 Alder Canal – Villa Ave Lift Station

The Alder Canal – Villa Ave Lift Station is comprised of two 60 hp VFD pumps and a 16.3 ft x 27 ft x 32 ft rectangular wet well. **Tables 5.12 and 5.13** summarize the results of the pumping and emergency storage capacity analysis for Alder Canal – Villa Ave Lift Station.

Table 5.12. Alder Canal – Villa Ave Lift Station Capacity Analysis – PWWF

Planning Scenario (Year)	Capacity (gpm)		Total Capacity (gpm / MGD)	Firm Capacity (gpm / MGD)	PWWF (MGD)	Deficient? (Yes/No)
	Pump 1	Pump 2				
Existing (2025)	1,908	1,908	3,816 / 5.50	1,908 / 2.75	1.16	No
Near-Term (2035)	1,908	1,908	3,816 / 5.50	1,908 / 2.75	1.48	No
Ultimate (2045)	1,908	1,908	3,816 / 5.50	1,908 / 2.75	1.59	No

Both pumps at Alder Canal – Villa Ave Lift Station have a design capacity of 1,908 gpm at 76.6 ft of TDH. Table 5.12 demonstrates that with one pump out of service, Alder Canal – Villa Ave Lift Station has adequate firm capacity to pump the modeled peak influent flow under wet weather conditions in each planning scenario.

Modeled flow through the 20-inch force main achieves a velocity of 1.1 fps and 1.2 fps under Existing PDWF and Ultimate PWWF conditions, respectively. The force main velocity is less than 2.0 fps in all flow scenarios due to the large diameter of the force main and relatively low influent flow to the lift station.

Table 5.13. Alder Canal – Villa Ave Lift Station Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/ No)
Existing (2025)	0.050	0.023	0.026	0.37	0.09	0.07	1.71	Yes
Near-Term (2035)	0.050	0.023	0.026	0.67	0.17	0.14	0.96	Yes
Ultimate (2045)	0.050	0.023	0.026	0.77	0.19	0.17	0.82	Yes

The wet well's lag pump on level and high water level settings are 7 ft and 15 ft, respectively. Table 5.13 demonstrates that in the Existing scenario, the wet well contains more than 90 minutes of emergency storage for the modeled ADWF through Alder Canal – Villa Ave Lift Station. The emergency storage duration decreases significantly in future scenarios as additional flow from the new Southern Lift Station is routed into the existing lift station.

5.5.4 4th & Wake Lift Station

The 4th & Wake Lift Station is comprised of two 10 hp constant speed pumps and a 19.9 ft deep circular wet well with a diameter of 5.5 ft. **Tables 5.14 and 5.15** summarize the results of the pumping and emergency storage capacity analysis for 4th & Wake Lift Station. The 4th & Wake Lift Station was only analyzed in the Existing scenario, as it is one of three lift stations that will be abandoned and replaced with the new Southern Lift Station prior to the Near-Term.

Table 5.14. 4th & Wake Lift Station Capacity Analysis – PWWF

Planning Scenario (Year)	Capacity (gpm)		Total Capacity (gpm / MGD)	Firm Capacity (gpm / MGD)	PWWF (MGD)	Deficient? (Yes/No)
	Pump 1	Pump 2				
Existing (2025)	200	200	400 / 0.58	200 / 0.29	0.09	No

Both pumps at 4th & Wake Lift Station have a design capacity of 200 gpm at an unknown TDH. Table 5.14 demonstrates that with one pump out of service, 4th & Wake Lift Station has adequate firm capacity to pump the modeled peak influent flow under wet weather conditions in the Existing scenario. Modeled flow through the 4-inch force main achieves a maximum velocity of 3.2 fps under Existing PDWF conditions.

Table 5.15. 4th & Wake Lift Station Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/No)
Existing (2025)	0.0014	0.0011	0.0003	0.085	0.0212	0.0209	0.085	Yes

The wet well's lag pump on level and high water level settings are 6.3 ft and 8 ft, respectively. Table 5.15 demonstrates that in the Existing scenario, the wet well contains only 5 minutes of emergency storage for the modeled ADWF through 4th & Wake Lift Station.

5.5.5 Lift Station No. 2

Lift Station No. 2 is comprised of two 15 hp constant speed pumps and a 26.4 ft deep circular wet well with a diameter of 10 ft. **Tables 5.16 and 5.17** summarize the results of the pumping and emergency storage capacity analysis for Lift Station No. 2.

Table 5.16. Lift Station No. 2 Capacity Analysis – PWWF

Planning Scenario (Year)	Capacity (gpm)		Total Capacity (gpm / MGD)	Firm Capacity (gpm / MGD)	PWWF (MGD)	Deficient? (Yes/No)
	Pump 1	Pump 2				
Existing (2025)	850	850	1,700 / 2.45	850 / 1.22	0.71	No
Near-Term (2035)	850	850	1,700 / 2.45	850 / 1.22	0.63	No
Ultimate (2045)	850	850	1,700 / 2.45	850 / 1.22	0.67	No

Both pumps at Lift Station No. 2 have a design capacity of 850 gpm at 30 ft of TDH. Table 5.16 demonstrates that with one pump out of service, Lift Station No. 2 has adequate firm capacity to pump the modeled peak influent flow under wet weather conditions in each planning scenario. The peak influent flow decreases in future scenarios as a portion of the collection system that is currently tributary to Lift Station No. 2 will be routed east into the new Southern Lift Station. Modeled flow through the 12-inch force main achieves a velocity of 3.2 fps and 3.3 fps under Existing PDWF and Ultimate PWWF conditions, respectively.

Table 5.17. Lift Station No. 2 Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/No)
Existing (2025)	0.0041	0.0041	0.00	0.58	0.14	0.14	0.00	Yes

Table 5.17. Lift Station No. 2 Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/No)
Near-Term (2035)	0.0041	0.0041	0.00	0.49	0.12	0.12	0.00	Yes
Ultimate (2045)	0.0041	0.0041	0.00	0.55	0.14	0.14	0.00	Yes

The wet well's lag pump on level and high water level settings are both 7 ft. Since the pump on level is equal to the high water level, there is assumed to be no emergency storage within the Lift Station No. 2 wet well. Table 5.17 demonstrates that in each planning scenario, the wet well does not contain any emergency storage for the modeled ADWF through Lift Station No. 2.

5.5.6 Eastside Lift Station

The Eastside Lift Station is comprised of two 15 hp constant speed pumps and a 27.4 ft deep circular wet well with a diameter of 10 ft. **Tables 5.18 and 5.19** summarize the results of the pumping and emergency storage capacity analysis for Eastside Lift Station.

Table 5.18. Eastside Lift Station Capacity Analysis – PWWF

Planning Scenario (Year)	Capacity (gpm)		Total Capacity (gpm / MGD)	Firm Capacity (gpm / MGD)	PWWF (MGD)	Deficient? (Yes/No)
	Pump 1	Pump 2				
Existing (2025)	1,132	1,132	2,264 / 3.26	1,132 / 1.63	3.21	Yes
Near-Term (2035)	1,132	1,132	2,264 / 3.26	1,132 / 1.63	2.68	Yes
Ultimate (2045)	1,132	1,132	2,264 / 3.26	1,132 / 1.63	2.58	Yes

Both pumps at Eastside Lift Station have a design capacity of 1,132 gpm at 26 ft of TDH. Table 5.18 demonstrates that with one pump out of service, Eastside Lift Station does not have adequate firm capacity to pump the modeled peak influent flow under wet weather conditions in each planning scenario. Modeled flow through the 10-inch force main achieves a velocity of 6.1 fps and 6.2 fps under Existing PDWF and Ultimate PWWF conditions, respectively.

Table 5.19. Eastside Lift Station Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/No)
Existing (2025)	0.0041	0.0041	0.00	0.46	0.12	0.12	0.00	Yes

Table 5.19. Eastside Lift Station Wet Well Emergency Storage Analysis – ADWF

Planning Scenario (Year)	Total Wet Well Volume (MG)	Operational Volume (MG)	Emergency Volume (MG)	ADWF (MGD)	Recommended Emergency Volume (MG)	Emergency Volume Deficiency (MG)	Emergency Storage Duration (hrs)	Deficient? (Yes/No)
Near-Term (2035)	0.0041	0.0041	0.00	0.53	0.13	0.13	0.00	Yes
Ultimate (2045)	0.0041	0.0041	0.00	0.59	0.15	0.15	0.00	Yes

The wet well's lag pump on level and high water level settings are both 7 ft. Since the pump on level is equal to the high water level, there is assumed to be no emergency storage within the Eastside Lift Station wet well. Table 5.19 demonstrates that in each planning scenario, the wet well does not contain any emergency storage for the modeled ADWF through Eastside Lift Station.

5.5.7 Lift Station Optimization Analysis

As depicted in Figure 5.2 and others, once constructed the Southern Lift Station will convey flow through the easternmost trunk main of the collection system to Alder Canal – Villa Ave Lift Station. By the Near-Term scenario, the Southern Lift Station will replace the existing 4th & Wake, Countryside, and Legacy lift stations, resulting in noticeably higher flows through Alder Canal – Villa Ave Lift Station. However, as demonstrated in Sections 5.4 and 5.5.3, the gravity main upstream of Alder Canal – Villa Ave Lift Station and the pumping units have adequate capacity to accommodate additional flows from Southern Lift Station under both dry and wet weather conditions.

Similarly, Public Works staff have considered decommissioning the Heil & Dogwood and Eastside lift stations and rerouting all tributary flow east to leverage the significant remaining available capacity at Alder Canal – Villa Ave Lift Station. However, the topography of Heil Ave and Commercial Ave is not conducive to uninterrupted gravity flow from the Heil & Dogwood and Eastside lift stations to Alder Canal – Villa Ave. New lift stations will be required to route the tributary flows east, negating any benefits of eliminating the existing lift stations.

Lastly, the Main Lift Station receives flow from trunk mains within Villa Ave and Imperial Ave, which converge at a single manhole at the intersection of Villa and Imperial Ave. From this manhole, a single gravity line conveys flow into Main Lift Station. Public Works staff recognize the manhole may be a critical point of failure within the collection system due to its prominent location upstream of Main Lift Station and lack of redundancy.

To establish separate influent lines to Main Lift Station from the east and south, a reconfiguration of the single manhole at Villa and Imperial Ave was evaluated in the Ultimate wet weather flow scenario. No new capacity deficiencies were identified due to the modification, which will improve the reliability and hydraulic performance of the existing system.

5.6 Capacity Analysis Summary

The Existing dry and wet weather flow scenarios evaluated in the preceding capacity analyses are based on the calibrated conditions described in Sections 4.3 and 4.4, respectively.

The Near-Term dry weather scenario is based on the calibrated Existing dry weather scenario, with the ADWF from each planned near-term development applied to the nearest modeled trunk sewer manhole. Finally, the Ultimate dry weather scenario is based on the Near-Term with a global multiplier of 1.108 applied to each ADWF loading.

Similarly, the Near-Term wet weather scenario is based on the calibrated Existing wet weather scenario, with the ADWF from each planned near-term development applied to the nearest modeled trunk sewer manhole. The Ultimate wet weather scenario is based on the Near-Term with a global multiplier of 1.108 applied to each ADWF loading. The defect flows developed in the Existing wet weather scenario were unmodified in the Near-Term and Ultimate.

Table 5.20 summarizes the existing and future modeled ADWF and PWWF for each planning scenario.

Table 5.20. Existing and Future Sewer Flows in Trunk Sewer Model

Planning Scenario (Year)	ADWF (MGD)	PWWF (MGD)
Existing (2025)	3.78	9.22
Near-Term (2035)	4.39	9.80
Ultimate (2045)	4.88	10.3

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6 Collection System Condition Assessment and Improvements

The following section summarizes the condition assessment performed on the City's existing lift stations, selected gravity mains, and wastewater treatment plant as part of the 2025 Update. Site investigations were conducted at each lift station and the treatment plant to assess the structural, mechanical, electrical, and other relevant characteristics of the existing facilities. Closed Circuit Television (CCTV) inspection reports were reviewed to evaluate the existing physical condition of selected gravity main segments.

Routine condition assessment helps ensure the City remains in compliance with the Statewide Sanitary Sewer Systems General Order (WQ 2022-0103-DWQ). The General Order requires condition assessment and proactive maintenance as part of a sewer service provider's Sanitary Sewer Management Plan (SSMP).

This section also summarizes recommended improvements to the lift stations, inspected gravity mains, and wastewater treatment plant. The recommendations are intended to improve the overall performance, safety, reliability, and day-to-day operations of critical collection and treatment facilities throughout the City's sewer system. A comprehensive list of condition-related recommended improvement projects is included in Section 7.

6.1 Lift Station Condition Assessment Summary

Field inspection of the City's 15 existing lift stations was completed in February 2025. Of the 15 operational lift stations, nine were subject to a comprehensive site visit and evaluation due to their advanced age or importance to the overall system. The remaining six lift stations received a wet well inspection only. **Figure 6.1** depicts the location of each inspected lift station in the City's collection system.

Detailed descriptions of the condition assessment performed at each lift station, including site layouts, hydraulic and pump characteristics, inspection results, and recommended improvements, are documented in a separate technical memorandum included in **Appendix A**.

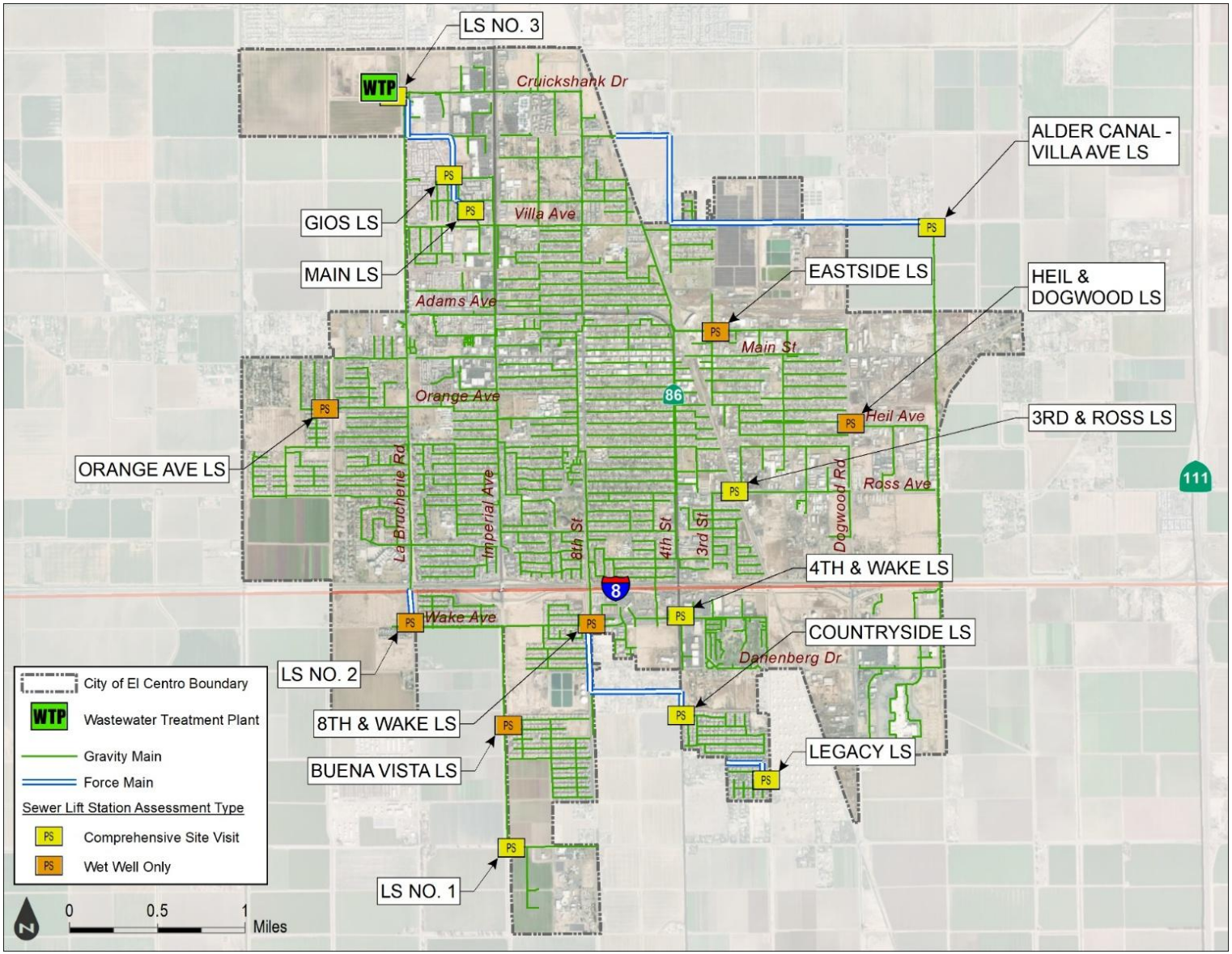

Figure 6.1 Lift Station Condition Assessment Locations

6.1.1 Methodology

Condition assessment of each lift station proceeded as follows:

- Conduct a field inspection to observe the existing condition of the following asset disciplines:
  - **Site:** Civil components including grading, paving, perimeter fencing, access, and utilities.
  - **Mechanical:** Pumps, piping, valves, odor control and mechanical equipment, and any HVAC within the lift station facility.
  - **Structural:** Access hatches and covers, below-grade concrete structures, and structural components relating to the wet well, lift station, vaults, and any applicable superstructures.
  - **Electrical & Instrumentation:** Electrical service equipment, emergency power equipment, motor controls, instruments, and control panels.
  - **Climate Change Vulnerability:** Potential impacts from flooding, electrical outages, heat waves, and other extreme weather events.
- Assess the condition of each asset discipline based on field observations, data review, and discussions with Public Works staff
- Assign each asset discipline a condition designation (Excellent, Good, Fair, or Poor)
- Identify recommended improvements based on each asset discipline's condition designation
- Prepare a planning-level engineer's opinion of construction costs for each recommended improvement (included in Section 7)

6.1.2 Results and Recommendations

Numerous structural and electrical defects were observed during field inspection of the City's lift stations. Representative examples of defects are depicted in **Figures 6.2 through 6.5**. Detailed observations recorded at each lift station are documented and categorized by asset discipline in **Appendix A**.



Figure 6.2 Main Lift Station Bar Screen Structure Grating Deterioration



Figure 6.3 Alder Canal Villa Ave Lift Station Infiltration Damage in Dry Well



Figure 6.4 Eastside Lift Station Level Transducer Cable



Figure 6.5 Countryside Lift Station Failing Wet Well Liner

Table 6.1 summarizes the condition designations of the asset disciplines of each lift station. The following improvements are generally recommended for implementation across all existing lift stations to enhance safety and operational reliability:

- Replacement of access hatches/covers and doors/doorways
- Structural and electrical upgrades required to conform to the latest national fire protection and electrical codes (i.e., NFPA 820 and NEC 500)
- Perform third-party testing on all electrical equipment and breakers
- Improve cellular connectivity and signal on site
- Ensure proper mounting of all ultrasonic level elements within wet well structures
  - At most lift stations, it was observed that the ultrasonic level sensors are attached via manufacturer's cable, which can cause strain and premature failure
- Perform a power system study including short circuit analysis, coordination, and arc flash analysis
  - Install Arc flash stickers on all electrical equipment
- Relocate all electrical and controls equipment outside of hazardous envelopes
- Install sealing fittings (seal-offs) on all conduits exiting wet wells and hazardous envelopes
  - Unsealed conduits are a safety hazard due to the possibility of hydrogen sulfide (H_2S) gas leaking into and accumulating within electrical panels or enclosures containing combustible equipment
- Relocate conduit penetrations for float switches and level sensors outside of equipment enclosures that contain electrical and controls equipment (alternatively, relocate all electrical and controls equipment out of pump enclosure and/or hazardous envelope)
- Install on-site water connection to provide a permanent water supply for site wash-down
- Install bypass connections for all sites that do not currently have one

Recommended improvement projects were ranked as High, Medium and Low priority corresponding to the planning scenario (Existing, Near-Term, or Ultimate) in which they should be completed. Detailed descriptions and prioritization of each improvement project are included in Section 7 and **Appendix A.** All system surveys, studies, and asset replacement projects necessary to meet current code requirements are categorized as High priority and scheduled for completion within the next ten years (Fiscal Year 2026 to 2035).

The High priority projects include:

- Structures, Hatches / Doors, and Bypass Connection Program
- Arch Flash / Short Circuit Study Program
- Testing and Studies Program
- Instrumentation and Controls Program
- Force Main Program
- Power and Generator Program
- Pumps, Piping, Supports, and HVAC Program
- Main Lift Station Rehabilitation Project
- Eastside Lift Station Rehabilitation Project
- Buena Vista Lift Station Rehabilitation Project

- Legacy Lift Station Decommissioning Project
- 4th & Wake Lift Station Decommissioning Project

Table 6.1. Lift Station Condition Assessment Summary

Lift Station	Site Civil	Mechanical	Structural	Electrical & Instrumentation	Climate Vulnerability
Lift Station No. 3	Excellent	Fair to Good	Poor	Poor to Fair	Poor
Gios	Excellent	Fair to Good	Poor	Poor to Fair	Poor
Main	Excellent	Fair to Good	Fair	Poor	Good
Countryside	Excellent	Fair	Poor to Fair	Poor to Fair	Fair to Good
Legacy (Southern Countryside)	Excellent	Fair	Good	Good	Good
Alder Canal – Villa Ave	Excellent	Fair	Fair	Fair	Good to Fair
3rd and Ross	Excellent	Fair	Poor	Fair	Poor
4th and Wake	Good to Excellent	Good	Poor	Fair	Fair
8th and Wake	N/A	Fair	Poor	N/A	N/A
Lift Station No. 2	N/A	Fair to Good	Excellent	N/A	N/A
Orange Ave	N/A	Good	Poor	N/A	N/A
Lift Station No. 1	Excellent	Fair to Good	Fair to Good	Good	N/A
Buena Vista	N/A	Good	Fair to Good	N/A	N/A
Eastside	N/A	Fair	Good	N/A	N/A
Heil and Dogwood	N/A	Poor to Fair	Fair to Good	N/A	N/A

6.2 Gravity Main Condition Assessment Summary

CCTV inspection reports for 40 gravity pipeline segments, totaling approximately 1.7 miles, were reviewed as part of the 2025 Update. Each inspection report documented the structural and other physical defects within each pipe segment as identified by the camera operator. The locations of the 40 segments are depicted in **Figure 6.6**.

A suitable rehabilitation or repair method was recommended for each pipe segment. Pipeline rehabilitation and repair methods range from the in-situ (i.e., trenchless), such as trimming intrusions and lining with Cured-In-Place Pipe (CIPP), to the more complex including excavation point repairs and complete replacement.

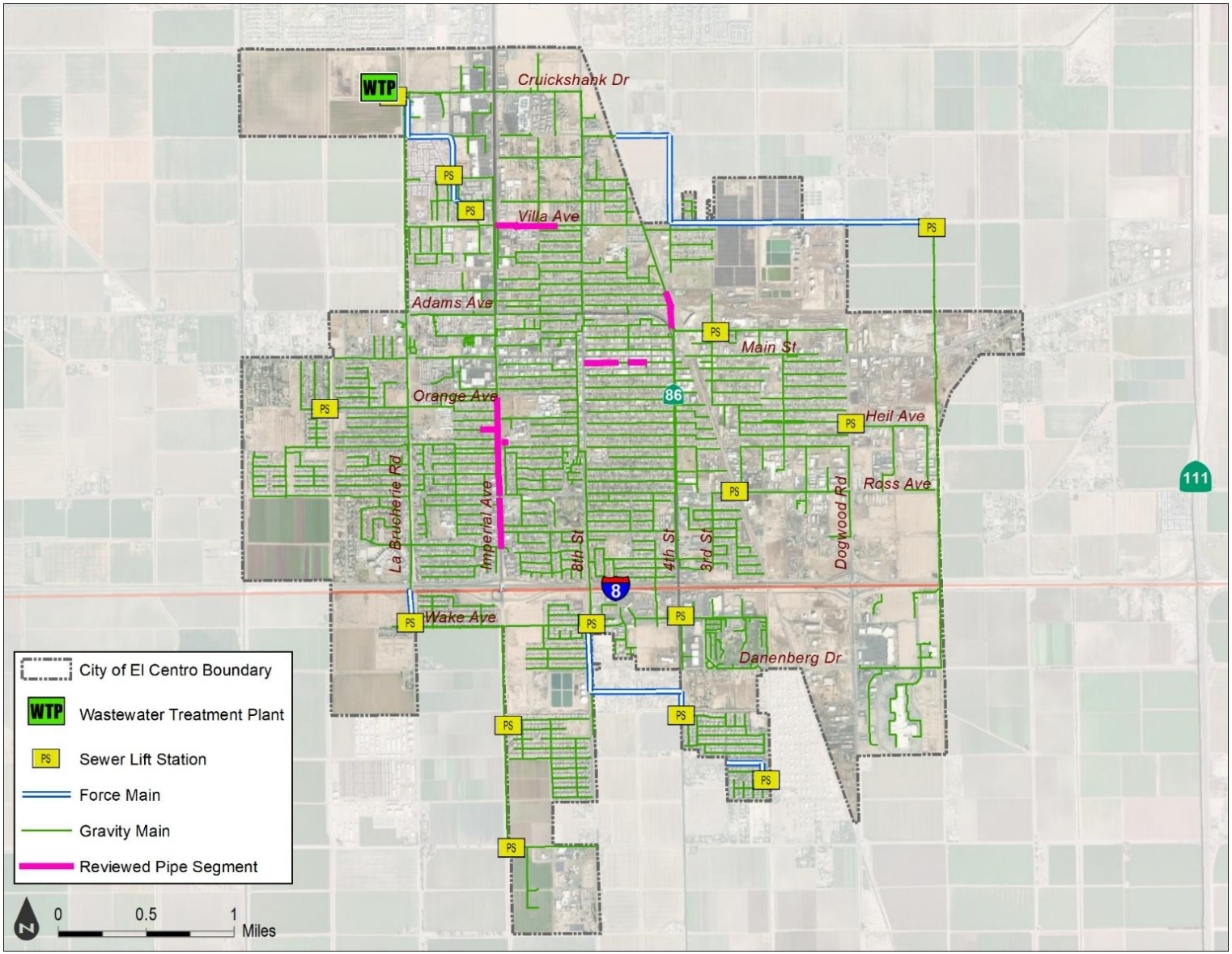

Figure 6.6 Gravity Main Condition Assessment Locations

6.2.1 Methodology

Condition assessment of each gravity main segment proceeded as follows:

- Review of CCTV inspection report provided by Public Works staff, including pictures and video where applicable
- Log all relevant gravity main and lateral data and observed defects as noted within report
- Identify an appropriate rehabilitation or repair method for the pipe segment, with less intrusive methods favored whenever suitable
- Prepare a planning-level engineer's opinion of construction costs for each recommended repair method (included in Section 7)

CCTV inspections of the reviewed pipe segments were completed between 2014 and 2025. The inspection reports were prepared in accordance with the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) standards.

The PACP standards define a uniform set of codes used to easily categorize any frequently encountered structural defects, faults and imperfections, or other physical observations within an inspected pipe segment. Table 6.2 summarizes the most common defects and observations noted during condition assessment of the City's gravity mains and their corresponding PACP code.

Table 6.2. Pipeline Assessment Certification Program (PACP) Codes

PACP Code	Definition
B	Broken
BSV/BVV	Broken Soils/Void Visible
CC/CL/CM	Crack Circumferential/Longitudinal/Multiple
DAE/DAGS	Deposits Attached Encrustation/Grease
DSC/DSZ	Deposits Settled Hard (Compacted)/Other
FC/FL/FM	Fracture Circumferential/Longitudinal/Multiple
H	Hole
JOL/JOM	Joint Offset Large/Medium
MCU	Miscellaneous Camera Underwater
MSA	Miscellaneous Survey Abandoned
MWL/MWM	Miscellaneous Water Level/Mark
MWLS	Miscellaneous Water Level Sag
OBI/OBZ	Obstruction through Wall/Other
RBL/RML	Roots Ball/Medium Lateral
RFJ/RMJ	Roots Fine Joint/Medium Joint
TBA/TBI	Tap Break In Active/Intruding
TFA/TFC/TFD	Tap Factory Active/Capped/Defective
X	Collapse

NASSCO PACP standards require all observed structural defects to be assigned a condition grade from 1 to 5. The condition grades noted in each inspection report can be used to quickly determine the presence and quantity of major defects in a pipe segment. As summarized in **Table 6.3**, a higher condition grade corresponds to a more severe defect, with the most critical assigned a grade of 4 or 5. In general, a pipe segment with a single Grade 5 structural defect is considered significantly more likely to fail and therefore requires immediate attention, compared to a segment with several Grade 1 or 2 defects that may remain in good condition for years to come.

Table 6.3. Pipeline Condition Grades

Grade	Description	Estimated Time to Failure
1	Excellent	Unlikely
2	Good	20+ years
3	Fair	10-20 years
4	Poor	5-10 years
5	Immediate Action	Has failed or could fail within 5 years

6.2.2 Results and Recommendations

The following repair methods were considered for each pipe segment after review of the inspection reports:

- **CIPP Lining:** Cured-In-Place Pipe (CIPP) lining of entire segment from manhole to manhole. CIPP lining effectively constructs a new pipeline within an existing line, using the existing pipe as a mold. The liner is a resin-saturated felt tube that is inverted into the existing pipe segment between two manholes and cured in place using steam or hot water. The resultant new pipeline is as strong as the original "host" pipe segment and has an expected useful life of more than 50 years.
- **Replace in Place:** Excavation and replacement of the entire segment from manhole to manhole.
- **In-situ Point Repair:** Trenchless/in-situ repair of a single defect, typically 4-feet in length or less, using a CIPP short liner.
- **Excavation Point Repair:** Replacement of a short segment of pipe by open trench construction to address a severe defect. Dresser style couplings for connections to the existing pipe are recommended to reduce the potential for differential settlement. May also include replacement of lateral connection(s) to the sewer main.
- **Trim Intrusion:** Laterals or other objects that intrude into the gravity main can catch debris and restrict sewer flow. Such intruding elements can be trimmed by a small robotic device traversing through the main.

In-situ (i.e., trenchless) methods were recommended whenever appropriate to reduce repair costs and potential impacts to the public and environment. Representative examples of observed defects with their corresponding recommended repair method are depicted in **Figures 6.7 through 6.10.**

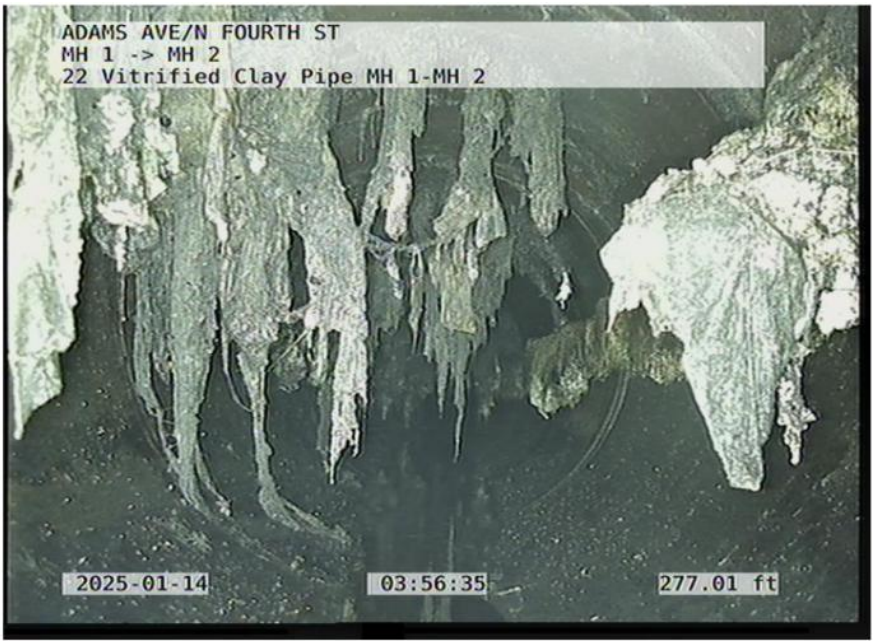

Figure 6.7 Severe Root Intrusion (Adams Ave) – Trim Intrusion & CIPP Lining



Figure 6.8 Broken Pipe with Soil Visible (State St) – Excavation Point Repair

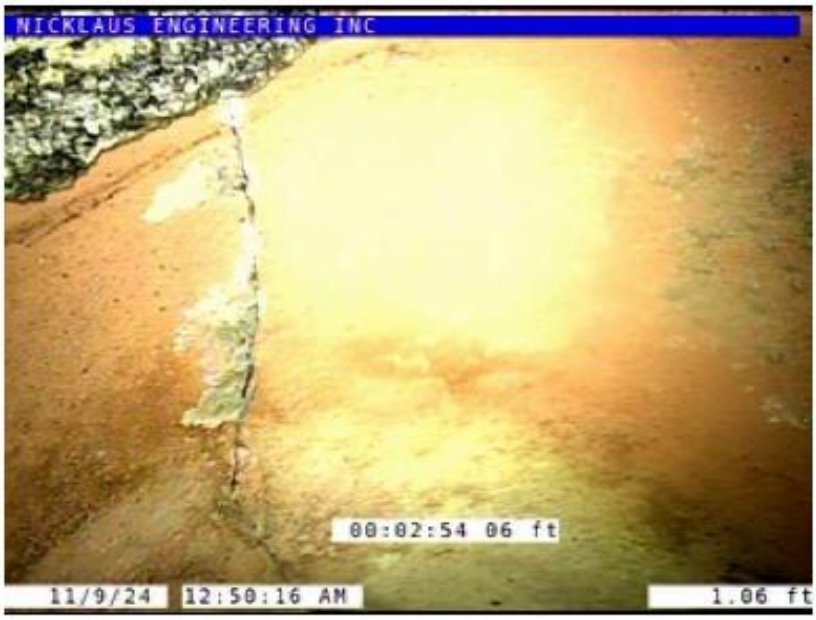

Figure 6.9 Crack Longitudinal (Imperial Ave) – CIPP Lining



Figure 6.10 Debris in Pipe (Imperial Ave) – Heavy Cleaning & Debris Removal

Of the 40 reviewed pipe segments, 25 were recommended for at least one method of rehabilitation or repair. A log of the reviewed pipe segments, including gravity main diameter, length, number of laterals, observed defects, and recommended repairs are included in **Appendix F. Table 6.4** summarizes the recommended repair methods and their respective quantities (lineal feet or number of segments). **Figure 6.11** depicts the locations of the recommended repairs.

Public Works staff noted that CIPP liner was installed within certain segments of the 27-inch trunk main in Villa Ave based on findings from inspection reports completed in 2015. Therefore, the trunk main in Villa Ave should be re-inspected prior to implementation of any lining project to verify if and where pipeline rehabilitation is still necessary. Furthermore, field survey of the trunk main in Villa Ave indicated extensive sagging throughout the pipeline. Public Works staff have observed misalignment of gravity main inverts at various locations throughout the collection system and attribute

Table 6.4. Gravity Main Condition Assessment Recommendations Summary

Recommended Repair / Rehabilitation Method	Number of Pipe Segments	Quantity (LF or EA)
CIPP Lining (8-, 12-, 22-, or 27-inch Pipe)	22	3,866 LF
Excavation Point Repair (8- or 12-inch Pipe)	3	EA

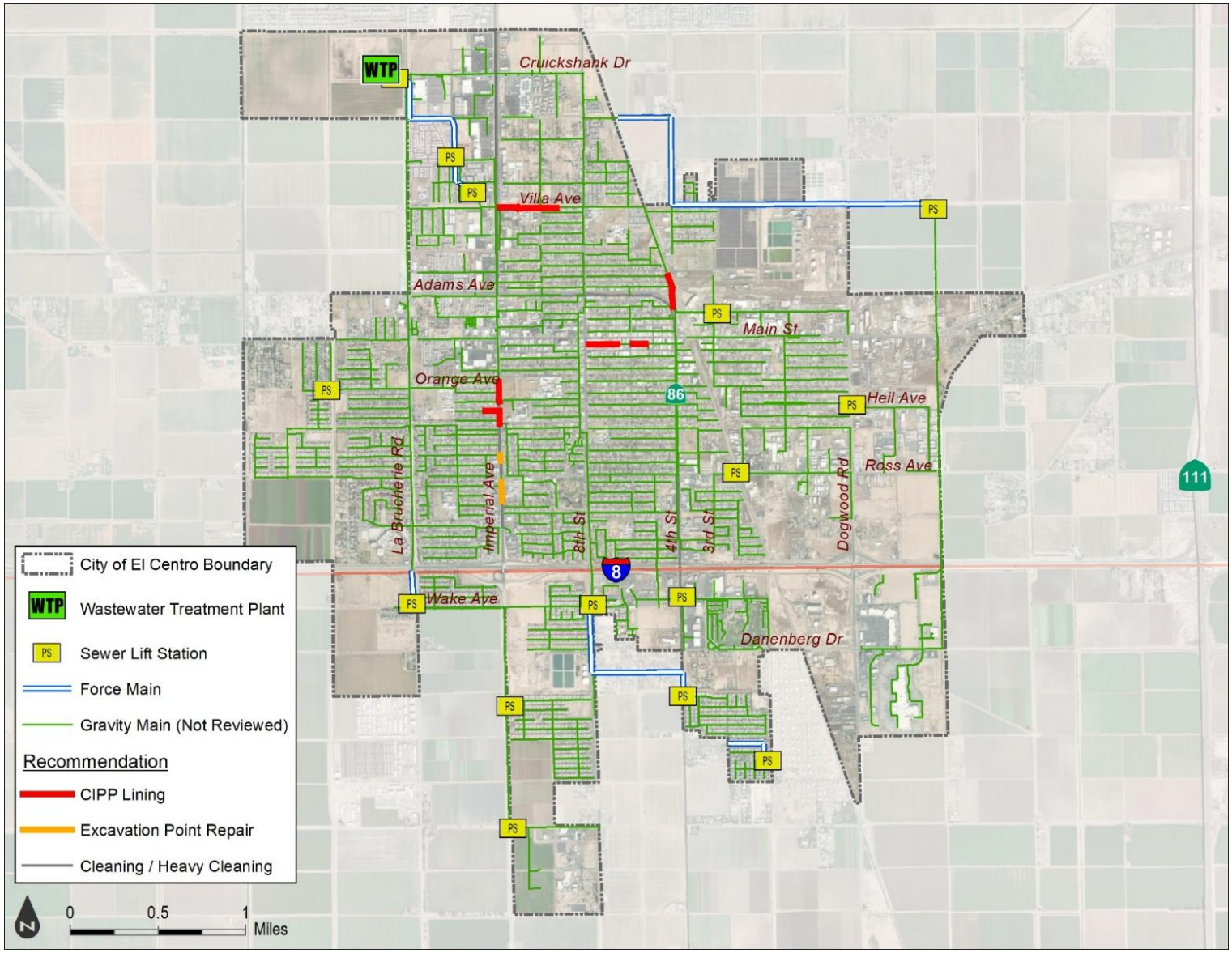

Figure 6.11 Gravity Main Condition Assessment Recommendations

6.2.2.1 Total Dissolved Solids (TDS) Concentrations

At the outset of the flow monitoring program summarized in Section 4.1, Public Works staff collected grab samples to measure the concentration of total dissolved solids (TDS) at each flow monitoring location. **Table 6.5** summarizes the measured TDS concentration at each flow monitoring location in March 2025.

Table 6.5. TDS Grab Samples Results

FM Location	TDS (mg/L)
FM 01	1,400
FM 02	2,300
FM 03	1,400
FM 04	3,200
FM 05	1,200
FM 06	1,400
FM 07	1,700
FM 08	1,500
FM 09	2,200

The average TDS concentration in the City's potable water supply is approximately 700 mg/L. The TDS concentration in domestic wastewater is typically 200 to 500 mg/L higher than its potable water equivalent. Industrial and commercial customers can significantly increase the TDS concentration in wastewater, depending on the on-site activities and quality of discharge involved.

Several of the grab sample collection sites, including FM 02, FM 04, and FM 09, resulted in notably high TDS concentrations that are not typically observed within a municipal sewer system primarily serving residential customers. Due to the predominance of agricultural land use throughout Imperial Valley, groundwater TDS concentrations often range from 1,000 to over 3,000 mg/L, depending on aquifer depth and proximity to agricultural activities (Source: California Water Library). Certain wells near sources of agricultural return flows have recorded TDS concentrations of up to 5,000 mg/L. City staff have detected TDS concentrations as high as 25,000 mg/L at a depth of approximately 20 ft in groundwater samples.

Elevated TDS concentrations within the City's sewer collection system may result from persistent groundwater infiltration via cracks and fractures in gravity mains. For example, a significant increase in defect flow was observed within the FM 04 and FM 09 sewersheds relative to their physical area during the wet weather calibration event described in Section 4.4. The high defect flows and TDS concentrations observed at FM 04 and FM 09 indicate the condition of the upstream gravity mains may be poor and require additional physical maintenance or repair. It is recommended that the City complete a focused I&I study within the FM 04 sewershed to identify specific locations that may be significant sources of defect flow or high TDS concentrations. Such sources may be individual commercial or industrial dischargers, or certain pipe segments with structural defects that allow for groundwater infiltration.

6.3 Manhole Condition Assessment Summary

The City performed field inspections on manholes in Imperial Avenue between Danenburg Avenue to McCabe Road, as shown in **Figure 6.12**. The City provided the list of manholes to Dudek for inclusion in the CIP project recommendations for this master plan. All manholes were found by the City to need significant rehabilitation. Based on discussions with City staff, the manhole rehabilitation method recommended included a combination of mortar repair with corrosion resistant geopolymer mortar and cured-in-place (CIP) PVC composite manhole liners (CIPM liner) for all 11 manholes.

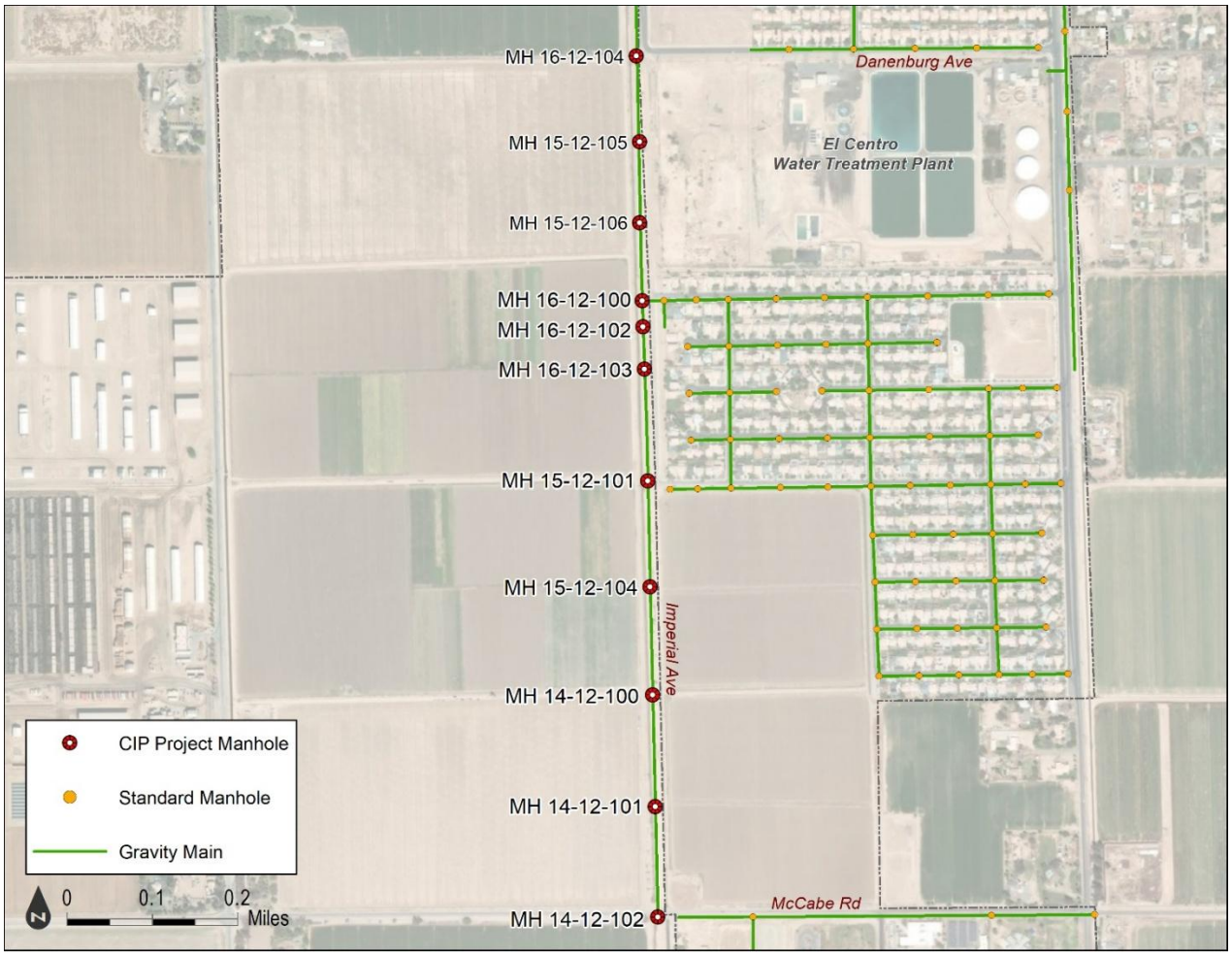

Figure 6.12 Missing Supports and Covers at Primary Clarifier Gallery

6.4 WWTP Condition Assessment Summary

A site investigation and capacity evaluation of the City's wastewater treatment plant was completed in July 2025 as part of the 2025 Update. The wastewater treatment plant was originally constructed in 1957 to treat sewer flows generated within the City before discharge into the Central Drain and ultimately Salton Sea. The most recent plant expansion was completed by the City in 1994 and included additional aeration basins, secondary clarifiers, a gas mixing system, and numerous other improvements and upgrades.

The treatment plant is permitted by the state of California to treat an average flow of 8.0 MGD. Generally, the plant operates well below its rated capacity as the average recorded influent flow is only 3.52 MGD. In addition, certain treatment processes within the plant limit its overall ability to accept the permitted flow rate.

Detailed descriptions of each existing wastewater treatment facility, condition assessment, capacity analysis, and recommended improvements are documented in a separate technical memorandum included in **Appendix B**.

6.4.1 Methodology

Condition assessment of the wastewater treatment plant proceeded as follows:

- Conduct a field inspection to observe the existing condition of each treatment facility or component.
- Assess the condition of each treatment facility based on field observations, data review, and discussions with Public Works staff
- Complete a desktop capacity evaluation of the plant's main treatment processes (i.e., primary clarifiers, aeration basins, and secondary clarifiers) under both existing and future flow conditions.
- Identify recommended improvements based on each treatment facility's condition and/or capacity deficiencies.
- Prepare a planning-level engineer's opinion of construction costs for each recommended improvement (included in Section 7)

6.4.2 Results and Recommendations

Numerous structural, mechanical, and electrical defects were observed during field inspection of the City's wastewater treatment plant. Representative examples of defects are depicted in **Figures 6.13 through 6.16**. **Table 6.6** summarizes the recommended improvements for each major facility at the wastewater treatment plant, categorized by replacement, repair, new installation, and/or removal.

Detailed observations recorded at each facility are documented in **Appendix B.**



Figure 6.13 Missing Supports and Covers at Primary Clarifier Gallery



Figure 6.14 Cracked Concrete and Exposed Rebar at Aeration Basins

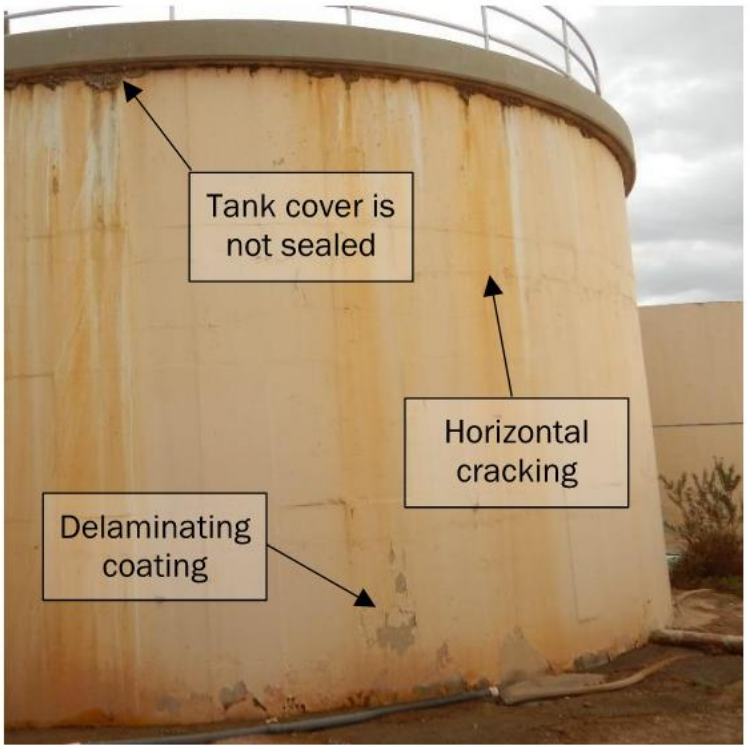

Figure 6.15 Delaminated Coating and Unsealed Cover at Digester Tank



Figure 6.16 Corrosion and Rusting at Belt Press Access Ladder

Table 6.6. WWTP Condition Assessment Recommendations Summary

Treatment Facility	Replacement	Repair / Rehabilitation	New Installation	Removal
Headworks (Primary Treatment)	Bar screen structure; channel grating hardware; all piping that is 6-inch or less and all related valves and appurtenances in the primary clarifier gallery; temporary piping connected to primary sludge pumps; five sluice gates and metallic safety components in the primary clarifier gallery	Floor drain at staircase landing; bar screen structure at lower-level entrance; recoat and inspect 24-inch influent line; clean and inspect interior and exterior of the influent distribution structure	Shade structure over primary sludge pump; permanent supports for influent line	All unused piping and related appurtenances in primary clarifier gallery; temporary supports for influent line
Aeration Basins (Secondary Treatment)	Diffusers and piping; 36 sluice gates	Concrete; inspect interior and exterior of basins	N/A	Mechanical mixer concrete pads
Secondary Clarifiers and Ancillary Pumps (Secondary Treatment)	West splitter box and sluice gates; sluice gates for central splitter box; roof deck of plant water pump station; concrete pads for WAS Pumps No. 1 and 2	Concrete for northwest access hatch of sludge pump room; concrete curb surrounding southwest aluminum hatch; inspect interior and exterior of plant water pump station; plant water pumps, piping, and appurtenances	Cover to the wet well in the sludge pump room	N/A
Digester Tanks (Solids Treatment)	Exterior coating of Tanks No. 2 and 3; concrete flatwork around tanks; floating cover for Tank No. 3; gas mixing systems for Tanks No. 1 and 2 with new pump-type mixing systems; all sludge piping, plug valves, and appurtenances; all waste gas piping and appurtenances for each digester; collapsed storm drain between the digesters and the primary clarifier gallery	Line tanks; recoat spiral stairway and remove lower sections and platforms by Tanks No. 2 and 3; relocate stairway by Tanks No. 1 and 2	N/A	Old digester sludge pump and replace with new rotary lobe pump on a permanent equipment pad; unused process piping, including digester supernatant piping, for each digester
Gravity Belt Thickeners (Solids Treatment)	GBTs and related piping and appurtenances; air compressors; temporary polymer piping with permanent piping; Polymer Feed Pump No. 2 and outlet connection joint	Concrete slabs; existing shade Structure	Shade structure over polymer totes that reach over the belt presses and cover polymer totes with plastic covering; a	N/A

Table 6.6. WWTP Condition Assessment Recommendations Summary

Treatment Facility	Replacement	Repair / Rehabilitation	New Installation	Removal
			permanent mount for TWAS Pumps No. 1 and 2	
Dewatering (Solids Treatment)	Belt Press No. 1; concrete pads under both belt presses; access ladders for both belt presses	N/A	Shade structure over both belt presses; new 209-feet x 209-feet x 6-inch sludge drying bed north of the existing sludge drying bed	N/A
Operations Building	N/A	Exterior of electrical room. Americans with Disability Act (ADA)-compliance.	New main office building Northeast of the existing building.	Used electrical equipment from the blower building electrical room (MCC No. 3)

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7 Capital Improvements Program

The following section summarizes the recommended capacity and condition improvement projects developed to address the pipeline, lift station, and wastewater treatment plant deficiencies identified in Sections 5 and 6. Additional recommendations include a staffing plan and other long-term initiatives to enhance the operational efficiency and resiliency of the City's sewer system. Lastly, the section presents planning-level engineer's cost opinions for each recommended project as well as potential funding sources for City staff to pursue.

The recommended projects and associated cost opinions are compiled into a multi-year sewer CIP for implementation by the City. The sewer CIP is a culmination of the results and recommendations developed in the 2025 Update. Completion of the projects defined in the CIP will improve the existing level of service, ensure regulatory compliance, and address future growth throughout the City's sewer system.

7.1 Pipeline Capacity Improvement Projects

Based on the results of the capacity analysis in Section 5, two pipeline improvement projects are recommended to address existing and anticipated capacity deficiencies under Existing and Ultimate PWWF conditions.

In addition to the two projects, a targeted Infiltration Study utilizing TDS sampling is recommended to better understand and mitigate groundwater infiltration into the sanitary sewer system. This approach will:

- Identify sewer sub-basins with elevated TDS levels indicative of groundwater intrusion;
- Prioritize areas for further CCTV inspection and rehabilitation;
- Support data-driven decisions for inflow and infiltration (I&I) reduction;
- Enhance system capacity and reduce treatment costs.

This infiltration study also aligns with the emphasis of the Sanitary Sewer Systems General Order (WQ 2022-0103-DWQ) on condition assessment and proactive maintenance planning, which is required as part of an agency's SSMP.

The following **Table 7.1** summarizes the two recommended pipeline capacity improvement projects, while **Figure 7.1** depicts the locations of the projects within the City's collection system.

As PCAP-1 is based on deficiencies identified in the Existing planning scenario, it is recommended that the City complete the project prior to the Near-Term scenario, or within the next 10 years. PCAP-2, the reconfiguration of the Main LS influent gravity sewers, is also recommended for completion prior to the Near-Term scenario.

Table 7.1. Recommended Pipeline Capacity Improvement Projects Summary

Project ID	Deficiency ID	Planning Scenario	Project Description	Justification
PCAP-1	EX-2	Existing (2025)	Focused I&I study of the Eastside LS tributary area as well as TDS sampling systemwide to identify sources of I&I; includes CCTV inspection and smoke testing of areas of suspected high I&I.	System flow data indicates high defect flow entering this basin and high TDS in the Eastside LS tributary area.
PCAP-2	N/A	Existing (2025)	Reconfigure influent sewer into the Main LS wet well and construct separate gravity lines from Villa and Imperial Ave	Establish a second influent pipe into Main Lift Station for redundancy / reliability due to failure of existing single convergence manhole during wet weather event

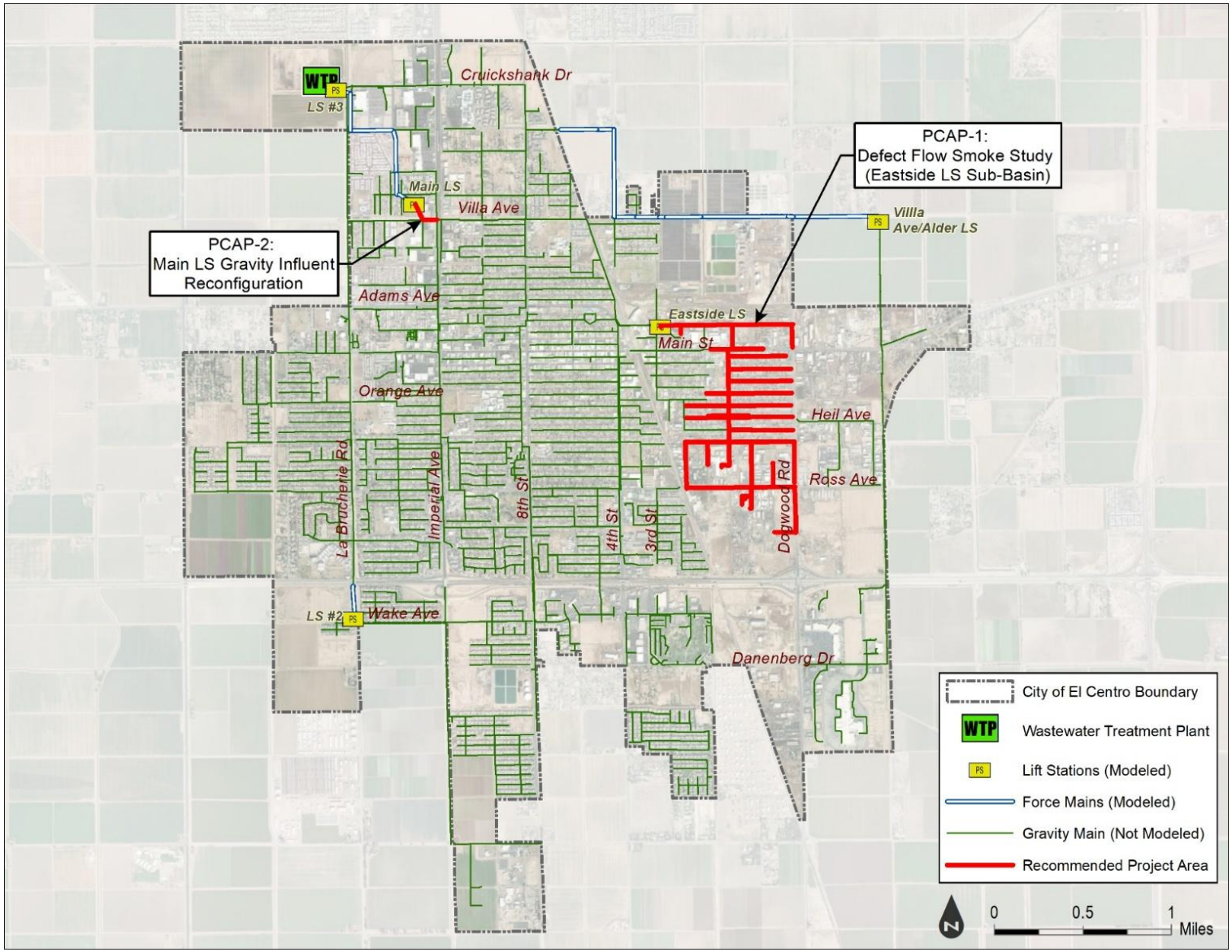

Figure 7.1 Recommended Pipeline Capacity Improvement Projects

7.2 Pipeline Condition Improvement Projects

The following **Table 7.2** summarizes the recommended condition improvement projects identified during condition assessment of the City's pipelines. The locations of the pipeline replacement projects are shown in Section 6.2.

Table 7.2. Recommended Pipeline Condition Improvement Projects Summary

Project ID	Description	Justification
PCON-1	Excavation point repair on the following gravity segments: Two 8-inch mains; One 12-inch main	Pipeline segments have one significant structural defect or encrusted/compacted deposits that severely impact normal sewer flow.
PCON-2	CIPP lining of 22 gravity segments, from manhole to manhole: 1,047 LF of 8-inch main; 1,087 LF of 12-inch main; 432 LF of 22-inch main; 1,300 LF 27-inch main. Heavy cleaning prior to CIPP lining.	Pipeline segments have multiple cracks or fractures
PCON-3	$1M Annual CIPP Lining Program from Year 11 through 20 (FY36-37 through FY45-46).	Continued rehabilitation of aging pipeline infrastructure to ensure system reliability.

7.3 Manhole Condition Improvement Projects

The following **Table 7.3** summarizes the recommended condition improvement projects identified during condition assessment of the City's manhole inspection data. The locations of the manhole rehabilitation projects are shown in Section 6.3.

Table 7.3. Recommended Pipeline Condition Improvement Projects Summary

Project ID	Description	Justification
MH-1	Manhole Mortar Repair and CIPM Lining of 11 manholes on Imperial Ave between Danenburg Ave to McCabe Rd.	Rehabilitation of manholes in poor condition.
MH-2	Ongoing $200,000 per year Manhole Rehabilitation Program from Year 6 through Year 20 (FY31-32 to FY45-46).	Continued rehabilitation of aging manhole infrastructure to ensure system reliability.

7.4 Lift Station Improvement Projects

The following **Table 7.4** provides a summary of recommended capital improvement projects for each of the evaluated lift stations. These recommended improvements projects are focused on mitigating existing operational and safety risks, while utilizing the remaining useful life left in each lift station asset. Each station is provided with recommended improvements involving rehabilitation of the lift station assets to address immediate concerns, potential catastrophic failure of existing structures, code violations, safety risks, security risks, bypass capability, and increased reliability.

Table 7.4. Recommended Lift Station Improvement Projects Summary

Project ID	Project Name	Description and Justification
LSCON-1	Structures, Hatches / Doors, and Bypass Connection Program – Phase 1	Structures – This program will address rehabilitation and replacement of structural components at lift stations to improve safety, reliability, and long-term performance. Improvements include rehabilitation of wet wells, replacement of wet well piping and pipe supports, rehabilitation of wet well liners, replacement of access stairs, replacement of wet well access covers, and wall penetration patching and related structural improvements. The specific scope will vary by facility based on condition assessments, but implementation of this program will extend service life of key structures, improve maintainability, and ensure compliance with safety standards. Hatches / Doors – This program will replace aging wet well access covers, hatches, and vault doors at lift stations to improve safety, security, and reliability. The specific improvements will vary by facility but will generally address deteriorated or non-standard access points that no longer meet current operational or safety requirements. Implementation of this program will enhance worker safety, improve site security, and ensure that facilities comply with applicable access and safety standards. Bypass Connection – This program involves installing permanent bypass pumping connections at all lift stations that currently lack this critical feature. The bypass assemblies will provide quick and reliable access points for temporary pumps during planned maintenance or emergency events, minimizing the risk of sanitary sewer overflows and service disruptions. Improvements will include new suction and discharge fittings, associated valving, and site modifications as needed to ensure safe and efficient pump setup. Implementation of this program will enhance system resiliency, improve operational flexibility, and support regulatory compliance across the wastewater collection system.
LSCON-2	Arc Flash / Short Circuit Study Program	This program will improve electrical safety at lift stations through the completion of power system studies and the application of updated arc flash labeling. The work will include short circuit and coordination analyses to confirm system protection settings, along with installation of arc flash hazard warning stickers at eight lift stations. Implementation of this program will enhance worker safety, ensure compliance with electrical safety standards, and reduce risks associated with maintenance and emergency response activities.
LSCON-3	Testing and Studies Program	This program will complete specialized evaluations and third-party testing to improve safety and reliability of lift station facilities. Planned work includes a dry well seismic evaluation at one facility to assess structural resilience and independent testing of motor control centers (MCCs) and breakers at three facilities to verify electrical safety and performance. Implementation of this program will provide critical data to guide future improvements, reduce operational risks, and ensure compliance with applicable safety and reliability standards.
LSCON-4	Instrumentation and Control Program – Phase 1	This program will replace and upgrade critical electrical and control systems at lift stations, including programmable logic controllers (PLCs), motor control centers (MCCs), automatic transfer switches (ATSs), variable frequency drives (VFDs), electrical panels, conduits, site lighting, instrumentation, and control panels. The specific improvements will vary by facility based on existing conditions and operational needs, but will generally focus on standardizing equipment, improving reliability, and extending service life. Implementation of this program will enhance operational efficiency, expand remote monitoring and control capabilities, and ensure compliance with current electrical and safety standards across the collection system.

Table 7.4. Recommended Lift Station Improvement Projects Summary

Project ID	Project Name	Description and Justification
LSCON-5	Force Main Program – Phase 1	This program will replace downstream force mains from Orange LS and Lift Station No. 3 to address existing operational challenges and capacity limitations. The work will include installation of new force mains designed to accommodate current and projected flows, along with all associated bypass pumping required to maintain service during construction. Implementation of this program will resolve hydraulic constraints, improve system reliability, and ensure the collection system can continue to operate effectively under future demand conditions.
LSCON-6	Power and Generator Program	This program will improve the reliability of lift station power systems through installation of permanent backup generators and portable generator connectors with transfer switches. Additional improvements include replacement of corroded generator piping, replacement of utility power poles, and replacement of main breakers. The specific scope will vary by facility based on condition assessments, but implementation of this program will enhance system resiliency, reduce the risk of service interruptions, and ensure compliance with electrical and safety standards.
LSCON-7	Structures, Hatches / Doors, and Bypass Connection Program – Phase 2	See LS.01 for detailed descriptions.
LSCON-8	Instrumentation and Control Program – Phase 2	See LS.04 for detailed descriptions.
LSCON-9	Pumps, Piping, Supports, and HVAC Program	This program will address mechanical and ventilation improvements at lift stations to enhance reliability, safety, and operability. Improvements include installation of emergency eye wash stations, replacement of force mains within wet wells, replacement of sump pumps and associated discharge piping, repair of forced air ventilation systems, replacement of pump bases, installation of chemical injection ports, replacement of suction piping in wet wells, and installation of discharge flow meters. The specific scope will vary by facility based on condition and operational needs, but implementation of this program will improve worker safety, extend equipment life, and ensure reliable system performance.
LSCON-10	Main Lift Station Rehabilitation Project	This project will rehabilitate key electrical, structural, and mechanical systems at the lift station to improve safety, reliability, and long-term performance. Planned improvements include upgrades to site and emergency lighting, replacement of the generator and flow meter, structural repairs to the bar screen vault (including floor grating and access stairs), and enhancements to safety and ventilation systems. Collectively, these improvements will extend facility service life, improve maintainability, and ensure continued reliable operation.
LSCON-11	East Side Lift Station	This project will rehabilitate critical components within the wet well to improve reliability and maintainability. Planned improvements include installation of a backup level element, replacement of suction piping, and rehabilitation of the

Table 7.4. Recommended Lift Station Improvement Projects Summary

Project ID	Project Name	Description and Justification
	Rehabilitation Project	wet well liner, along with associated bypass pumping to support construction activities. Together, these upgrades will extend the service life of the wet well, reduce operational risk, and ensure continued reliable performance of the lift station.
LSCON-12	Buena Vista Lift Station Rehabilitation Project	This project will address security, structural, and operational needs at the lift station. Planned improvements include installation of intrusion switches to enhance site security, replacement of wet well access covers to improve safety and maintainability, and spot repairs to the wet well liner to extend structural service life. The project will also include bypass pumping to support construction activities. Together, these improvements will reduce operational risks, improve safety, and ensure reliable facility performance.
LSCON-13	Legacy Lift Station Decommissioning Project	This project will decommission the existing lift station that will no longer required for system operation. Planned work will include permanent disconnection of electrical and mechanical equipment, abandonment or removal of wet well piping, and demolition or filling of below-grade structures as required. Additional work may include site restoration and minor utility rerouting to ensure continuity of service. Collectively, these improvements will safely retire the facility, eliminate ongoing maintenance costs, and reduce long-term operational risk.
LSCON-14	4th & Wake Lift Station Decommissioning Project	This project will decommission the existing lift station that will no longer required for system operation. Planned work will include permanent disconnection of electrical and mechanical equipment, abandonment or removal of wet well piping, and demolition or filling of below-grade structures as required. Additional work may include site restoration and minor utility rerouting to ensure continuity of service. Collectively, these improvements will safely retire the facility, eliminate ongoing maintenance costs, and reduce long-term operational risk.
LSCON-15	Force Main Program – Phase 2	This program will replace approximately 12,300 linear feet of downstream force main of Alder Villa LS to address the existing oversized force main. The project will include installation of new piping designed to accommodate current and future flows, along with bypass pumping to maintain service during construction. Implementation of this program will resolve hydraulic constraints, improve reliability, and ensure the collection system continues to perform effectively under future demand conditions.
LSCON-16	Gios Lift Station Rehabilitation Project	This project will implement targeted upgrades to improve safety, reliability, and maintainability at the lift station. Planned improvements include installation of an emergency eye wash to improve worker safety, replacement of water service piping to ensure dependable utility connections, and installation of pump lifting chains to facilitate safer and more efficient pump maintenance. Collectively, these improvements will enhance operational safety, reduce risks, and support reliable long-term performance of the facility.
LSCON-17	Lift Station No. 3 Rehabilitation Project	This project will rehabilitate key electrical, structural, and mechanical components of the lift station to improve safety, reliability, and performance. Planned improvements include replacement of wet well lighting, installation of a discharge flow meter with a new vault, site grading to improve drainage and access, and installation of a permanent fixed access ladder for the bar screen motor. Additional work will include replacement of existing 40-HP pumping units, replacement of wet well access hatches, and provision of bypass pumping to support construction activities.

Table 7.4. Recommended Lift Station Improvement Projects Summary

Project ID	Project Name	Description and Justification
		Collectively, these improvements will extend the service life of the facility, enhance worker safety, and ensure continued reliable operation.
LSCON-18	8th & Wake Lift Station Rehabilitation Project	This project will replace the existing 5-HP pumps to improve reliability and maintainability of the lift station. The pump replacement will extend equipment service life, reduce the risk of unplanned failures, and ensure continued reliable operation of the facility.
LSCON-19	Alder Canal - Villa Ave Lift Station Rehabilitation Project	This project will rehabilitate key electrical, structural, and site components of the lift station to improve safety, reliability, and performance. Planned improvements include verification of the drywell flood alarm and integration with the RTU, redesign and installation of LED lighting in the drywell, and drainage and grading improvements to prevent water infiltration. Additional work will include installation of outdoor lighting at the chemical area, replacement of exterior and interior lighting at the electrical building, installation of a discharge flow meter with a new vault, and site grading improvements. Station bypass pumping will be provided to support construction activities. Collectively, these improvements will extend the service life of the facility, enhance worker safety, and ensure continued reliable operation.
LSCON-20	3rd & Ross Lift Station Rehabilitation Project	This project will implement targeted upgrades to improve safety, reliability, and maintainability of the lift station. Planned improvements include installation of new site task lighting and provision of an on-site water connection to support facility operations and maintenance. Collectively, these improvements will enhance worker safety, improve operational efficiency, and ensure continued reliable performance of the facility.

7.5 WWTP Improvement Projects

Recommended improvements to the City's wastewater treatment plant are listed in **Table 7.5** to address the condition and capacity deficiencies described in **Appendix B**. These improvements are broken down into treatment processes.

Table 7.5. Recommended Wastewater Treatment Plant Improvement Projects Summary

Project ID	Project Name	Description and Justification
WWTP-1	Headworks	Bar screen structure - replace entrance door hardware and intrusion switch. Repair floor drain at staircase landing, bar screen structure lower-level entrance. Replace channel grating hardware, bar screen structure. Recoat and inspect 24-inch influent line and replace temporary wooden supports with permanent concrete or steel supports Empty, clean, and

Table 7.5. Recommended Wastewater Treatment Plant Improvement Projects Summary

Project ID	Project Name	Description and Justification
		have a structural engineer inspect the interior and exterior of the influent distribution structure to determine proposed structural improvements.
WWTP-2	Primary Clarifiers	Replace existing clarifiers with two larger clarifiers (Alternative B). Install shade structure over primary sludge pumps. Replace all piping that is 6- inches or less, scum piping, plug valves, and all other related valves and appurtenances in the primary clarifier gallery. Remove all unused piping and related appurtenances in primary clarifier gallery. Replace temporary piping connected to primary sludge pumps with permanent piping in primary clarifier gallery. Replace the five sluice gates and metallic safety components including the grating, handrail, light pole, shade structure, and sampling shed platform in the primary clarifier gallery
WWTP-3	Aeration Basins	Empty, clean, and inspect interior and exterior of each basin. Rehabilitate concrete. Remove mechanical mixer concrete pads. Replace diffusers and piping. Replace 36 sluice gates.
WWTP-4	Secondary Clarifiers	Replace west splitter box and sluice gates. Replace sluice gates for central splitter box. Inspect interior and exterior of plant water pump station. Replace roof deck of plant water pump station. Inspect plant water pumps, piping, and appurtenances. Refurbish concrete for northwest access hatch of sludge pump room and rehabilitate concrete curb surrounding southwest aluminum hatch. Replace concrete pads for WAS Pumps No. 1 and No. 2. Install cover to the wet well in the sludge pump room.
WWTP-5	Digesters	Reline each digester. Replace exterior coating on Digesters No. 2 and No. 3. Replace floating cover on Digester No. 3. Remove old digested sludge pump and replace it with new rotary lobe pump on a permanent equipment pad. Add one digested sludge pump. Replace gas mixing system with new pump-type mixing system for Digesters No. 1 and No. 2. Replace all sludge piping, plug valves, and appurtenances between the digesters and primary clarifiers and between the digesters and the belt presses. Replace all waste gas piping and appurtenances for each digester. Remove unused piping, including the digester supernatant piping, for each digester. Recoat spiral stairway and remove lower section by Digester No. 2 and No. 3. Relocate stairway by Digester No. 1 and No. 2. Recoat the platforms for Digesters No. 2 and No. 3. Replace storm drain between digesters and primary clarifier gallery. Replace concrete flatwork for each digester.
WWTP-6	Gravity Belt Thickeners	Replace GBTs and related piping and appurtenances. Replace air compressors. Rehabilitate concrete slabs. Replace temporary polymer piping with permanent piping. Replace Polymer Feed Pump No. 2 and outlet connection joint. Install shade structure over polymer totes that reach over the belt presses and cover polymer totes with plastic covering. Rehabilitate existing shade structure. Permanently mount TWAS Pumps No. 1 and No. 2. Replace temporary piping for TWAS Pump No. 1 with permanent piping and install permanent piping for TWAS Pump No. 2.
WWTP-7	Dewatering	Replace Belt Press No. 1. Replace concrete pads under both belt presses. Replace access ladders for both belt presses. Install shade structure over both belt presses. Install new 209-feet x 209-feet x 6-inch sludge drying bed north of the existing sludge drying bed.

Table 7.5. Recommended Wastewater Treatment Plant Improvement Projects Summary

Project ID	Project Name	Description and Justification
WWTP-8	Operations Building	Construct a new main office building Northeast of the existing building. Remove used electrical equipment from the blower building electrical room (MCC No. 3) and refurbish the exterior of the electrical room
WWTP-9	Operations Building ADA Compliance	Bring current Operations Building up to ADA basic compliance, including ramp installation, adjusted threshold and door clearances, accessible route from parking to entrance, widen doors to 32" clear opening, replacing knobs with lever-style handles, adjusting closing force and door swing clearance. Modifying restrooms to include grab bars, ADA-compliant stall and sink (heights, faucet controls, turning radius). Providing at least one van accessible space and installing compliant signage and striping. Lowering light switches, thermostats and other controls to 48" max height, adjusting counters to provide auxiliary surfaces at 34" height.

7.6 Staffing Plan

To ensure that all current and future needs of the sewer system are met, and to support its long-term resilience and regulatory compliance, it is essential to have a robust staffing plan. As part of the 2025 Update, a staffing study was prepared to estimate the additional personnel required to support the City's goals for effective sewer system management. The study is included in **Appendix G** of this report. Work effort incorporated within this staffing study includes routine maintenance activities such as cleaning, lift station inspections, CCTV inspections, infrastructure rehabilitation or replacement, and treatment plant operations and maintenance.

To conduct the study, the following documents were reviewed:

- Organizational charts from various districts
- Staffing plans from various districts
- El Centro's Sewer System Management Plan
- El Centro's ongoing Water and Sewer Master Plan
- Notes from interviews with City staff

A staffing plan was then developed based on the reviewed documents. The methodology for developing a staffing plan began with a review of organizational charts and staffing plans from multiple water/sewer service districts and cities to identify common workforce structures. Ratios relative to service area or service volume served as a reference for shaping the City of El Centro's workforce structure. Data from El Centro's Sewer System Management Plan and Sewer Master Plan were then incorporated into the analysis. These metrics were used as scaling factors and were applied to peer agency staffing ratios to estimate El Centro's full-time equivalent staffing requirements.

Table 7.6 summarizes the total number of full-time employees needed to maintain both the sewer collection system and the WWTP, based on the analysis in **Appendix G**. Based on the analysis of the sewer collection system maintenance requirements and the organizational charts for the WWTP staff, it is recommended that the City staff a total of 13 employees for the WWTP, five to six operators for sewer collection system maintenance, and one dedicated WWTP Instrumentation Electrical Technician. Alongside that, it is recommended that the City hire one to five additional engineering staff, as well as one to two additional administrative staff to be shared between the Sewer and Water maintenance efforts.

Table 7.6. Summary of Total Recommended Full Time Employee (FTEs)

Department	Current Number of FTTs	Recommended Additional FTEs	Recommended Total FTEs
WWTP Staff	13	1	14
Instrumentation Electrical Technician	0.5	0.5	1
Underground Utilities Staff (Sewer Operators)	3	2 to 3	5 to 6
Engineering[1]	5	1 to 5	6 to 10
Administration[1] (excluding Fleet staff)	6	1 to 2	7 to 8

Notes:
[1] Recommendations for Engineering and Administration staff are shared between the Sewer and Water Systems.

7.7 Additional Recommendations

To enhance system integrity, operational security, and environmental compliance, the following capital and programmatic initiatives summarized in **Table 7.7** are recommended:

Table 7.7. Recommended Additional Improvement Projects Summary

Project ID	Project Description	Justification
AD-1	Brick Sewer Study - Focused study program to investigate all the brick sewer pipes in the system. Conduct CCTV inspections of all suspected brick segments, particularly those located parallel to the Union Pacific Railroad between Adams Avenue and Villa Avenue. Brick sewers, due to their age and material composition, are highly susceptible to structural failure, including sudden collapse, root intrusion, and infiltration.	Extend the service life of legacy infrastructure; reduce the risk of sanitary sewer spills; improve hydraulic performance and structural integrity; comply with the General Order's requirements for asset management and risk mitigation.
AD-2	Cybersecurity Vulnerability Assessment - Evaluate the vulnerability of the City's wastewater treatment facilities, SCADA systems, and data networks to unauthorized access, ransomware, and other cyber threats.	Safeguard public health, ensure regulatory compliance, and protect the City's operational continuity.
AD-3	Sewer Collection System Survey – Perform full sewer collection system survey of all 1,981 manholes over 5-year period and update City sewer GIS.	Build a complete, accurate GIS of the sewer collection system, including manhole inverts, ground surface elevations, and confirmed pipeline diameters.

7.8 Recommended CIP Projects Cost Summary

Estimated project costs were developed using planning-level assumptions informed by recent bid data, industry-standard unit costs, and engineering judgment. For pipeline rehabilitation and replacement, costs were calculated on a per-linear-foot basis and adjusted for variables such as pipe diameter, installation depth, and surface restoration requirements. Lift station rehabilitation costs reflect the anticipated scope of mechanical, electrical, and structural improvements necessary to restore or enhance operational reliability. Wastewater treatment plant rehabilitation estimates are based on preliminary assessments of process upgrades, equipment replacement, and structural repairs. Costs for additional studies, including condition assessments and flow evaluations, were estimated based on expected level of effort and professional labor rates. All estimates include allowances for contingencies, permitting, and construction management to provide the City with a realistic and comprehensive foundation for capital planning. **Table 7.8** provides a breakdown of the cost multiplier assumptions.

Table 7.8. Cost Multiplier Summary

Cost Multiplier	Value
General Requirements	10%
Contingency	30 – 40%
Engineering	10 – 30% depending on project size
Construction Management	10 – 15% depending on project size

Table 7.8. Cost Multiplier Summary

Cost Multiplier	Value
Engineering Services during Construction	2%
Environmental	2%
Administration	2%

Projects identified in the master plan were prioritized based on the severity of observed deficiencies and an assessment of overall system risk. This prioritization framework ensures that resources are allocated to the most critical needs, or those with the highest potential for service disruption, environmental impact, or regulatory non-compliance.

Tables 7.9 through 7.14 summarize the probable construction and total project costs associated with each recommended CIP project. Detailed cost breakdowns for individual projects are provided in **Appendix H**. All cost estimates are based on an Engineering News Record (ENR) Construction Cost Index (CCI) of 15,993.96 for September 2025, with a 4% annual escalation factor applied to reflect fiscal year cost projections.

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Table 7.9. Recommended Pipeline Improvement Projects Cost Summary

PIPELINE IMPROVEMENT PROJECTS																							
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																			
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	PCON-1	Excavation Point Repairs	$ 358	$74	$311	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PCON-2	CIPP Lining - No Excavation	$ 4,382	$ -	$ -	$ -	$ -	$ 424	$ 1,021	$ 1,062	$ 1,105	$ 1,149	$ 1,195	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PCON-3	Annual CIPP Lining Program	$ 10,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,540	$ 1,602	$ 1,666	$ 1,732	$ 1,801	$ 1,873	$ 1,948	$ 2,026	$ 2,107	$ 2,192
		TOTAL CONDITION:	**$ 14,740**	**$ 74**	**$ 311**	**$ -**	**$ -**	**$ 424**	**$ 1,021**	**$ 1,062**	**$ 1,105**	**$ 1,149**	**$ 1,195**	**$ 1,540**	**$ 1,602**	**$ 1,666**	**$ 1,732**	**$ 1,801**	**$ 1,873**	**$ 1,948**	**$ 2,026**	**$ 2,107**	**$ 2,192**
Capacity	PCAP-1	Inflow and Infiltration Study	$ 466	$ -	$ -	$ -	$ 273	$ 284	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PCAP-2	Main LS Gravity Influent Reconfiguration	$ 3,849	$ -	$ -	$ -	$ -	$ -	$ 523	$ 4,522	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL CAPACITY:	**$ 4,315**	**$ -**	**$ -**	**$ -**	**$ 273**	**$ 284**	**$ 523**	**$ 4,522**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
		COMBINED TOTAL:	**$ 19,055**	**$ 74**	**$ 311**	**$ -**	**$ 273**	**$ 708**	**$ 1,544**	**$ 5,584**	**$ 1,105**	**$ 1,149**	**$ 1,195**	**$ 1,540**	**$ 1,602**	**$ 1,666**	**$ 1,732**	**$ 1,801**	**$ 1,873**	**$ 1,948**	**$ 2,026**	**$ 2,107**	**$ 2,192**

Table 7.10. Recommended Manhole Improvement Projects Cost Summary

MANHOLE IMPROVEMENT PROJECTS																							
Improvement Type	Project ID	Project Name	Total Project Cost (1,000$)	Project Cost (1,000$)																			
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	MCON-1	Manhole Mortar Repair and CIPM Lining	$ 778	$ 129	$ 177	$ 184	$ 192	$ 199	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	MCON-2	Ongoing Manhole Rehabilitation Program	$ 3,000	$ -	$ -	$ -	$ -	$ -	$ 254	$ 264	$ 274	$ 285	$ 297	$ 308	$ 321	$ 334	$ 347	$ 361	$ 375	$ 390	$ 406	$ 422	$ 439
		TOTAL:	**$ 3,778**	**$ 129**	**$ 177**	**$ 184**	**$ 192**	**$ 199**	**$ 254**	**$ 264**	**$ 274**	**$ 285**	**$ 297**	**$ 308**	**$ 321**	**$ 334**	**$ 347**	**$ 361**	**$ 375**	**$ 390**	**$ 406**	**$ 422**	**$ 439**

Table 7.11. Recommended Lift Station Improvement Projects Cost Summary

LIFT STATION IMPROVEMENT PROJECTS																									
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																					
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	LSCON-01	Structures, Hatches / Doors and Bypass Connection Program - Phase 1	$ 4,801	$ -	$ 779	$ 4,590	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-02	Arc Flash / Short Circuit Study Program	$ 204	$ -	$ -	$ 34	$ 203	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-03	Testing and Studies Program	$ 206	$ -	$ -	$ 35	$ 205	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-04	Instrumentation and Control Program - Phase 1	$ 1,810	$ -	$ -	$ 305	$ 1,800	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-05	Force Main Program - Phase 1	$ 1,337	$ -	$ -	$ -	$ 235	$ 1,383	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-06	Power and Generator Program	$ 998	$ -	$ -	$ -	$ 175	$ 1,032	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-07	Structures, Hatches / Doors and Bypass Connection Program - Phase 2	$ 2,058	$ -	$ -	$ -	$ -	$ 376	$ 2,213	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-08	Instrumentation and Control Program - Phase 2	$ 1,412	$ -	$ -	$ -	$ -	$ -	$ 268	$ 1,579	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-09	Pumps, Piping, Supports, and HVAC Program	$ 891	$ -	$ -	$ -	$ -	$ -	$ 169	$ 997	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-10	Main Lift Station Rehabilitation Project	$ 1,601	$ -	$ -	$ -	$ -	$ -	$ -	$ 316	$ 1,862	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-11	East Side Lift Station Rehabilitation Project	$ 259	$ -	$ -	$ -	$ -	$ -	$ -	$ 51	$ 301	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-12	Buena Vista Lift Station Rehabilitation Project	$ 241	$ -	$ -	$ -	$ -	$ -	$ -	$ 48	$ 280	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-13	Legacy Lift Station Decomissioning Project	$ 697	$ -	$ -	$ -	$ -	$ -	$ -	$ 138	$ 811	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-14	4th & Wake Lift Station Decomissioning Project	$ 697	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 143	$ 843	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-15	Force Main Program - Phase 2	$ 8,304	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,705	$ 10,046	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-16	Gios Lift Station Rehabilitation Project	$ 29	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6	$ 38	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-17	Lift Station No. 3 Rehabilitation Project	$ 1,056	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 234	$ 1,382	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-18	8th & Wake Lift Station Rehabilitation Project	$ 243	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 56	$ 331	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-19	Alder Canal - Villa Ave Lift Station Rehabilitation Project	$ 521	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 125	$ 737	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	LSCON-20	3rd & Ross Lift Station Rehabilitation Project	$ 47	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11	$ 67	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 27,412	$ -	$ 779	$ 4,964	$ 2,618	$ 2,791	$ 2,650	$ 3,129	$ 5,102	$10,889	$ 240	$ 1,476	$ 467	$ 804	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Table 7.12. Recommended Wastewater Treatment Plant Improvements Projects Cost Summary

WWTP IMPROVEMENT PROJECTS																							
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																			
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	WWTP-1	Headworks	$ 172	$ -	$ -	$ -	$ 202	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-2	Primary Clarifiers	$ 10,816	$ -	$ -	$ -	$ -	$ 523	$ 3,694	$ 6,552	$ 3,407	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-3	Aeration Basins	$ 4,257	$ -	$ -	$ -	$ 396	$ 2,385	$ 2,480	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-4	Secondary Clarifiers	$ 749	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,026	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-5	Digesters	$ 10,031	$ 414	$ 2,928	$ 5,195	$ 2,701	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-6	Gravity Belt Thickeners	$ 3,929	$ 1,004	$ 2,125	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-7	Dewatering	$ 3,289	$ 567	$ 1,779	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-8	Operations Building	$ 7,356	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 832	$ 3,342	$ 3,476	$ 3,615	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	WWTP-9	Operations Building ADA Improvements	$ 455	$ 94	$ 403	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 41,054	$ 2,079	$ 7,235	$ 5,195	$ 3,299	$ 2,908	$ 6,174	$ 6,552	$ 4,433	$ 832	$ 3,342	$ 3,476	$ 3,615	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Table 7.13. Recommended Additional Improvements Projects Cost Summary

ADDITIONAL IMPROVEMENT PROJECTS																							
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																			
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	AD-1	Brick Sewer Study	$ 172	$ -	$ -	$ 194	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Security	AD-2	Cybersecurity Vulnerability Assessment	$ 198	$ -	$ -	$ -	$ -	$ -	$ 251	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
GIS	AD-3	Sewer Collection System Survey and GIS Update	$ 984	$ 205	$ 213	$ 222	$ 231	$ 240	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 1,354	$ 205	$ 213	$ 416	$ 231	$ 240	$ 251	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Table 7.14. Annual CIP Project Summary Table by Improvement Type

Improvement Type	Total Project Cost ($1,000)	Project Cost ($1,000)																			
		Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Pipeline Rehab	$ 14,740	$ 74	$ 311	$ -	$ -	$ 424	$ 1,021	$ 1,062	$ 1,105	$ 1,149	$ 1,195	$ 1,540	$ 1,602	$ 1,666	$ 1,732	$ 1,801	$ 1,873	$ 1,948	$ 2,026	$ 2,107	$ 2,192
System Capacity	$ 4,315	$ -	$ -	$ -	$ 273	$ 284	$ 523	$ 4,522	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Manholes	$ 3,778	$ 129	$ 177	$ 184	$ 192	$ 199	$ 254	$ 264	$ 274	$ 285	$ 297	$ 308	$ 321	$ 334	$ 347	$ 361	$ 375	$ 390	$ 406	$ 422	$ 439
Lift Stations	$ 27,412	$ -	$ 779	$ 4,964	$ 2,618	$ 2,791	$ 2,650	$ 3,129	$ 5,102	$ 10,889	$ 240	$ 1,476	$ 467	$ 804	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WWTP	$ 41,054	$ 2,079	$ 7,235	$ 5,195	$ 3,299	$ 2,908	$ 6,174	$ 6,552	$ 4,433	$ 832	$ 3,342	$ 3,476	$ 3,615	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Projects	$ 1,354	$ 205	$ 213	$ 416	$ 231	$ 240	$ 251	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Totals:	$ 92,653	$ 2,487	$ 8,715	$ 10,759	$ 6,613	$ 6,846	$ 10,873	$ 15,529	$ 10,914	$ 13,155	$ 5,074	$ 6,800	$ 6,005	$ 2,804	$ 2,079	$ 2,162	$ 2,248	$ 2,338	$ 2,432	$ 2,529	$ 2,631

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7.9 Potential Funding Sources

Table 7.15 presents descriptions of potential State and Federal funding sources the City may want to consider for the sewer CIP.

Table 7.15. Potential Funding Sources

Funding Source	Program	Description	Type	Typical Range of Funding	Estimated Time to Acquire Funds
California State Water Resources Control Board (SWRCB)[1]	Clean Water State Revolving Fund (CWSRF)	Provides low-interest loans for water quality improvement projects, including sewer system upgrades.	State	$1 million to $100 million	6-12 months
California Infrastructure and Economic Development Bank (IBank)	Infrastructure State Revolving Fund (ISRF) Program	Offers low-cost financing to public agencies for various infrastructure projects, including sewer systems.	State	$1 million to $65 million	6-12 months
Department of Housing & Urban Development (HUD)	Community Development Block Grants (CDBG)[2]	Administered by HUD, these grants can be used for infrastructure projects in low- to moderate-income communities.	Federal	Varies, typically $500,000 to $5 million	6-18 months
U.S. Environmental Protection Agency (EPA)	Water Infrastructure Finance and Innovation Act (WIFIA)	Provides long-term, low-cost supplemental loans for significant water and wastewater projects.	Federal	$20 million to $7.5 billion	12-24 months
Federal Emergency Management Agency (FEMA)	Building Resilient Infrastructure and Communities (BRIC)	Funds infrastructure resilience projects, including water/ wastewater systems.	Federal	$500,000 to $50 million	12–24 months
California Department of Water Resources (DWR)	Integrated Regional Water Management (IRWM) Grants	Funds regional water management projects, including wastewater and stormwater.	State	$1 million to $10 million	6–18 months

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Appendix A

Sewer Lift Station Condition Assessment Technical Memorandum

Sewer Lift Station Condition Assessment Technical Memorandum

Sewer Master Plan and Rate Study

OCTOBER 2025

Prepared for:

CITY OF EL CENTRO PUBLIC WORKS
Serving our community by sustaining and improving life

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ATTACHMENTS

Attachment A: Lift Station CIP Project Cutsheets

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AC	Asphalt Concrete
ATS	Automatic Transfer Switch
CEC	California Electrical Code
CIP	Capital Improvement Plan
CMU	Concrete Masonry Unit
DIP	Ductile Iron Pipe
EI&C	Electrical, Instrumentation, and Controls
FOG	Fats, Oils and Grease
ft/s	Feet Per Second
FY	Fiscal Year
gpm	Gallons Per Minute
H_2S (H2S)	Hydrogen Sulfide
HI	Hydraulic Institute
HP	Horsepower
HWL	High Water Line
IID	Imperial Irrigation District (electrical utility)
LS	Lift Station
MTS	Manual Transfer Switch
MCC	Motor Control Center
NA or N/A	Not Accessible or Not Applicable
NEC	National Electrical Code
NEMA	National Electric Manufacturers Association
NFPA	National Fire Protection Association
OSHA	Occupational Health and Safety Administration
PLC	Programmable Logic Controller
RFP	Request For Proposals
RTU	Remote Telemetry Unit
SES	Service Entrance Section
SMP/SSMP	Sewer [System] Master Plan
SSO	Sanitary Sewer Overflow
TDH	Total Dynamic Head
UPS	Uninterruptible Power Supply
UWMP	Urban Water Management Plan
VFD	Variable Frequency Drive
WRF	Water Reclamation Facility
WWTP	Waste Water Treatment Plant

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1 Introduction

The City of El Centro (City) contracted Dudek to prepare a Sewer Master Plan Update that incorporates Condition Assessments and Capital Improvement Plans for the City's wastewater system that will guide strategic planning and investments for the City's collection and treatment programs.

The following technical memorandum provides desktop analysis and assessment/evaluation of all fifteen (15) lift stations. Dudek and the City have determined that a comprehensive field investigation is only necessary for select older and critical lift stations. Nine (9) out of the City's fifteen (15) active lift stations will receive a comprehensive condition assessment. A wet well assessment was performed on remaining six (6) active lift stations. In addition, this technical memorandum provides a list of recommended Capital Improvement Plan (CIP) projects with estimated associated planning-level construction value for the associated improvements of each lift station.

Table 1 displays summarized record information for the City's fifteen (15) existing sewer lift stations and Figure 1 includes a vicinity map displaying the general location of each lift station. The lift station characteristics were compiled from available record drawings, information provided by City operations staff, and the City's 2008 Sewer System Master Plan (SSMP). Where possible, asset characteristics were visually confirmed during field inspections. Note that in some instances equipment identification labels/nameplates were not accessible or were found to no longer exist during field inspections; therefore, characteristics of some equipment shown on record drawings could not be verified during field investigations.

Table 1. Existing Lift Station Characteristics Summary

Lift Station No.	Lift Station Site	Year of Install or Modification	Facility Type	Firm Capacity	Scope of Condition Assessment	
					Comprehensive	Wet Well Only
1	Lift Station No. 3	2006	Wet Well/Dry Well	3,000 gpm @ 37.4' TDH	X	
2	Gios	1976	Submersible Wet Well	250 gpm@ 20' TDH	X	
3	Main	1933 2007 (Rehabilitation)	Wet Well/Dry Well	2,535 gpm @ 39' TDH	X	
4	Countryside	2002	Above Grade Packaged Pump Station	550 gpm @ 45' TDH	X	
5	Legacy	2006	Submersible Wet Well	250 gpm @ 20'	X	
6	Alder Canal/ Villa Ave	2005	Wet Well/Dry Well	Unknown	X	
7	3rd & Ross	1988	Above Grade Packaged Pump Station	325 gpm @ 27 TDH'	X	
8	4th & Wake	1985	Above Grade Packaged Pump Station	200 gpm @ Unknown TDH	X	
9	8th & Wake	2006	Above Grade Packaged Pump Station	200 gpm @ 35' TDH		X
10	Lift Station No. 2	1975 2016 (Relocated)	Submersible Wet Well	850 gpm @ 30' TDH		X
11	Orange Ave	2005	Above Grade Packaged Pump Station	400 gpm @ 46' TDH		X
12	Lift Station No. 1	1975	Wet Well/Dry Well	400 gpm @ 14.6 TDH	X	
13	Buena Vista	2006	Above Grade Packaged Pump Station	369 gpm @ 27' TDH		X
14	East Side	1913 2007 (Rehabilitation)	Submersible Wet Well	1,000 gpm @ 26' TDH		X
15	Heil & Dogwood	1993	Above Grade Packaged Pump Station	250 gpm @ 25' TDH		X

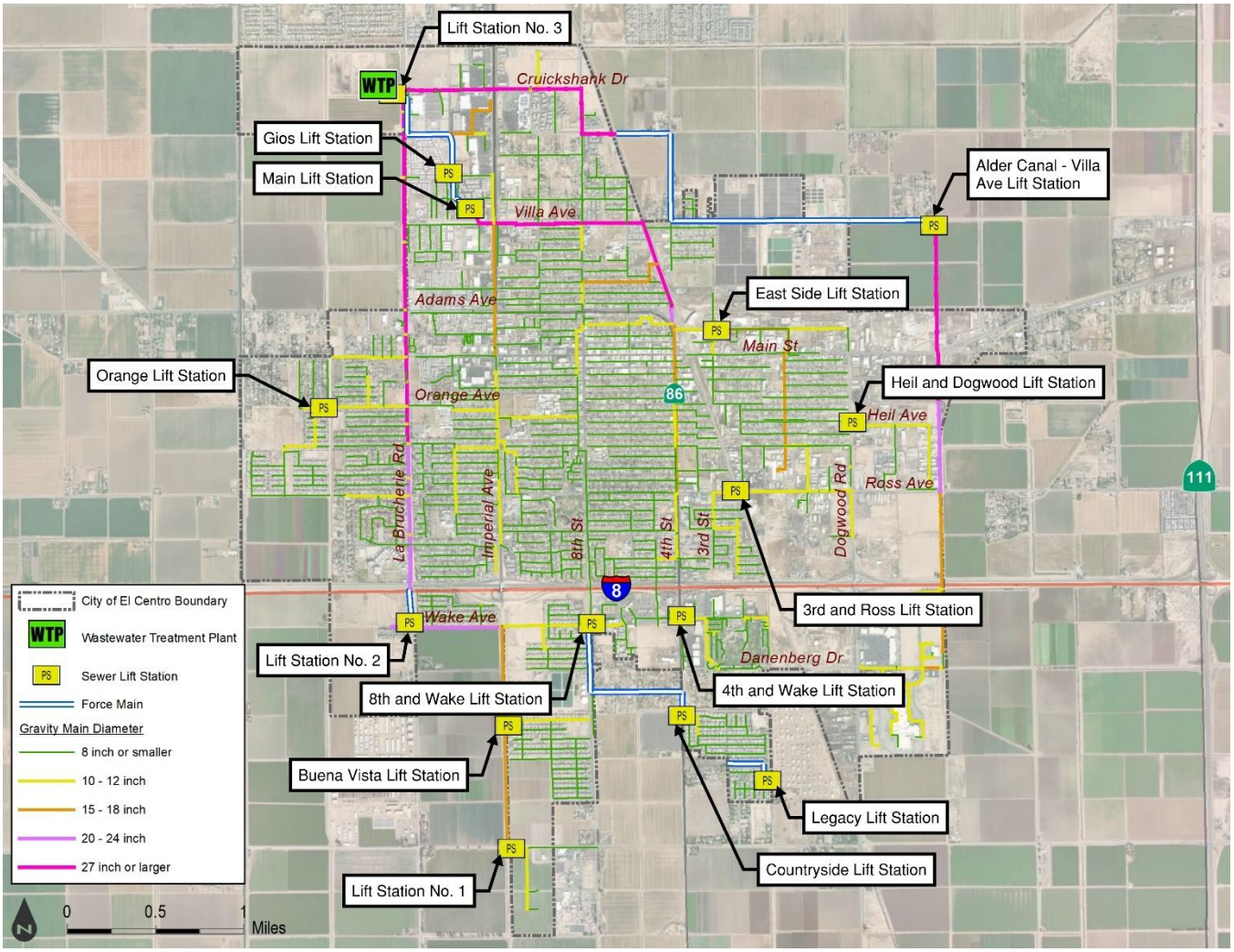


Figure 1. Lift Station Vicinity Map

2 Project Background and Approach

The City of El Centro's sewage collection system is currently comprised of fifteen (15) lift station (LS) sites and associated force mains, 125 miles of gravity pipe and one (1) Wastewater Treatment Plant (WWTP). The age of the assessed lift stations varies from 19 to 112 years old, though some have been modified or rehabilitated since. The system serves an approximate population of 44,000 (2020 Urban Water Management Plan, Psomas) and the continued operation and expansion of the system is a critical factor in the City's success. Dudek was tasked with completing condition assessments of major elements of the City's sewer infrastructure and providing CIP recommendations as part of an updated Sewer Master Plan.

The new Southern Lift Station is currently under construction and is intended to replace the 4th & Wake, Legacy, and Countryside Lift Stations within the next five years. Flow from these three lift stations will be redirected to the new Southern Lift Station wet well. Accordingly, each of the three lift stations can be decommissioned once flows have been redirected to the new Southern Lift Station. Additionally, the City informed Dudek that Imperial County (County) has secured a grant to replace Lift Station No. 1. The lift station replacement project is currently under design and is scheduled to be replaced. This facility is owned and operated by the City but serves the County and is outside the City's limits.

The City cited odor problems as a key issue within the collection system. The City currently spends about $300,000 per year on chemical dosing and injection to control odor problems, but this approach has limited success. Odor problems due to hydrogen sulfide gas generated within the collection system are mainly caused by oversized lift stations and force mains (i.e., excess capacity), which lead to long detention times and anaerobic conditions. A key contributor to the odor problems is the Alder Canal – Villa Avenue Lift Station force main, which is a 20-inch PVC pipe that is approximately 12,000 feet long. The hydraulic efficiencies and corresponding recommendations for improvement are discussed in Section 3.6.

2.1 Objective

The objective of this task is to perform condition assessments for fifteen (15) of the City's active lift stations, identify asset deficiencies, and develop prioritized improvement recommendations for rehabilitation or replacement of assets at each lift station. Six (6) of these active lift stations will only have their wet wells assessed. Recommended improvements are to be grouped and prioritized based on factors including existing conditions, failure risks, and accommodation for anticipated growth.

2.2 Field Investigation Overview

Dudek staff performed condition assessment field investigations on February 11, 12, and 13 of 2025 to observe and assess the condition of existing site/civil, mechanical, structural, and electrical, instrumentation and controls (EI&C) assets at the City's lift stations. The condition assessment team featured registered professional engineers in civil engineering and electrical engineering with in engineers-in-training (EIT) playing a supporting role. City staff assisted with the investigations by providing access to facilities and providing insight relating to the operational performance and history of various facilities and equipment, including maintenance and emergency access

concerns. The condition assessment team that performed the site investigations are hereinafter referred to as "inspector."

2.3 Condition Assessment Methodology

The approach to the comprehensive condition assessment of the lift stations will identify specific site civil, mechanical, structural, EI&C improvements that extend the useful life and provide increased operational reliability of each lift station. Additionally, evaluation of safety, emergency features, access, and impact to the surrounding environment suggests improvements that will reduce risk of injury, risk of sewer spill, and prevent negative impacts to the community.

The condition assessment field investigation consisted of visual inspection for rust, corrosion, cracking, leaks, abnormal noise, and other indications suggesting wear to gauge the relative condition of the facility. In some cases, the City staff provided information regarding the condition of mechanical and electrical equipment which the inspector would not otherwise see or detect, such as historical failures, reoccurring issues, prior rehabilitation and/or replacement, and/or retrofits. This information from City staff is included in the observations for each facility as applicable. Assets at each lift station were organized into one of four specific disciplines. Facility asset disciplines were organized according to the following:

- **Site/Civil**: Civil elements including grading, paving, perimeter fencing, access, and utilities.
- **Mechanical**: Pumps, piping, valves, odor control and mechanical equipment, and any HVAC within the lift station.
- **Structural**: Access hatches and covers, facility structures including below-grade concrete structures, wet well, lift station, vaults, and superstructures, as applicable.
- **Electrical & Instrumentation**: Electrical service equipment, emergency power equipment, motor controls, instruments, and control panel.

An additional evaluation was performed to characterize the climate change vulnerability at lift stations where a comprehensive assessment was completed. This included assessing the potential impacts from flooding, electrical outages, and extreme heat.

Following the field inspection, equipment, structures, and electrical gear were assigned one of four condition designations to describe relative condition. The general condition designations are explained in Table 2.

Table 2. Condition Assessment Designations Descriptions

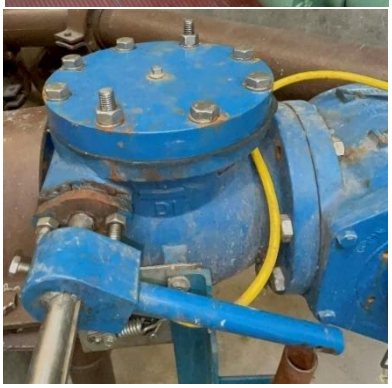
Condition	Description
Excellent	Observed to be new or like new. No corrosion, rust, coating deterioration or structural deficiencies detected during inspection. Wear and maintenance of the facility is appropriate for age and use intensity. City staff do not report any operations or maintenance deficiencies or concerns such as excessive noise, vibration, or leaks.
Good	Observed to be operating as intended with minimal corrosion, rust, painting deterioration, and no structural deficiencies. Normal wear and maintenance of the facility or components is observed but does not appear to be inhibiting performance. City staff does not report any significant operations or maintenance deficiencies or concerns.

Condition	Description
Fair	Observed to be in satisfactory operating condition while containing minor corrosion, rust, painting deterioration, or structural deficiencies. Normal wear and maintenance of the facility or components is observed and more frequent inspection and monitoring by City Staff may be warranted. City staff may have reported significant operations or maintenance deficiencies related to the equipment, structure, or gear.
Poor	Observed to be functioning below acceptable operating conditions and/or exhibiting high levels of corrosion, rust, painting deterioration, or structural deficiencies. More frequent monitoring and maintenance is required. City staff have reported significant operations or maintenance deficiencies and concerns.

It is recommended that the City maintain its normal schedule for operation and maintenance, as well as frequency of monitoring the condition of the facility equipment, structures, or gear, with an "Excellent" or "Good" overall facility condition. More frequent monitoring and/or maintenance as well as potential rehabilitation or replacement may be warranted for equipment, structures, or gear for stations that were assessed to be in overall "Fair" condition. It is recommended that the City rehabilitate or replace equipment, structures, or gear for facilities with an overall "Poor" assessed condition immediately and perform more frequent maintenance and monitoring of the condition until rehabilitation or replacement.

Examples of observed asset conditions (i.e., excellent, good, fair, poor) for mechanical, structural, electrical, and site/civil elements are displayed on Table 3. These examples were provided to standardize evaluations and offer a clear understanding of what each condition designation represents, aligning with the goal of creating actionable and transparent assessments and recommendations.

Table 3. Condition Assessment Designation Examples

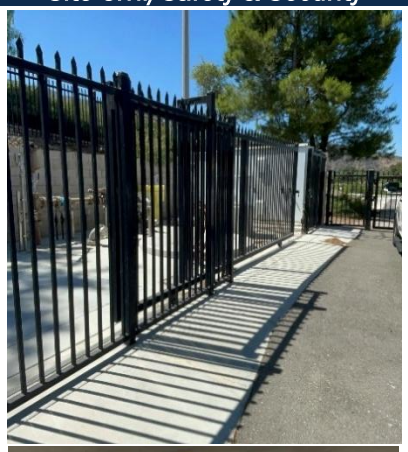
Condition	Mechanical (Pumps, Piping, Valves, and Appurtenances)	Description
Excellent	 	• Observed to be new or like new • No corrosion, rust, coating deterioration or structural deficiencies observed • No reports of operations and maintenance deficiencies or concerns such as excessive noise, vibration, or leaks • No need for replacement in the foreseeable future • No potential risk of Sanitary Sewer Overflow (SSO)
Good	 	• Observed to be operating as intended • Minimal corrosion, rust, coating deterioration, and no structural deficiencies observed • Normal wear and maintenance of the asset observed but does not appear to be inhibiting performance • No reports of significant operations and maintenance deficiencies or concerns • Minimal to no potential risk of SSO • End of useful life 10 to 20 years away

Condition	Mechanical (Pumps, Piping, Valves, and Appurtenances)	Description
Fair	   	• Observed to be in satisfactory operating condition • Minor to moderate corrosion, rust, coating deterioration, and insignificant structural deficiencies observed • Normal wear and maintenance of the asset observed and may require more frequent inspection and monitoring • Reports of moderate operations and maintenance deficiencies or concerns, minimal frequency • Minor to moderate potential risk of SSO, minimal frequency • End of useful life approaching: 4 to 10 years away

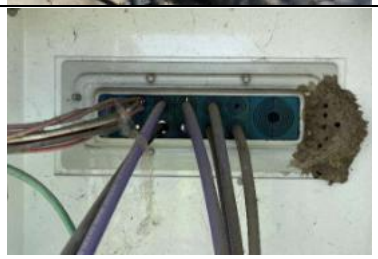
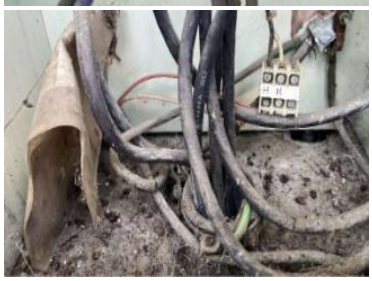
Condition	Mechanical (Pumps, Piping, Valves, and Appurtenances)	Description
Poor	   	• Observed to be functioning below acceptable operating conditions • Exhibiting moderate to severe corrosion, rust, coating deterioration, and significant structural deficiencies observed • At or near the end of its useful service life; maintenance of the asset may require more frequent inspection and monitoring • Reports of operations and maintenance deficiencies or concerns at a moderate to high frequency, such as excessive/unusual noise, excessive heat output, vibration, leaks, ragging • Exhibiting signs of failure or potential imminent failure • Severe risk of SSO • Very near the end of useful life, should be replaced in the near future: 1 to 3 years • Needs replacement right away, currently does not operate/function properly

Condition	Metals	Description
Excellent		• Little to no corrosion • No general loss of wall thickness • Minimal to no wall thickness loss from pitting • Widespread but insignificant extent of corrosion
Good		• Minor corrosion • Minimal general loss of wall thickness • Minimal wall thickness loss from pitting • Localized extent of corrosion
Fair		• Moderate corrosion • Moderate general loss of wall thickness • Moderate wall thickness loss from pitting • Extent of corrosion observed on up to half of the surface
Poor	 	• Severe corrosion • Signs of failure or potential imminent failure • Significant general loss of wall thickness • Significant wall thickness loss from pitting. Pinholes and holes observed on the surface • Extent of corrosion observed on up to half of the surface

Condition	Concrete	Description
Excellent		• Minimal to no damage to concrete • Hard surface • Smooth, apparently intact surface profile • Hairline width cracks, minimal frequency • No spalling • Reinforcement not exposed or damaged
Good		• Minor concrete surface damage • Soft surface to 1/8-inch depth • Fine aggregate exposed • Hairline width cracks, moderate frequency • Shallow spalling, minimal frequency • Reinforcement not exposed or damaged
Fair		• Moderate concrete surface damage • Soft surface to 1/4-inch depth • Large aggregate exposed or protruding • Up to 1/32-inch width, moderate frequency • Shallow spalling, minimal frequency • Reinforcement exposed; minor damage, minimal frequency
Poor	 	• Loss of concrete mortar and damage to reinforcement • Bulk loss of concrete and reinforcement • Soft paste beyond 1/4-inch depth • Large aggregate exposed, loose, or missing • 1/8-inch width or greater, moderate to high frequency • Deep spalling, moderate to high frequency • Reinforcement exposed with damage, moderate frequency; or reinforcement consumed causing a loss of structural integrity

Condition	Site Civil/Safety & Security	Description
Excellent	 	• Observed to be new or like new • Low to no threat of injury • Negligible risk • Insignificant consequence • No regulatory violations/fines • No reports of significant operations and maintenance deficiencies or concerns • No need for replacement in the foreseeable future • Good security measures to prevent unauthorized access • Sufficient site lighting
Good	 	• Observed to be operating as intended • Minor threat of injury • Minor risk • Minor consequence • No reports of significant operations and maintenance deficiencies or concerns • Normal wear and maintenance of the asset observed but does not appear to be inhibiting performance • No regulatory violations/fines • End of useful life 10 to 20 years away • Good security measures to prevent unauthorized access • Adequate site lighting

Condition	Site Civil/Safety & Security	Description
Fair	 	• May require medical attention in the event of an injury • Moderate risk and economic consequence could result • Normal wear and maintenance of the asset observed; may require more frequent inspection and monitoring • Reports of moderate operations and maintenance deficiencies or concerns, minimal frequency • Possibility of regulatory violations/fines • End of useful life approaching: 4 to 10 years away • Lacks sufficient security measures against unauthorized access • Insufficient site lighting
Poor	 	• High risk; hospitalization or possibly death from serious injuries could result • Active major regulatory violations/fines • Potential of catastrophic failure that requires immediate attention • Major consequences • Widespread public interest and potential public investigation • At or near the end of its useful service life should be replaced in the near future: < 3 years • Maintenance of the asset may require more frequent inspection and monitoring • Nonfunctional or no security measures in place to prevent unauthorized access • Nonfunctional or no existing site lighting

Condition	Electrical (Telemetry, Panels, Instrumentation, Meters, Lighting, Conduits and Conductors, Sensors)	Description
Excellent	 	• Observed to be new or like new • No corrosion, rust, coating deterioration or structural deficiencies observed • No reports of operations and maintenance deficiencies or concerns such as excessive heat output and excessive noise • No need for replacement in the foreseeable future • No code violations
Good		• Good condition, observed to be operating as intended • Minimal corrosion, rust, coating deterioration, and no structural deficiencies observed • Normal wear and maintenance of the asset observed but does not appear to be inhibiting performance • No reports of significant operations and maintenance deficiencies or concerns • No code violations • End of useful life 10 to 20 years away
Fair	 	• Fair condition, observed to be in satisfactory operating • Minor to moderate corrosion, rust, coating deterioration, and insignificant structural deficiencies observed • Normal wear and maintenance of the asset observed and may require more frequent inspection and monitoring • Reports of moderate operations and maintenance deficiencies or concerns, minimal frequency • New arc flash study and labels needed in the near future: 1 to 3 years • Minor code violations, minimal threat of injury • End of useful life approaching: 4 to 10 years away

Condition	Electrical (Telemetry, Panels, Instrumentation, Meters, Lighting, Conduits and Conductors, Sensors)	Description
Poor	  	• Observed to be functioning below acceptable operating conditions • Exhibiting moderate to severe corrosion, rust, coating deterioration, and significant structural deficiencies observed • At or near the end of its useful service life should be replaced in the near future: < 3 years • Maintenance of the asset may require more frequent inspection and monitoring • Reports of operations and maintenance deficiencies or concerns at a moderate to high frequency, such as excessive/unusual heat output and excessive noise • Exhibiting signs of failure or potential imminent failure • Arc flash study and labels are missing or outdated • Major code violations, moderate to severe threat of injury

2.4 Summary of Condition Assessment Results

A condition assessment designation for each asset discipline was indicated for all of the City's sewer lift stations, which accounts for the overall representative average asset condition per discipline at all of the lift stations. A general summary of the average asset condition within each discipline can be seen in Table 4. These representative asset conditions were based on the results of the condition assessment for the City's sewer lift stations which take into consideration asset condition, relative criticality and safety risk, increased risk of SSO, and asset useful life.

Table 4. General Evaluation Summary for Lift Stations by Asset Discipline

Lift Station	Site Civil	Mechanical	Structural	Electrical & Instrumentation	Climate Vulnerability
Lift Station No. 3	Excellent	Fair to Good	Poor	Poor to Fair	Poor
Gios	Excellent	Fair to Good	Poor	Poor to Fair	Poor
Main	Excellent	Fair to Good	Fair	Poor	Good
Countryside	Excellent	Fair	Poor to Fair	Poor to Fair	Fair to Good
Legacy	Excellent	Fair	Good	Good	Good
Alder Canal / Villa Ave	Excellent	Fair	Fair	Fair	Good to Fair
3rd & Ross	Excellent	Fair	Poor	Fair	Poor
4th & Wake	Good to Excellent	Good	Poor	Fair	Fair
8th & Wake	N/A[1]	Fair	Poor	N/A[1]	N/A[1]
Lift Station No. 2	N/A[1]	Fair to Good	Excellent	N/A[1]	N/A[1]
Orange Ave	N/A[1]	Good	Poor	N/A[1]	N/A[1]
Lift Station No. 1	Excellent	Fair to Good	Fair to Good	Good	Poor
Buena Vista	N/A[1]	Good	Fair to Good	N/A[1]	N/A[1]
East Side	N/A[1]	Fair	Good	N/A[1]	N/A[1]
Heil & Dogwood	N/A[1]	Poor to Fair	Fair to Good	N/A[1]	N/A[1]

1. *An evaluation was not performed for this asset discipline as discussed in Section 1.*

3 Lift Station Assessments

This section describes the following information for each of the evaluated lift stations:

- Location and Layout
- System Characteristics
- Inspection Summary
- Hydraulic Assessment
- Recommended Improvements

Notably, recommended improvements were categorized into two classes: (1) maintenance actions and (2) capital actions. Maintenance actions are defined as low-cost solutions that could be completed the City's operation and maintenance staff. Capital actions consist of asset or equipment rehabilitation, replacement, or demolition, that require the hire of an outside contractor and/or consultant to complete the work and therefore are need to be included in the Lift Station CIP.

3.1 Lift Station No. 3

3.1.1 Location and Layout

The City of El Centro's Lift Station No. 3 is located at 2255 N La Brucherie Road, within the El Centro Wastewater Treatment Plant (WWTP) property. The site can be accessed by the gated WWTP main entry way drive on North La Brucherie Road. There is sufficient parking adjacent to the lift station. Lift Station No. 3 is a dry well / wet well lift station that regulates flow entering the WWTP.



Figure 2: Lift Station No. 3 Location

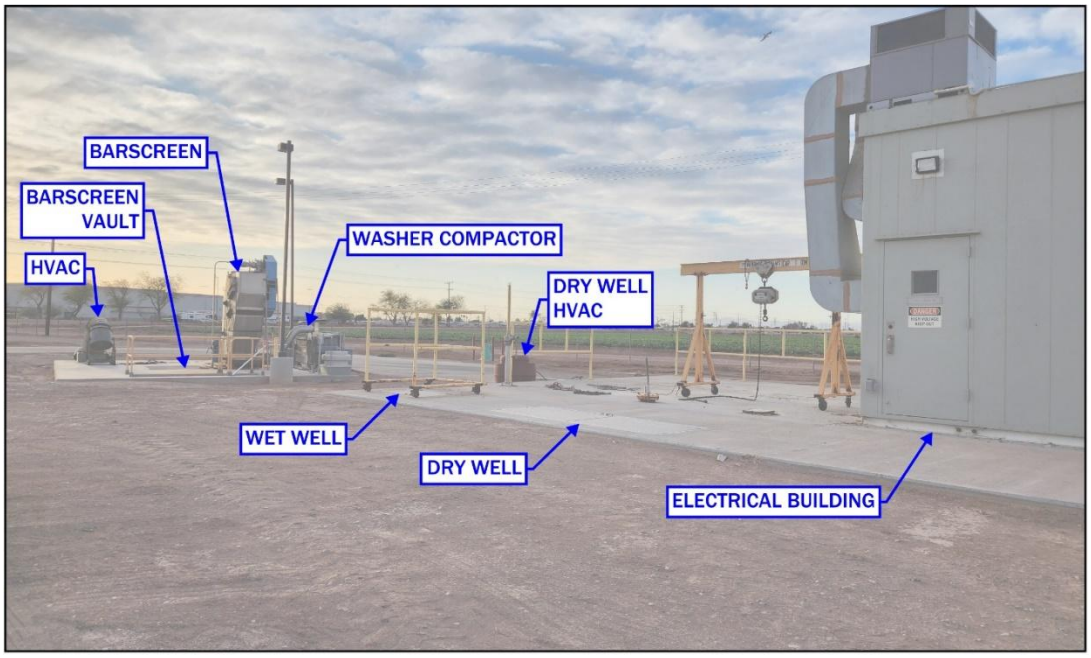


Figure 3: Lift Station No. 3 Layout

3.1.2 System Characteristics

3.1.2.1 Pump Station

A summary of the pumping units for Lift Station No. 3 is provided on Table 5, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and the force main are summarized on Table 6.

Table 5. Lift Station No. 3 Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Chicago Pump LS8-4A	
Pump Type	Dry well	
Mount	Pedestal Mount	
Design Capacity	3,000 gpm @ 37’ TDH (City provided)	
Motor, hp	40	
Motor Operation	(2) Pumps Soft Starts; (1) Pump VFD	
Speed, rpm	880	
Discharge Diameter, inches	8	
Year Installed	2006	

Table 6. Lift Station No. 3 Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Lined concrete
Diameter, feet	32’ x 10’
Depth, feet	31.3’
Floor Elevation, feet	-76.75’
Influent Sewer Invert, feet	-72.33’
Cover/Hatch Type	Single-leaf hatch
Bypass Assembly	
Valve Location	Dry well
Bypass Connection	None
Force Main	
Diameter	24”
Length	Approximately 400’ (obtained from GIS)
Material	Ductile Iron

3.1.2.2 Operations and Maintenance History

Operations reported that the pumps at Lift Station No. 3 are overhauled every five years. During one scheduled refurbishment, the impellers were trimmed to reduce flow and better match system demand. Originally, all three dry pit pumps used VFDs. However, at low speeds, the pumps could not maintain enough pressure to move flow through the force main. To address this, Operations replaced two of the VFDs with soft starters and now run those pumps at full speed. The third VFD is planned to be replaced with a soft starter when it fails.

The bar screen system was installed in 2018, which according to City staff improved ragging issues previously experienced at this site. Due to high flows in summer, the bar screen confined space vault can only be accessed during winter. Operations also noted that the wet well is rarely cleaned due to limited access, poor visibility, and its depth. Operations staff informed that this wet well rarely has to be bypassed.

The PLC requires frequent maintenance. When it fails, the City receives either a pump failure or high-level alarm. The SCADA system only receives alarms from the PLC and does not collect flow data.

3.1.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at Lift Station No. 3. Table 7 contains observations made during the February 11, 2025 site inspection and information provided by the City during the pre- and post-inspection workshops.

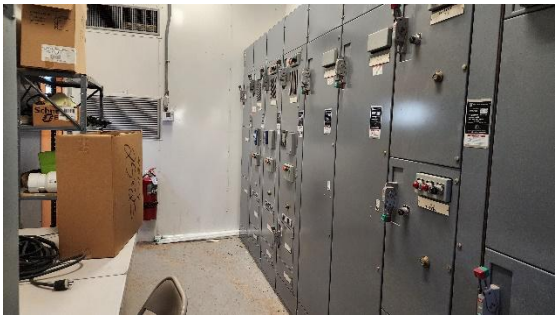
Table 7. Lift Station No. 3 Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ Surrounding site grading fair. Unpaved and becomes muddy during precipitation events ▪ Low points in dirt around perimeter of the lift station slab causing ponding - Ponding water at low points and/or high groundwater may be causing infiltration at dry well structure joints; Infiltration water marks observed at joints on the interior of the dry well ▪ The lift station site is within the WWTP perimeter security fencing ▪ Wet well access hatch was observed to be experiencing moderate corrosion in localized areas. No permanent/integrated fall protection observed at wet well access hatch. Portable 3 sided safety railing was positioned around wet well access hatch at time of inspection. Lift assist was not observed to be functioning ▪ Outdoor lighting recently installed at the lift station ▪ It was observed that the bar screen motor can only be accessed by a standard ladder (unfixed). No safety railings at the top of the bar screen ▪ No working intrusion switches or locks on the dry well or wet well access hatches. - Only working intrusion switch observed onsite is located at bar screens vault entry door ▪ Mobile safety railing around wet well hatch has moderate corrosion and coating delamination	Good	 **Figure 4:** Lift Station No. 3 Site Grading and Access  **Figure 5:** Lift Station No. 3 Site Safety

Mechanical	Condition	Photo(s)
Pumps ▪ Three (3) dry pit pumps within dry well. Dry well contains pedestal and piping stub outs for two (2) future pumps ▪ Varying levels of corrosion and coating delamination observed to be occurring on pumping units. Severe corrosion was observed at Pump 3 base. Structural integrity of pump base anchor bolts may be at risk of failure in the near term. Seal leak at Pump 3 is believed to be causing accelerated corrosion - Pump 1 and 2 volutes and motors appear to be in good condition with normal signs of wear and tear on coating ▪ Pumps located on concrete pedestals. Pedestals in good condition ▪ Pumps are controlled with level transducers with high water alarm floats. ▪ Operations have to use truck crane to remove pumps from dry well. No permanent bridge crane within dry well. Existing gantry crane observed onsite adjacent to dry well pump access hatches. - It is standard for dry wells of this size and design to have a monorail within the dry well for pump removal and maintenance, and a crane at grade can then remove pumps or equipment at a single location. **Bar Screens** ▪ Minor surface corrosion observed at localized areas on bar screen equipment. - Observed grease and debris buildup on exterior of bar screen equipment caused from leakage at multiple locations. Overall condition of bar screen is fair ▪ Operations staff reported high summer flows limit bar screen vault access due to surcharging of the channel within bar screen vault. Dudek was not able to access the vault at the time of the inspection ▪ High H2S levels observed in the bar screen vault.	Poor/Fair	 **Figure 6:** Lift Station No. 3 Dry Well Pumps and Pump Base  **Figure 7:** Lift Station No. 3 Bar Screen (Side View)

Piping and Valves ▪ Most assets appear to be in fair to good condition - Varying levels of minor corrosion and coating delamination are occurring, particularly at flanges - Rate of corrosion may be accelerated by exposure to H_2S in wet well vapors ▪ Piping and valves appear to have an overcoat ▪ No flow meter present at lift station ▪ No force main bypass connection observed at this lift station	Good / Excellent	 **Figure 8:** Lift Station No. 3 Piping and Valves
Odor Control/Ventilation ▪ Moderate corrosion observed on ventilation inlet blower. Minor surface corrosion observed on ventilation exhaust blower. ▪ Temporary ventilation was observed at the bar screen confined space vault. ▪ Ventilation ducts within the dry well are in excellent condition.	Fair	 **Figure 9:** Lift Station No. 3 Forced Air Ventilation
Structural	**Condition**	**Photo(s)**
Dry Well ▪ Sections of the dry well concrete were observed to be flaking ▪ Minor spalling observed at the bottom stair. Moderate crack located after on dry well floor at base of stairs ▪ Infiltration located at dry well joints ▪ Dry well sump pump system has failed twice in the past. City was not notified of dry well flooding due to failure of the flood float switch (located near pump 1) - Sump pump controlled by level floats ▪ Gas sensor in the dry well was not functioning at the time of the inspection. - Operations informed that the H2S alarm was disconnected after it repeatedly failed ▪ Forced air ventilation system is in good condition	Poor/Fair	 **Figure 10:** Lift Station No. 3 Dry well structure  **Figure 11:** Lift Station No. 3 H2S Sensor

Wet Well ▪ Portions of the wet well liner under the dry well access stair are observed to be separating from the structure ▪ Walkway within the wet well has filled with debris. Dudek was unable to inspect the walkway or the wet well beneath the walkway as a result ▪ Liner is delaminating and concrete is experiencing moderate to severe corrosion around the wet well access opening ▪ Poor lighting observed within the wet well. ▪ Operations informed that the wet well level has never got high enough to surcharge influent pipe.		 **Figure 12:** Lift Station No. 3 Wet Well Liner Delamination  **Figure 13:** Lift Station No. 3 Wet Well Raised Walkway
Panel Enclosure Building ▪ Panel enclosure building was observed to be in good condition. ▪ Minor cracking at panel enclosure building access stair ▪ Moderate corrosion at forced air ventilation ducting - Corrosion primarily at ducting joints	Good	 **Figure 14:** Lift Station No. 3 Panel Enclosure Building

Electrical & Instrumentation	Condition	Photo(s)
Electrical Building ▪ The exterior of the MCC in the Electrical Building appeared to be in good condition and have 15 years of useful life remaining. ▪ City staff reported that they have replaced two of the three VFDs in the MCC with soft starters when the VFDs failed, and will replace the third VFD with a soft starter when it fails. ▪ Corrosion from H_2S gas reported by staff in the MCC and other electrical equipment. Staff reported having to remove corrosion from the MCC bus bars. ▪ No sealing fittings were observed on any conduits on site and are required per the National Electrical Code and California	Good	 **Figure 15:** Lift Station No. 3 Electrical Building Interior & MCC

Electrical Code on conduits once they leave a hazardous area, such as the wet well. A lack of sealing fittings is a safety hazard, a risk for equipment damage, and is likely the reason for H_2S gas entering the Electrical Building.

- Lighting appeared sufficient inside the building and in good condition. Staff indicated that the fluorescent bulbs were replaced by installing LED light tubes inside the existing fluorescent light fixtures.
- Exterior lights all appeared to have been replaced with LED fixtures except one. Newer lights are in good condition.
- No arc flash stickers were observed in the electrical building, or anywhere on site.
- No third-party maintenance/testing stickers were observed on the electrical equipment.
- City staff indicated that the pumps start and stop based on contacts from the ultrasonic level transmitter, and that there is no backup pump control using float switches.
- The existing site PLC is an Allen-Bradley Micrologix 1500, which was discontinued in 2017 according to the manufacturer's web site. New parts are no longer available.
- I/O is transmitted off site using a Mission Communications Cellular Wireless RTU, for the lift station and the bar screen.

Outdoors

- City staff advised that the intrusion switches on the dry well and wet well access hatches do not work. Staff would like all intrusion switches to work.
  - The only working intrusion switch observed onsite is located at bar screens vault entry door.
- Sealing fittings were not observed on conduits that exit the wet well and continue outside of the hazardous area, such as the ultrasonic sensor conduit, and the float switch conduit.
- According to City staff, power is provided to Lift Station #3 from the WWTP, and the power feed is backed up by a standby generator at the WWTP.
- No lift station discharge flowmeter was observed.

Fair



Figure 16: Lift Station No. 3 Level Sensor Mounting with No Conduit Sealing Fitting.

Drywell ▪ Gas sensor in the dry well was not functioning at the time of the inspection. ▪ Most conduit in the drywell was observed to be galvanized rigid metal conduit, not PVC-Coated galvanized rigid metal conduit. Some conduit corrosion was observed. **Wet Well** ▪ City staff advised that the lighting needs to be updated in the wet well. The City could not determine if only bulbs need to be replaced, or if lighting fixtures or conduit and wire also need to be replaced. **Bar Screen** ▪ Evaluation of the Bar Screen area will be provided as part of the WWTP evaluation.	Good Not Observed Not Observed	 **Figure 17:** Lift Station No. 3 Conduit Corrosion at Drywell Floor

Climate Change Vulnerability	Condition	Photo(s)
Flooding ▪ Surrounding site grading is unpaved and becomes muddy during precipitation events ▪ Low points in dirt around perimeter of the lift station slab causing ponding - Ponding water at low points and/or high groundwater may be causing infiltration at dry well structure joints; Infiltration water marks observed at joints on the interior of the dry well **Electrical Outages** ▪ According to City staff, power is provided to Lift Station #3 from the WWTP, and the power feed is backed up by a standby generator at the WWTP. **Extreme Heat** ▪ Temperature control observed within the electrical building.	Poor	

3.1.4 Hydraulic Assessment

The Lift Station No. 3 hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with Hydraulic Institute (HI) standards. From the provided data, it was found that pumps #1, #2, and

#3 kick on approximately 147 times per day on average. Pumps #1 and #3 start approximately 2.1 times per hour on average with a maximum of 13 starts per hour. Pump #2 starts approximately 9 times per hour on average with a maximum of 9 starts per hour. Based on National Electric Manufacturers Association's (NEMA) recommendations for the maximum allowable number of motor starts per hour, a 40 HP, 4-pole (1620 rpm) motor should have a maximum number of 7.4 motor starts per hour. It was observed that the instances number of starts per hour exceeds the NEMA recommended starts per hour based on the provided SCADA data. This indicates that the existing operational set points may need to be adjusted. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 220 minutes of run time per day (3,353 total hours) while pump #2 averages approximately 216 minutes of run time per day (3,291 total hours). Pump #3 averages 223 minutes of run time per day (3.3 total hours). This data indicates that the pumps kick on with similar frequency and run times.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 feet per second (ft/s) for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Lift Station No. 3 force main is a 24" ductile iron pipe (DIP). It is unknown when the force main was installed. The existing force main is assumed to be in fair condition with no significant issues or concerns. Based on current industry standards it has a useful life of approximately 50 years. Lift Station No. 3 is a triplex lift station that operates in a lead/lag configuration. With two duty pumps in operation, the flow velocity through this existing 24" force main is estimated at approximately 2.1 ft/sec which is in accordance with HI standards.

Force Main Operation

The Lift Station No. 3 force main discharges into Main Lift Station force main, causing the two systems to pump against each other. This hydraulic conflict leads to reduced efficiency, increased wear on equipment, and inconsistent flow rates. Operations staff informed that the Lift Station No. 3 pumps only move flow effectively when operated at maximum speed, indicating high backpressure and poor system coordination. As discussed in section 3.1.2.2, two of the three original variable frequency drives (VFD) have been replaced with soft starters, enabling the City to operate the pumps as single speed pumps running at max speed. To resolve these issues, we recommend installing a second force main parallel to the existing Main Lift Station one, allowing each station to operate independently and improving overall system performance.

3.1.5 Recommended Improvements

Recommended improvements were developed for Lift Station No. 3 based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 8.

Table 8. Lift Station No. 3 Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
E&IC	Install sealing fittings	Install conduit sealing fittings on all conduits as they exit the hazardous envelope (including the wet well).	Code Violation/ Operational Failure	Maintenance
EI&C	Perform Power System Study & Install Arc Flash Stickers	Per NFPA 70E, a power system study should be performed, and updated every 5 years. Updates should be made whenever modifications are made. Arc flash stickers should be provided on the electrical equipment.	Safety Risk	Arc Flash / Short Circuit Study Program (Near-term)
EI&C	Perform third-party testing on MCC and its breakers	This is preventative maintenance that identifies equipment issues ahead of time. It also makes sure the breakers are tripping at the amperage and settings they are supposed to—to keep staff and equipment safe.	Injury Risk/ Operational Failure	Testing and Studies Program (Near-term)
EI&C	Replace Inoperable Intrusion Switches	It is recommended to install intrusion switches for SCADA notification to prevent unauthorized access and tampering of lift station equipment.	Safety Risk/ Security Risk	Maintenance
EI&C	Replace existing PLC	SCADA equipment is provided with an Allen-Bradley MicroLogix PLC which is at the end of its useful life, as it was discontinued in 2017 by the manufacturer.	End of Useful Life	Instrumentation and Control Program – Phase 2 (Mid-term)
EI&C	Replace Lighting in Wet Well	Per City Staff, lighting levels are low in the wet well.	Safety Risk	Lift Station No. 3 Rehabilitation (Long-term)
EI&C	Install discharge flow meter	Install flowmeter on pump discharge to allow flow monitoring which provides useful operational data and serves as indication of diminishing pump performance over time.	Operations Preference	Lift Station No. 3 Rehabilitation (Long-term)
Site Civil/ EI&C	Replace Gas Detection System	Gas sensor in the dry well was not functioning at the time of the inspection.	Code Violation/ Operational Failure	Maintenance
Site Civil / Climate Change Vulnerability	Site Grading	There are low points in the unpaved area along the dry well where nearby runoff ponds up. During heavy rains, the accumulation of water in these areas are most likely seeping down along the exterior of the dry well structure and infiltrating through the concrete joints.	Preventative Maintenance	Lift Station No. 3 Rehabilitation (Long-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Site Civil	Install Permanent / Fixed Access Ladder for Bar Screen Motor	Bar screen motor access is in the form of a portable ladder. It is recommended to install a fixed ladder with safety railings around the top so operations staff can safely access bar screen motor.	Risk of Injury	Lift Station No. 3 Rehabilitation (Long-term)
Site Civil/ Mechanical	Clear Debris within Wet Well	Walkway within the wet well has filled with debris. Dudek was unable to inspect the walkway or the wet well beneath the walkway as a result.	Preventative Maintenance	Maintenance
Mechanical	Replacement of Existing Pump Base (Pump #3)	Varying levels of corrosion and coating delamination observed to be occurring on all pumping units. Severe corrosion was observed at Pump 3 base. Structural integrity of pump base anchor bolts may be at risk of failure in the near term. Seal leak at Pump 3 is believed to be causing accelerated corrosion.	Corrosion	Pumps, Piping, Supports and HVAC Program (Mid-term)
Mechanical	Replacement of Existing Pumping Units	Pumps are nearing the end of useful service life. Schedule replacement of pumping units in the next 5 years.	End of Useful Life	Lift Station No. 3 Rehabilitation (Long-term)
Mechanical	Routine Valve Exercising	It is recommended to adopt a more frequent and proactive maintenance schedule for valve exercising.	Preventative Maintenance	Maintenance
Mechanical	Install Lift Station Bypass Connection	There is no existing bypass connection for this lift station. It is recommended to install a force main bypass connection in the event of a lift station failure.	Increased SSO Potential	Force Main Program – Phase 1 (Near-term)
Mechanical	Recoat Existing Mechanical Equipment in Dry Well	The existing mechanical piping, valves, and pumps within the dry well remain in good condition, however there is minor corrosion and coating delamination occurring in several locations	Coating Delamination / Failure	Maintenance
Mechanical	Recoat Existing Forced Air Ventilation Equipment	The existing above grade forced air ventilation blowers, piping, fittings and blowers are experiencing varying levels of corrosion and coating delamination.	Preventative Maintenance	Maintenance
Mechanical	Replace Existing Sump Pumps and Discharge Piping	Dry well sump pump system has failed twice in the past.	Operational Failure	Pumps, Piping, Supports and HVAC Program (Mid-term)
Mechanical	Install New Force Main	Due to the pumping difficulties experienced at this site it is recommended to install a force main separate from the Main Lift Station force main.	Operational Failure	Force Main Program – Phase 1 (Near-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Mechanical	Routine Pump Testing	It is recommended that the City consider implementing routine pump performance testing to gather data on pump performance and to prioritize preventive maintenance activities. Routine pump efficiency evaluations provide valuable information on trending of the facilities efficiency, adequacy of installed equipment, and electro-mechanical condition. Since this data collection and analysis has a cost associated with it, routine pump performance testing is only recommended for pump stations that exhibit high "load factors" (i.e., significant daily runtimes), significant motor loads, and/or high-head operations (e.g., two-stage pumping stations)	Preventative Maintenance	Maintenance
Structural	Replace Wet Well Access Hatches	The existing wet well access hatches are moderately corroded and the lift assist was not working. It is recommended to replace the access hatches with new hatches that are equipped with integrated fall protection, slam lock, and lift assist.	Injury Risk/ Operational Failure	Lift Station No. 3 Rehabilitation (Long-term)
Structural	Wall Penetration Improvements	Use hydrophilic grout at all wall penetrations to prevent water infiltration into the dry well.	Preventative Maintenance	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Mid-term)
Structural	Rehabilitate Liner and Liner Termination within Wet Well	Rehabilitate the existing concrete at the liner and liner terminations within the wet well and provide improvements to the liner terminations as-needed to prevent accelerated corrosion of the structure.	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Mid-term)

3.2 Gios Lift Station

3.2.1 Location and Layout

The Gios Lift Station is located at the southeast corner of the Gios Mobile Home Estates, enclosed in a concrete masonry unit (CMU) block wall outside of the public right-of-way. A chain link gate on North Waterman Avenue provides access to the Gios Lift Station. The facility can also be accessed through the Gios Mobile Home Estates. Gios Lift Station is a compact, submersible Vaughan Chopper facility that serves the Gios Mobile Home Estates community to the south of the WWTP. The Gios lift station is owned by the mobile home park but operated by the City.



Figure 18: Gios Lift Station Location

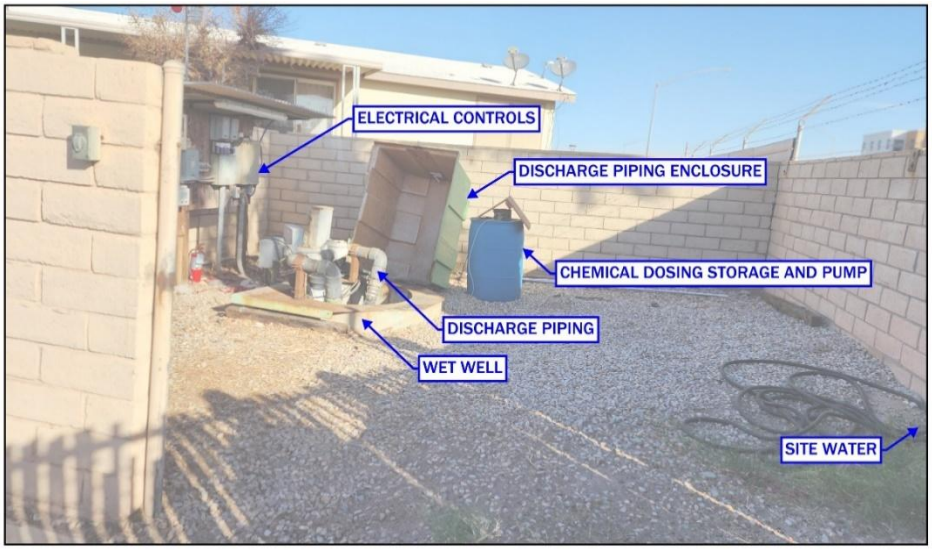


Figure 19: Gios Lift Station Layout

3.2.2 System Characteristics

3.2.2.1 Pump Station

A summary of the pumping units for Gios LS is provided on Table 9, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 10.

Table 9. Gios Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Vaughan Model SE3F2	
Pump Type	Submersible	
Design Capacity	250 gpm @ 20’ TDH	
Motor, hp	5	
Motor Operation	Constant Speed	
Speed, rpm	1750	
Discharge Diameter, inches	4	
Year Installed	1975; Pumps Replaced in 2016 (per provided pump cut sheet)	

Table 10. Gios Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete
Diameter, feet	4
Depth, feet	Unknown
Floor Elevation, feet	Unknown
Influent Sewer Invert, feet	Unknown
Cover/Hatch Type	Fiberglass Enclosure
Bypass Assembly	
Valve Location	N/A
Bypass Connection	Yes

After reviewing the available Gios Lift Station record drawings and site investigations it was observed that there is no dedicated force main for this lift station. Two gravity influent lines enter the wet well. Flow is then pumped above grade where it passes through check valves before joining and flowing back into the wet well. It then leaves the wet well into one effluent line which flows by gravity to the nearest downstream manhole.

3.2.2.2 Operations and Maintenance History

The wet well at Gios Lift Station is scheduled for cleaning every six months. However, operations staff reported that it is sometimes cleaned every three months, depending on conditions. During a site inspection, operations staff informed Dudek that the existing chopper pumps are planned to be replaced within two weeks of the February 11, 2025 site inspection. The existing pumps do not have lifting cables and have to be manually retrieved during removal. The lift station uses chemical dosing odor control. The dosing pumps operate every 45 minutes to an hour for about 30 to 40 seconds per cycle. The chemical storage drum typically requires refilling once per month.

3.2.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at the Gios Lift Station. Table 11 contains observations made during the February 11, 2025, site inspection and information provided by the City during the pre- and post-inspection workshops.

Table 11. Gios Lift Station Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ Site grade is crushed rock. - Low points not observed adjacent to wet well. ▪ Water meter and hose located within the CMU block wall. - Water service backflow preventor is moderately corroded and oxidized. Above grade service piping is PVC. PVC has minor chalking. - The water meter was not inspected while on site. ▪ Chemical dosing system located adjacent to the wet well. - No eye wash station located at this site. OSHA 29 CFR 1910.151 requires eye wash stations be located at facilities with injurious corrosive materials stored. ▪ No permanent/integrated fall protection observed at wet well access hatch. ▪ Fiberglass enclosure was unlocked at the time of the inspection with no intrusion switch.	Good	 **Figure 20:** Gios Lift Station Facility Site  **Figure 21:** Gios Lift Station Water Service Backflow Preventor

Mechanical	Condition	Photo(s)
Pumps ▪ Submersible pumps were not pulled for assessment during field inspections. ▪ Pump discharge hoses are observed to be in good condition. Operations reported no issues with them. ▪ No pump lifting chains at this lift station. Operations informed they have to "fish" for the pump bail to remove the pumps. ▪ FOG observed in the wet well.	Good	 **Figure 22:** Gios Lift Station Submersible Pumps
Piping and Valves ▪ Moderate to severe corrosion at pipe support base of discharge pipe. - PVC discharge elbow below coupling is at risk if pipe supports fail. ▪ PVC discharge piping is in good condition. Moderate chalking observed. ▪ Operations reports no issues with PVC check valves. ▪ PVC bypass connection located on vertical piping beneath discharge header. - Camlock bypass connection.	Fair	   **Figure 23:** Gios Lift Station Piping, Valves, and Pipe Supports

Structural	Condition	Photo(s)
Wet Well ▪ A sheet metal rim sits on top of the precast concrete wet well. - The fiberglass enclosure rests on the metal rim. - Rim was observed to have moderate corrosion and in fair condition. ▪ Moderate concrete spalling at the wet well overflow pipe penetration and around the top of the wet well. - Concrete sections may fall and damage pumps. - Operations informed that the overflow line conveys flow to the manhole downstream of the force main. ▪ Moderate concrete corrosion observed in the wet well, and large aggregate exposed. ▪ Wet well vault is not sealed causing surrounding environment to a hazardous location per NFPA 820.	Poor	 **Figure 24:** Gios Lift Station Wet Well Concrete Condition  **Figure 25:** Gios Lift Station Wet Well Spalling

Electrical & Instrumentation	Condition	Photo(s)
▪ Wet well vault did not appear to be sealed causing surrounding environment to a hazardous location per NFPA 820 and NEC. ▪ Electrical equipment, including the electrical service meter and electrical equipment rack, was not observed to be rated NEMA 7 but is within the hazardous envelope because the wet well is exposed under the fiberglass cover, which was not observed to be a sealed barrier. This is a code and safety issue.	Poor	 **Figure 26:** Gios Lift Station Open Wet Well, Adjacent Electrical Equipment, Electrical Rack

- No sealing fittings are observed on any electrical conduits, so wet well gases can enter electrical equipment via conduits. Cables appeared to exit the j-boxes adjacent to wet well and enter wet well directly.
- Numerous electrical junction boxes were observed mounted adjacent to the wet well and did not appear to be NEMA 7 rated. One of the junction boxes was observed to swivel, but it should not.
- Galvanized pipe was observed to be used as conduit. This is a code violation that needs to be replaced.
- The City advised that they do not have their own power source to the lift station from the utility. The City advised that the existing electrical is single-phase 240-volts from the park's electrical system.
- All electrical equipment appeared to be old, in poor condition, and beyond useful life. Knocked out blank breaker spaces were observed such that the panel interior is exposed to personnel.
- One LED light fixture was observed at the equipment rack that appeared to be rated for wet locations.
- No arc flash stickers were observed on the electrical equipment.
- No standby power generator or portable generator connection was observed.
- City staff indicated that the pumps start and stop based on float switches.



Figure 27: Gios Lift Station Non-Hazardous Rated Electrical Meter & J-Boxes at Wet Well





Figure 28: Gios Lift Station Galvanized Pipe Used as Electrical Conduit & Electrical Equipment Safety Concern & Equipment Condition Example

▪ I/O appeared to be transmitted off site using a Mission Communications Cellular Wireless RTU, for the lift station. City staff indicated that the lift station is not on the SCADA system. ▪ City staff advised that the Warrick pump moisture sensors do not work. ▪ No lift station discharge flowmeter was observed. ▪ City staff advised that the wet well high level float activates the local red light but does not report back the Mission Control RTU. ▪ No intrusion switches were observed on site.		
Climate Change Vulnerability	**Condition**	**Photo(s)**
Flooding ▪ Site grade is crushed rock. - Low points not observed adjacent to wet well. **Electrical Outages** ▪ No standby generator / ATS or portable generator receptacle observed on site. **Extreme Heat** ▪ Air cooling / temperature control not observed inside electrical enclosures.	Poor	

3.2.4 Hydraulic Assessment

The Gios Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 1.1 times per hour on average with a maximum of 27 starts per hour. Pump #2 starts approximately 0.02 times per hour on average with a maximum of 0.6 starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 5 HP, 4-pole (1750 rpm) motor should have a maximum number of 16.3 motor starts per hour. It was observed that the instances number of starts per hour exceeds the NEMA recommended starts per hour based on the provided SCADA data.

Pump #1 averages 106 minutes of run time per day (1,609 total hours) while pump #2 averages 2.3 minutes of run time per day (35 total hours). The difference in run time and starts per hour will unevenly wear the pumps. This may be indicative of an issue with the control logic of the pumps or an issue with the level control instrumentation. Dudek recommends for the City Operations staff to investigate the cause of this discrepancy.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Lift Station No. 3 force main is a 4" of unknown material and believed to be installed in 1976. The condition of the force main is unknown; however, it is nearing the end of its industry standard useful life of approximately 50 years. Gios Lift station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 4" force main is estimated at approximately 6.4 ft/sec which is in accordance with HI standards.

3.2.5 Recommended Improvements

Recommended improvements were developed for Gios LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 12.

Table 12. Gios Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
EI&C/ Climate Change Vulnerability	Replace all Electrical and Controls Equipment, including junction boxes, conduit, and wire	All equipment appeared to be in poor condition, is within hazardous envelope, has safety and code violations, is beyond useful life. Replace all electrical, controls, and instrumentation. Install ultrasonic level transmitter and have it control the pumps, as appeared to be typical with most of the City's Lift Stations. Install air cooling / temperature control on the control panel.	Code Violation/ Operational Failure	Instrumentation and Control Program – Phase 1 (Near-term)
EI&C	Locate new Electrical/ Control Equipment Rack and all electrical and controls j-boxes outside of Hazardous Envelope	Safety issue, code violation, equipment failure/damage possible in existing location.	Code Violation/ Operational Failure	Instrumentation and Control Program – Phase 1 (Near-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
E&IC	Replace existing electrical service and pump motor controllers	Replace existing 120/240V single-phase electrical service from park power system with w 480V three-phase electrical service directly from the Utility. This service, with 480V pumps will provide better operational reliability, with less downtime, anticipated less equipment failure utilizing more commonly available equipment. Put in location outside of hazardous envelope.	Operational Failure	Instrumentation and Control Program - Phase 2 (Mid-term)
EI&C	Perform Power System Study & Install Arc Flash Stickers	Per NFPA 70E, a power system study should be performed, and updated every 5 years Updates should be made whenever modifications are made. Arc flash stickers should be provided on the electrical equipment.	Safety Risk	Arc Flash / Short Circuit Study Program (Near-term)
EI&C / Climate Change Vulnerability	Install a portable generator connector	This will allow the City to bring a portable generator on site to provide power when utility power fails.	Operational Failure	Power and Generator Program
EI&C	Have high level float switch report to Mission RTU	Per City staff request.	Operations Preference	Maintenance
EI&C	Install Intrusion Switches	Intrusion switches are not currently installed on the electrical equipment. It is recommended to install intrusion switches for RTU notification to prevent unauthorized access and tampering of lift station equipment.	Safety Risk/ Security Risk	Maintenance
Site Civil	Installation of Emergency Eye Wash	This facility has no onsite water and no emergency eye wash station. OSHA 29 CFR 1910.151 requires eye wash stations be located at facilities with injurious corrosive materials stored.	Injury Risk/ Operational Failure	Gios Lift Station Rehabilitation (Long-term)
Mechanical	Replace Water Service Piping	Water service backflow preventor is moderately corroded and oxidized. Above grade service piping is PVC. PVC has minor chalking.	Corrosion	Maintenance
Mechanical	Install Pump Lifting Chains	No pump lifting chains at this lift station. Operations informed they have to “fish” for the pump bail to remove the pumps.	Operations Preference	Gios Lift Station Rehabilitation (Long-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Mechanical	Pipe Support Replacement	Moderate to severe corrosion at pipe support base of discharge pipe assembly. PVC discharge elbow below coupling is at risk of failure if pipe supports fail.	Operational Failure	Maintenance
Structural	Replace / Redesign Wet Well Access Cover Plate	It is recommended to replace or redesign the wet well access cover plate with new hatches that are equipped with integrated fall protection, locking mechanism, and lift assist.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Rehabilitate Wet Well and Install Wet Well Liner	Moderate concrete corrosion observed in the wet well, and large aggregate exposed. There is currently no existing liner within the wet well leading to accelerated corrosion.	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

3.3 Main Lift Station

3.3.1 Location and Layout

The Main Lift Station is the largest lift station in the City's wastewater system and is located at 1587 W Pico Avenue, west of North Park and east of the Humane Society of Imperial County. The lift station is a dry well/wet well facility with a large service area that includes industrial and residential areas in the City's northern area. Site access for this facility is by a driveway and fence gate south of Pico Avenue. The lift station is secured by a perimeter fence.

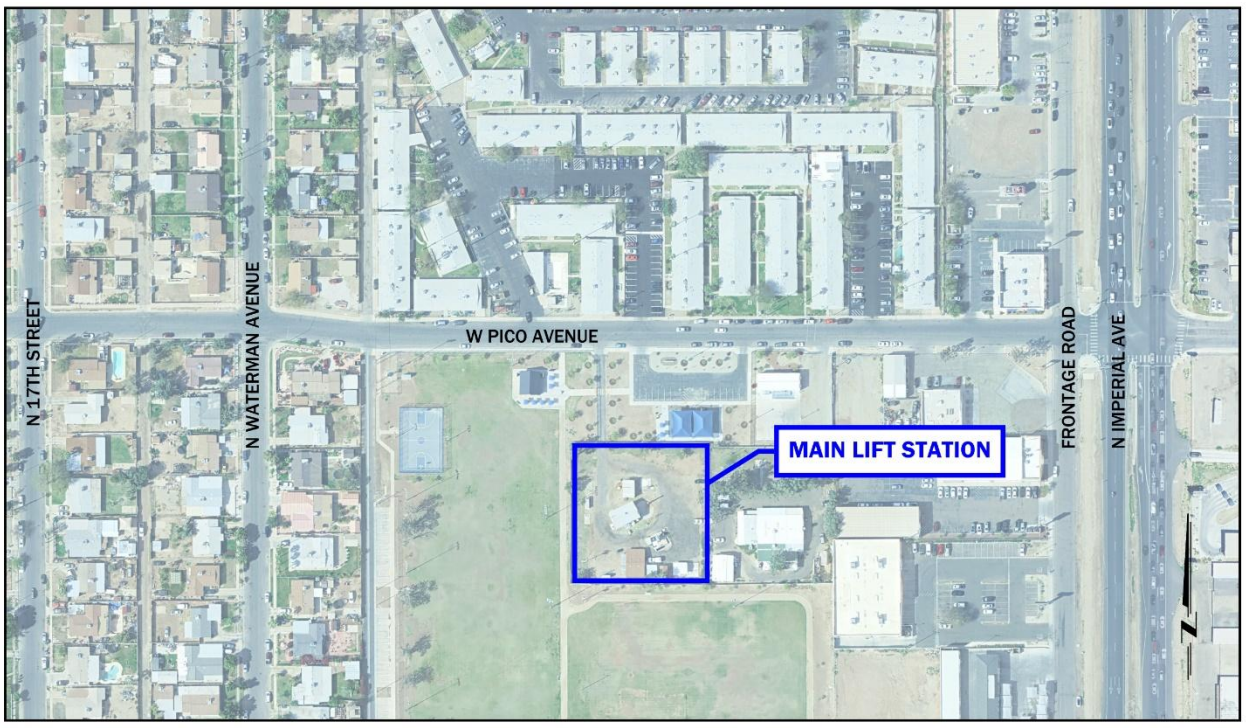


Figure 29: Main Lift Station Location

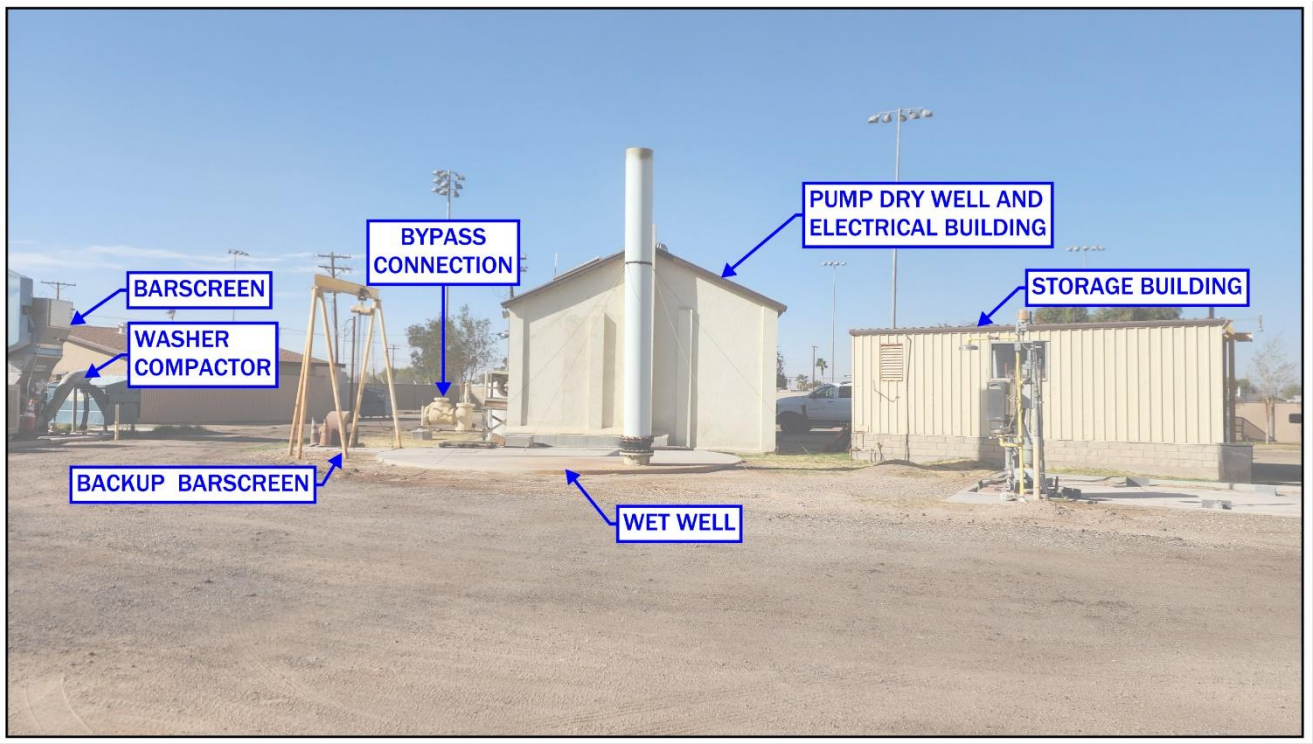


Figure 30: Main Lift Station Layout

3.3.2 System Characteristics

3.3.2.1 Pump Station

A summary of the pumping units for Main LS is provided on Table 13, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 14.

Table 13. Main Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Chicago Pump, Model CP8175LS	
Pump Type	Dry well	
Design Capacity	2535 gpm @ 39' TDH	
Motor, hp	50	
Motor Operation	VFD	
Speed, rpm	875	
Discharge Diameter, inches	8	
Year Installed	1935, Rehabilitated 1993, 1999, and 2007	

Table 14. Main Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Lined concrete
Diameter, feet	32 x 10
Depth, feet	31.3
Floor Elevation, feet	-76.75
Influent Sewer Invert, feet	-72.33
Cover/Hatch Type	Single-leaf hatch
Dry Well	
Size, feet	23.5 x 12
Material	Cast in place concrete
Depth, feet	33.33
Cover/Hatch Type	Staircase within Dry Well / Electrical Building
Bypass Assembly	
Valve Location	Dry well
Bypass Connection	Above grade outside the Dry Well / Electrical Building
Force Main	
Diameter, inches	30
Length, feet	Approximately 5,826
Material	PVC

3.3.2.2 Operations and Maintenance History

The Main Lift Station was built in 1935. Originally it was designed as an extended shaft dry well pump station with a 27-foot wet well. In 1993, a chlorination building was installed, and the original 18-inch force main was replaced by a 27" force main. In 1999 the force main was replaced again with a 30" force main. In 2007, Main Lift Station was rehabilitated including new pumps, VFDs, and mechanical piping. Operations staff report that the flow-matching pump control causes pumps to operate without rotating until the wet well reaches the pump shutoff set point. This results in uneven pump run times. To correct this, staff must manually monitor and rotate pump operation to balance usage.

It was reported that the air release valve on the lift station bypass connection has not been maintained, and the check valve has not been exercised. Onsite observations showed that the original magnetic flow meter failed, and a clamp-on flow meter was installed just below it. Operations staff consider the clamp-on meter a temporary solution but would like a new magnetic flow meter. The temporary clamp on flow meter does not transmit to the City's SCADA system.

The Bioxide injection odor control system was determined to be ineffective by the City and was moved to the East Side Lift Station.

Operations staff conduct monthly inspections of the bar screen vault. The vault frequently floods, which displaces the floor grates and requires them to be repositioned. Staff also report low water pressure in the bar screen system, which is believed to result from sharing a water meter with the neighboring humane society.

3.3.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at the Main Lift Station. Table 15 contains observations made during the February 11, 2025 site inspection and information provided by the City during the pre- and post-inspection workshops.

Table 15. Main Lift Station Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ Entrance to the Main Lift Station site is through an asphalt concrete access road off of West Pico Avenue ▪ There is an existing automatic sliding entrance gate for vehicular access to the site ▪ An existing chain link fence with barbed wire and privacy slats surrounds the site, preventing unauthorized access ▪ Surrounding site grading is unpaved and becomes muddy during precipitation events	Good	

Figure 31: Main Lift Station Facility Access Road and Sliding Entrance Gate

- The at-grade concrete slabs for the various lift station structures do not have issues with flooding/drainage and no tripping hazards were observed
- The access stairs down to the dry well and bar screen structure have safety handrails that remain in good condition
- Various segments of bar screen vault floor grating lifts off of frame and falls into channel when flow backs up and rises inside of vault leaving large gaps in the floor which introduce a significant safety risk for operations staff.
  - Spalling observed at bar screen vault stairs. Safety hazard for operations entering/ leaving vault.
- The wet well access hatches are significantly corroded and are not safe to walk on introducing a significant safety risk for operations staff
  - No permanent/integrated fall protection observed at wet well access hatch. Lift assist was not observed to be functioning.
  - No working intrusion switches or locks on the wet well access hatches.
- Approximately half of the lighting was operable, however it was mentioned that it was insufficient for staff to work. Approximately half of the upstairs lighting is inoperable, and operations staff mentioned they are inaccessible to change bulbs or replace.
- There is an existing emergency eye wash station on site that remains in good condition



Figure 32: Main Lift Station Facility Sliding Entrance Gate (From Interior)



Figure 33: Main Lift Station Dry Well Access Stairs and Handrails



Figure 34: Main Lift Station Bar Screen Structure Grating

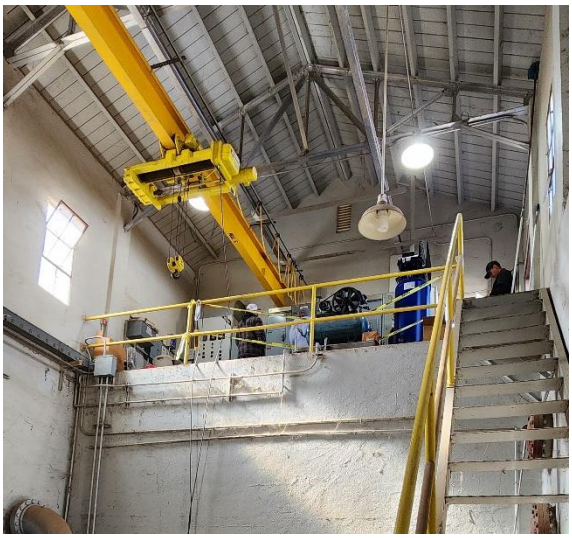


Figure 35: Main Lift Station Wet Well Access Hatch

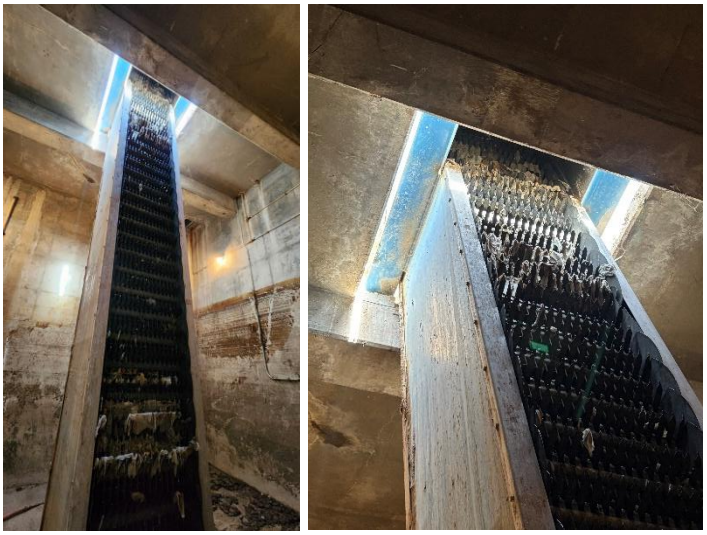


Figure 36: Main Lift Station Electrical Room Lighting

Mechanical	Condition	Photo(s)
Pumps ▪ Three (3) dry pit submersible pumps are located within the dry well. - Pumps are controlled by level transducers with float high water alarm. ▪ Pumps located on pedestals than are anchored to concrete housekeeping pads. The pump bases and concrete pads are in good condition. ▪ Insignificant extent of minor corrosion and coating delamination was observed on the pumping units ▪ All flanged connections remain leak-tight and in good condition	Fair / Good	



Figure 37: Main Lift Station Dry Well Pumps and Pump Bases

▪ Operations use monorail crane system within electrical building above the dry well to remove pumps for maintenance/replacement. ▪ Two (2) submersible sump pumps are located within the sump pit within the dry well. - Submersible sump pumps were not pulled for assessment during field inspections.		 **Figure 38:** Main Lift Station Dry Well Submersible Sump Pumps
Bar Screens ▪ It was observed that the bar screen motor can only be accessed by a standard ladder (unfixed). No safety railings at the top of the bar screen. ▪ Old equipment framing within "Back-up Bar Screen Structure" is significantly corroded; corroded metal can fall into channel. ▪ H_2S gas smell is noticeably present at the bar screen location at grade level. There are gaps of a couple of inches in the concrete structure all around the enclosed bar screen. With these gaps, the screen area would be classified similar to a screen over an open channel outdoors as a Class 1, Division 2 hazardous location for 10 feet all around the opening.	Fair	 **Figure 39:** Main Lift Station Bar Screen System  **Figure 40:** Main Lift Station Bar Screen System

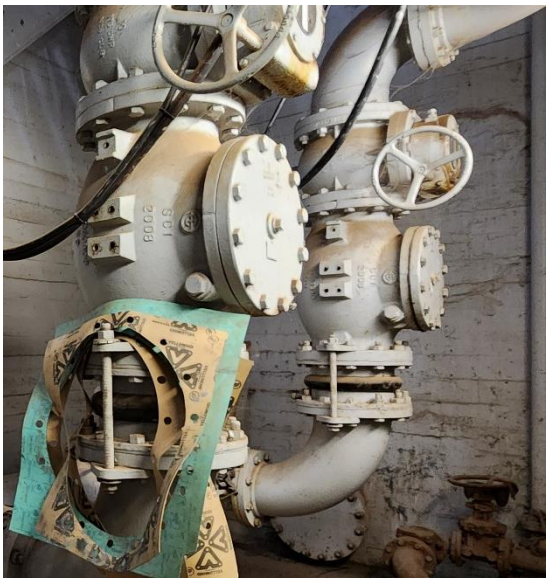
Piping and Valves ▪ The existing above-grade bypass connection assembly appeared to be in fair to good condition, however the bypass connection air valve and check valve have not been exercised or maintained ▪ Staff reports that the existing magnetic flowmeter element is inoperable and needs to be replaced - A retrofitted clamp on flow meter is installed directly below the magnetic flow meter. Operations staff indicated that this is an acceptable short term flow measurement system. ▪ Piping was observed to be in good condition. ▪ Pump discharge valves appeared to be in good condition. Little to no corrosion and coating delamination was observed. Signs of insignificant amounts of oil leaking was observed on some of the plug valves ▪ Sump pump piping is deteriorated and inadequately supported. Appears to be missing pipe supports. Only pipe support is a wooded block located at the tee. ▪ Sump pump isolation valves and fittings are severely corroded with observed loss of material thickness and degradation structural integrity ▪ Wooded blind flange observed at old force main alignment.	Good	 **Figure 41:** Main Lift Station Bypass Connection Assembly  **Figure 42:** Main Lift Station Discharge Flow Meter  **Figure 43:** Main Lift Station Pump Discharge Valves

		 **Figure 44:** Main Lift Station Sump Pump Discharge Valves and Fittings
Odor Control/Ventilation ▪ The wet well odors are emitted through an above grade PVC standpipe which remains in good condition - The segment of the standpipe that penetrates through the wet well top slab is in fair to poor condition ▪ The mitered 90-degree bend at the top of the swamp cooler air inlet duct is disconnected and is likely not functioning as intended to provide clean, cool air down into the dry well ▪ Bar screen valve vault only has a forced air inlet fan and does not have a dedicated exhaust vent or air exhaust fan - Air is pumped into vault from ceiling but may be short circuiting out of opening around bar screen penetration at grade. ▪ The bioxide injection station is constructed of primarily PVC and the piping, valves, and fittings remain in good condition - Operations staff mentioned that the bioxide injection station was not effective at Main Lift Station and was moved to a different lift station ▪ The external low-flow water supply system and surge tanks remain in fair to good condition with minor	Good	 **Figure 45:** Main Lift Station Odor Exhaust Standpipe  **Figure 46:** Main Lift Station Swamp Cooler Air Inlet Duct within Electrical Building/Dry Well

levels of corrosion on some of the valves and fittings



Figure 47: Main Lift Station Bioxide Injection Station



Figure 48: Main Lift Station Low-Flow Water Supply System and Surge Tanks

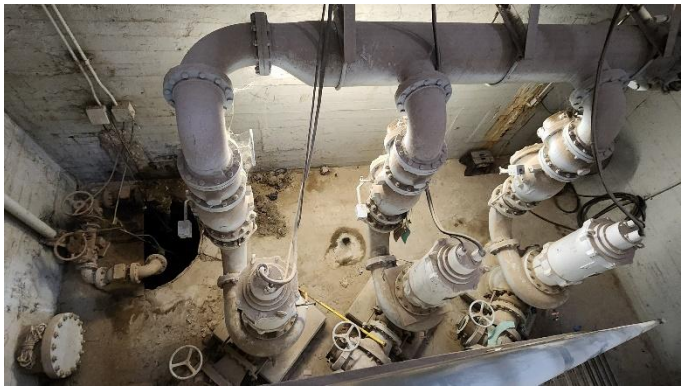
Standby Generator ▪ Staff reports that the existing standby generator burns a gallon of oil per month. Staff also stated that the engine for the generator was manufactured outside of the United States, so parts availability and lead time is a concern. ▪ Some of the exterior piping connected to the standby generator are moderately corroded and showing signs of oxidation.	Fair	 **Figure 49:** Main Lift Station Standby Generator Exterior Piping  **Figure 50:** Main Lift Station Pad-Mounted Emergency Standby Generator
Structural	**Condition**	**Photo(s)**
Dry Well ▪ The existing pipe supports within the dry well remain in good condition ▪ All equipment anchorage within the dry well appeared to remain in good condition with no signs of damage ▪ The structural concrete/CMU block walls were observed to be intact however there were some areas where minor cracking is occurring ▪ Based on discussions with the City, the dry well structural integrity is a concern - Seismic evaluation of lift station structure has not been conducted. - Heavy corrosion near electrical services on bottom floor. - Walls on bottom floor near pumps are cracking and delaminating.	Good	 **Figure 51:** Main Lift Station Pump Discharge Supports



Figure 52: Main Lift Station Dry Well Structure



Figure 53: Main Lift Station Minor Cracking of Dry Well Walls



Figure 54: Main Lift Station Cracking of Concrete Floor Near Pump Bases

Wet Well ▪ The existing wet well top slab was observed to be in fair condition. - The above-grade exterior segment of the top slab was in good condition with no signs of degradation - The bottom of the top slab was observed to be moderately damaged with signs of moderate to severe corrosion of the concrete, leading to large aggregate being exposed and concrete spalling ▪ The wet well access hatches are significantly corroded and the spring lift assist is broken in several places ▪ The existing wet well liner is in fair condition with varying levels of delamination and degradation - Unable to determine concrete condition behind liner. ▪ The existing wet well liner was compromised at the wet well access hatch openings. Acidic moisture can buildup and migrate behind the liner causing it to bubble and peel away from the concrete resulting in accelerated corrosion of concrete ▪ Sealing fittings were not observed on site. Conduits exiting the wet well should have sealing fittings installed on them to prevent gases from entering electrical equipment and non-hazardous areas in accordance with NEC 500 and NFPA 820	Fair	  **Figure 55:** Main Lift Station Wet Well Top Slab   **Figure 56:** Main Lift Station Wet Well Access Hatches



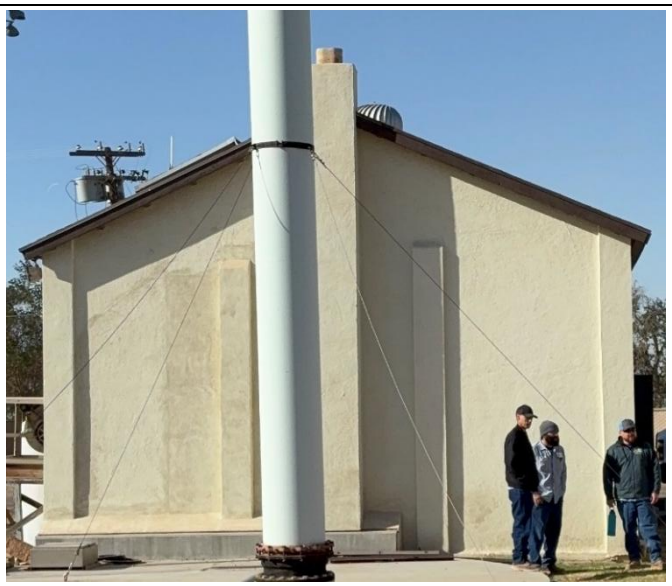
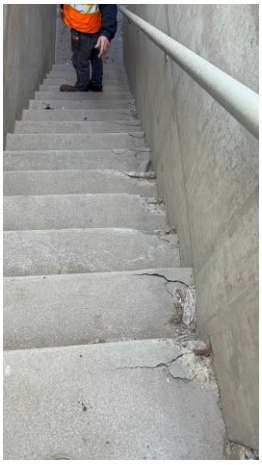
Figure 57: Main Lift Station Concrete Wet Well Structure Interior



Figure 58: Main Lift Station Deteriorating Wet Well Liner

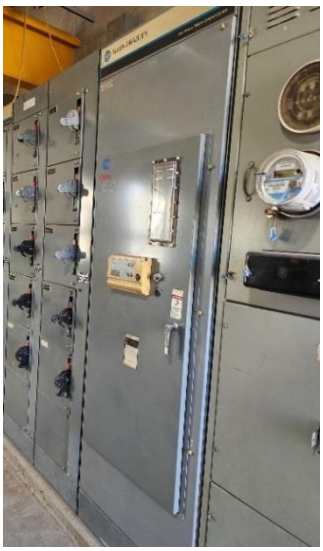


Figure 59: Main Lift Station Compromised Wet Well Liner at Access Hatch Openings

Electrical Building ▪ The electrical building exterior and interior are in good condition ▪ The existing access stairs and handrails within the electrical building are in good condition with no signs of damage ▪ The existing monorail and hoist are in good condition	Good	 **Figure 60:** Main Lift Station Electrical/Controls Building   **Figure 61:** Main Lift Station Interior of the Electrical/Controls Building   **Figure 62:** Main Lift Station Access Stairs to Bar Screen Vault

Bar Screen Vault ▪ Bar screen vault door frame severely corroded and inoperable ▪ Spalling observed at bar screen vault stairs. Safety hazard for operations entering/ leaving vault ▪ Some of the pipe supports/clamps are experiencing moderate to severe corrosion ▪ Cracking of the concrete ceiling was observed ▪ Degradation of concrete at the roof access hatch opening	Poor	  **Figure 63:** Main Lift Station Bar Screen Vault Access Door Frame  **Figure 64:** Main Lift Station Pipe Clamp within Bar Screen Vault  **Figure 65:** Main Lift Station Concrete Degradation of Bar Screen Vault Ceiling

Electrical & Instrumentation	Condition	Photo(s)
General / Site ▪ Staff reported that approximately half of the existing lighting on the electrical/drywell building exterior has not been replaced with LED light fixtures. ▪ Staff reported that the existing natural gas-powered standby generator burns a gallon of oil per month. Staff also stated that the engine for the generator was manufactured outside of the United States, so parts availability and lead times are a concern. ▪ The standby generator visually appeared to be in good condition. ▪ Some of the exterior piping connected to the standby generator appeared to be moderately corroded and showing signs of oxidation. ▪ Staff advised that they run the generator monthly with a load bank. ▪ Staff advised that the generator is sized sufficiently for the site electrical load. ▪ The utility pole feeding the site appeared to be leaning significantly. The pole could break during a significant wind or weather event, as it appeared to be succumbing to the tension from the cables. Note that the stadium light pole in the photo is perpendicular to the ground. ▪ Intrusion switches were not observed on site.	Fair	 **Figure 67:** Main Lift Station Standby Natural Gas Generator   **Figure 66:** Corroded Generator Piping (Left), Leaning Utility Pole (Right)

Wet Well ▪ Sealing fittings were not observed on site. Conduits exiting the hazardous areas should have sealing fittings installed on them to prevent gases from entering electrical equipment and non-hazardous areas in accordance with NEC 500 and NFPA 820. ▪ City staff advised that the wet well supply fan has been abandoned. ▪ A NEMA 4X stainless steel enclosure was observed mounted to the top of the wet well deck, for what appeared to be level instruments, with conduits exiting to the wet well below with no sealing fittings. Since no exposed conduits were observed exiting the enclosures above the deck, it is possible that some conduits are embedded in the deck slab on their way back to the electrical building. Without the presence of sealing fittings, the enclosures should be rated NEMA 7 for hazardous locations. ▪ Mounting of instrumentation within the wet well could not be observed.	Fair	 **Figure 68:** Main Lift Station Electrical Enclosure Conduits Without Sealing Fittings
Electrical & Drywell Building ▪ Emergency lighting was not observed within the electrical and drywell building. **Upper Level—Electrical Area:** ▪ The existing Utility meter Service Entrance Section (SES) with main breaker has a manufacturer date of 11/04/92 on its nameplate. Therefore, this equipment has reached the end of its useful life. It is assumed that the MCC was installed at the same time as the SES. ▪ Staff reports that the ATS was replaced 6 months ago. A new ATS was observed installed inside the old ATS's section in the MCC. As long as there is no live exposed bus bar in the section, this installation did not appear to violate code. Bus	Fair	  **Figure 69:** Main Lift Station Existing Utility Meter SES, ATS, and MCC

bar was not observed. The old ATSs section door had to be opened to access the front of the new ATS and its keypad and screen. Only the old ATS controller and status lights are visible on the front of the MCC, which are no longer active.

- The MCC appeared to originally house the motor controllers for the lift station pumps. Modifications were made to install three VFDs with bypass contactors in a stand-alone enclosure adjacent to the MCC. The existing MCC buckets were used for their breakers to feed power to each VFD.
  - Should staff need to work in the VFD panel, the power to all three pumps would need to be shut down and no lift pumps could operate.
  - Should there be a fault or some other electrical event in the VFD panel that creates damage that prevents all three VFDs from running, the three lift pumps would be inoperable until repairs are complete.
  - The VFD panel has a dedicated A/C unit and ductwork into the top of the panel to keep the VFDs cool. There is no A/C for the rest of the building.
  - The VFDs are likely at the end of their useful life and acquiring parts may become difficult.
- There is a 3-foot-wide control panel between the MCC and the VFD panel that has 33 600V rated relays to run motors, but City staff advised that only 4 relays are in operation to run 4 pieces of equipment on site. Keeping this panel in service with abandoned and operating equipment can create confusion, which could lead to an event or injury.
- City staff reported that the existing lift station pump discharge magnetic flowmeter has failed. Staff installed



Figure 70: Main Lift Station Newer ATS & Controller Inside Old ATS's MCC Section Behind Door



Figure 71: Main Lift Station VFD Enclosure with Three Lift Pump VFDs

a strap-on doppler flow meter to take its place as an interim solution.

- City staff advised that the ultrasonic lever transmitter commands the lift pumps to start and stop, and the doppler flow transmitter commands VFD speed of the lift pumps to maintain a flow setpoint.
- City staff advised that the bioxide system transformer and panelboard located on the wall to the left of the VFD panel is abandoned and can be removed.
- Lighting on the upper level for the electrical equipment appeared operable.
- No arc flash stickers were observed in the electrical building, or anywhere on site.
- No third-party maintenance/testing stickers were observed on the electrical equipment.
- I/O appeared to be transmitted off site using a Mission Communications Cellular Wireless RTU, for the lift station.
- Per City staff, the wet well high level signal is transmitted off site via separate land phone line.

Mid Level—Pump Disconnects:

- None of the lighting appeared to be operable on middle level. Staff stated they cannot access the light fixtures to replace bulbs and light fixtures.

Lower Level—Pump Area:

- The drywell lower level is insufficiently lit to work with a significant amount of lights not working. Even if all lights were working in the lower level, it appeared to be insufficient to work.
- The sump pump control panels are very small for a control panel, and the control panels and associated electrical appeared to be in poor condition.

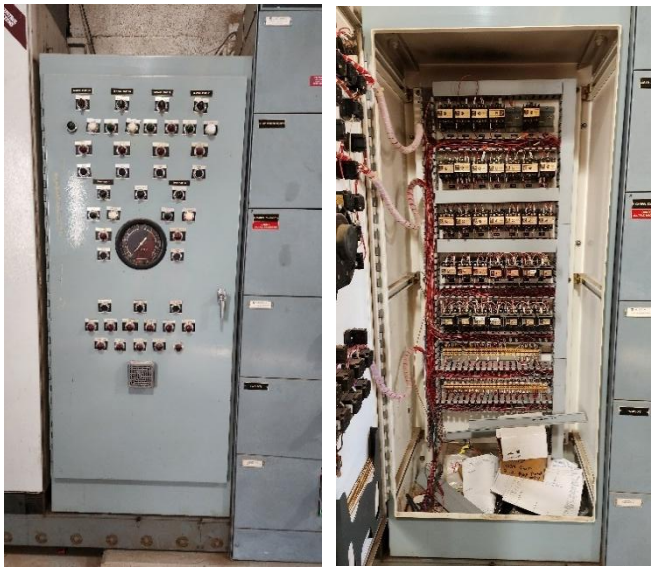


Figure 72: Main Lift Station Control Panel with 33 Contactors (Four are in Use)

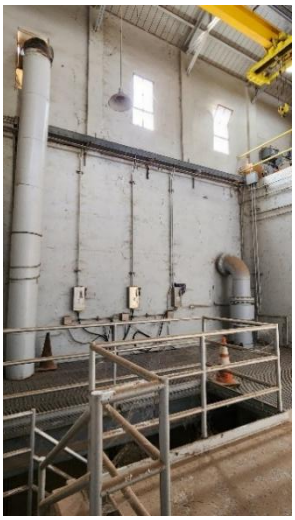
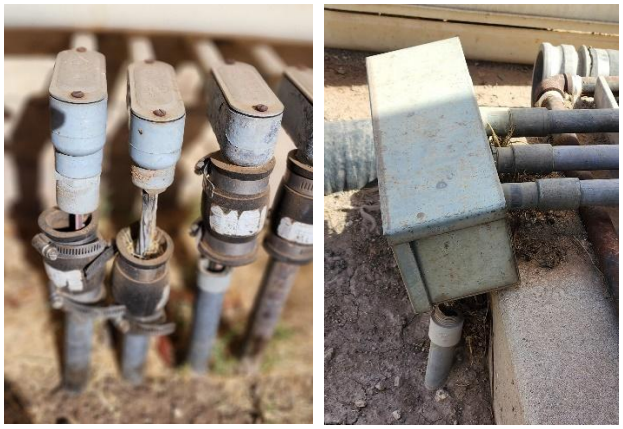


Figure 73: Example of Height of Existing Middle Level Lighting



Figure 74: Main Lift Station Existing Drywell Sump Pump Control Panels

Bar Screen Area & Vault ▪ H_2S gas smell was strong at the bar screen area at grade level. Gaps of a few of inches in the concrete structure were observed all around the enclosed bar screen. There was also no solid door at the screen vault entrance at the bottom of the stairs. Considering both the gaps around the screen and the open vault entry, the screen area at grade would be classified similar to a screen over an open channel outdoors as a Class 1, Division 2 hazardous location for 10 feet in all directions around the openings and vault door. ▪ No electrical and controls equipment at grade level appeared to be rated NEMA 7 for use in a hazardous location but are all within the 10 foot envelope of the gaps around the bar screen, including the control panel, lighting, emergency stop button, and receptacles. ▪ A ventilation fan was observed adjacent to the control panel. Could not determine if its motor(s) and electrical is rated for use in a hazardous location. ▪ Two light fixtures were observed within the 10-foot hazardous envelope around the bar screen and are not hazardous location rated. One fixture is mounted to the control panel strut, and the second is mounted to the bar screen itself. ▪ Broken conduits and stretched exposed conductors were observed at both ends of the conduits between the electrical/drywell building and the bar screen area. This is likely due to ground settling, as the break and gaps in the conduits appeared to be approximately two inches. ▪ Sealing fittings at grade level were observed on only two conduits going between the bar screen control panel and the concrete slab. No sealing fittings were observed on	Poor	 **Figure 75:** Main Lift Station Large Gaps Around Bar Screen  **Figure 76:** Main Lift Station Electrical, Screen Control Panel, Conduits, Light (Not Hazardous-Rated)  **Figure 77:** Main Lift Station Broken Conduits: At Electrical Building (Left), At Bar Screen (Right)

any other conduits at grade level in the bar screen area. Conduits exiting hazardous areas associated with the bar screen and bar screen vault should have sealing fittings installed on them to prevent gases from entering electrical equipment and non-hazardous areas in accordance with NEC 500 and NFPA 820. ▪ Lighting fixtures inside the bar screen vault did not appear to be rated for a Class 1, Division 1 hazardous location, but were inaccessible to read their nameplate to verify. If they are not properly rated, they should be replaced. ▪ The bar screen vault appeared to have previously flooded high enough to submerge conduits on the walls. ▪ Some conduit corrosion was noted within the vault, but did not appear to have corroded through the conduits.		 **Figure 78:** Main Lift Station Typical Bar Screen Vault Light Fixture  **Figure 79:** Main Lift Station Water Line on Wall Indicating Previous Flood Level

Climate Change Vulnerability	Condition	Photo(s)
Flooding ▪ Surrounding site grading is unpaved and becomes muddy during precipitation events ▪ The at-grade concrete slabs for the various lift station structures do not have issues with flooding/drainage and no tripping hazards were observed **Electrical Outages** ▪ The standby generator visually appeared to be in good condition. **Extreme Heat** ▪ The VFD panel has a dedicated A/C unit and ductwork into the top of the panel to keep the VFDs cool. There is no A/C for the rest of the building.	Good	

3.3.4 Hydraulic Assessment

The Main Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 0.1 times per hour on average with a maximum of 56 starts per hour. Pump #2 starts approximately 0.1 times per hour on average with a maximum of 5 starts per hour. Pump #3 starts approximately 0.1 times per hour on average with a maximum of 7 starts per hour. All three pumps average the same starts per hour. It is assumed that Pump 1 had a malfunction during the hour which it started 56 times on 8/17/22. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 50 HP, 6-pole (875 rpm) motor should have a maximum number of 7.7 motor starts per hour. All three pumps are in compliance with the NEMA recommended number of pump starts per hour.

Pump #1 averages 421 minutes of run time per day (6,414 total hours) while pump #2 averages approximately 336 minutes of run time per day (5,122 total hours). Pump #3 averages 731 minutes of run time per day (11,141 total hours). This data indicates that the pumps kick on with similar frequency however their run times vary greatly. The difference in run time may unevenly wear the pumps.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Main Lift Station force main is a 30" PVC pipe installed in 1999. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. Main Lift Station is a triplex lift station. With two duty pumps in operation, the flow velocity through this existing 30" force main is estimated at approximately 2.3 ft/sec which is in accordance with HI standards.

3.3.5 Recommended Improvements

Recommended improvements were developed for Main LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 16.

Table 16. Main Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
EI&C	Replace existing drywell/electrical building interior and exterior lighting completely	Replace outdoor lighting to improve light levels and energy savings. Replace indoor lighting with better light levels, LEDs to save energy, and fixtures that can be accessed for maintenance and replacement on all three level.	Safety Risk/ Security Risk	Main Lift Station Rehabilitation (Mid-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
EI&C	Install emergency lighting	Install emergency lighting in electrical/drywell building and screen vault.	Safety Risk	Main Lift Station Rehabilitation (Mid-term)
E&IC/ Climate Change Vulnerability	Replace existing generator	Replace the permanent generator with a new generator that has an engine manufactured in the USA and more readily available replacement parts.	Operational Failure	Main Lift Station Rehabilitation (Mid-term)
EI&C	Repair corroded generator piping	Repair corroded piping for the standby generator	Preventitive Maintenance	Power and Generator Program (Near-term)
EI&C	Replace Utility power pole feeding the site	Request the Utility replace the leaning power pole that powers the site—to prevent an unplanned outage due to a weather or wind event breaking or toppling the pole.	Operational Failure	Power and Generator Program (Near-term
EI&C	Install sealing fittings	Install conduit sealing fittings on all conduits as they exit the hazardous envelope (including the wet well, screen vault, and screen area at grade) and before they enter any enclosures or junction boxes.	Code Violation/ Operational Failure	Maintenance
EI&C	Replace discharge magnetic flow meter	Replace flowmeter on pump discharge to allow flow monitoring which provides useful operational data and serves as indication of diminishing pump performance over time. Magnetic flowmeters are typically more accurate than strap-on doppler flowmeters.	Operations Preference	Maintenance
E&IC	Install intrusion switches	Install intrusion switches and have them report to the RTU.	Safety Risk/ Security Risk	Maintenance

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
EI&C	Replace VFD enclosure with three new VFD enclosures	Replace single enclosure with three LS pump VFDs with three enclosures with one LS pump VFD in each. To make room in the electrical building, the 3-foot control panel with 33 contactors will need to be removed, as will the bioxide transformer and panel board. Starter buckets can be installed in space in the MCC to run the equipment still being operated by the 3-foot control panel.	Operational Failure	Instrumentation and Control Program – Phase 1 (Near-term)
EI&C	Replace the existing SES, ATS section, and MCC completely	Recommend planning to replace these within 5 years—they are already at the end of their useful life.	End of Useful Life	Main Lift Station Rehabilitation (Mid-term)
EI&C	Replace sump pump electrical, instruments, & control panels	Replace all and put new sump pump control panels on the middle level—staff request.	Operational Failure	Instrumentation and Control Program – Phase 1 (Near-term)
EI&C	Perform Power System Study & Install Arc Flash Stickers	Per NFPA 70E, a power system study should be performed, and updated every 5 years Updates should be made whenever modifications are made. Arc flash stickers should be provided on the electrical equipment.	Safety Risk	Arc Flash / Short Circuit Study Program (Near-term)
EI&C	Perform third-party testing on MCC and its breakers	This is preventative maintenance that identifies equipment issues ahead of time. It also makes sure the breakers are tripping at the amperage and settings they are supposed to—to keep staff and equipment safe.	Injury Risk/ Operational Failure	Testing and Studies Program (Near-term)
EI&C	Relocate all control panels, electrical, lighting, and receptacles outside the 10-foot hazardous area[1]	Relocate all non-hazardous location rated equipment at the bar screen on grade level outside of the hazardous envelope, including the control panel, lighting, emergency stop button, and receptacles.	Code Violation/ Operational Failure	Maintenance

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
EI&C	Replace Bar Screen E-stop with NEMA 7	Replace Emergency stop button mounted to the bar screen with a NEMA 7 rated button.	Code Violation/ Operational Failure	Instrumentation and Control Program – Phase 1 (Near-term)
EI&C	Repair broken conduits for bar screen exiting drywell/electrical building	Safety hazard and risk of breaking of conductors, interrupting operations.	Code Violation/ Operational Failure	Instrumentation and Control Program – Phase 1 (Near-term)
EI&C	Repair broken conduits for bar screen at the bar screen area	Safety hazard and risk of breaking of conductors, interrupting operations. Recommend intercepting conduits below grade and extending to new bar screen control panel location per recommendation above.	Code Violation/ Operational Failure	Maintenance
EI&C	Replace bar screen vault lighting and repair conduits	Replace bar screen vault lighting fixtures if they are not rated for a Class 1, Division 1 hazardous location. Repair conduits as needed—some due to corrosion, some due to prior submergence.	Code Violation/ Operational Failure	Maintenance
EI&C	Replace lighting at bar screen[1]	Existing lighting is not hazardous location rated and appeared to be in a hazardous envelope. Replace with NEMA 7 rated fixtures, or relocate outside the hazardous envelope. Evaluate lighting level in the area and add lighting if needed.	Code Violation/ Operational Failure	Maintenance
Site Civil	Replace Floor Grating within Bar Screen Vault	Various segments of bar screen vault floor grating has fallen into channel when flow backs up and rises inside of vault leaving large gaps in the floor which introduce a significant safety risk for operations staff.	Safety Risk/ Security Risk	Main Lift Station Rehabilitation (Mid-term)
Site Civil	Repair Access Stairs to Bar Screen Vault	Concrete spalling of the access stairs leading to the bar screen vault poses a tripping/safety hazard for operations staff. It is recommended to repair the access stairs where spalling is occurring.	Concrete Degradation	Main Lift Station Rehabilitation (Mid-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Site Civil	Install Permanent / Fixed Access Ladder for Bar Screen Motor	Bar screen motor access is in the form of a portable ladder. It is recommended to install a fixed ladder with safety railings around the top so operations staff can safely access bar screen motor.	Risk of Injury	Main Lift Station Rehabilitation (Mid-term)
Site Civil	Replace Bar Screen Vault Door	The bar screen vault door frame is severely corroded making the access door inoperable	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program - Phase 1
Mechanical	Recoat Existing Mechanical Equipment in Dry Well	The existing mechanical piping, valves, and pumps within the dry well remain in good condition, however there is minor corrosion and coating delamination occurring in several locations	Coating Delamination / Failure	Maintenance
Mechanical	Replace Existing Sump Pumps and Discharge Piping	Although the existing sump pumps were not pulled for inspection, it is anticipated that they are at or near the end of their useful life and in need of replacement. The existing discharge piping, valves, and fittings are experiencing severe corrosion and need to be replaced.	End of Useful Life	Main Lift Station Rehabilitation (Mid-term)
Mechanical	Routine Valve Exercising	The existing bypass connection air valve and check valve have not been exercised or maintained. It is recommended to adopt a more frequent and proactive maintenance schedule for valve exercising.	Preventative Maintenance	Maintenance
Mechanical	Replace Existing Flowmeter	City operations staff report that the existing magnetic flowmeter element is inoperable and needs to be replaced.	Operational Failure	Main Lift Station Rehabilitation (Mid-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Mechanical	Repair Forced Air Ventilation System within Dry Well and Electrical Building	The mitered 90-degree bend at the top of the forced air ventilation inlet ducting is disconnected and is likely discharging mostly within the electrical building	Operational Failure	Main Lift Station Rehabilitation (Mid-term)
Mechanical	Routine Pump Testing	It is recommended that the City consider implementing routine pump performance testing to gather data on pump performance and to prioritize preventive maintenance activities. Routine pump efficiency evaluations provide valuable information on trending of the facilities efficiency, adequacy of installed equipment, and electro-mechanical condition. Since this data collection and analysis has a cost associated with it, routine pump performance testing is only recommended for pump stations that exhibit high "load factors" (i.e., significant daily runtimes), significant motor loads, and/or high-head operations (e.g., two-stage pumping stations)	Preventative Maintenance	Maintenance
Mechanical	Redesign Forced Air Ventilation System at Bar Screen Vault	Bar screen vault only has an air intake fan and does not have an air exhaust fan. Clean air is blown into the vault but may be short circuiting out of opening around bar screen penetration through vault top slab at grade.	Operational Failure	Main Lift Station Rehabilitation (Mid-term)
Mechanical	Replace Existing Standby Generator	Staff reports that the existing standby generator burns a gallon of oil per month. Staff also stated that the engine for the generator was manufactured outside of the United States, so parts availability and lead time is a concern.	N/A	Maintenance
Mechanical	Replace wooden "blind flange" with ductile iron blind flange	The existing wooden blind flange does not properly seal the abandoned pipe and is a safety hazard.	Injury Risk/ Operational Failure	Maintenance

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Structural	Replace Wet Well Access Hatches	The existing wet well access hatches are significantly corroded and are not safe to walk on. It is recommended to replace the access hatches with new hatches that are equipped with integrated fall protection, slam lock, and lift assist.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program - Phase 1 (Near-term)
Structural	Dry Well Seismic Evaluation	The structural integrity of the dry well is a concern and based on discussions with the City, a seismic evaluation of lift station structure has not been conducted.	Code Violation/ Operational Failure	Testing and Studies Program (Near-term)
Structural	Rehabilitate Liner Termination within Wet Well	Rehabilitate the existing concrete at the liner terminations within the wet well and provide improvements to the liner terminations as-needed to prevent accelerated corrosion of the structure.	Operational Failure	Main Lift Station Rehabilitation (Mid-term)

1. *Should the City address electrical code violations and seal all penetrations and conduits at bar screen, this recommendation would not be required.*

3.4 Countryside Lift Station

3.4.1 Location and Layout

The Countryside Lift Station is located northeast of the intersection of Highway 86 and Willow Bend Drive, within a small, fenced site. The lift station is a self-priming duplex station with lift up fiberglass enclosure that serves the Countryside residential community located to the southeast. This facility is located within a CMU block wall with a chain-link access gate on its west side near Highway 86. Parking for this site is located on Willow Bend Drive or just outside of the facility fence. The City informed Dudek that this lift station will be taken offline next year, and that the new Southern Lift Station handle the demand seen at Countryside Lift Station.

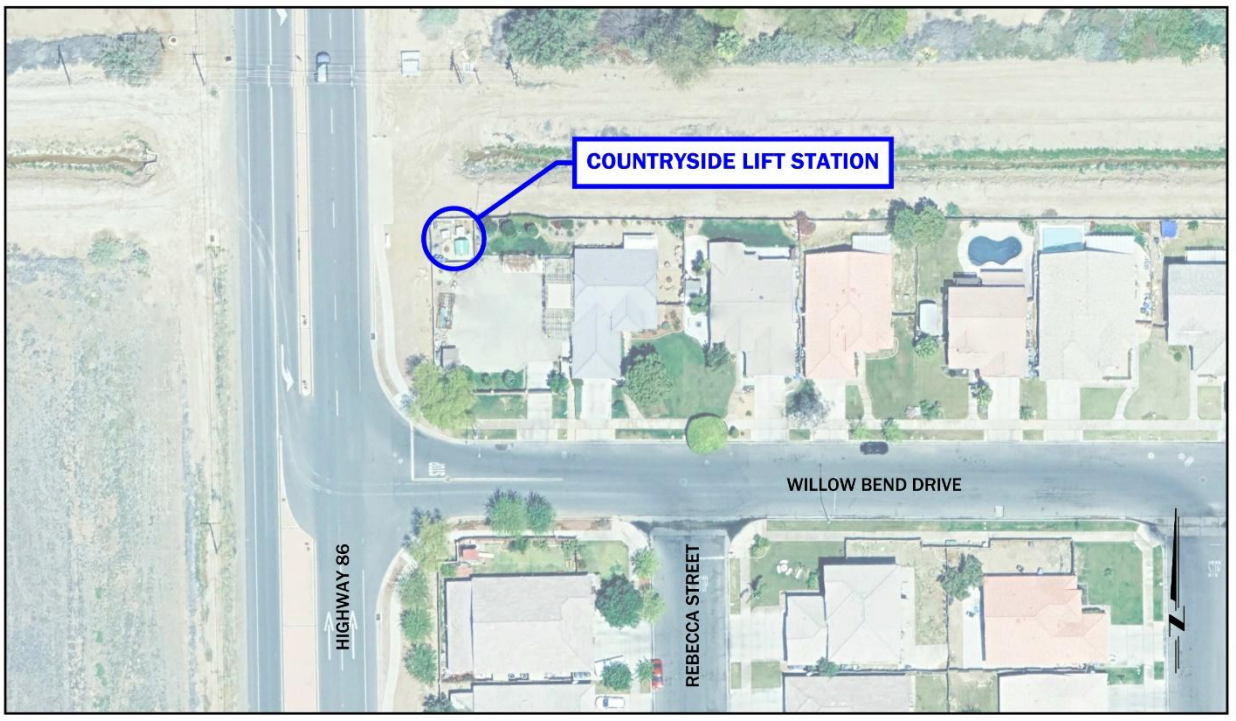


Figure 80: Countryside Lift Station Location

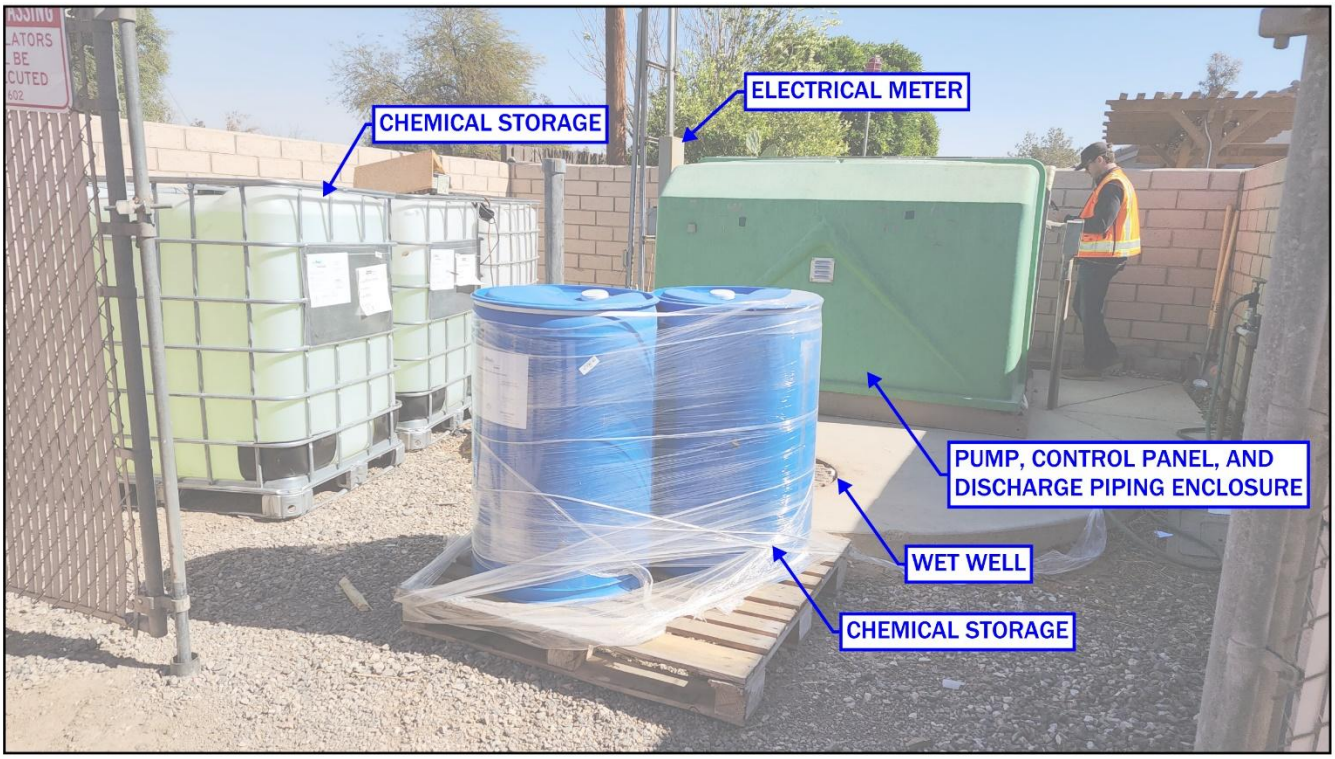


Figure 81: Countryside Lift Station Layout

3.4.2 System Characteristics

3.4.2.1 Pump Station

A summary of the pumping units for Countryside LS is provided on Table 17, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 18.

Table 17. Countryside Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Barrett Pump Pioneer P6	
Pump Type	Self Priming	
Design Capacity	550 gpm @ 45’ TDH	
Motor, hp	15	
Motor Operation	Constant Speed	
Speed, rpm	1100	
Discharge Diameter, inches	4	
Year Installed	2002	

Table 18. Countryside Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Reinforced concrete
Diameter, feet	10
Depth, feet	25
Floor Elevation, feet	-54
Influent Sewer Invert, feet	-41.8
Cover/Hatch Type	36” manhole
Bypass Assembly	
Valve Location	Above grade fiberglass enclosure.
Bypass Connection	None
Force Main	
Diameter, inches	6”
Length, feet	5,390
Material	HDPE and PVC

3.4.2.2 Operations and Maintenance History

Operations staff informed that the pumps receive regular maintenance as a part of operation’s maintenance schedule. Historically Operations reported oil leakage from pump, however this issue was resolved. Operations also

indicated that the check valves at this site have experienced ragging issues in the past but regular valve maintenance keeps the ragging issues to a minimum. No other ragging issues were reported at this site.

Chemical dosing is used at this facility. A 500-gallon tote of SulFade Commander is automatically injected into the wet well. Operations informed that when half of the SulFade Commander tote has been dosed into the wet well, Operations staff manually adds half a 55-gallon drum of Magnesium Oxide to the wet well.

3.4.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at the Countryside Lift Station. Table 19 contains observations made during the February 11, 2025 site inspection and information provided by the City during the pre- and post-inspection workshops.

Table 19. Countryside Lift Station Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ Site grade is crushed rock. ▪ Water meter and hose located within the CMU block wall. - Backflow preventor was observed to be above grade and experiencing moderate corrosion. Backflow assembly is supported by existing galvanized steel piping with hose clamps. - Above grade service piping is PVC. PVC has minor chalking. - Water meter was not inspected while on site. ▪ Chemical dosing system located adjacent to the wet well. - No eye wash station located at this site. OSHA 29 CFR 1910.151 requires eye wash stations be located at facilities with injurious corrosive materials stored. ▪ No permanent/integrated fall protection at wet well access manhole. ▪ Fiberglass enclosure was unlocked at the time of the inspection with no intrusion switch. ▪ The only security incident reported at this lift station was one occurrence of theft of water from the water meter. ▪ The only lighting observed onsite was within the fiberglass enclosure.	Fair/Good	 **Figure 82:** Countryside Lift Station Site  **Figure 83:** Countryside Lift Station Water Backflow Preventer
Mechanical	**Condition**	**Photo(s)**
Pumps ▪ Self-priming pumps are in good condition. - Minor corrosion and coating delamination observed at flanges.	**Good**	  **Figure 84:** Countryside Lift Station Self-Priming Pump and Motors

Piping and Valves ▪ Above grade ductile iron discharge piping and valves are in good condition. - Discharge piping and valves are located within the above grade fiberglass enclosure. - Mild corrosion and coating delamination observed. Rate of corrosion may be accelerated by exposure to H_2S in wet well vapors. - Custom (non-standard) ductile iron bends observed at pump discharge. ▪ PVC pump suction piping within wet well. Piping transitions to ductile iron after leaving the wet well. ▪ Force main fitting within the wet well is severely corroded. Potential for catastrophic failure. ▪ No bypass connection observed.	Fair/Good	 **Figure 85:** Countryside Lift Station Piping and Valves
Structural	**Condition**	**Photo(s)**
Wet Well ▪ Wet well access manhole frame and cover were observed to be moderately corroded providing a safety risk for operations. ▪ Wet well concrete is cracked and spalling. ▪ Liner observed to be failing throughout the wet well. - Liner is sagging severely at the top of the wet well. - Liner was observed to have extensive delaminating at the bottom of the wet well. - Liner failure at various locations on the wet well wall.	Poor	 **Figure 86:** Countryside Lift Station Wet Well Access  **Figure 87:** Countryside Lift Station Failing Wet Well Liner

Liner can fail in sheets and clog the pump. - Concrete behind the liner was observed to be moderately to severely corroded. ▪ There are no conduit seal offs installed on conduits leaving the wet well, and there are penetrations between the between the wet well and the enclosure above that are not sealed, causing the enclosure area to be considered a Class 1 Div 1 . Hazardous area. Neither the motors or the electrical and controls equipment within the enclosure are rated for a Class 1, Division 1 hazardous location. H_2S gas corrosion was observed in the motor control panel.		 **Figure 88:** Countryside Lift Station Conduit Penetration
Electrical & Instrumentation	**Condition**	**Photo(s)**
▪ The pumps and electrical/controls equipment we observed to be on top of the wet well deck under a fiberglass enclosure. The equipment did not appear to be rated for a hazardous location and appeared to be at the end of its useful life. ▪ No sealing fittings were observed on any conduits on site but are required per the National Electrical Code and California Electrical Code on conduits once they leave a hazardous area, such as the wet well. A lack of sealing fittings is a safety hazard, a risk for equipment damage, and is likely the reason for H_2S gas entering the electrical equipment. ▪ H_2S corrosion inside the electrical equipment was reported by City staff and appeared to be present in the pump control panel enclosure. ▪ A junction box in the pump area mounted to the top of wet well deck was observed to have a cover that was not bolted down. Inside the junction box, there were conduit openings that appeared to go directly into the wet well. This can	Poor	 **Figure 89:** Countryside Lift Station Junction Box with Conduits Directly to Wet Well and Unbolted Cover

allow H_2S gas to travel through the conduits.

- The existing level transducer appeared to be hanging from its cable in the wet well, which can cause premature failure of the cable.
- The penetration through the wet well deck for the level transducer appeared to be approximately 4-inches in diameter and covered by a thin metal plate that rests on the concrete. The metal plate and conduit can be easily lifted. H_2S gas could escape the wet well through this penetration.
- The level transducer penetration appeared to be approximately one foot from the pump/electrical enclosure. This short distance could lead to an interpretation that the pump and electrical equipment enclosure is within a hazardous envelope.
- The wet well manhole appeared to be approximately 3 feet from the pump/electrical enclosure. Should the manhole not seal completely, the manhole proximity could put the pump/electrical enclosure within a hazardous envelope.
- City staff advised that the high-level float switch is inoperable and does not report to the RTU or back to the WWTP via the phone line that is present.
- City staff indicated that the pumps start and stop based on signals from the level transmitter.
- Lift Station I/O appeared to be transmitted off site using a Mission Communications Cellular Wireless RTU.
- An air supply fan and an exhaust vent were observed inside the pump/electrical enclosure.
- Existing electrical service was observed to be 240-volts, three-phase, 200 amps.



Figure 90: Countryside Lift Station Level Sensor Mounting and Opening to Wet Well



Figure 91: Countryside Lift Station Broken Power Conduit from Utility Meter as it Enters the Green Fiberglass Enclosure

▪ The latch on the electrical meter main breaker cover appeared to be broken. ▪ An open conduit pointing up the utility pole near the electrical meter did not appear to be sealed to prevent water entry. ▪ The conduit from the electrical service as it enters the pump/electrical equipment enclosure appeared to be broken and the conductors visible. ▪ No arc flash stickers were observed on the electrical equipment. ▪ No standby power generator or portable generator connection was observed. ▪ The flexible conduits on site appeared to be in fair condition, but appeared to be degrading due to exposure to the sun and elements. ▪ Rubber hoses with worm gear clamps appeared to be routed between each pump and the wet well within the enclosure, which could present an opportunity for H_2S gas to exit the wet well through a potential loose or cracked hose. ▪ An office Uninterruptible Power Supply (UPS) was observed within the pump/electrical equipment enclosure, not in an electrical enclosure. ▪ One light fixture was observed inside the pump/electrical enclosure. No exterior lighting was observed. ▪ No intrusion switches were observed on site. ▪ No lift station discharge flowmeter was observed. ▪ The City advised they plan to abandon this lift station within a year.		

Climate Control Vulnerability	Condition	Photo(s)
Flooding ▪ Site grade is crushed rock.	Fair to Good	

- Wet well top slab extends approximately 6 inches above grade preventing flooding. **Electrical Outages** ▪ No standby power generator or portable generator connection was observed. **Extreme Heat** ▪ An air supply fan and an exhaust vent were not observed inside the electrical control panel.		

3.4.4 Hydraulic Assessment

The Countryside Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 2.0 times per hour on average with a maximum of 11 starts per hour. Pump #2 starts approximately 1.7 times per hour on average with a maximum of 16 starts per hour. Both pumps have a similar number of starts per hour and would wear evenly. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 15 HP, 4-pole (1750 rpm) motor should have a maximum number of 10.7 motor starts per hour. It was observed that the instances number of starts per hour exceeds the NEMA recommended starts per hour based on the provided SCADA data. This indicates that the existing operational set points may need to be adjusted. Note that newer motor models are capable of exceeding NEMA's recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 230 minutes of run time per day (3,510 total hours) while pump #2 averages approximately 194 minutes of run time per day (2,957 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Countryside Lift Station force main is a 6" HDPE and PVC pipe installed in 2002. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC and HDPE is approximately 50 years. Countryside Lift station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 6" force main is estimated at approximately 6.2 ft/sec which is in accordance with HI standards.

3.4.5 Recommended Improvements

Since Countryside Lift Station is currently being decommissioned, there are no recommendations for this site.

3.5 Legacy Lift Station

3.5.1 Location and Layout

The Legacy Lift Station is located on Valor Lane between Farmsworth Lane and Rubert Franks Drive within a small, fenced site. This site can be accessed by a chain-link gate on the south side of Valor Lane. There is plenty of parking on the street, however, traffic control must be implemented to access the wet well located in the middle of Valor Lane. The lift station is a submersible duplex station with lift up fiberglass valve enclosure and wet well located within Valor Lane. The Legacy Lift Station pumps flows from the southern half of the Countryside residential community to the northern half of the community where it flows by gravity to the Countryside Lift Station.

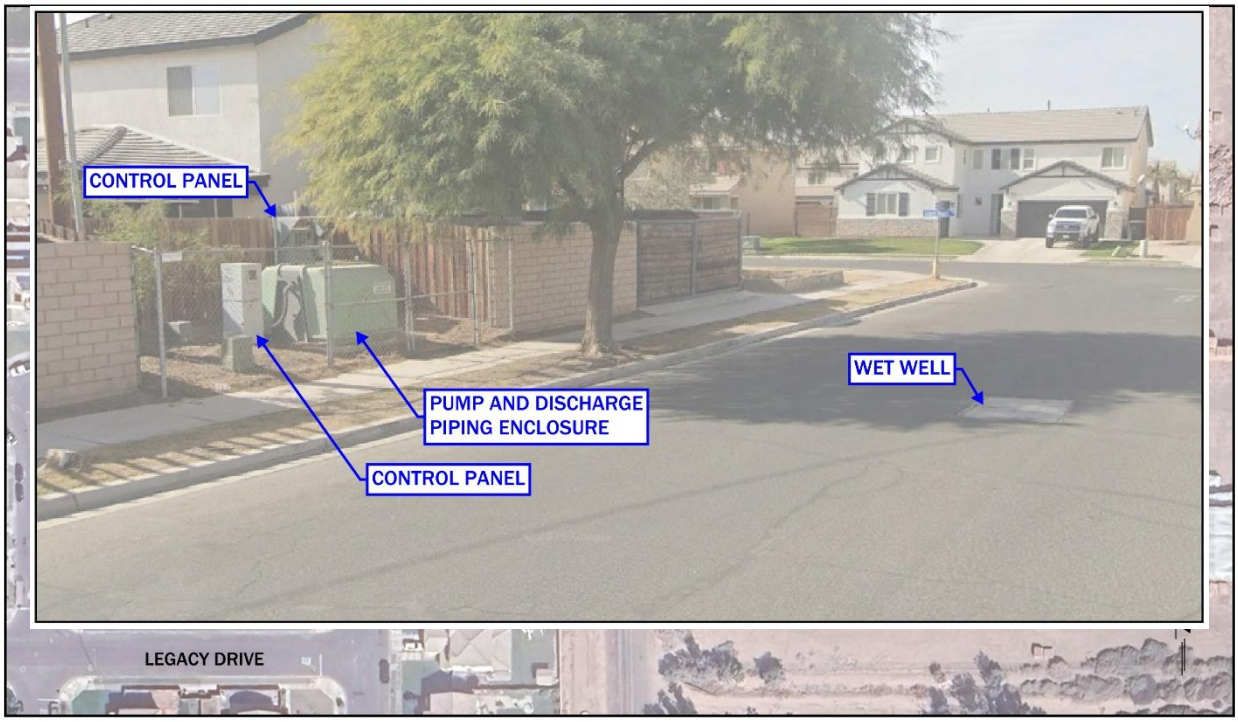


Figure 92: Legacy Lift Station Location

3.5.2 System Characteristics

Dudek performed a comprehensive lift station condition assessment at Lift Station No. 3. The following bullet points contain observations made during the February 12, 2025, site inspection and information provided by the City during the pre- and post-inspection workshops.

3.5.2.1 Pump Station

A summary of the pumping units for Legacy LS is provided on Table 20, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 21.

Table 20. Legacy Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Vaughan SE3F1	Unknown
Pump Type	Chopper Submersible	Non-Clog Submersible
Design Capacity	250 gpm @ 20’ TDH	
Motor, hp	5	
Motor Operation	Constant Speed	
Speed, rpm	1750	
Discharge Diameter, inches	4	
Year Installed	2006, Pump #1 Replaced in 2011	

Table 21. Legacy Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete
Diameter, feet	6
Depth, feet	17.5
Floor Elevation, feet	-43.5
Influent Sewer Invert, feet	-38.34
Cover/Hatch Type	3’x5’ double leaf hatch
Bypass Assembly	
Valve Location	Within fiberglass enclosure
Bypass Connection	None
Force Main	
Diameter, inches	6”
Length, feet	2006
Material	PVC

3.5.2.2 Operations and Maintenance History

Records indicate that Pump #1 and electrical panels were replaced in 2011. Operations staff informed that the pumps were scheduled to be replaced again within two weeks of the February 2025 inspection. No ragging issues reported at this lift station. It was observed that the suction piping within the wet well was repaired at some point. Operations also informed that one of the swing arm check valves were replaced approximately 3 years ago with a disc check valve.

3.5.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at Legacy Lift Station. Table 22 contains observations made during the February 11, 2025 site inspection and information provided by the City during the pre- and post-inspection workshops. During the April 8, 2025 post inspection workshop, the City indicated that the

Legacy Lift Station will be abandoned by 2030. Flows previously served by this lift station will be redirected via gravity to the new Southern Lift Station which will replace this lift station.

Table 22. Legacy Lift Station Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ No onsite water service. ▪ Site grading is dirt and sloped towards above grade fiberglass enclosure. ▪ The only lighting observed onsite was within the fiberglass enclosure. ▪ Fiberglass enclosure was unlocked at the time of the inspection with no intrusion switch. - Site perimeter fence was locked at the time of the inspection. ▪ No permanent/integrated fall protection at wet well access hatch.	Fair	 **Figure 94:** Legacy Lift Station Facility Site
Mechanical	**Condition**	**Photo(s)**
Pumps ▪ Submersible pumps were not pulled for assessment during field inspections. ▪ Mild corrosion observed at pump guide rail. - Guide rails appear to have a kink in them near the top. Corrosion at the pump guide rail supports may be the cause.	Good	 **Figure 95:** Legacy Lift Station Submersible Pumps and Guide Rails

Piping and Valves ▪ Varying levels of mild corrosion observed at discharge piping and valves. Piping and valves are in good condition. - Check valve observed to have a leak causing accelerated corrosion and coating failure. - Significant dirt and debris within the fiberglass enclosure. ▪ Air valve within fiberglass enclosure is damaged and was disconnected at the time of the inspection.	Good	

Figure 96: Legacy Lift Station Piping and Valves

Structural	Condition	Photo(s)
Wet Well ▪ Wet well access hatches were observed to be in poor condition. - Lift assist is corroded and no longer working. - Severe corrosion observed at pump hatch frame. - Operations informed that the access hatch has to be bolted shut to reduce noise of traffic driving over it. ▪ The wet well liner was observed to be in good condition. - Suction pipe penetrations have been repaired with grout and are not protected by the liner. - Liner failing around influent wet well penetration. ▪ Mild root intrusion observed at the wet well inlet piping penetration. ▪ Grease solids accumulation is occurring at the wet well high-water line.	Fair	

Figure 97: Legacy Lift Station Wet Well Access and Root Intrusion



Figure 98: Legacy Lift Station Grease Accumulation in Wet Well

Electrical & Instrumentation	Condition	Photo(s)
▪ Pump Control Panel, level transmitter, and Mission Communications Cellular Wireless RTU appeared new and are located on a rack on site away from the existing green equipment fiberglass enclosure. ▪ City staff advised Pump Control Panel, level transmitter, and RTU were recently installed and the old control panel, transmitter, and RTU were removed from within the green enclosure. ▪ City staff advised that the conduits between the wet well and the green enclosure were intercepted underground and routed to a new junction box adjacent to the green enclosure. New conduits run from the j-box to the new control panel rack. Dudek observed only one conduit of the approximate size of the conduits in the wet well entering the new j-box. Dudek assumes the second conduit still routes into the green equipment enclosure. ▪ No sealing fittings were observed on any conduits on site and are required per the National Electrical Code and California Electrical Code on conduits once they leave a hazardous area, such as the wet well. A lack of sealing fittings is a safety hazard, a risk for equipment damage, and can allow H_2S gas to enter the electrical equipment. The spray foam sealing conduits in the new control panel is not sufficient and does not meet code for a hazardous barrier. ▪ City staff indicated that the pumps start and stop based on signals from the level transmitter.	Good	 **Figure 99:** Legacy Lift Station New Pump Control Panel Rack  **Figure 100:** Legacy Lift Station New Junction Box Intercepting Wet Well Conduits

▪ Lift Station I/O appeared to be transmitted off site using a Mission Communications Cellular Wireless RTU. ▪ An air supply fan and an exhaust vent were observed inside the pump/electrical enclosure. ▪ One light fixture was observed inside the pump/electrical enclosure and staff stated it is active. No exterior lighting was observed. ▪ Existing electrical service was observed to be 240-volts, three-phase. ▪ No arc flash stickers were observed on the electrical equipment. ▪ No standby power generator or portable generator connection was observed. ▪ An existing transformer and 120V/240V single-phase panelboard was observed under the pump/electrical enclosure and staff stated it is active. ▪ No intrusion switches were observed on site. ▪ No lift station discharge flowmeter was observed. ▪ The existing level transducer appeared to be hanging from its cable in the wet well, which can cause premature failure of the cable.		 **Figure 101:** Legacy Lift Station Missing Sealing Fittings on Conduits from Wet Well  **Figure 102:** Legacy Lift Station Existing Level Transducer Hanging from its Cable
Climate Control Vulnerability	**Condition**	**Photo(s)**
Flooding ▪ Site grading is dirt and sloped towards above grade fiberglass enclosure. **Electrical Outages** No standby power generator or portable generator connection was observed. **Extreme Heat** ▪ An air supply fan and an exhaust vent were not observed inside the electrical control panel.	Good	

3.5.4 Hydraulic Assessment

The Legacy Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 2.7 times per hour on average with a maximum

of 13 starts per hour. Pump #2 starts approximately 0.01 times per hour on average with a maximum of 7 starts per hour. This indicates that the existing operational set points may need to be adjusted. Dudek recommends for the City Operations staff to investigate the cause of this discrepancy. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 5 HP, 4-pole (1750 rpm) motor should have a maximum number of 16.3 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed that both pumps are in compliance with the number of NEMA recommended starts per hour.

Pump #1 averages 245 minutes of run time per day (3,738 total hours) while Pump #2 averages approximately 0.2 minutes of run time per day (3.3 total hours). This data indicates that the Pump #1 runs significantly more than pump #2. Dudek recommends for Operations staff to determine why such a large discrepancy between run time of pumps is taking place.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Legacy Lift Station force main is a 6" PVC pipe installed in 2006. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. Legacy Lift station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 6" force main is estimated at approximately 2.8 ft/sec which is in accordance with HI standards.

3.5.5 Recommended Improvements

Recommended improvements were developed for Legacy LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 23.

Table 23. Legacy Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
EI&C	Install sealing fittings	Install conduit sealing fittings on all conduits as they exit the hazardous envelope the wet well) and before they enter any enclosures or junction boxes per NEC. This could be done before entering the new j-box and just as the conduit(s) enter the green fiberglass equipment enclosure.	Code Violation/ Operational Failure	Maintenance
EI&C	Perform Power System Study & Install Arc Flash Stickers	Per NFPA 70E, a power system study should be performed, and updated every 5 years Updates should be made whenever modifications are made. Arc flash	Safety Risk	Arc Flash / Short Circuit Study Program (Near-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		stickers should be provided on the electrical equipment.		
EI&C/ Climate Control Vulnerability	Install a Portable Generator Connector and Transfer Switch	This will allow the City to bring a portable generator on site to provide power when utility power fail.	Operational Failure	Power and Generator Program (Near-term)
EI&C	Install Intrusion Switches	Intrusion switches are not currently installed on the electrical equipment. It is recommended to install intrusion switches for RTU notification to prevent unauthorized access and tampering of lift station equipment.	Safety Risk/ Security Risk	Maintenance
EI&C	Install Discharge Flow Meter[1]	Install flowmeter on pump discharge to allow flow monitoring which provides useful operational data and serves as an indication of diminishing pump performance over time.	Operations Preference	N/A
Mechanical	Recoat Existing Mechanical Equipment in Dry Well[1]	The existing mechanical piping, valves, and pumps within the fiberglass enclosure remain in good condition, however there is minor corrosion and coating delamination occurring in several locations	Coating Delamination / Failure	Maintenance
Mechanical	Replacement of Pumps[1]	Submersible pumps were not pulled for assessment during field inspections; however it is assumed they are either at or near the end of their useful life. The existing pump guide rails appear to have a kink in them near the top likely due to corrosion.	Operational Failure	N/A
Mechanical	Replace Air Valve	Air valve within fiberglass enclosure is damaged and was disconnected at the time of the inspection.	Operational Failure	Maintenance
Mechanical	Install Lift Station Bypass Connection[1]	There is no existing bypass connection for this lift station. It is recommended to install a force main bypass connection in the event of a lift station failure.	Increased SSO Potential	N/A
Structural	Replace Wet Well Access Hatches	The existing wet well access hatches and pump access hatches are severely corroded and the lift assist is no longer working. The pump access hatch has to be bolted down to reduce noise from traffic. It is recommended to replace the	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		access hatches with new hatches that are equipped with integrated fall protection, slam lock, and lift assist.		(Near-term)
Structural	Wall Penetration and Wet Well Liner Improvements[1]	Liner failing around influent wet well penetration. Mild root intrusion observed at the wet well inlet piping penetration. Use hydrophilic grout at all wall penetrations to prevent water infiltration into the wet well.	Preventative Maintenance	N/A
Site Civil/ Climate Control Vulnerability	Install Crushed Rock and Regrade Site Away from Pump Enclosure[1]	Grade is sloped towards above grade pump enclosure which may cause flooding during precipitation event.	Preventative Maintenance	Maintenance

1. *This recommended improvement is assumed to not be required due to the planned decommission of the lift station within one year of writing this technical memorandum. If the lift station is in service beyond the currently scheduled decommission timeline, then it is recommended that the City perform this improvement.*

3.6 Alder Canal - Villa Ave Lift Station

3.6.1 Location and Layout

The Alder Canal – Villa Ave Lift Station is located just to the southeast of the intersection of Villa Lane and E Villa Road. The lift station is a full sized dry well / wet well lift station within a fenced facility. Site access is provided by a gate on the south side of East Villa Road. There is plenty of parking within the site perimeter fence.

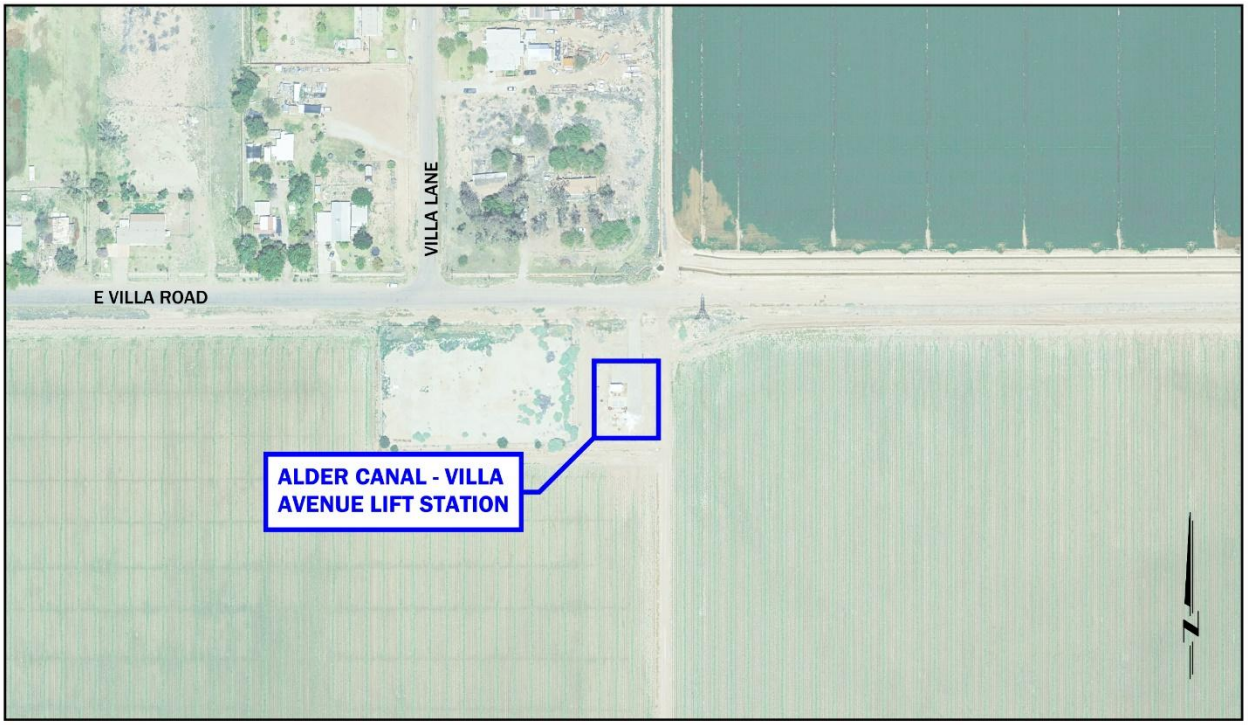
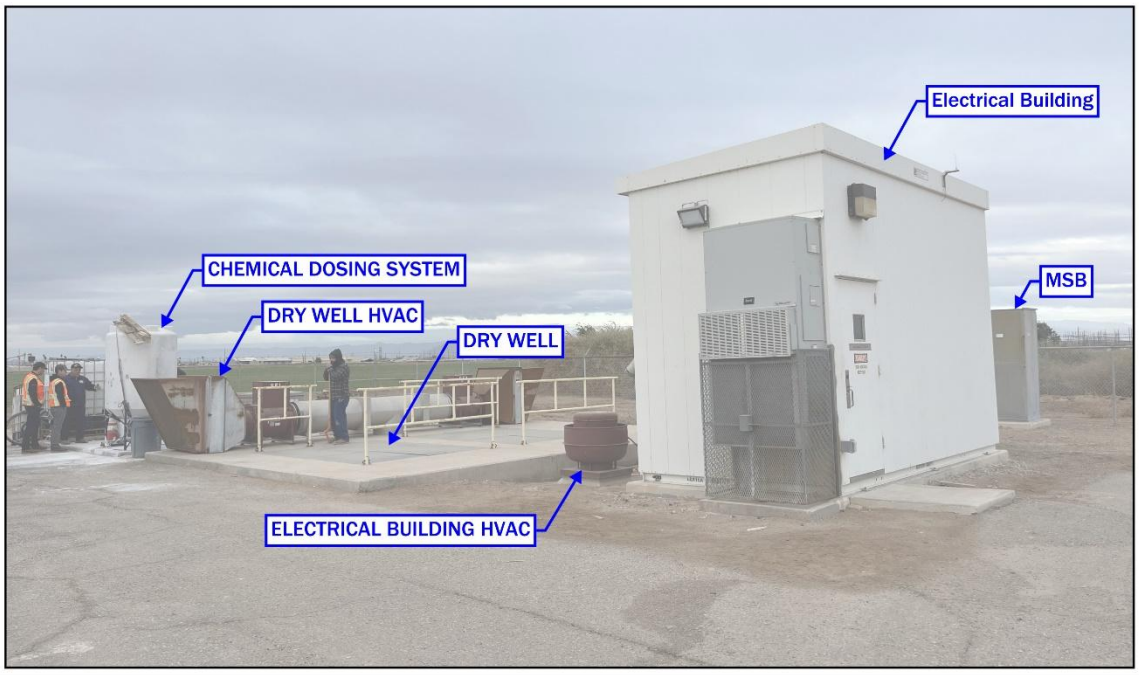


Figure 103: Villa Lift Station Location



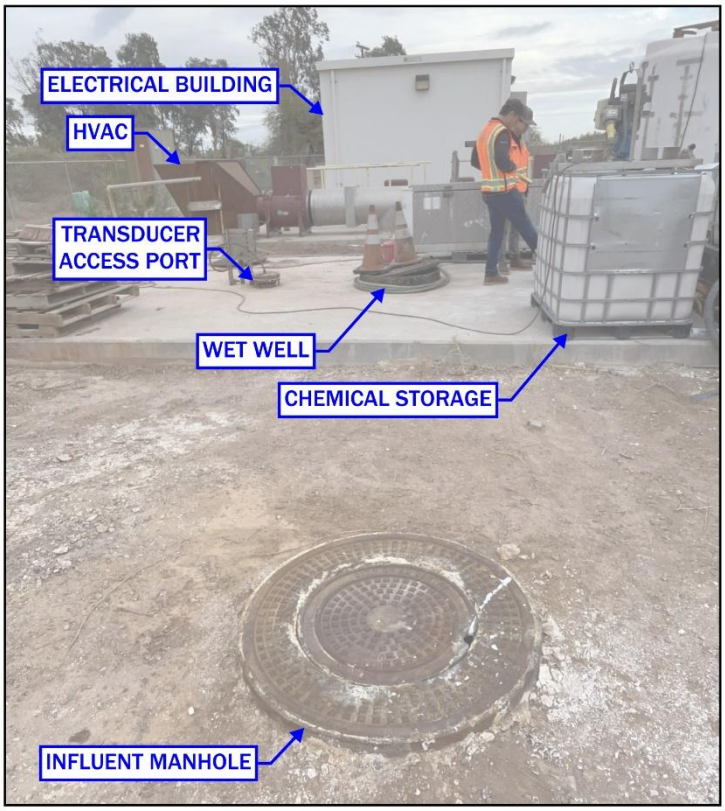


Figure 104: Villa Lift Station Layout

3.6.2 System Characteristics

3.6.2.1 Pump Station

A summary of the pumping units for Alder Canal – Villa Ave LS is provided on Table 24, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 25.

Table 24. Alder Canal – Villa Ave Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Pentair Hydromatic Pump, Model 80MMP	Pentair Hydromatic Pump, Model 80MMP
Pump Type	Self Priming Dry Well	Self Priming Dry Well
Design Capacity	1908 gpm @ 76.6’	
Motor, hp	60	
Motor Operation	VFD	
Speed, rpm	1780	
Discharge Diameter, inches	10	
Year Installed	2005, Rehabilitation Date Unknown	

Table 25. Alder Canal – Villa Ave Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Cast in place concrete
Diameter, feet	16’-4” x 27’
Depth, feet	32
Floor Elevation, feet	-49.29
Influent Sewer Invert, feet	-66.87
Cover/Hatch Type	30”
Dry Well	
Size, feet	Unknown
Material	Cast in place concrete
Depth, feet	19
Cover/Hatch Type	8’ x 10’ Access Hatch with Staircase; 30” x 36” Access Hatch with Ladder
Bypass Assembly	
Valve Location	Within dry well
Bypass Connection	None
Force Main	
Diameter, inches	20
Length, feet	12,236
Material	PVC

3.6.2.2 Operations and Maintenance History

Villa Lift Station was built in 2005. The lift station was rehabilitated at some point and a new dry well access stair and hatch were installed. Operations informed that the dry well is entered every six months to perform pump and valve maintenance. Operations staff also indicated that there have never been any flooding issues withing the dry well. Magnesium Oxide and Commander treatments are added to the wet well to combat odor issues and hydrogen sulfide. Previously the odor control treatments were added to the influent manhole.

Operations staff reported low flows at this site. In order to flush the force main, the City fills the wet well with canal water and conducts a flushing cycle every three months.

3.6.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at Villa Ave Lift Station. Table 26 contains observations made during the February 12, 2025 site inspection and information provided by the City during the pre- and post-inspection workshops.

Table 26. Alder Canal - Villa Ave Lift Station Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ Entrance to the Alder Canal – Villa Ave Lift Station site is through an asphalt concrete access road off of E Villa Rd ▪ There is an existing double leaf chain link entrance gate for vehicular access to the site ▪ An existing chain link fence with barbed wire surrounds the site to prevent unauthorized access ▪ The existing asphalt concrete pavement was observed to have some large cracks, however the AC pavement remains in fair condition ▪ Outside of the AC pavement the site grading is unpaved and becomes muddy during precipitation events ▪ Dry well access stairs are severely corroded which is a safety risk to anyone entering/ leaving the dry well. Appears to be caused by infiltration at air duct penetration ▪ Tripping hazards observed at grade around wet well access cover (junction box hatch, level sensor access flange, chemical injection hose)	Excellent	 **Figure 105:** Villa Lift Station Facility Access Road and Entrance Gate   **Figure 106:** Villa Lift Station Site Security Fencing and AC Pavement

- The chemical feed hose for the Magnesium Oxide is laid out on the top slab of the wet well and wrapped around the wet well access cover posing a tripping hazard.
- Infiltration was observed at several wall penetrations throughout dry well.
  - The infiltration on the wall adjacent to the access stairs is most likely caused by surface water that ponds up in the depressed area next to the top slab. During heavy rains, the accumulation of water in this area is most likely seeping down along the exterior of the dry well structure and infiltrating through the existing conduit and duct wall penetrations.
  - The depressed area also poses a tripping hazard for operations staff
- Dry well light switch is located at the bottom of the old access ladder. Operations staff have to enter the dry well in the dark which is a safety risk
- Per staff, not all of the lighting within the dry well and electrical building is operable and is inadequate
- Influent manhole lid is severely corroded and fell into the manhole during the inspection leaving a significant safety risk for operations staff working in the area
- No onsite water. Chemical storage on site requires an eye wash station in case of exposure to operations staff
  - OSHA 29 CFR 1910.151 requires eye wash stations be located at facilities with injurious corrosive materials stored
- Gas sensors in the drywell were not functioning at the time of the inspection. This introduces a safety risk for operations staff working in unsafe conditions
- No locks or intrusion alarms at hatches provides a public safety hazard



Figure 107: Villa Lift Station Dry Well Access Stairs



Figure 108: Villa Lift Station Above Grade Tripping Hazards Near Wet Well



Figure 109: Villa Lift Station Depressed Area Near Dry Well Top Slab



Figure 110: Villa Lift Station Dry Well Light Switch

- The right door to the electrical service entrance switchboard will not latch closed and should be repaired. An open door invites intruders, critters, and rain/water to get into the switchboard, which could affect operation
- A limit switch believed to be the flood alarm was observed to be broken near the dry well floor
- Emergency lighting fixtures appeared corroded in drywell
- Wet well access manhole is corroded and poses risk to operations staff walking around the area
- Influent manhole needs to be cleaned; old chemical build-up on top of bench and on walls



Figure 111: Villa Lift Station Inoperable Lighting within Dry Well



Figure 112: Villa Lift Station Inoperable Lighting within Electrical Building



Figure 113: Villa Lift Station Influent Manhole Lid at the Bottom of Manhole

Mechanical	Condition	
Pumps ▪ Skid mount packaged duplex dry pit submersible pumps are located within the dry well ▪ Pumps are anchored into to concrete equipment pad. The pump motors are mounted to a metal frame that is anchored to the concrete pad. - The pump bases are in fair condition and are adequately anchored. The pump bases are showing signs of minor corrosion and oxidation - The metal motor mount frames are experiencing minor to moderate levels of corrosion and are showing signs of oxidation ▪ Insignificant extent of minor corrosion and coating delamination was observed on the pumping units ▪ All flanged connections appear secure with no signs of leaking ▪ Dry well contains suction isolation valve and piping stub outs for two (2) future pumps. ▪ The bearing bracket surrounding the pump shaft was replaced for one of the pumping units, leaving the v-belt drive exposed. Both of these assets appear to be in good condition - The other pumping unit appears to include the original bearing bracket and the v-belt drive is within an enclosure. - These assets appear to be in fair condition with minor levels of corrosion and oxidation and varying levels of coating delamination ▪ The pump suction body and suction elbow for both pumping units were observed to be in fair condition with minor levels of corrosion and oxidation occurring ▪ One (1) submersible sump pump is located within the sump pit within the dry well. - The submersible sump pump was not pulled for assessment during field inspections, however it was observed	Fair	 **Figure 114:** Villa Lift Station Dry Pit Pumping Units and Discharge Piping  **Figure 115:** Villa Lift Station Dry Pit Pumping Units and Force Main  **Figure 116:** Villa Lift Station Future Pump Connection Stub Outs  **Figure 117:** Villa Lift Station Dry Pit Pump Motor Shaft and V-Belt Drive

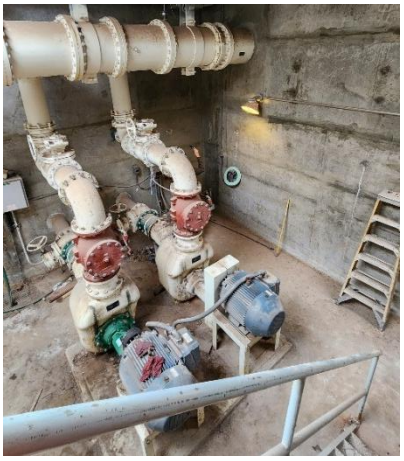
that the sump pump was experiencing moderate to severe levels of corrosion - Unable to determine if sump pump discharge line elevation is above wet well water level - If plastic check valve on sump pump discharge line fails, wet well may drain back into the dry well - Infiltration observed at wall penetration of sump pump discharge line ▪ Operations have to use truck crane to remove pumps from dry well. No permanent bridge crane within dry well.		 **Figure 118:** Villa Lift Station Pump Suction Body and Suction Elbow
Piping and Valves ▪ The existing pump suction, pump discharge, and force main piping and valves are in good condition with little to no corrosion observed ▪ The existing floor-mounted pipe supports for the pump suction piping are in fair condition with minor signs of corrosion and oxidation occurring ▪ The existing wall-mounted pipe supports appeared to be in good condition with secure anchorage and no corrosion observed ▪ The sump pump piping, valves and fittings are in good condition ▪ The suction piping within the wet well are in poor to fair condition - Varying levels of corrosion, loss of material thickness, and coating delamination were observed on the metal piping and fittings ▪ The PVC piping and fittings were in better condition ▪ There is no force main bypass connection at this lift station ▪ No flow meter present at lift station	Fair	 **Figure 119:** Villa Lift Station Pump Discharge Piping and Valves  **Figure 120:** Villa Lift Station Pump Discharge Piping, Valves, and Force Main



Figure 121: Villa Lift Station Floor-Mounted Pipe Supports



Figure 122: Villa Lift Station Wall-Mounted Pipe Struts



Figure 123: Villa Lift Station Sump Pump Discharge Piping



Figure 124: Villa Lift Station Wet Well Suction Piping

Odor Control/Ventilation ▪ Ventilation ducts within the dry well are primarily in good to excellent condition, however some locations were observed to have minor corrosion occurring on the ducting ▪ The air exhaust blowers were observed to be in good condition ▪ Little to no corrosion observed on ventilation supply fans ▪ Minor corrosion and oxidation observed on the inlet forced air ventilation system filter banks ▪ The electrical building heater and exhaust units and vents were observed to be in good condition ▪ Magnesium Oxide chemical dosing system discharges into the wet well. - Extensive chemical splattering and spillage observed around the Magnesium Oxide storage container.	Good	 **Figure 125:** Villa Lift Station Dry Well Supply Air Ducting  **Figure 126:** Villa Lift Station Dry Well Ventilation Ducting  **Figure 127:** Villa Lift Station Ventilation Air Exhaust Blowers  **Figure 128:** Villa Lift Station Air Intake Filter Bank and Supply Blower Motors

		 **Figure 129:** Villa Lift Station Electrical Building Heater and Exhaust Units  **Figure 130:** Villa Lift Station Electrical Building Heater and Exhaust Vents
Structural	**Condition**	**Photo(s)**
Dry Well ▪ The dry well access ladder is in good condition with little to no corrosion observed and secure anchorage to the walls ▪ Infiltration was observed at several wall penetrations throughout dry well - The infiltration on the wall adjacent to the access stairs is most likely caused by surface water that ponds up in the depressed area next to the top slab. During heavy rains, the accumulation of water in this area is most likely seeping down along the exterior of the dry well structure and infiltrating through the existing conduit and duct wall penetrations.	Fair to Good	 **Figure 131:** Villa Lift Station Dry Well Access Ladder

- Infiltration was also observed at the penetration for the sump pump discharge piping

- Dry well access stairs are severely corroded which is a safety risk to anyone entering/ leaving the dry well. Appears to be caused by water infiltration at air duct penetration
- In general the existing wall penetrations within the dry well are properly sealed and in good condition, however some penetrations were observed to have water intrusion.
- The dry well pumps are removed/replaced through the dry well roof equipment hatches. No issues were observed with the equipment hatches



Figure 132: Villa Lift Station Infiltration Marks within Dry Well



Figure 133: Villa Lift Station Dry Well Access Stairs



Figure 134: Villa Lift Station Pipe Penetration within Dry Well

		 **Figure 135:** Villa Lift Station Dry Well Roof Equipment Hatch
Wet Well ▪ The existing wet well is a below grade concrete structure with a PVC T-Lok liner that remains in good condition with no holes or openings observed ▪ The underlying concrete was properly protected from the PVC liner and therefore was not inspected ▪ There appeared to be some discoloration of the liner and signs of chemical buildup within the bottom of the wet well ▪ The wall penetrations through the wet well wall appeared to be properly sealed ▪ The wet well ceiling/top slab was observed to be in fair to good condition ▪ The PVC liner had some discoloration around the opening for the ultrasonic level transducer and the access manhole opening ▪ Moderate to severe corrosion of the concrete was observed above the liner termination within the wet well access opening ▪ Moderate corrosion of the access manhole frame	Good	 **Figure 136:** Villa Lift Station Wet Well Structure (Facing East)  **Figure 137:** Villa Lift Station Wet Well Structure (Facing West)



Figure 138: Villa Lift Station Wet Well Ceiling/Top Slab (Facing East)



Figure 139: Villa Lift Station Wet Well Ceiling/Top Slab (Facing West)

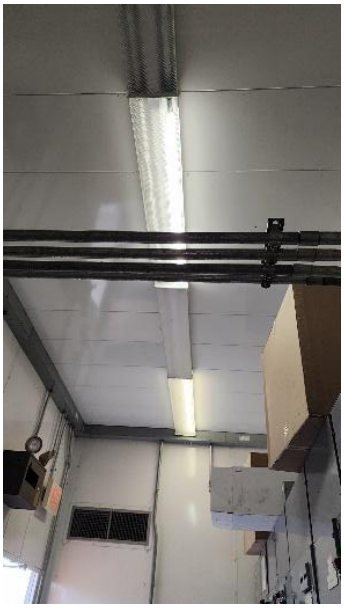


Figure 140: Villa Lift Station Wet Well Bottom and Suction Piping



Figure 141: Villa Lift Station Wet well Access Cover and Frame

Lift Station Influent Manhole ▪ The existing lift station influent manhole is coated with a PVC T-Lok liner that remains in fair condition with minor signs of degradation and flaking. ▪ At the bottom of the influent manhole there is an accumulation of chemical buildup on the manhole bench and in the channel. ▪ The manhole access cover and frame are severely corroded with visible loss of material thickness and structural integrity - During the field inspection, the manhole cover fell through the frame into the manhole.	Fair	 **Figure 142:** Villa Lift Station Influent Manhole Cone Section and Liner  **Figure 143:** Villa Lift Station Influent Manhole Bench and Chemical Buildup  **Figure 144:** Villa Lift Station Influent Manhole Bench and Chemical Buildup  **Figure 145:** Villa Lift Station Manhole Frame and Cover

Electrical Building ▪ The existing prefabricated electrical building is in good to excellent condition	Good to Excellent	 **Figure 146:** Villa Lift Station Electrical Building
Electrical & Instrumentation	**Condition**	**Photo(s)**
Electrical Building ▪ The exterior of MCC in the Electrical Building appeared to be in good condition and had 15 years of useful life remaining. ▪ There are four holes in the front of the Pump #1 MCC section that need to be covered—the holes appeared to be from previous pilot lights, pushbuttons, or switches. ▪ City staff reported that they have replaced one of the two VFDs in the MCC with soft starters when the VFD failed and will replace the second VFD with a soft starter when it fail. However, it appeared that the keypads for both pumps indicate that they are already both run by soft starters. ▪ Corrosion from H_2S gas was reported by staff in the MCC and other electrical equipment. Staff stated that the corrosion was less at Villa LS compared to Lift Station No. 3.	Good	 **Figure 147:** Villa Lift Station MCC Condition and Four Holes in MCC Face for Pump #1  **Figure 148:** Villa Lift Station Partially Inoperable Lighting in Electrical Building

- No sealing fittings were observed on any conduits on site except two conduits on the wet well deck that terminate in a stainless steel junction box for the level sensor. Sealing fittings and are required per the National Electrical Code and California Electrical Code on conduits once they leave a hazardous area, such as the wet well. A lack of sealing fittings is a safety hazard, a risk for equipment damage, and is likely the reason for H_2S gas entering the Electrical Building. Foam sealant was observed on the conduits entering the control panel through the floor in the electrical building, but this method is not in accordance with the NEC, as it does not substitute for a sealing fitting.
- Some of the lighting inside the electrical building appeared inoperable and needs to be repaired or replaced.
- One exterior light on the electrical building appeared to have been replaced with an LED fixture. The three remaining fixtures appeared to be original fixtures from when the site was built. The newer light appeared to be in good condition.
- No arc flash stickers were observed in the electrical building, or anywhere on site.
- No third-party maintenance/testing stickers were observed on the electrical equipment.
- City staff indicated that the pumps start and stop based on contacts from the ultrasonic level transmitter, and that there is no backup pump control using float switches.
- The existing site PLC is an Allen-Bradley Micrologix 1500, which was discontinued in 2017 according to the manufacturer's web site. New parts are no longer available.
- I/O is transmitted off site using a Mission Communications Cellular Wireless RTU, for the lift station.
- Per City staff, the wet well high level signal is transmitted off site via separate land phone line.



Figure 149: Villa Lift Station Existing Discontinued PLC



Figure 150: Villa Lift Station Level Transmitter Junction Box (Left), Float Switch Junction Box (Right)

Outdoors

- The stainless-steel junction box next to the level transmitter mounting flange is corroding, and since there is no sealing fitting between it and the level sensor flange, the junction box did not appear to be rated for use in a hazardous location but should be.
- The existing level transducer appeared to be hanging from its cable in the wet well, which can cause premature failure of the cable.
- There appeared to be a stainless steel enclosure embedded into the wet well concrete deck, with its back removed to allow what appeared to be a float switch cable to go down into the wet well. There was a conduit that emerges from within the concrete deck that did not appear to have a sealing fitting on it. The Kellems grip on the cable appeared to be heavily corroded. The enclosure is not NEMA 7 rated for hazardous locations and its door did not appear to seal, so H_2S gas could escape from it.
- All outdoor flex conduits appeared brittle and damaged by the sun and elements.
- The existing chemical odor control equipment located on the wet well deck appeared to be powered by extension cords from site convenience receptacles. The City advised that they are installing permanent power to the equipment in the short-term future.
- The Site SES main switchboard door did not close/latch properly, which can allow dirt, vermin, water, and intruders inside.
- The Site SES main switchboard had a lot of dust, dirt and cobwebs inside.
- Site SES main switchboard enclosure exterior has surface rust.
- A portable generator receptacle was observed. It allows a generator to be brought on site to provide power during a utility outage.

Fair



Figure 151: Villa Lift Station SES Main Switchboard Condition

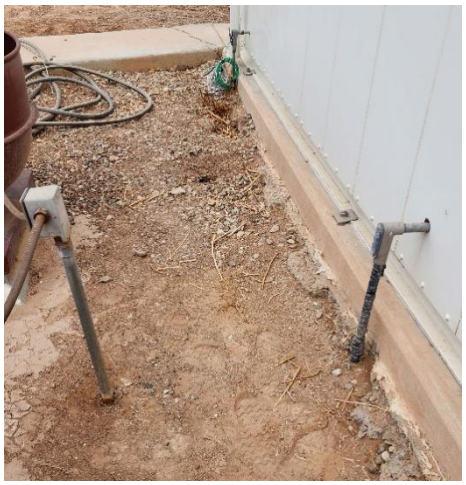


Figure 152: Villa Lift Station Corroded Exhaust Fans Conduit (Left)



Figure 153: Villa Lift Station Drywell Conduit, Lighting and Instrument Corrosion

▪ The conduit that powers exhaust fans EF-1 & EF-2 appeared to be heavily corroded as it comes above grade and does not have the protective 20 mil PVC based corrosion protection tape around it. The conduit appeared to be corroded all the way through (left conduit in photo). ▪ No lift station discharge flowmeter was observed. ▪ City staff stated that the intrusion switches on the hatches do not work and do not report to the PLC. **Drywell** ▪ City staff advised that the lighting in the drywell is bad—not all of it works. ▪ City staff advised that the light switch is in a bad spot—it is at the bottom of the manway ladder. Staff would like the light switch moved to the entry hatch above. ▪ City staff advised that they don't know if the drywell flooded float switch works or if it reports to the RTU or PLC. ▪ All conduit in the drywell appeared to be galvanized rigid metal conduit, not PVC-Coated galvanized rigid metal conduit. There are areas in the drywell with significant conduit corrosion due to water infiltration ▪ A severely corroded instrument and emergency light were also observed. The Emergency light did not appear to be operable. ▪ Drywell conduit and electrical/lighting corrosion appeared to be all along the wall closest to the electrical building (north wall), and on the wall near the drywell sump (south wall). ▪ Staff did not indicate an issue with the gas detector in the drywell, but information was not observed on its display.	Fair	 **Figure 154:** Villa Lift Station Water Infiltration (Severe Conduit Corrosion Where Conduits Penetrate Wall)
Wet Well	Not Observed	

Climate Control Vulnerability	Condition	Photo(s)
Flooding ▪ The existing asphalt concrete pavement was observed to have some large cracks, however the AC pavement remains in fair condition ▪ Outside of the AC pavement the site grading is unpaved and becomes muddy during precipitation events **Electrical Outages** ▪ A portable generator receptacle was observed. It allows a generator to be brought on site to provide power during a utility outage. **Extreme Heat** ▪ Air cooling / temperature control was observed within the electrical building.	Good to Fair	

3.6.4 Hydraulic Assessment

The Alder Canal – Villa Avenue Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 1.1 times per hour on average with a maximum of 16 starts per hour. Pump #2 starts approximately 1.3 times per hour on average with a maximum of 14 starts per hour. Both pumps have a similar number of starts per hour and would wear evenly. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 50 HP, 4-pole (1780 rpm) motor should have a maximum number of 6.8 motor starts per hour. . It was observed that the instances number of starts per hour exceeds the NEMA recommended starts per hour based on the provided SCADA data. This indicates that the existing operational set points may need to be adjusted. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 37.8 minutes of run time per day (576 total hours) while pump #2 averages approximately 55.6 minutes of run time per day (848 total hours). This data indicates that the pump #1 runs significantly more than pump #2. Dudek recommends for Operations staff to determine why such a large discrepancy between run time of pumps is taking place.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Villa Lift Station force main is a 20" PVC pipe installed in 2005. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. From the SCADA data that was received, the minimum flow and resulting velocity is 1,270 gpm and 1.3 ft/s. Villa Lift station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the maximum flow and resulting velocity is 2,350 gpm and 2.6 ft/s.

3.6.4.1 Lift Station and Force Main Capacity Issues

Per discussions with City staff, it is understood that this lift station was originally sized to handle an expected significant increase in sewer load based on future planned developments. The City explained that these developments are no longer expected to be completed resulting in the existing force main to be oversized in comparison to the flow capacity of the lift station. This has resulted in the sewage within the force main to turn septic due to the inability for the lift station to consistently fully flush the force main.

Legacy LS, Countryside LS, 4th & Wake LS are to be eliminated in the near future and flow from each will be redirected to the new Southern Lift Station. Once the 3 existing lift stations have been decommissioned, the Southern Lift Station will then pump towards the Alder Canal – Villa Avenue Lift Station (Alder Canal - Villa Ave LS).

Dudek evaluated rerouting the influent flow at the East Side LS directly east to the Alder Canal - Villa Ave trunk sewer. This option was found to be infeasible. Due to the minimal amount of fall between the East Side LS wet well's influent gravity sewer and the Alder Canal - Villa Ave trunk sewer, redirecting flow via a new gravity sewer is not physically possible. Moreover, installing a new force main to redirect 100% of East Side LS's flow to the Alder Canal - Villa Ave trunk sewer would increase the force main length, thus requiring the pump motors to be significantly upsized. This would then require upgrades to the electrical system and other infrastructure at East Side LS. Therefore, diverting flow from East Side LS to the Alder Canal - Villa Ave trunk sewer is not recommended.

3.6.5 Recommended Improvements

Recommended improvements were developed for Alder Canal – Villa Ave LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 27.

Table 27. Alder Canal - Villa Ave Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
E&IC	Install Sealing Fittings	Install conduit sealing fittings on all conduits as they exit the hazardous envelope (including the wet well).	Code Violation/ Operational Failure	Maintenance
EI&C	Perform Power System Study & Install Arc Flash Stickers	Per NFPA 70E, a power system study should be performed, and updated every 5 years Updates should be made whenever modifications are made. Arc flash stickers should be	Safety Risk	Arc Flash / Short Circuit Study Program (Near-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		provided on the electrical equipment.		
EI&C	Perform Third-Party Testing on MCC and its Breakers	This is preventative maintenance that identifies equipment issues ahead of time. It also makes sure the breakers are tripping at the amperage and settings they are supposed to—to keep staff and equipment safe.	Injury Risk/ Operational Failure	Testing and Studies Program (Near-term)
EI&C	Replace Inoperable Intrusion Switches	It is recommended to install intrusion switches for SCADA notification to prevent unauthorized access and tampering of lift station equipment.	Safety Risk/ Security Risk	Maintenance
EI&C	Verify Existing Drywell Flood Alarm Device Works and Reports to RTU	To report drywell flood to staff via RTU so they know before it gets worse and can respond.	Operational Failure	Maintenance
EI&C	Replace Existing PLC	SCADA equipment is provided with an Allen-Bradley MicroLogix PLC which is at the end of its useful life, as it was discontinued in 2017 by the manufacturer.	End of Useful Life	Instrumentation and Control Program – Phase 2 (Mid-term)
EI&C	Cap Holes in MCC at Pump #1	Code and safety issue.	Code Violation	Maintenance
EI&C	Re-Design and Install All New LED Lighting in Drywell	Per City Staff, lighting levels are low in the drywell, and the light switches are in bad locations that require staff to enter the dark drywell to access the light switch at the bottom.	Safety Risk	Alder Canal – Villa Lift Station Rehabilitation (Long-term)
EI&C	Replace Damaged/ Corroded Items in Drywell	Replace corroded and damaged conduits, lighting, and equipment.	Operational Failure	Maintenance
EI&C	Clean, Repair, and Paint the Exterior of the SES Main Switchboard	Clean to reduce risk of operational failure. Repair to keep dirt, weather, vermin, and intruders out. Repair and repaint enclosure.	Preventative Maintenance	Maintenance
EI&C	Test all Emergency Lighting	The emergency lighting appeared to be original equipment. Recommend testing	Injury Risk/ Operational Failure	Maintenance

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		and repairing/replacing any failed equipment.		
EI&C	Add Outdoor Lighting at Chemical Area	Would allow staff to work at and troubleshoot the chemical system when it is dark outside.	Operations Preference	Alder Canal – Villa Lift Station Rehabilitation (Long-term)
EI&C	Replace Exterior Lights on Electrical Building	Would provide better lighting for staff. Much more energy efficient than existing.	Risk of Injury	Alder Canal – Villa Lift Station Rehabilitation (Long-term)
EI&C	Repair or Replace Interior Lights in Electrical Building	No ensure bright enough working space for staff. Underlit electrical rooms are a safety concern.	Operations Preference	Alder Canal – Villa Lift Station Rehabilitation (Long-term)
EI&C	Install Discharge Flow Meter	Install flowmeter on pump discharge to allow flow monitoring which provides useful operational data and serves as an indication of diminishing pump performance over time.	Operations Preference	Alder Canal – Villa Lift Station Rehabilitation (Long-term)
Site Civil/ EI&C	Replace Gas Detection System	The gas sensor in the dry well was not functioning at the time of the inspection.	Code Violation/ Operational Failure	Maintenance
Site Civil	Repair / Replace Dry Well Access Stairs	Dry well access stairs are severely corroded which is a safety risk to anyone entering/leaving the dry well.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Site Civil / Climate Change Vulnerability	Site Grading	There is a low point in the unpaved area adjacent to the dry well top slab where surface runoff ponds up. During heavy rains, the accumulation of water in this area is most likely seeping down along the exterior of the dry well structure and infiltrating through the existing conduit and duct wall penetrations. The depressed area also poses a tripping hazard for operations staff.	Preventative Maintenance	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Site Civil	Mitigation of Tripping Hazards	Alleviate all tripping hazards observed at grade around wet well access cover.	Risk of Injury	Maintenance
Site Civil	Clean Influent Manhole	At the bottom of the influent manhole there is an accumulation of residual chemical buildup on the manhole bench and in the channel	Preventative Maintenance	Maintenance
Site Civil	Install Permanent Injection Port for Magnesium Oxide	Existing configuration on the wet well top slab of the Magnesium Oxide dosing hose poses a tripping hazard around the wet well access cover.	Risk of Injury	Pumps, Piping, Supports and HVAC Program (Mid-term)
Site Civil/ Mechanical	Installation of Emergency Eye Wash and On-Site Water Connection[1]	This facility has no onsite water and no emergency eye wash station. Chemical storage on site requires an eye wash station in case of exposure to operations staff.	Risk of Injury	N/A[1]
Mechanical	Recoat Existing Mechanical Equipment in Dry Well	The existing mechanical piping, valves, and pumps within the dry well remain in good condition, however there is minor corrosion and coating delamination occurring in several locations	Coating Delamination / Failure	Maintenance
Mechanical	Routine Pump Testing	It is recommended that the City consider implementing routine pump performance testing to gather data on pump performance and to prioritize preventive maintenance activities. Routine pump efficiency evaluations provide valuable information on trending of the facilities efficiency, adequacy of installed equipment, and electro-mechanical condition. Since this data collection and analysis has a cost associated with it, routine pump performance testing is only recommended for pump stations that exhibit high “load factors” (i.e., significant daily runtimes), significant motor loads, and/or high-head operations (e.g., two-stage pumping stations)	Preventative Maintenance	Maintenance
Mechanical	Routine Valve Exercising	It is recommended to adopt a more frequent and proactive	Preventative Maintenance	Maintenance

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		maintenance schedule for valve exercising.		
Mechanical	Install Lift Station Bypass Connection	There is no existing bypass connection for this lift station. It is recommended to install a force main bypass connection in the event of a lift station failure.	Increased SSO Potential	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Mechanical	Replace Existing Pump Suction Piping in Wet Well	The existing suction piping within the wet well is experiencing moderate to severe corrosion and is likely at the end of its useful life.	Risk of Injury	Pumps, Piping, Supports and HVAC Program (Mid-term)
Mechanical	Recoat Existing Forced Air Ventilation Equipment	The existing above grade forced air ventilation piping, fittings and blowers are experiencing varying levels of corrosion and coating delamination	Preventative Maintenance	Maintenance
Mechanical	Clean Chemical Storage Area	Extensive chemical staining and spattering around the Magnesium Oxide storage tank. Chemical spills need to be cleaned and disposed of according to OSHA code.	Preventative Maintenance	Maintenance
Mechanical	Replace Force Main with Smaller Diameter Force Main	Existing force main is oversized with no expectation of a future significant increase in sewer loading at the lift station. A smaller diameter force main will help improve flow velocity through force main and reduce sewage retention time within the pipeline.	Odor / Operational Issues	Force Main Program – Phase 2 (Mid-term)
Structural	Replacement of Influent Manhole Access Cover	Influent manhole lid is severely corroded and fell into the manhole during the inspection leaving a significant safety risk for operations staff working in the area	Risk of Injury	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Replace Wet Well Access Cover	Access to the existing wet well is through a cast iron manhole lid. It is recommended to replace the cast iron access cover with a new aluminum or type 316 stainless steel hatch that is equipped with integrated fall protection, slam lock, and lift assist. Alternatively, the existing cast iron cover can be	Safety Risk/ Security Risk	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		removed and a new, lockable composite manhole cover and frame can be retrofitted in its place.		
Structural	Wall Penetration Improvements	Use hydrophilic grout at all wall penetrations to prevent water infiltration into the dry well.	Preventative Maintenance	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Near-term)
Structural	Rehabilitate Liner Termination within Wet Well	Rehabilitate the existing concrete at the liner terminations within the wet well and provide improvements to the liner terminations as-needed to prevent accelerated corrosion of the structure.	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Near-term)

1. *Future recommendation to be completed once a potable waterline is installed in the vicinity of this facility.*

3.7 3rd & Ross Lift Station

3.7.1 Location and Layout

The 3rd & Ross Lift Station is located north of West Ross Street, between 2nd street and 3rd street. This lift station can be accessed by a chain-link fence on the north side of West Ross Avenue. Parking can be found between the lift station and West Ross Avenue. The lift station is a self-priming duplex station with lift up fiberglass enclosure.

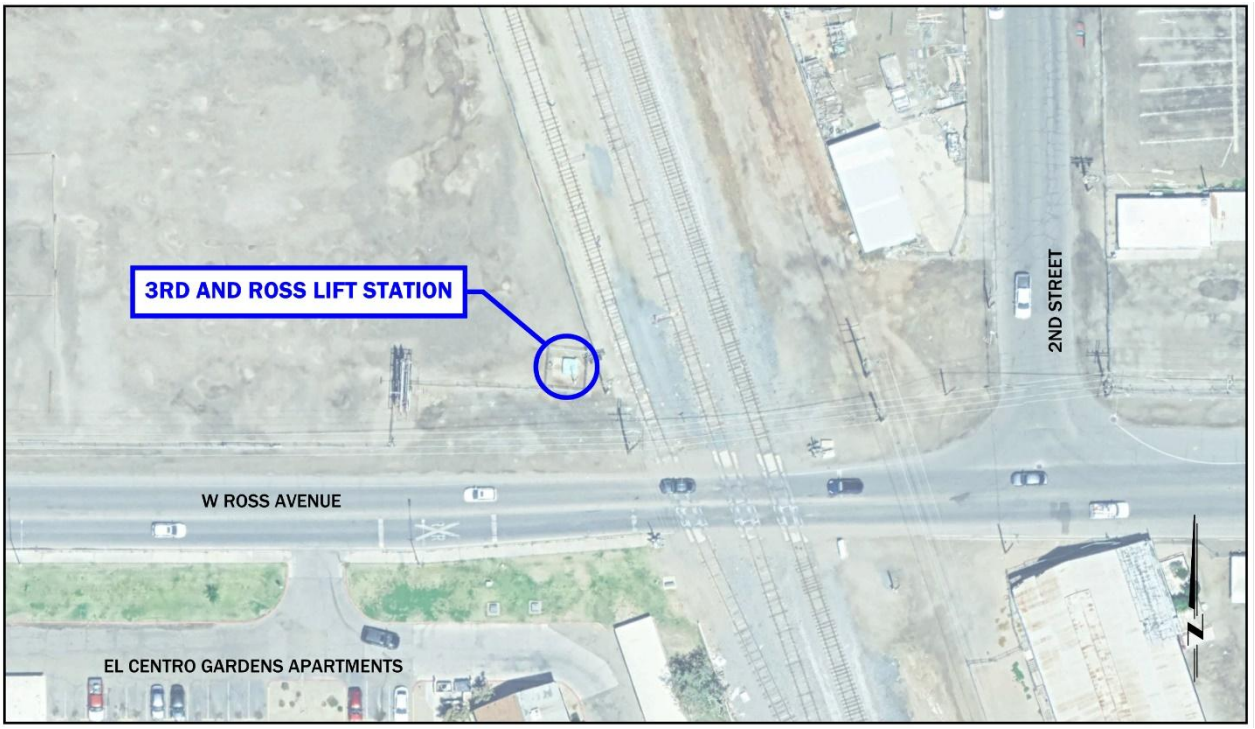


Figure 155: 3rd & Ross Lift Station Location



Figure 156: 3rd & Ross Lift Station Layout

3.7.2 System Characteristics

3.7.2.1 Pump Station

A summary of the pumping units for 3rd & Ross LS is provided on Table 28, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 29.

Table 28. 3rd & Ross Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Gorman Rupp Model T4A3-B	Gorman Rupp Model T4A3-B
Pump Type	Self Priming	Self Priming
Pump Mount	Above grade	
Design Capacity	325 gpm @ 27’ TDH	
Motor, hp	7.5	
Motor Operation	Constant Speed	
Speed, rpm	1450	
Discharge Diameter, inches	4	
Year Installed	1988; Pumps were replaced in 2016/2017	

Table 29. 3rd & Ross Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete
Diameter, feet	5.5
Depth, feet	19.2
Floor Elevation, feet	-61.7
Influent Sewer Invert, feet	-53.7
Cover/Hatch Type	24” Manhole
Bypass Assembly	
Valve Location	Above grade fiberglass enclosure
Bypass Connection	None
Force Main	
Diameter, inches	6”
Length, feet	224
Material	HDPE

3.7.2.2 Operations and Maintenance History

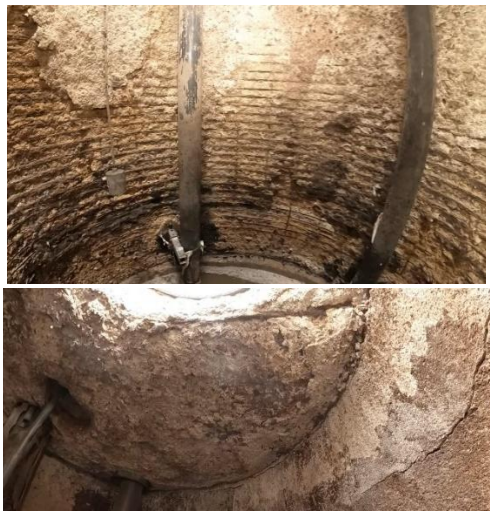
The 3rd & Ross Lift Station’s pumps were replaced in 2016/2017. However, Operations informed that mechanical issues have since been experienced at this facility. Additionally, operations reported that the check valves have experienced ragging in the past, although they are currently considered acceptable by the City staff.

3.7.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at the 3rd & Ross Lift Station. Table 30 contains observations made during the February 12, 2025 site inspection and information provided by the City during the pre- and post-inspection workshops. During the lift station review workshop on August 5, 2025, the City reported that it had received quotes for rehabilitating the existing lift station wet well. Wet well rehabilitation is scheduled to begin in fiscal year (FY) 2025 and will be completed before this technical memorandum is finalized. The work includes removing mechanical equipment, piping, and related components from the wet well, followed by concrete repair and liner installation. The City noted that this rehabilitation may extend the life of the facility by a few years before additional upgrades are needed in the mid- to long-term.

Table 30. 3rd & Ross Lift Station Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ Site grade around the lift station is dirt. - Low point observed at the edge of the pad. Ponding water at low points and/or high groundwater may accelerate deterioration of the wet well. ▪ No onsite water service. ▪ No permanent/integrated fall protection at wet well access cover. - Wet well access cover is corroded and introduces a safety risk to operations. ▪ Fiberglass enclosure was unlocked at the time of the inspection with no intrusion switch. ▪ No lighting observed on site.	Fair/Good	 **Figure 157:** 3rd & Ross Lift Station Facility Site
Mechanical	**Condition**	**Photo(s)**
Pumps ▪ Self-priming pumps are in good condition. - Minor corrosion and coating delamination observed at flanges. - No ragging reported at the site at the time of the inspection. ▪ Pumps are belt driven. Belts are protected by belt guards. ▪ Pumps are controlled by ultrasonic level transmitter with float high water alarm.	Good	 **Figure 158:** 3rd & Ross Lift Station Self-Priming Pump and Motors
Piping and Valves ▪ Pump discharge piping (force main) within wet well was observed to be severely corroded and is experiencing significant loss of pipe wall thickness. This section of the force main is at high risk of failure. ▪ Mild to moderate corrosion and coating delamination was observed on the above grade suction and discharge piping. ▪ No bypass connection observed.	Poor	  **Figure 159:** 3rd & Ross Lift Station Piping and Valves

Structural	Condition	Photo(s)
Wet Well ▪ Wet well concrete was observed to be cracked and severely corroded. Majority of the wet well structure's interior has appeared to have lost approximately 3" to 4" of concrete from the original surface profile and sections of the exposed rebar have corroded to the point that portions of the rebar are missing. Wet well is in poor condition. ▪ Wet well access manhole and rim were observed to be moderately corroded providing a safety risk for operations. - Manhole cover is not a standard lid. - Manhole ring is corroded and has appeared to have disconnected from the wet well top slab. ▪ There are no conduit seal offs installed on conduits leaving the wet well, and there are penetrations between the between the wet well and the enclosure above that are not sealed, causing the enclosure area to be considered a Class 1 Div 1. Hazardous area. Neither the motors or the electrical and controls equipment within the enclosure are rated for a Class 1, Division 1 hazardous location. H_2S gas corrosion was observed in the motor control panel.	Poor	 **Figure 160:** 3rd & Ross Lift Station Wet Well  **Figure 161:** 3rd & Ross Lift Station Wet Well Access Manhole  **Figure 162:** 3rd & Ross Lift Station Conduit Penetration

Electrical & Instrumentation	Condition	Photo(s)
▪ The pumps and electrical/controls equipment we observed to be on top of the wet well deck under a fiberglass enclosure. The equipment did not appear to be rated for a hazardous location and appeared to be at the end of its useful life. ▪ No sealing fittings were observed on any conduits on site but are required per the National Electrical Code and California Electrical Code on conduits once they leave a hazardous area, such as the wet well. A lack of sealing fittings is a safety hazard, a risk for equipment damage, and is likely the reason for H_2S gas entering the electrical equipment and the fiberglass enclosure. ▪ The existing level transducer appeared to be hanging from its cable in the wet well, which can cause premature failure of the cable. ▪ The level transducer penetration through the wet well deck is inside the fiberglass enclosure, is not sealed, and the cover can be lifted without unbolting or unsealing the cover. This could lead to an interpretation that the inside of the pump and electrical equipment enclosure is within a hazardous envelope. ▪ The wet well manhole appeared to be 1 foot or less from the pump/electrical enclosure, does not seal properly, and has a small hole in it. The manhole proximity plus the ventilation openings observed in the enclosure appear to put the pump/electrical enclosure within a hazardous envelope. ▪ Cables, including power cables and the float switch cable appeared damaged and should be replaced. ▪ The float switch cable is run exposed (not in conduit through the enclosure wall and into the wet well, therefore the cable is not protected from damage and the elements. ▪ An approximate 1.5-inch opening was observed in the fiberglass enclosure where a conduit may have been. ▪ City staff indicated that the pumps start and stop based on signals from the level transmitter.	Poor	 **Figure 163:** 3rd & Ross Lift Station Fiberglass Enclosure with Equipment, Level Sensor Penetration and Manhole in Close Proximity  **Figure 164:** 3rd & Ross Lift Station Uncapped Enclosure Opening  **Figure 165:** 3rd & Ross Lift Station Float Switch Cable Outside Enclosure (Between Enclosure and Wet Well, Not in Conduit)

▪ Lift Station I/O appeared to be transmitted off site using a Mission Communications Cellular Wireless RTU. ▪ Existing electrical service was observed to be 240-volts, three-phase, 100 amps. ▪ The electrical service meter and main breaker are severely corroded and should be completely replaced. ▪ No arc flash stickers were observed on the electrical equipment. ▪ No standby power generator or portable generator connection was observed. ▪ The flexible conduits on site appeared to be in poor condition and are degrading due to exposure to the sun and elements. ▪ An office UPS was observed within the pump/electrical equipment enclosure, not in an electrical enclosure. ▪ No lighting was observed at this site. ▪ No intrusion switches were observed on site. ▪ No lift station discharge flowmeter was observed.		  **Figure 166:** 3rd & Ross Lift Station Utility Meter and Main Breaker Condition
Climate Control Vulnerability	**Condition**	**Photo(s)**
Flooding ▪ Site grade around the lift station is dirt. - Low point observed at the edge of the pad. Ponding water at low points and/or high groundwater may accelerate deterioration of the wet well. **Electrical Outages** ▪ No standby power generator or portable generator connection was observed. **Extreme Heat** ▪ Air cooling / temperature control not observed inside electrical enclosures.	Poor	

3.7.4 Hydraulic Assessment

The 3rd & Ross Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 3.6 times per hour on average with a maximum of 13 starts per hour. Pump #2 starts approximately 3.4 times per hour on average with a maximum of 28 starts per hour. Both pumps have a similar average number of starts per hour, however pump #2 has a higher maximum number of starts per hour based on the SCADA data received. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 7.5 HP, 4-pole (1450 rpm) motor should have a maximum number of

13.9 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed instances where the number of Pump #2 starts per hour has exceeded the NEMA recommended starts per hour. This may be indicative of an issue with the control logic of the pumps or an issue with the level control instrumentation. Dudek recommends for the City Operations staff to investigate the cause of this discrepancy. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 201 minutes of run time per day (3,067 total hours) while pump #2 averages approximately 175 minutes of run time per day (2,668 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing 3rd & Ross Lift Station force main is a 4" Acrylonitrile Butadiene Styrene (ABS) pipe installed in 1988. The condition of the force main is assumed to be fair to poor due to the age of the force main. The industry standard useful life of ABS is approximately 50 years. 3rd & Ross Lift Station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 4" force main is estimated at approximately 8.3 ft/sec which exceeds HI velocity standards. It is recommended to replace the force main with 6" PVC piping in order to meet the HI velocity standards.

3.7.5 Recommended Improvements

Recommended improvements were developed for 3rd & Ross LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 31.

Table 31. 3rd & Ross Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
EI&C	Move Utility Pole, Meter, and Main Breaker	Move all electrical and controls equipment away from the wet well, and outside of hazardous envelope, provide working clearance per NEC.	End of Useful Life	Power and Generator Program (Near-term)
EI&C/ Climate Change Vulnerability	Install MTS & Generator Receptacle	Install a manual transfer switch and generator receptacle to allow powering the site from a portable generator when utility power is down.	Safety Risk	Power and Generator Program (Near-term)
EI&C/ Climate Change Vulnerability	Replace All Electrical, Instrumentation, and Controls	Replace all electrical, instrumentation, and control. Put electrical, pump control panel, level transmitter, RTU, and all other equipment on a rack outside of the hazardous envelope. Install sealing fittings	Code Violation/ Operational Failure	Instrumentation and Control Program – Phase 2 (Mid-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		on all conduits that enter the hazardous envelope in accordance with NFPA 820 and NEC. This will likely require expanding the site footprint (fence). Install air cooling / temperature control inside electrical enclosures to account for rising temperatures.		
EI&C	Install Sealing Fittings	Install conduit sealing fittings on all conduits as they exit the hazardous envelope (including the wet well) and before they enter any enclosures or junction boxes.	Code Violation/ Operational Failure	Maintenance
EI&C	Perform Power System Study & Install Arc Flash Stickers	Per NFPA 70E, a power system study should be performed, and updated every 5 years. Updates should be made whenever modifications are made. Arc flash stickers should be provided on the electrical equipment.	Safety Risk	Arc Flash / Short Circuit Study Program (Near-term)
EI&C	Seal All Penetrations Through Wet Well Deck	All penetrations through wet well deck should be sealed per NFPA 820 and NEC.	Code Violation	Maintenance
EI&C	Replace and Upgrade the Level Transducer Mounting and Penetration	A new pipe sleeve and flange to mount the transducer to and connect the conduit to, with a sealing fitting, and penetration concrete repairs could address the hazardous envelope barrier concern and sensor mounting. Alternately, the penetration could be permanently sealed and the level transducer relocated away from the electrical and controls equipment, or the controls equipment replaced and moved outside of the enclosure and hazardous envelope and the motors replaced with motors rated for a Class 1, Division 1 hazardous location.	Code Violation/ Operational Failure	Maintenance
EI&C	Replace High Level Float, Install Cable in	Install new float switch, cable, conduit, and sealing fitting. Ensure high level signal is	Code Violation/	Maintenance

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
	Conduit with Sealing Fitting	transmitted via AT&T phone line to staff.	Operational Failure	
EI&C	Replace All Flexible Conduits	In poor condition.	End of Useful Life	Maintenance
EI&C	Provide Site Task Lighting	To provide adequate lighting for staff on site to work, maintain, and troubleshoot.	Safety Risk	3rd & Ross Lift Station Rehabilitation (Long-term)
EI&C	Install Intrusion Switches	Intrusion switches on site gate, electrical equipment, control panel and have report to RTU.	Security Risk	Maintenance
EI&C	Install Discharge Flow Meter	Install flowmeter on pump discharge to allow flow monitoring which provides useful operational data and serves as an indication of diminishing pump performance over time.	Operations Preference	Pumps, Piping, Supports, and HVAC Program (Mid-term)
Site Civil/ Mechanical	On-Site Water Connection	Install an on-site water connection to provide a water supply for site wash-down.	Preventative Maintenance	3rd & Ross Lift Station Rehabilitation (Long-term)
Site Civil/ Mechanical / Climate Change Vulnerability	Site Grading	There is a low point in the unpaved area adjacent to the dry well top slab where surface runoff ponds up. During heavy rains, the accumulation of water in this area is most likely seeping down along the exterior of the dry well structure and infiltrating through the existing conduit and duct wall penetrations. The depressed area also poses a tripping hazard for operations staff.	Preventative Maintenance	3rd & Ross Lift Station Rehabilitation (Long-term)
Mechanical	Recoat Existing Above Grade Mechanical Equipment	The existing above grade pumps, suction and discharge mechanical piping, and valves are experiencing varying levels of minor to moderate minor corrosion and coating delamination occurring in several locations.	Coating Delamination / Failure	Maintenance
Mechanical	Replace Existing Force Main within Wet Well	Pump discharge piping (force main) within wet well was observed to be severely corroded and is experiencing significant loss of	Operational Failure	Pumps, Piping, Supports, and HVAC Program (Mid-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
		pipe wall thickness. This section of the force main is at high risk of failure. The force main is undersized and the velocities within the piping exceed the HI standards for pipe velocity.		
Mechanical	Install Lift Station Bypass Connection	There is no existing bypass connection for this lift station. It is recommended to install a force main bypass connection in the event of a lift station failure.	Increased SSO Potential	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Mid-term)
Structural	Replace Wet Well Top Slab and Access Hatch	The existing wet well access manhole frame and cover were observed to be moderately corroded providing a safety risk for operations. Additionally, the manhole cover is not a standard lid and the manhole ring appeared to have disconnected from the wet well top slab. It is recommended to replace the wet well access cover with new hatches that are equipped with integrated fall protection, slam lock, and lift assist. Alternatively, a composite manhole cover can be retrofitted around the existing access cover frame to mitigate the immediate safety concern.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

3.8 4th & Wake Lift Station

3.8.1 Location and Layout

The 4th & Wake Lift Station is located at the northeastern corner of the intersection of Wake Avenue and S 4th Street. Site access for this lift station is a chain-link gate on the east side of the facility. There is no dedicated parking at the 4th & Wake Lift Station however the adjacent parking lot to the northeast can be used. The lift station is a self-priming duplex station with lift up fiberglass enclosure located within a small, fenced site.

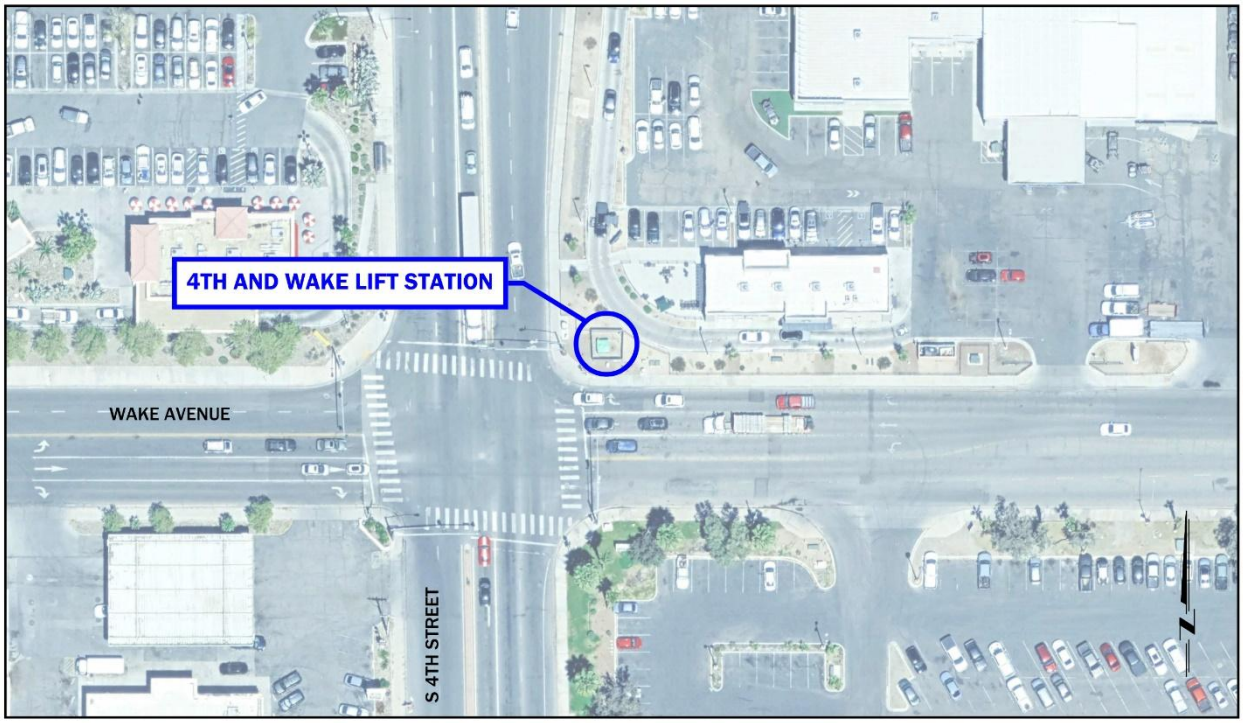


Figure 167: 4th & Wake Lift Station Location



Figure 168: 4th & Wake Lift Station Layout

3.8.2 System Characteristics

3.8.2.1 Pump Station

A summary of the pumping units for 4th & Wake LS is provided on Table 32, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 33.

Table 32. 4th & Wake Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Gorman Rupp Model T4A3-B	Gorman Rupp Model T4A3-B
Pump Type	Self Priming	Self Priming
Pump Mount	Guide Rail System	
Design Capacity	200 gpm @ Unknown TDH	
Motor, hp	10	
Motor Operation	Constant Speed	
Speed, rpm	1750	
Discharge Diameter, inches	4	
Year Installed	1985	

Table 33. 4th & Wake Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete
Diameter, feet	5.5
Depth, feet	19.9
Floor Elevation, feet	-53.9
Influent Sewer Invert, feet	-46.4
Cover/Hatch Type	24” Manhole
Bypass Assembly	
Valve Location	Above grade fiberglass enclosure
Bypass Connection	4” cleanout
Force Main	
Diameter, inches	4”
Length, feet	334
Material	PVC

3.8.2.2 Operations and Maintenance History

Operations reported that fats, oils, and grease (FOG) accumulate in the wet well; however, regular cleaning has prevented significant buildup. During onsite inspections, Dudek observed that the existing enclosure is small and difficult to work in. During the inspection it was discovered that the level control floats were obstructed by the suction pipe and its support. Onsite testing confirmed that the floats were faulty and did not activate the alarm system. Additionally, operations noted past instances of ragging in the check valves, but consistent maintenance has ensured proper functionality.

3.8.3 Inspection Summary

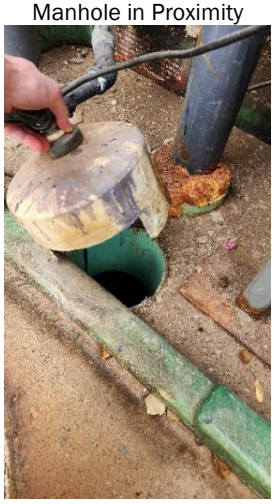
Dudek performed a comprehensive lift station condition assessment at the 4th & Wake Lift Station. Table 34 contains observations made during the February 12, 2025 site inspection and information provided by the City during the pre- and post-inspection workshops. During the April 8, 2025 post inspection workshop, the City indicated that the 4th & Wake Lift Station will be abandoned by 2030. Flows previously served by this lift station will be redirected via gravity to the new Southern Lift Station which will replace this lift station.

Table 34. 4th & Wake Lift Station Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ Site perimeter fence is in excellent condition and contains privacy slats. - Fiberglass enclosure was unlocked at the time of the inspection. - No security issues reported at this site. ▪ Lift station concrete pad is in good condition. - Site grade around the pad is dirt and sloping away from the wet well and enclosure. ▪ Site has a water meter with a backflow preventor and hose. - The water meter was not assessed during the field inspections. - The backflow preventor was observed to be in fair condition with moderate oxidation and corrosion.	Fair/Good	 **Figure 169:** 4th & Wake Lift Station Concrete Pad (Left), Water Meter Backflow Preventer (Right)

Mechanical	Condition	Photo(s)
Pumps ▪ Self-priming pumps appear to be in good condition. - Minor corrosion and delamination observed. - Pumps are belt driven. Belts are protected by belt guards.	Good	  **Figure 172:** 4th & Wake Lift Station Self-Priming Pumps
Piping & Valves ▪ Suction and discharge piping within wet well is PVC and in fair condition. - PVC chalking observed. ▪ 4" force main clean out located within site fence perimeter. ▪ Discharge and suction piping and valves within the above grade fiberglass enclosure is in good to fair condition. - Minor to moderate corrosion and coating delamination observed on ductile iron piping and fittings. Suction and discharge piping transitions to ductile iron once above grade. PVC appears to be in good condition.	Good	 **Figure 171:** 4th & Wake Lift Station Suction and Discharge Piping Within Wet Well  **Figure 170:** 4th & Wake Lift Station Suction and Discharge Piping Above Grade

Structural	Condition	Photo(s)
Wet Well ▪ Concrete structure was observed to be exhibiting severe corrosion from H_2S exposure. - Aggregate and rebar were exposed within wet well. - Extreme loss of wall thickness and concrete spalling. ▪ Concrete wet well top slab was observed to be exhibiting severe corrosion from H_2S exposure. - Loss of slab thickness. - Large aggregate is exposed. ▪ Wet well access manhole is custom made (non-standard) and observed to be moderately to severely corroded. ▪ Wet well vault did not appear to be sealed causing surrounding environment and fiberglass enclosure to a hazardous location per NFPA 820. ▪ Piping within wet well was observed to be in good condition. ▪ Submersible pumps were not pulled for assessment during field inspections ▪ Unistrut suction piping supports are moderately to severely corroded within wet well. - Pipe supports point of contact with wet well is corroded and chipping. It is likely that the corroded support is accelerating the wet well deterioration at this location.	Poor	 **Figure 173:** 4th & Wake Lift Station Wet Well Concrete Condition   **Figure 174:** 4th & Wake Lift Station Wet Well Top Slab  **Figure 175:** 4th & Wake Lift Station Wet Well Access Manhole

Electrical & Instrumentation	Condition	Photo(s)
▪ The pumps and electrical/controls equipment were observed to be on top of the wet well deck under a fiberglass enclosure. The equipment did not appear to be rated for a hazardous location. ▪ No sealing fittings were observed on any conduits on site but are required per the National Electrical Code and California Electrical Code on conduits once they leave a hazardous area, such as the wet well. A lack of sealing fittings is a safety hazard, a risk for equipment damage, and H2S gas entering the electrical equipment and the fiberglass enclosure. ▪ The existing level transducer appeared to be hanging from its cable in the wet well, which can cause premature failure of the cable. ▪ The level transducer penetration through the wet well deck is inside the fiberglass enclosure is not sealed. The cover can be lifted without unbolting or unsealing the cover—it appeared to simply rest on the concrete deck. This could lead to an interpretation that the inside of the pump and electrical equipment enclosure is within a Class 1, Division 1 hazardous envelope. ▪ The wet well manhole appeared to be 1 foot or less from the pump/electrical enclosure, does not seal properly, and has a small hole in it. The manhole proximity plus the ventilation openings observed in the enclosure could put the pump/electrical enclosure within a hazardous envelope. A vent is in the fiberglass enclosure wall near the manhole. ▪ One pump motor appeared to be rated for Class 1, Division 2 hazardous locations, and to other pump motor did not appear to be rated for hazardous locations. ▪ There are noticeably visible gaps/openings between the piping and the concrete deck as the piping enters the wet well. H2S gas is entering the enclosure where the pumps and electrical equipment are located. This plus the level transducer opening could make the area within the fiberglass enclosure a Class 1, Division 1 hazardous location until modifications are made.	Poor	 **Figure 176:** 4th & Wake Lift Station Fiberglass Enclosure with Equipment, Level Penetration Inside and Manhole in Proximity  **Figure 177:** 4th & Wake Lift Station Level Transducer Penetration Inside the Fiberglass Enclosure  **Figure 178:** 4th & Wake Lift Station Example of Gap/Opening to Wet Well

- The existing pump control panel appeared to have been replaced at some point in time—it did not appear to be the original pump control panel. The control panel did not appear to be rated for a hazardous location, and corrosion was observed inside the control panel, likely from H2S gas. It also appeared to have been field modified over time.
- There is a receptacle, a snap switch, and exposed wiring and wiring connections inside the fiberglass enclosure.
- City staff indicated that the pumps start and stop based on signals from the level transmitter.
- Lift Station I/O appeared to be transmitted off site using a Mission Communications Cellular Wireless RTU.
- Per staff, the high-level float switch signal is transmitted via an AT&T phone line.
- City staff tested the high-level float during the site visit and determined it to be inoperable.
- Existing electrical service was observed to be 240-volts, three-phase, 100 amps.
- The electrical service meter is in fair condition and has surface corrosion.
- The main breaker enclosure is a safety hazard and code violation in its current condition. When opening the enclosure, there is no dead front, so the breaker, all terminations, and wiring are exposed.
- There is conduit damage at the fiberglass enclosure for the power conduit from the main breaker that appeared to be from ground settling. It appeared that duct tape was previously used to seal the conduit at the two breaking points.
- No arc flash stickers were observed on the electrical equipment.
- No standby power generator or portable generator connection was observed.
- An office Uninterruptible Power Supply (UPS) was observed within the pump/electrical equipment enclosure.
- No lighting was observed at this site.
- No intrusion switches were observed on site.



Figure 179: 4th & Wake Lift Station Receptacle and Swich (Left), Exposed Wires and Terminations (Right)



Figure 180: 4th & Wake Lift Station Electrical Utility Meter and Main Breaker Enclosure



Figure 181: 4th & Wake Lift Station Broken Power Conduit

▪ No lift station discharge flowmeter was observed. ▪ Air cooling / temperature control not observed inside electrical enclosures.		
Climate Control Vulnerability	**Condition**	**Photo(s)**
Flooding ▪ Site grade around the pad is dirt and sloping away from the wet well and enclosure. **Electrical Outages** ▪ No standby power generator or portable generator connection was observed. **Extreme Heat** ▪ Air cooling / temperature control not observed inside electrical enclosures.	Fair	

3.8.4 Hydraulic Assessment

The 4th & Wake Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 2.3 times per hour on average with a maximum of 35 starts per hour. Pump #2 starts approximately 2.1 times per hour on average with a maximum of 26 starts per hour. Both pumps have a similar average number of starts per hour, however pump #1 has a higher maximum number of starts per hour based on the SCADA data received. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 10 HP, 4-pole (1750 rpm) motor should have a maximum number of 12.5 motor starts per hour. It was observed that the instances number of starts per hour exceeds the NEMA recommended starts per hour based on the provided SCADA data. This indicates that the existing operational set points may need to be adjusted. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 105 minutes of run time per day (1,594 total hours) while pump #2 averages approximately 101 minutes of run time per day (1,545 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Legacy Lift Station force main is a 4" PVC pipe installed in 1985. The force main condition is assumed to be fair due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. 4th & Wake Lift Station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 4" force main is estimated at approximately 5.1 ft/sec which is in accordance with HI standards.

3.8.5 Recommended Improvements

Recommended improvements were developed for 4th & Wake LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 35.

Table 35. 4th & Wake Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk	Associated Project (Term)
EI&C	Replace Site Main Breaker Enclosure	Exposed breaker, terminations, wiring inside	Safety Risk	Instrumentation and Control Program – Phase 1 (Near-term)
EI&C/ Climate Change Vulnerability	Install MTS & Generator Receptacle[1]	Install a manual transfer switch and generator receptacle to allow powering the site from a portable generator when utility power is down.	Operational Failure	N/A
EI&C/ Climate Change Vulnerability	Replace All Electrical, Instrumentation, and Controls[2]	Replace all electrical, instrumentation, and control. Put electrical, pump control panel, level transmitter, RTU, and all other equipment on a rack outside of the hazardous envelope. Install sealing fittings on all conduits that enter the hazardous envelope in accordance with NFPA 820 and NEC. This will likely require expanding the site footprint (fence). Install air cooling / temperature control inside electrical enclosures to account for rising temperatures.	Code Violation/ Operational Failure	N/A
EI&C	Install Sealing Fittings	Install conduit sealing fittings on all conduits as they exit the hazardous envelope (including the wet well) and before they enter any enclosures or junction boxes.	Code Violation/ Operational Failure	Maintenance
EI&C	Perform Power System Study & Install Arc Flash Stickers	Per NFPA 70E, a power system study should be performed, and updated every 5 years Updates should be made whenever modifications are made. Arc flash stickers should be provided on the electrical equipment.	Safety Risk	Arc Flash / Short Circuit Study Program (Near-term)
EI&C	Seal All Penetrations	All penetrations through wet well deck should be sealed per	Code Violation	Maintenance

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk	Associated Project (Term)
	Through Wet Well Deck	NFPA 820 and NEC.		
EI&C	Replace and Upgrade the Level Transducer Mounting and Penetration	A new pipe sleeve and flange to mount the transducer to and connect the conduit to, with a sealing fitting, and penetration concrete repairs could address the hazardous envelope barrier concern and sensor mounting. Alternately, the penetration could be permanently sealed and the level transducer relocated away from the electrical and controls equipment, or the controls equipment replaced and moved outside of the enclosure and hazardous envelope and the motors replaced with motors rated for a Class 1, Division 1 hazardous location.	Code Violation/ Operational Failure	Maintenance
EI&C	Replace high level float (if needed) conduit and install sealing fitting	Install new float switch, cable, conduit, and sealing fitting. Ensure high level signal is transmitted via AT&T phone line to staff.	Code Violation/ Operational Failure	Maintenance
EI&C	Replace all flexible conduits	In poor condition.	End of Useful Life	Maintenance
EI&C	Provide site task lighting[1]	To provide adequate lighting for staff on site to work, maintain, and troubleshoot.	Safety Risk	N/A
EI&C	Install intrusion switches	Intrusion switches on site gate, electrical equipment, control panel and have report to RTU.	Security Risk	Maintenance
EI&C	Install discharge flow meter[1]	Install flowmeter on pump discharge to allow flow monitoring which provides useful operational data and serves as an indication of diminishing pump performance over time.	Operations Preference	N/A
EI&C	Replace motors[1]	Replace motors with Class 1, Division 1 hazardous location rated motors.	Code Violation/ Operational Failure	N/A
EI&C	Repair wet well deck and seal all openings[1]	Repair wet well concrete and seal all openings to wet well—gaps around piping, level transducer opening, nearby	Code Violation/ Operational Failure	N/A

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk	Associated Project (Term)
		manhole lid with opening.		
EI&C	Repair /replaced damaged conduit	Repair or replace broken power conduit due to ground settling	Operational Failure	Maintenance
EI&C / Climate Change Vulnerability	Install Electrical Panel Air Cooling and Temperature Control[1]	Install air cooling / temperature control inside electrical enclosures to account for rising temperatures.	Preventative Maintenance	N/A
Mechanical	Recoat Existing Above Grade Mechanical Equipment	The existing above grade pumps, suction and discharge mechanical piping, and valves are experiencing varying levels of minor to moderate minor corrosion and coating delamination occurring in several locations.	Coating Delamination / Failure	Maintenance
Mechanical	Replace Existing Pipe Supports in Wet Well	Unistrut suction piping supports are moderately to severely corroded within wet well.	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Replace Wet Well Access Cover	The existing wet well access manhole frame and cover were observed to be moderately corroded providing a safety risk for operations. Additionally, the manhole cover is not a standard lid making replacement more difficult. It is recommended to replace the wet well access cover with new hatches that are equipped with integrated fall protection, slam lock, and lift assist. Alternatively, a composite manhole cover can be retrofitted around the existing access cover frame to mitigate the immediate safety concern.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Rehab of Wet Well	Wet well concrete was observed to be cracked and severely corroded with exposed and damaged rebar. Concrete wet well top slab was observed to be exhibiting severe corrosion from H_2S exposure. Wet well is in critical/poor condition and is at	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk	Associated Project (Term)
		high risk of catastrophic failure. Slip line existing wet well with FRP basin, install cast in place manhole liner, or completely replace the existing wet well.		

1. *This recommended improvement is assumed to not be required due to the planned decommission of the lift station within one year of writing this technical memorandum. If the lift station is in service beyond the currently scheduled decommission timeline, then it is recommended that the City perform this improvement.*
2. *Should the City address electrical code violations and seal all penetrations and conduits at wet well, this recommendation would not be required.*

3.9 8th & Wake Lift Station

3.9.1 Location and Layout

The 8th & Wake Lift Station is located at the northeast side of the S 8th Street and Wake Avenue intersection. Parking for this facility is the dirt lot adjacent to the lift station on its east side. The lift station is a self-priming duplex station with lift up fiberglass enclosure located within a small, fenced site.

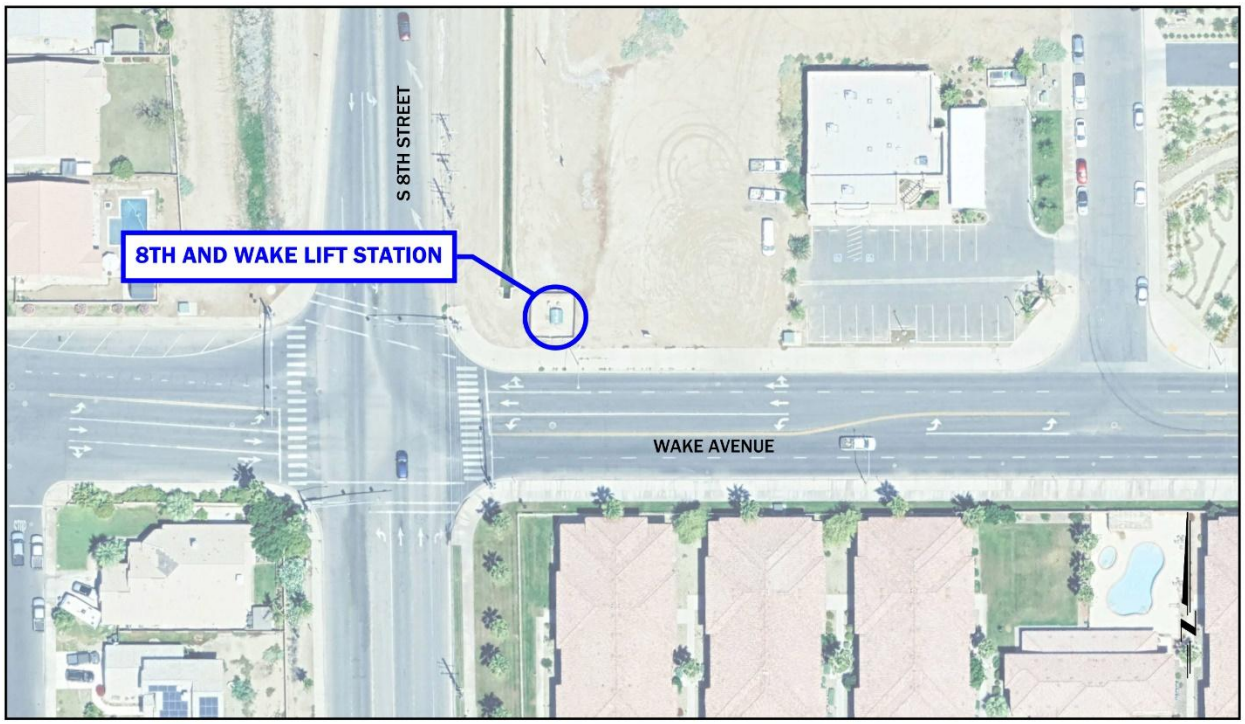


Figure 182: 8th & Wake Lift Station Location

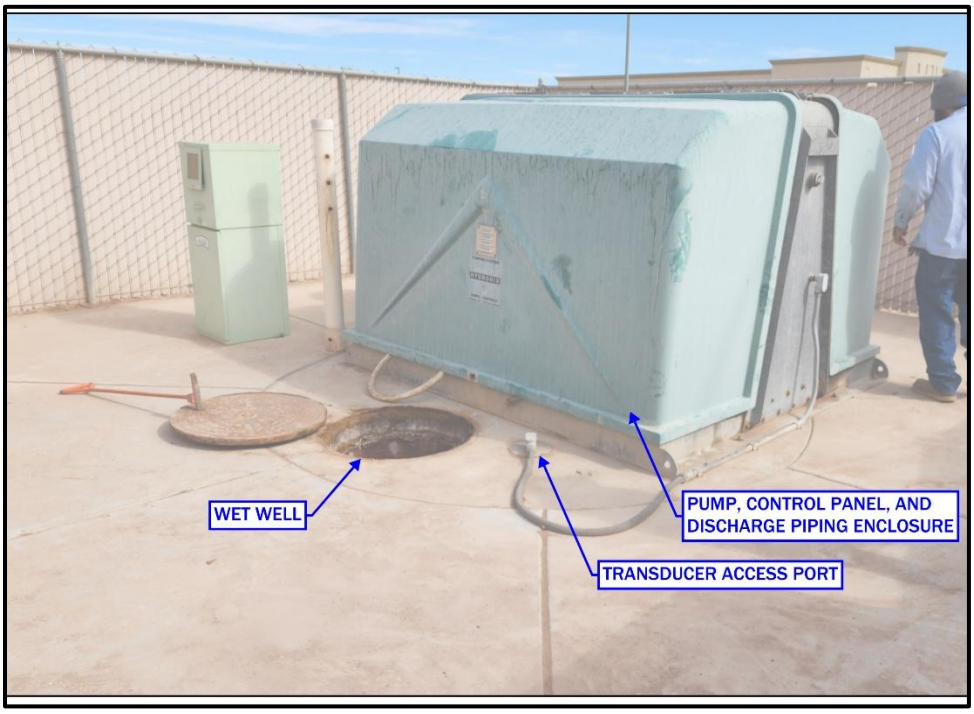


Figure 183: 8th & Wake Lift Station Layout

3.9.2 System Characteristics

3.9.2.1 Pump Station

A summary of the pumping units for 8th & Wake LS is provided on Table 36, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 37.

Table 36. 8th & Wake Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Barrett Pump Pioneer P6	Barrett Pump Pioneer P6
Pump Type	Self Priming	Self Priming
Pump Mount	Above grade	
Design Capacity	200 gpm @ 35’ TDH	
Motor, hp	5	
Motor Operation	Constant Speed	
Speed, rpm	1800	
Discharge Diameter, inches	4	
Year Installed	2006	

Table 37. 8th & Wake Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete with polyurethane liner
Diameter, feet	8
Depth, feet	20.50
Floor Elevation, feet	-52.50
Influent Sewer Invert, feet	-46.5
Cover/Hatch Type	24” Manhole
Bypass Assembly	
Valve Location	Above grade fiberglass enclosure
Bypass Connection	None
Force Main	
Diameter, inches	6”
Length, feet	136.5
Material	PVC

3.9.2.2 Operations and Maintenance History

There were no operational concerns reported at this facility.

3.9.3 Inspection Summary

Dudek performed a wet well assessment 8th & Wake LS. Table 38 contains observations made during the February 12, 2025 wet well condition assessment and information provided by the City during the pre- and post-inspection workshops.

Although a comprehensive inspection was not performed at 8th & Wake LS, it is assumed that the facility follows the trends observed at other facilities including electrical code violations, missing arc flash studies and warning labels, absence of emergency generators or receptacles, and lack of bypass pumping connections.

Table 38. 8th & Wake Lift Station Inspection Summary

Structural	Condition	Photo(s)
Wet Well ▪ Wet well access manhole cover is severely corroded. ▪ Wet well concrete slab at access manhole is corroded and spalling has occurred. - Concrete sections may fall and damage pumps. ▪ Wet well liner was observed to be bubbling and delaminated in several locations. ▪ Wet well liner appears to have a breach at liner termination. - Unable to determine concrete condition behind liner. ▪ There are no conduit seal offs observed to be installed on conduits leaving the wet well, which allows hazardous gases into the electrical equipment and enclosure. ▪ The wet well manhole cover and level sensor penetration are less than 1 foot away from the green enclosure, the manhole cover has a small hole in it, and it is assumed that the green enclosure is not sealed to keep gases out. This would require classifying the green enclosure area as a hazardous location and relocating all electrical and control equipment out of the green enclosure and away from the wet well per NFPA 820. ▪ Submersible pumps were not pulled for assessment during field inspections	Poor	 **Figure 184:** 8th & Wake Lift Station Wet Well Concrete at Access Manhole  **Figure 185:** 8th & Wake Lift Station Wet Well Walls  **Figure 186:** 8th & Wake Lift Station Wet Well Liner



Figure 187: 8th & Wake Lift Station Transducer Penetration and Wet Well Access

3.9.4 Hydraulic Assessment

The 8th & Wake Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 1.2 times per hour on average with a maximum of 6 starts per hour. Pump #2 starts approximately 1.2 times per hour on average with a maximum of 11 starts per hour. Both pumps have a similar average number of starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 5 HP, 4-pole (1800 rpm) motor should have a maximum number of 16.3 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed that both pumps are in compliance with the number of starts per hour.

Pump #1 averages 50.8 minutes of run time per day (773 total hours) while pump #2 averages approximately 59.3 minutes of run time per day (904 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing 8th & Wake Lift Station force main is a 6" PVC pipe installed in 2006. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. 8th & Wake Lift Station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 6" force main is estimated at approximately 2.3 ft/sec which is in accordance with HI standards.

3.9.5 Recommended Improvements

Recommended improvements were developed for 8th & Wake LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 39.

Table 39. 8th & Wake Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Mechanical	Replace Existing Pumps	Submersible pumps were not pulled for assessment during field inspections, however it is anticipated that the existing pumps are either at or near the end of their useful life.	End of Useful Life	8th & Wake Lift Station Rehabilitation (Long-term)
Mechanical	Install Lift Station Bypass Connection	There is no existing bypass connection for this lift station. It is recommended to install a force main bypass connection in the event of a lift station failure.	Increased SSO Potential	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Mid-term)
Structural	Replace Wet Well Access Cover	The existing wet well access manhole frame and cover were observed to be moderately corroded providing a safety risk for operations. It is recommended to replace the wet well access cover with new hatches that are equipped with integrated fall protection, slam lock, and lift assist. Alternatively, a composite manhole cover can be retrofitted around the existing access cover frame to mitigate the immediate safety concern.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Replace Wet Well Liner	Wet well liner was observed to be separating from concrete and delaminating in several locations. Wet well liner appears to have a breach at liner termination at the bottom of the wet well and within the wet well access shaft.	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

3.10 Lift Station No. 2

3.10.1 Location and Layout

Lift Station No. 2 is located northwest of the intersection of South La Brucherie Road and Wake Avenue. The lift station is a full sized dry well / wet well lift station within a block wall facility. This site can be accessed by a chain-link slide gate on Wake Avenue. There is ample room within the CMU block wall facility for parking.



Figure 188: Lift Station No. 2 Location

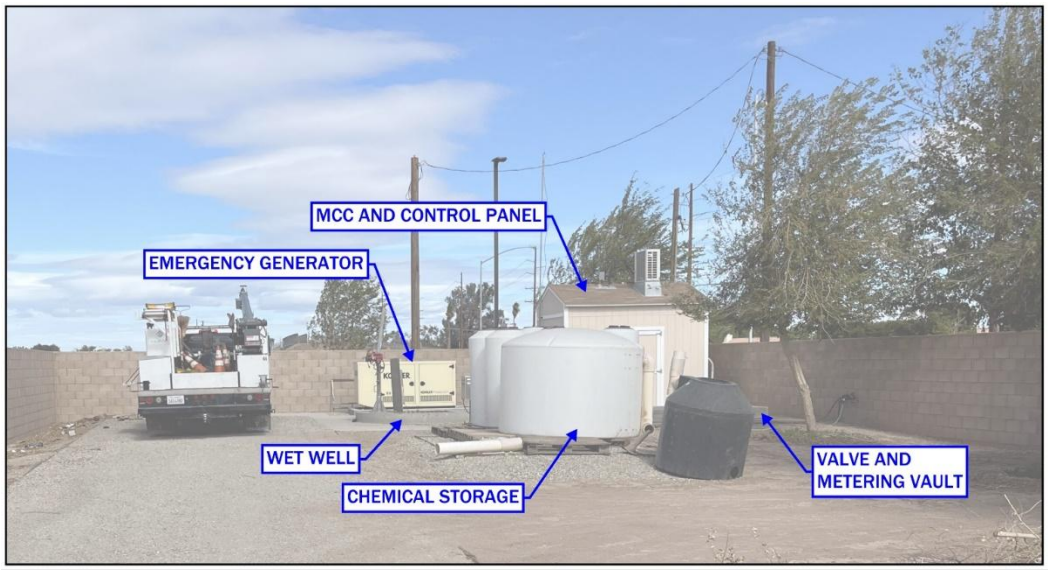


Figure 189: Lift Station No. 2 Layout

3.10.2 System Characteristics

3.10.2.1 Pump Station

A summary of the pumping units for Lift Station No. 2 is provided on Table 40, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 41.

Table 40. Lift Station No. 2 Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Vaughan SE4T3 Chopper	Vaughan SE4T3 Chopper
Pump Type	Submersible	Submersible
Pump Mount	Guide Rail System	
Design Capacity	unknown	
Motor, hp	15	
Motor Operation	Constant Speed	
Speed, rpm	1800	
Discharge Diameter, inches	4	
Year Installed	1975, rehabilitated in 2016	

Table 41. Lift Station No. 2 Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Lined precast concrete
Diameter, feet	10
Depth, feet	26.4
Floor Elevation, feet	-52.3
Influent Sewer Invert, feet	-45.3
Cover/Hatch Type	43” x 66” Access Hatch
Valve Vault	
Size, feet	12 x 8
Material	Cast in place concrete
Depth, feet	8.5
Cover/Hatch Type	50” x 74” aluminum hatch
Bypass Assembly	
Valve Location	N/A
Bypass Connection	None
Force Main	
Diameter, inches	12
Length, feet	981
Material	PVC

3.10.2.2 Operations and Maintenance History

Lift Station No. 2 was constructed in 1975 and replaced in 2016. The lift station replacement included new wet well, submersible pumps, valve vault, emergency backup generator, and MCC/pump control panel. There were no operational concerns reported at this facility.

3.10.3 Inspection Summary

Dudek performed a wet well assessment for Lift Station No. 2. Table 42 contains observations made during the February 12, 2025 wet well condition assessment and information provided by the City during the pre- and post-inspection workshops.

Although a comprehensive inspection was not performed at Lift Station No. 2, it is assumed that the facility follows the trends observed at other facilities including electrical code violations, missing arc flash studies and warning labels, absence of emergency generators or receptacles, and lack of bypass pumping connections.

Table 42. Lift Station No. 2 Inspection Summary

Structural	Condition	Photo(s)
Wet Well ▪ Wet well structure appeared to be in excellent condition. Little to no corrosion observed. ▪ Integral fall protection observed at the wet well access hatch and is in good condition. - Protection grating coating has begun delaminating and grating has minor corrosion. - The hatches and framing were observed to be in excellent condition. ▪ Submersible pumps were not pulled for assessment during field inspections ▪ Piping within the wet well was observed to be in good to fair condition. ▪ No bypass connection	Excellent	 **Figure 190:** Lift Station No. 2 Access Hatch (Above) and Wet Well (Below)

3.10.4 Hydraulic Assessment

The Lift Station No. 2 hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 1.5 times per hour on average with a maximum of 11

starts per hour. Pump #2 starts approximately 1.6 times per hour on average with a maximum of 16 starts per hour. Both pumps have a similar average number of starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 15 HP, 6-pole (1160 rpm) motor should have a maximum number of 12.1 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed instances where Pump #2's starts per hour has exceeded the NEMA recommended starts per hour. This indicates that the existing operational set points may need to be adjusted to reduce the number of starts per hour. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 205 minutes of run time per day (3,121 total hours) while pump #2 averages approximately 268 minutes of run time per day (4,082 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Lift Station No. 2 force main is a 12" PVC pipe installed in 2016. The condition of the force main is assumed to be excellent due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. Lift Station No. 2 is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 12" force main is estimated at approximately 2.4 ft/sec which is in accordance with HI standards.

3.10.5 Recommended Improvements

Recommended improvements were developed for Lift Station No. 2 based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 43.

Table 43. Lift Station No. 2 Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Mechanical	Install Lift Station Bypass Connection	There is no existing bypass connection for this lift station. It is recommended to install a force main bypass connection in the event of a lift station failure.	Increased SSO Potential	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

3.11 Orange Lift Station

3.11.1 Location and Layout

The Orange Lift Station is located on the south side of West Orange Avenue between Lotus Avenue and Haskell Road. The lift station is a self-priming duplex station with lift up fiberglass enclosure located within a block wall and fenced site. Parking can be found on West Orange Avenue or within the facility.



Figure 191: Orange Lift Station Location

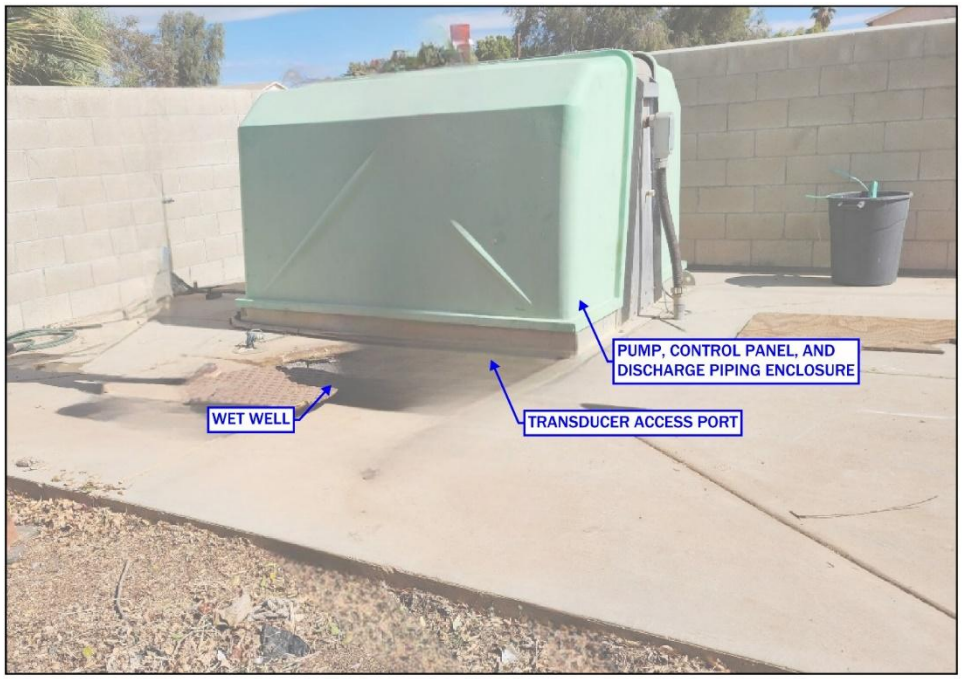


Figure 192: Orange Lift Station Layout

3.11.2 System Characteristics

3.11.2.1 Pump Station

A summary of the pumping units for Orange LS is provided on Table 44, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 45.

Table 44. Orange Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Barrett Pump Pioneer P4	Barrett Pump Pioneer P4
Pump Type	Self Priming	Self Priming
Pump Mount	Above Grade	
Design Capacity	300 gpm @ 20’ TDH (Provided by City)	
Motor, hp	10	
Motor Operation	Constant Speed	
Speed, rpm	1750	
Discharge Diameter, inches	4	
Year Installed	2005	

Table 45. Orange Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Lined precast concrete
Diameter, feet	7
Depth, feet	18.7
Floor Elevation, feet	-53.3
Influent Sewer Invert, feet	-46.6
Cover/Hatch Type	24” Manhole
Bypass Assembly	
Valve Location	Above grade fiberglass enclosure
Bypass Connection	Yes
Force Main	
Diameter, inches	4
Length, feet	62
Material	PVC

3.11.2.2 Operations and Maintenance History

Operations informed that the pumps were replaced recently at Orange Lift Station. There were no operational concerns reported at this facility.

3.11.3 Inspection Summary

Dudek performed a wet well assessment for the Orange Lift Station. Table 46 contains observations made during the February 12, 2025 wet well condition assessment and information provided by the City during the pre- and post-inspection workshops.

Although a comprehensive inspection was not performed at Lift Station No. 2, it is assumed that the facility follows the trends observed at other facilities including electrical code violations, missing arc flash studies and warning labels, absence of emergency generators or receptacles, and lack of bypass pumping connections.

Table 46. Orange Lift Station Inspection Summary

Structural	Condition	Photo(s)
Wet Well ▪ Wet well access manhole and manhole ring are severely corroded. ▪ Moderate to severe concrete corrosion within the wet well observed at locations where the liner is failing. ▪ Wet well liner is failing and flaking off in sheets. - Liner failure at various points throughout wet well. ▪ PVC suction and discharge (force main) piping appear to be in fair condition within wet well. ▪ Flexible conduits exposed to the outdoors have completely failed. ▪ There are no conduit seal offs installed on conduits leaving the wet well or conduits entering the hazardous area, which allows hazardous gases into the electrical equipment and enclosure. ▪ The wet well manhole cover and level sensor penetration are right up against the green enclosure, and it is assumed that the green enclosure is not sealed to keep gases out. This would require classifying the green enclosure area as a hazardous location and relocating all electrical and control equipment out of the green enclosure and away from the wet well per NFPA 820. ▪ Operations informed that the force main bypass is located on West Orange Avenue.	Excellent	  **Figure 193:** Orange Lift Station Wet Well Structure    **Figure 194:** Orange Lift Station Wet Well Manhole Cover (Top Left), Wet Well Access Manhole (Top Right), Level Sensor Penetration (Bottom)

3.11.4 Hydraulic Assessment

The Orange Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 2.0 times per hour on average with a maximum of 15 starts per hour. Pump #2 starts approximately 1.5 times per hour on average with a maximum of 20 starts per hour. Both pumps have a similar average number of starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 10 HP, 4-pole (1750 rpm) motor should have a maximum number of 12.5 motor starts per hour. . It was observed that the instances number of starts per hour exceeds the NEMA recommended starts per hour based on the provided SCADA data. This indicates that the existing operational set points may need to be adjusted to reduce the number of starts per hour. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 97.5 minutes of run time per day (1,486 total hours) while pump #2 averages approximately 74.5 minutes of run time per day (1,137 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Orange Lift Station force main is a 4" PVC pipe installed in 2005. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. The flow velocity through this existing 4" force main is estimated at approximately 7.7 ft/sec which exceeds the HI standards. Orange Lift Station is a duplex lift station that is assumed to operate in a duty/standby configuration.

3.11.5 Recommended Improvements

Recommended improvements were developed for Orange LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 47.

Table 47. Orange Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
Structural	Replace Wet Well Access Cover	The existing wet well access manhole frame and cover were observed to be moderately corroded providing a safety risk for operations. It is recommended to replace the wet well access cover with new hatches that are equipped with integrated fall protection, slam lock, and lift assist. Alternatively, a composite manhole cover can be retrofitted around the existing access cover frame to mitigate the immediate safety concern.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Replace Wet Well Liner	Moderate to severe corrosion of the concrete wet well observed at liner failures. The wet well liner is failing and flaking off in sections in several areas. The liner is also failing at all wet well penetrations.	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)

3.12 Lift Station No. 1

3.12.1 Location and Layout

Lift Station No. 1 is located south of West McCabe Road, west of the Imperial County Office of Education Building E. The lift station is packaged dry well/wet well facility. The wet well hatch is located within West McCabe Road and traffic control has to be implemented to access the wet well. The dry well is within a small, fenced enclosure

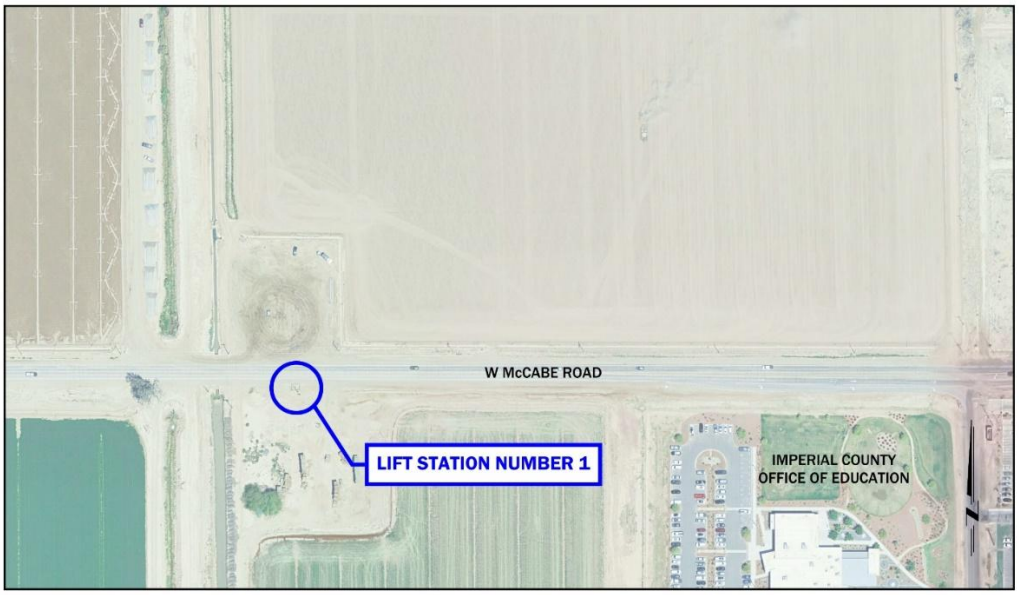
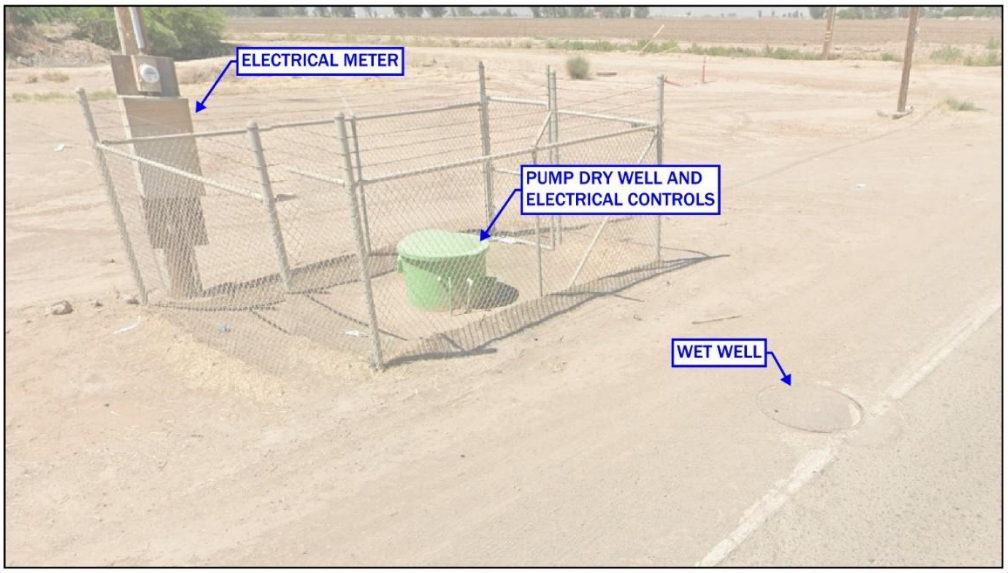


Figure 195: Lift Station No. 1 Location

Figure 196: Lift Station No. 1 Layout



adjacent to the road. Parking can be found in the dirt lot south of the dry well.

3.12.2 System Characteristics

3.12.2.1 Pump Station

A summary of the pumping units for Lift Station No. 1 LS is provided on Table 48, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 49.

Table 48. Lift Station No. 1 Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Gorman Rupp T6A3S-B	Gorman Rupp T6A3S-B
Pump Type	Self Priming Dry Well	Self Priming Dry Well
Pump Mount	Guide Rail System	
Design Capacity	400 gpm @ 14.6 TDH	
Motor, hp	5	
Motor Operation	Constant Speed	
Speed, rpm	1725	
Discharge Diameter, inches	6	
Year Installed	1975	

Table 49. Lift Station No. 1 Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete with liner
Diameter, feet	6
Depth, feet	18
Floor Elevation, feet	-40.52
Influent Sewer Invert, feet	-34.27
Cover/Hatch Type	24” Manhole
Valve Vault	
Size, inches	90
Material	Reinforced Fiber Glass Dry Well
Depth, feet	N/A
Cover/Hatch Type	24” diameter hatch
Bypass Assembly	
Valve Location	N/A
Bypass Connection	None
Force Main	
Diameter, inches	6
Length, feet	182
Material	PVC

3.12.2.2 Operations and Maintenance History

This facility historically has experienced ragging issues. Operations installed the "Eradicator" solids management system which has improved the frequent ragging at this site. Operations reported safety concerns with accessing the wet well at Lift Station No. 1.

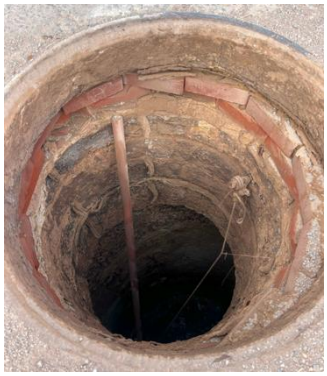
3.12.3 Inspection Summary

Dudek performed a comprehensive lift station condition assessment at Lift Station No. 1. Table 50 contains observations made during the site inspection performed on February 12, 2025 and information provided by the City during the pre- and post-inspection workshops. During the September 17, 2025 planning level cost estimate review meeting, the City informed Dudek that Lift Station No. 1 is currently being designed for relocation and there are no recommendations for this site.

Table 50. Lift Station No. 1 Inspection Summary

Site Civil/ Safety & Security	Condition	Photo(s)
General ▪ The surrounding grade around the dry well access hatch (within the perimeter fence) is all dirt and slopes towards the access hatch. - It appears that this would cause ponding water directly around the access shaft creating muddy conditions during and immediately after a rain event. ▪ Dry well access does not have any type of safety post to assist with safe access onto and off the ladder. ▪ Site fencing and dry well hatch were locked at the time of the inspection.	Fair/Good	 **Figure 197:** Lift Station No. 1 Facility Site  **Figure 198:** Lift Station No. 1 Dry Well Access

Mechanical	Condition	Photo(s)
Pumps ▪ Self-priming pumps appear to be in good condition. - Moderate corrosion was observed at Pump 3 base. - Pumps are belt driven. Belts are protected by belt guards.	Fair	  **Figure 199:** Lift Station No. 1 Self-Priming Pump and Motors
Piping and Valves ▪ Ductile iron discharge piping and valves were observed to be in fair to good condition. - Discharge piping and valves are located within the below grade dry well. - Dust and debris covered majority of piping and inhibited Dudek's ability to inspect. ▪ No bypass connection observed. ▪ No piping or valve issues reported by Operations.	Fair/Good	  **Figure 200:** Lift Station No. 1 Piping and Valves

Structural	Condition	Photo(s)
Wet Well ▪ Wet well access is within West McCabe Road. Accessing the wet well is a safety concern due to the high traffic seen on West McCabe. ▪ The manhole riser of the wet well has a brick stretcher course. The mortar between the bricks has eroded away and some of the bricks appear to be loose and have shifted out of place. One of the bricks can fall and damage the ultrasonic level sensor. In addition, the missing brick can jeopardize the structural integrity of the manhole grade ring. ▪ The ultrasonic level sensor is being held in place by a makeshift support using a pipe with a wrench attached to it as well as some twine to position it towards the center of the wet well. ▪ The overall condition of the manhole is poor, and the interior concrete appears to be moderately to severely corroded in many areas with significant loss of concrete surface profile. There appears to be significant corrosion on the pump suction elbows within the wet well based on a portion of one of the elbows that is not covered in build-up. **Dry Well** ▪ Forced Air Ventilation supply fan in the drywell is supplied power from an extension cord that is wire-nutted to the fan leads in open air. This installation is not to National Electrical Code requirements and is a safety hazard. The fan appears to have an on/off switch located at the top of the drywell shaft. - Ground water leak observed at blower bracket bolt hole within dry well.	Poor	 **Figure 201:** Lift Station No. 1 Wet Well Riser  **Figure 202:** Lift Station No. 1 Wet Well Structure and Suction Elbow

▪ Operations requested better lighting to be installed within Dry Well. ▪ Dry well structure was observed to be in good condition. - Dry well had significant dust and debris build up within the structure. - Internal diameter was measured to be 89-inches.		
Electrical & Instrumentation	**Condition**	**Photo(s)**
▪ The electrical assessment is limited, as the drywell is a confined space entry—the electrical engineer did not enter the drywell and performed the assessment based on photos by others. ▪ The electrical equipment, including the pump control panel appeared to be beyond its useful life expectancy. ▪ The conduits entering the drywell shaft were separating from the LBs (conduit body), probably due to ground settling. It appeared that a repair was attempted with duct tape and paint to seal the area, but the duct tape was deteriorating due to being exposed to the elements. It is likely that water can get into the broken conduit area and into the conduit during a rain event. ▪ There is a missing cover on an LB inside the drywell shaft at the top that needs to be installed. Missing covers are a safety hazard and code violation. ▪ A conduit LB inside the drywell shaft at the top was broken with wires visible and needs to be replaced. ▪ Dudek could not identify where the conduits for the ultrasonic sensor and float switches from the wet well enter the drywell, so we could not determine if a sealing fitting is installed on each conduit as it enters the drywell.	Poor	  **Figure 203:** Lift Station No. 1 Broken Conduits Due to Ground Settling (2 Photos)  **Figure 204:** Lift Station No. 1 Broken Conduit at LB and LB with Missing Cover

- The air supply fan in the drywell is supplied power from an extension cord that is wire-nutted to the fan leads in open air. This installation is not to code and is a safety hazard. The fan appeared to have an on/off switch located at the top of the drywell shaft.
- There is a small hole in the cover of the control panel that should be plugged with a hole plug to prevent dust from entering the panel.
- The interior of the pump control panel was full of dust, most likely made worse from the hole on the panel cover.
- The ultrasonic level sensor appeared to be held in place by a makeshift support using a pipe with a wrench attached to it as well as some twine to position it towards the center of the wet well.
- The interior of the enclosure on the power pole that has a disconnect switch inside it—the enclosure and the disconnect need to be cleaned out to remove cobwebs, dust and dirt. Dust, dirt and cobwebs can provide a path for electricity that can cause a short circuit fault. We observed this inside the enclosure, but did not open the live disconnect switch.
- There was a conduit that routes up the power pole to the red beacon light that appeared to be taped significantly at its 90-degree bend. We presume that there is conduit damage and separation here that needs to be replaced.
- City staff indicated that the pumps start and stop based on signals from the level transmitter.
- Lift Station I/O appeared to be transmitted off site using a Mission Communications Cellular Wireless RTU.
- Per staff, the high-level float switch signal is transmitted via an AT&T phone line.





Figure 205: Lift Station No. 1 Exposed Fan Wiring and Wire Terminations in Drywell





Figure 206: Lift Station No. 1 Utility Meter, Main Disconnect, and Conduits on Utility Pole

▪ No arc flash stickers were observed on the electrical equipment. ▪ No standby power generator or portable generator connection was observed. ▪ No intrusion switches were observed on site. ▪ No lift station discharge flowmeter was observed.		
Climate Control Vulnerability	**Condition**	**Photo(s)**
Flooding ▪ The surrounding grade around the dry well access hatch (within the perimeter fence) is all dirt and slopes towards the access hatch. - It appears that this would cause ponding water directly around the access shaft creating muddy conditions during and immediately after a rain event. **Electrical Outages** ▪ No standby power generator or portable generator connection was observed. **Extreme Heat** ▪ Air cooling / temperature control not observed inside electrical enclosures.	Poor	

3.12.4 Hydraulic Assessment

The Lift Station No. 1 hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 4.2 times per hour on average with a maximum of 16 starts per hour. Pump #2 starts approximately 4.2 times per hour on average with a maximum of 19 starts per hour. Both pumps have a similar average number of starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 5 HP, 4-pole (1725 rpm) motor should have a maximum number of 16.3 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed instances where Pump #2's starts per hour has exceeded the NEMA recommended starts per hour. This indicates that the existing operational set points may need to be adjusted to reduce the number of starts per hour. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 100 minutes of run time per day (1,534 total hours) while pump #2 averages approximately 91 minutes of run time per day (1,389 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Lift Station No. 1 force main is a 6" PVC pipe installed in 1975. The condition of the force main is assumed to be poor due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. Lift Station No. 1 is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 6" force main is estimated at approximately 4.5 ft/sec which is in accordance with HI standards.

3.12.5 Recommended Improvements

Since Lift Station No. 1 is currently being designed for replacement and relocation, there are no recommendations for this site.

3.13 Buena Vista Lift Station

3.13.1 Location and Layout

The Buena Vista Lift Station is to the southeast of the intersection of Imperial Avenue and Manuel Ortiz Avenue. The lift station is a self-priming duplex station with lift up fiberglass enclosure located within a block wall site. A fenced gate along the frontage of imperial avenue provides access to the site. Parking can be found directly to the west of the facility between Imperial Avenue and the lift station.



Figure 207: Buena Vista Lift Station Location



Figure 208: Buena Vista Lift Station Layout

3.13.2 System Characteristics

3.13.2.1 Pump Station

A summary of the pumping units for Buena Vista LS is provided on Table 51, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 52.

Table 51. Buena Vista Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Unknown	Unknown
Pump Type	Self Priming	Self Priming
Pump Mount	N/A	
Design Capacity	369 gpm @ 27’ TDH	
Motor, hp	7.5	
Motor Operation	Constant Speed	
Speed, rpm	1750	
Discharge Diameter, inches	4	
Year Installed	2006	

Table 52. Buena Vista Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete
Diameter, feet	8
Depth, feet	22
Floor Elevation, feet	-45.5
Influent Sewer Invert, feet	-39.5
Cover/Hatch Type	24” Manhole
Bypass Assembly	
Valve Location	Above grade fiberglass enclosure
Bypass Connection	Yes
Force Main	
Diameter, inches	8
Length, feet	132
Material	PVC

3.13.2.2 Operations and Maintenance History

There were no operational concerns reported at this facility.

3.13.3 Inspection Summary

Dudek performed a wet well assessment for the Buena Vista Lift Station. Table 53 contains observations made during the February 13, 2025 wet well condition assessment and information provided by the City during the pre- and post-inspection workshops.

Although a comprehensive inspection was not performed at Buena Vista LS, it is assumed that the facility follows the trends observed at other facilities including electrical code violations, missing arc flash studies and warning labels, absence of emergency generators or receptacles, and lack of bypass pumping connections.

Table 53. Buena Vista Lift Station Inspection Summary

Structural	Condition	Photo(s)
Wet Well ▪ Manhole lid and ring were observed to be moderate to severely corroded. ▪ PVC suction and discharge piping are in good condition. ▪ Liner beginning to fail at discharge line wet well penetration. ▪ Flexible conduits exposed to the outdoors have completely failed. ▪ There are no conduit seal offs installed on conduits leaving the wet well, which allows hazardous gases into the electrical equipment and enclosure. ▪ The wet well manhole cover and level sensor penetration are right up against the green enclosure and it is assumed that the green enclosure is not sealed to keep gases out. This would require classifying the green enclosure area as a hazardous location and relocating all electrical and control equipment out of the green enclosure and away from the wet well per NFPA 820. ▪ The location of the utility service meter pedestal compared to the green enclosure location should be reviewed to ensure compliance with NFPA 820. ▪ Force main bypass connection located in the street.	Good	 **Figure 209:** Buena Vista Lift Station Wet Well  **Figure 210:** Buena Vista Lift Station Wet Well Access

3.13.4 Hydraulic Assessment

The Buena Vista Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 3.4 times per hour on average with a maximum of 11 starts per hour. Pump #2 starts approximately 3.8 times per hour on average with a maximum of 12 starts per hour. Both pumps have a similar average number of starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 7.5 HP, 4-pole (1750 rpm) motor

should have a maximum number of 13.9 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed that both pumps are in compliance with the NEMA recommended number of starts per hour.

Pump #1 averages 161 minutes of run time per day (2,455 total hours) while pump #2 averages approximately 169 minutes of run time per day (2,570 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Legacy Lift Station force main is a 8" PVC pipe installed in 2006. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. Buena Vista Lift Station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 8" force main is estimated at approximately 2.4 ft/sec which is in accordance with HI standards.

3.13.5 Recommended Improvements

Recommended improvements were developed for Buena Vista LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 54.

Table 54. East Side Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk	Associated Project (Term)
EI&C	Install Intrusion Switches	Intrusion switches are not currently installed on the electrical equipment, generator enclosure, SCADA equipment, MCC enclosure, and dry well hatch. It is recommended to install intrusion switches for SCADA notification to prevent unauthorized access and tampering of lift station equipment.	Safety Risk/ Security Risk	Buena Vista Lift Station Rehabilitation (Mid-term)
Structural	Replace Wet Well Access Cover	The existing wet well access manhole frame and cover were observed to be moderately to severely corroded introducing a safety risk for operations. It is recommended to replace the wet well access cover with new hatches that are equipped with integrated fall protection, slam lock, and lift assist. Alternatively, a composite manhole cover can be retrofitted around the existing access cover frame to mitigate the immediate safety concern.	Injury Risk/ Operational Failure	Buena Vista Lift Station Rehabilitation (Mid-term)
Structural	Wet Well Liner Spot Repairs	The wet well liner is beginning to fail at discharge line wet well penetration.	Concrete Degradation	Buena Vista Lift Station Rehabilitation (Mid-term)

3.14 East Side Lift Station

3.14.1 Location

The East Side Lift Station is located to the southeast of the intersection of North 3rd Street and West Commercial Avenue. The lift station is a large wet well facility with an electrical building and a valve and metering vault within a fenced site. Access to this lift station is a gated fence on the south side of West Commercial Avenue. There is parking within the facility perimeter.

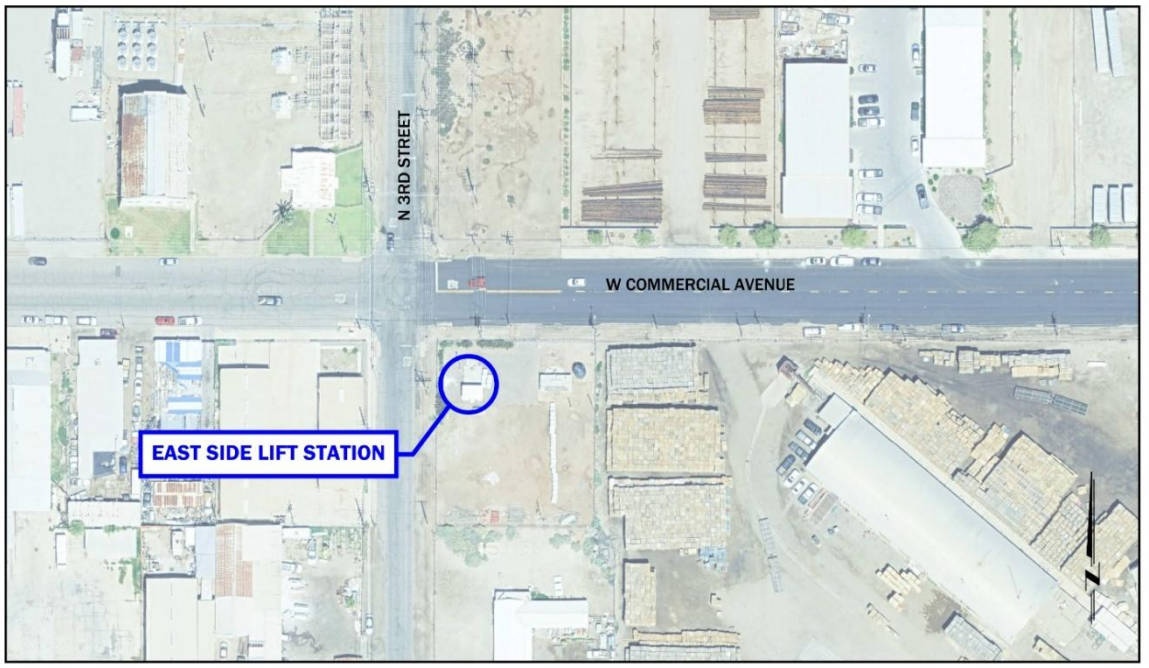


Figure 211: East Side Lift Station Location

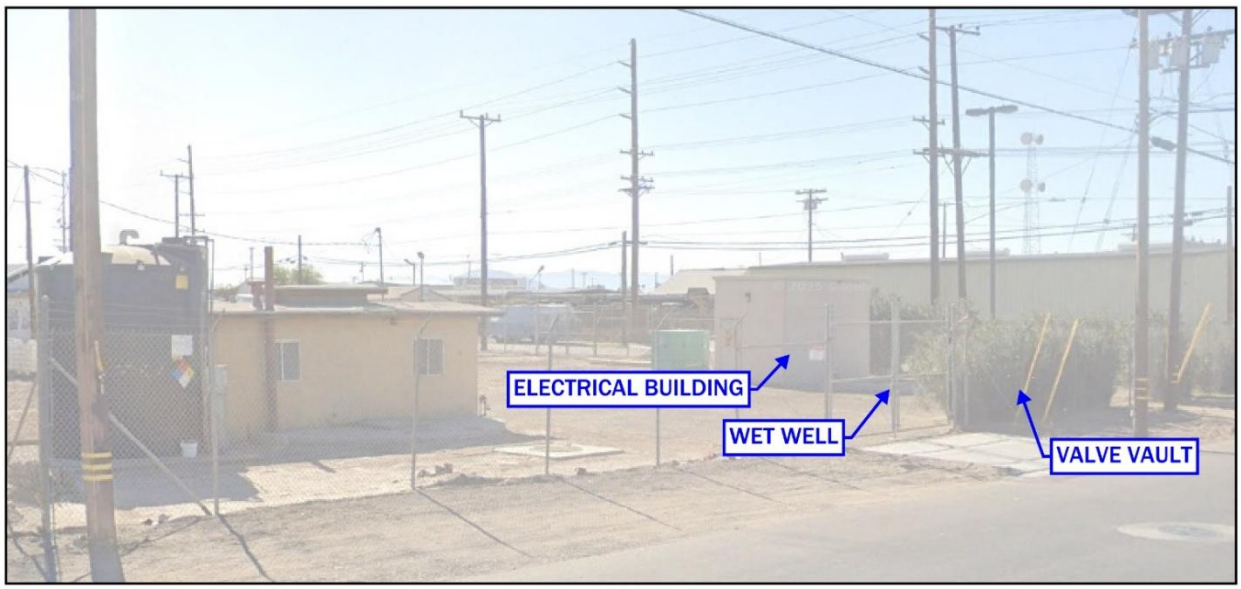


Figure 212: East Side Lift Station Layour

3.14.2 System Characteristics

3.14.2.1 Pump Station

A summary of the pumping units for East Side LS is provided on Table 55, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 56.

Table 55. East Side Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Vaughan SE6U3	Vaughan SE6U3
Pump Type	Dry well	Dry well
Pump Mount	N/A	
Design Capacity	1132 gpm @ 216’ TDH	
Motor, hp	125	
Motor Operation	Constant Speed or VFD	
Speed, rpm	unknown	
Discharge Diameter, inches	4	
Year Installed	1913. Lift Station replaced in 2007.	

Table 56. East Side Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Lined precast concrete
Diameter, feet	10
Depth, feet	27.4
Floor Elevation, feet	-26.9
Influent Sewer Invert, feet	-19.6
Cover/Hatch Type	(2) 48” x 48” hatches
Dry Well Size, feet	35.33 x 20
Valve Vault	
Dimensions, feet	6 x 8
Material	Precast concrete
Depth, feet	4.2
Cover/Hatch Type	8’ x 6’ Double leaf aluminum hatch
Bypass Assembly	
Valve Location	N/A
Bypass Connection	None
Force Main	
Diameter, inches	10
Length, feet	68
Material	PVC

3.14.2.2 Operations and Maintenance History

There were no operational concerns reported at this facility.

3.14.3 Inspection Summary

Dudek performed a wet well assessment for the East Side Lift Station. Table 57 contains observations made during the February 13, 2025 wet well condition assessment and information provided by the City during the pre- and post-inspection workshops.

Although a comprehensive inspection was not performed at East Side LS, it is assumed that the facility follows the trends observed at other facilities including electrical code violations, missing arc flash studies and warning labels, absence of emergency generators or receptacles, and lack of bypass pumping connections.

Table 57. East Side Lift Station Inspection Summary

Structural	Condition	Photo(s)
Wet Well ▪ Liner beginning to fail at liner termination and various points throughout the wet well. Several holes and bulging observed. - Unable to determine concrete condition behind liner. ▪ Ductile iron suction piping fittings are observed to be moderately corroded. - Significant corrosion at the flanged interface between PVC and ductile iron piping. ▪ Ultrasonic pump control. No high water floats at this site. ▪ Integral fall protection observed at the wet well access hatch and is in good condition. - Protection grating coating has begun delaminating and grating has minor corrosion. - The hatches and framing were observed to be in excellent condition. ▪ Submersible pumps were not pulled for assessment during field inspections.	Good	 **Figure 213:** East Side Lift Station Wet Well  **Figure 214:** East Side Lift Station Wet Well Access Hatch

3.14.4 Hydraulic Assessment

The East Side Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 2.1 times per hour on average with a maximum of 10 starts per hour. Pump #2 starts approximately 2.0 times per hour on average with a maximum of 28 starts per hour. Both pumps have a similar average number of starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 15 HP, 6-pole (1160 rpm) motor should have a maximum number of 12.1 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed instances where Pump #2's starts per hour has exceeded the NEMA recommended starts per hour. This indicates that the existing operational set points may need to be adjusted to reduce the number of starts per hour. Note that newer motor models are capable of exceeding NEMAs recommended maximum starts per hour and therefore acceptance varies per motor manufacturer.

Pump #1 averages 160 minutes of run time per day (2,439 total hours) while pump #2 averages approximately 163 minutes of run time per day (2,480 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing East Side Lift Station force main is a 10" PVC pipe installed in 2007. The condition of the force main is assumed to be good due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. East Side Lift station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 10" force main is estimated at approximately 4.1 ft/sec which is in accordance with HI standards.

3.14.5 Recommended Improvements

Recommended improvements were developed for East Side LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 58.

Table 58. East Side Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/Risk	Associated Project (Term)
E&IC/ Mechanical	Install Backup Level Element in Wet Well	This lift station is not equipped with backup mechanical floats. It is recommended to install a secondary level element in the event the existing ultrasonic level transducer fail.	Increased SSO Potential	East Side Lift Station Rehabilitation (Mid-term)
Mechanical	Replace Existing Suction Piping within Wet Well	Ductile iron suction piping fittings are observed to be moderately corroded. Significant corrosion at the flanged interface between PVC and ductile iron piping.	Operational Failure	East Side Lift Station Rehabilitation (Mid-term)
Mechanical	Install Lift Station Bypass Connection	There is no existing bypass connection for this lift station. It is recommended to install a force main bypass connection in the event of a lift station failure.	Increased SSO Potential	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Replace Wet Well Liner	Several holes and signs of liner separating from concrete were observed in the existing wet well.	Operational Failure	East Side Lift Station Rehabilitation (Mid-term)

3.15 Heil & Dogwood Lift Station

3.15.1 Location

The Heil & Dogwood Lift Station is located to the northeast of the intersection of South Dogwood Road and East Heil Avenue. The lift station is a large wet well facility with an electrical building and a valve and metering vault within a fenced site. Parking can be found in the dirt parking lot to the north of the lift station.

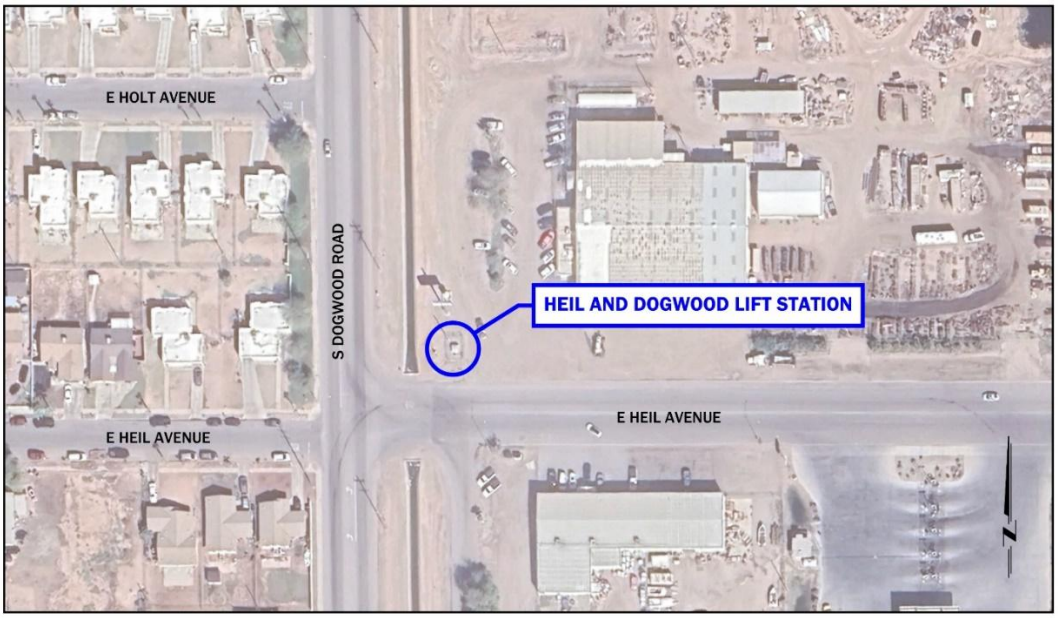


Figure 215: Heil & Dogwood Lift Station Location



Figure 216: Heil & Dogwood Lift Station Layout

3.15.2 System Characteristics

3.15.2.1 Pump Station

A summary of the pumping units for Heil & Dogwood LS is provided on Table 59, which includes the number of pumps, pump model, pump type, design capacity, motor size, speed, discharge diameter, and year installed. Similarly, all onsite structures (e.g., wet well, dry well) and force main are summarized on Table 60.

Table 59. Heil & Dogwood Lift Station Pumping Units

Pump Characteristic	Pump No.	
	Pump 1	Pump 2
Pump Model	Gorman Rupp T4A3-B	Gorman Rupp T4A3-B
Pump Type	Self Priming	Self Priming
Pump Mount	N/A	
Design Capacity	250 gpm @ 25' TDH	
Motor, hp	5	
Motor Operation	Constant Speed	
Speed, rpm	1050	
Discharge Diameter, inches	4	
Year Installed	1998	

Table 60. Heil & Dogwood Lift Station Structures and Force Main Characteristics

Structure Characteristic	Description
Wet Well	
Material	Precast concrete
Diameter, feet	5.5
Depth, feet	20.5
Floor Elevation, feet	-65.5
Influent Sewer Invert, feet	-59.0
Cover/Hatch Type	24" Manhole
Bypass Assembly	
Valve Location	Above grade fiberglass enclosure
Bypass Connection	Yes
Force Main	
Diameter, inches	6
Length, feet	174
Material	PVC

3.15.2.2 Operations and Maintenance History

There were no operational concerns reported at this facility.

3.15.3 Inspection Summary

Dudek performed a wet well assessment for the Heil & Dogwood Lift Station. Table 61 contains observations made during the February 13, 2025 wet well condition assessment and information provided by the City during the pre- and post-inspection workshops.

Although a comprehensive inspection was not performed at Heil & Dogwood LS, it is assumed that the facility follows the trends observed at other facilities including electrical code violations, missing arc flash studies and warning labels, absence of emergency generators or receptacles, and lack of bypass pumping connections.

Table 61. Heil & Dogwood Lift Station Inspection Summary

Structural	Condition	Photo(s)
Wet Well ▪ Wet well wall concrete is in good condition. - Spalling observed at penetrations. - Ductile iron vent top slab penetration is severely corroded. ▪ Wet well top slab is spalling and sections of concrete may fall and damage pumps. - Loss of concrete compromises top slab integrity is a safety concern ▪ Piping within wet well is severely corroded, rusted, and has significant structural deficiencies observed. Potential for catastrophic failure. ▪ Wet well access manhole and manhole ring are moderately corroded. - No integral fall protection observed at the wet well access manhole. ▪ Force main bypass connection located in the street. ▪ Operations reported that this site experiences strong oil odors occasionally. - This lift station is located in an industrial zone which may be the source of this odor.	Fair	 **Figure 217:** Heil and Dogwood Lift Station Wet Well  **Figure 218:** Heil and Dogwood Lift Station Wet Well Access

3.15.4 Hydraulic Assessment

The Heil & Dogwood Lift Station hydraulic assessment is based on pump start and run time data recorded between June 2022 and December 2024. Additionally, the assessment will determine if the approximated force main flow velocity is in accordance with HI standards. Pump #1 starts approximately 0.3 times per hour on average with a maximum of 11 starts per hour. Pump #2 starts approximately 0.3 times per hour on average with a maximum of 5 starts per hour. Both pumps have a similar average number of starts per hour. Based on NEMA's recommendations for the maximum allowable number of motor starts per hour, a 5 HP, 6-pole (1050 rpm) motor should have a maximum number of 18.4 motor starts per hour. Based on the provided SCADA data that was reviewed, we observed that both pumps are in compliance with NEMA's recommended number of starts per hour.

Pump #1 averages 31.0 minutes of run time per day (472 total hours) while pump #2 averages approximately 24.1 minutes of run time per day (368 total hours). This data indicates that the pumps run times are comparable.

A hydraulic evaluation of the existing force main was conducted to determine if the approximated force main flow velocity is in accordance with HI standards. The HI standards for force main velocity include a recommended range of 2 to 8 ft/s for standard wastewater applications. A minimum velocity of 2 ft/s is generally recommended to keep solids in suspension.

The existing Heil & Dogwood Lift Station force main is a 6" PVC pipe installed in 1993. The force main condition is assumed to be fair due to the age of the force main. The industry standard useful life of PVC is approximately 50 years. Heil & Dogwood Lift Station is a duplex lift station that is assumed to operate in a duty/standby configuration. With one pump in operation, the flow velocity through this existing 6" force main is estimated at approximately 2.8 ft/sec which is in accordance with HI standards.

3.15.5 Recommended Improvements

Recommended improvements were developed for Heil & Dogwood LS based on the findings from the lift station inspection and hydraulic assessment. A summary of the recommended improvements is provided in Table 62.

Table 62. Heil & Dogwood Lift Station Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk	Associated Project (Term)
Mechanical	Replace Existing Piping within Wet Well	Piping within wet well is severely corroded, rusted, and has significant structural deficiencies observed. Potential for catastrophic failure.	Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 1 (Near-term)
Structural	Install Wet Well Liner	The wet well was observed to have no liner protecting the concrete from the corrosive environment within the wet well.	Concrete Degradation	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Near-term)
Structural	Replace Wet Well Top Slab	Wet well top slab is spalling and sections of concrete may fall and damage pumps. Loss of concrete compromises top slab integrity is a safety concern. Ductile iron vent top slab penetration is severely corroded.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 2

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk	Associated Project (Term)
				(Near-term)
Structural	Replace Wet Well Access Cover	The existing wet well access manhole frame and cover were observed to be moderately to severely corroded introducing a safety risk for operations. It is recommended to replace the wet well access cover with new hatches that are equipped with integrated fall protection, slam lock, and lift assist. Alternatively, a composite manhole cover can be retrofitted around the existing access cover frame to mitigate the immediate safety concern.	Injury Risk/ Operational Failure	Structures, Hatches / Doors and Bypass Connection Program – Phase 2 (Near-term)

4 Recommended Improvement Projects

A summary of the scheduled improvements and operational changes, and recommended lift station capital improvement projects is provided in Section 4.

4.1 Scheduled Lift Station Improvements and Operational Changes

The City identified several scheduled or ongoing improvements and operational changes that will be completed within the next two years. Accordingly, these improvements have been excluded from the Lift Station CIP to avoid redundant recommendations. The ongoing improvements, scheduled improvements, and operational changes are summarized in Table 63.

Table 63. Scheduled Lift Station Improvements and Operational Changes

Lift Station Site	Type	Description	Estimated Timeline for Completion
Southern Lift Station (New)	Ongoing Improvement	The lift station is under construction and is intended to replace three of the City's existing lift stations	FY 2025
3rd & Ross Lift Station	Scheduled Improvement	The wet well is scheduled to be rehabilitation	FY 2025
Lift Station No. 1	Scheduled Improvement	Full lift station replacement and relocation	FY 2026
Countryside Lift Station	Operational Change	The lift station is planned for decommission	FY 2025

4.2 General Recommended Improvements

Listed below are several general improvements that are recommended to be implemented across nearly all lift stations:

- Replacement of access hatches, covers, and doors or doorways
- Implement improvements to conform to the requirements of NFPA 820 and NEC 500
- Perform third-party testing on electrical equipment and breakers
- Improve cellular connection at each lift station
- All ultrasonic level elements within wet wells shall be properly mounted
    - At majority of lift station sites, ultrasonic level sensors were hung by the manufacturer's cable which can cause strain and premature cable failure

- Perform power system study that includes short circuit analysis, coordination, and arc flash analysis and install Arc flash stickers on all electrical equipment at each lift station
- Relocate all electrical and controls equipment outside of hazardous envelopes
- Install sealing fittings, or seal-offs, on all conduits that exit wet wells and that exit hazardous envelopes at each site
  - This is a safety hazard due to the possibility of H_2S gases leaking into, and accumulating inside of, electrical panels or enclosures that have equipment that is not spark-proof or explosion-proof
- Relocate conduit penetrations for float switches and level sensors outside of equipment enclosures that have electrical and controls equipment in them.
  - This is a safety hazard due to the possibility of H2S gases leaking into, and accumulating inside of, electrical panels or enclosures that have equipment that is not spark-proof or explosion-proof
  - An alternate solution is to move all electrical and controls equipment out of pump enclosure and out of hazardous envelope
- Install an on-site water connection for all sites to provide a water supply for site wash-down
- Install bypass connections for all lift station sites that do not currently have one

These improvements will enhance safety and reliability at each lift station.

4.3 Lift Station CIP Projects

In addition to the City's lift station ongoing improvements, scheduled improvements, and operational changes described in Section 4.1, Dudek's evaluation and assessment identified additional recommendations aimed at further enhancing the performance, reliability, operability, and longevity of the City's lift stations. The recommendations identified throughout Section 3 were grouped into capital improvement projects and aim to address observed deficiencies, operational nuisances, and potential safety or security risks that were identified during the field inspections and through conversations with the City's operation staff for each site. A general description and prioritization ranking of the Lift Station CIP projects is presented in Table 64. The prioritization of the Lift Station CIP projects is discussed in further detail in Section 4.3.1.

Table 64. Recommended Lift Station CIP Projects

Project No.	Project Name	Prioritization Rank	Description[1]
LSP.01	Structures, Hatches / Doors, and Bypass Connection Program – Phase 1	1	Phase 1 of a replacement and rehabilitation program focused on the replacement or rehabilitation of high priority structures, hatches/doors, and bypass connections.
LSP.02	Arc Flash / Short Circuit Study	2	A program focused on the completion of power system studies and updating Arc Flash labeling.
LSP.03	Testing and Studies Program	3	A program focused on enhancing the evaluation of seismic and electrical resiliency at Main LS, Lift Station No. 3, and Alder Canal - Villa Ave LS.
LSP.04	Instrumentation and Control Program - Phase 1	4	Phase 1 of a program focused on the replacement and upgrade of critical electrical and controls equipment.
LSP.05	Force Main Program - Phase 1	5	Phase 1 of a program focused on replacing critical force mains to address existing operational challenges and capacity limitations. Phase 1 targets deficiencies at Lift Station No. 3.
LSP.06	Power and Generator Program	6	A program focused on improving reliability of lift station power systems through the installation of permanent backup generators or portable generator transfer switch.
LSP.07	Structures, Hatches / Doors and Bypass Connection Program - Phase 2	7	Phase 2 of a replacement and rehabilitation program focused on the replacement or rehabilitation of moderate priority structures, hatches/doors, and bypass connections.
LSP.08	Instrumentation and Control Program - Phase 2	8	Phase 2 of a program focused on the replacement and upgrade of critical electrical and controls equipment.
LSP.09	Pumps, Piping, Supports, and HVAC Program	9	A program focused on critical mechanical and ventilation improvements.
LSP.10	Main Lift Station Rehabilitation Project	10	A project focused on the Main LS assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.
LSP.11	East Side Lift Station Rehabilitation Project	11	A project focused on the East Side LS assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.
LSP.12	Buena Vista Lift Station Rehabilitation Project	12	A project focused on the Buena Vista LS assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.
LSP.13	Legacy Lift Station Decommissioning Project	13	A project focused on the decommission of Legacy LS, in accordance with the new Southern Lift Station being brought online.

Table 64. Recommended Lift Station CIP Projects

Project No.	Project Name	Prioritization Rank	Description[1]
LSP.14	4th & Wake Lift Station Decommissioning Project	14	A project focused on the decommission of 4th & Wake LS, in accordance with the new Southern Lift Station being brought online.
LSP.15	Force Main Program - Phase 2	15	Phase 2 of a program focused on replacing critical force mains to address existing operational challenges and capacity limitations. Phase 1 targets deficiencies at Alder Canal - Villa Ave LS.
LSP.16	Gios Lift Station Rehabilitation Project	16	A project focused on the Gios LS assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.
LSP.17	Lift Station No. 3 Rehabilitation Project	17	A project focused on the Lift Station No. 3 assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.
LSP.18	8th & Wake Lift Station Rehabilitation Project	18	A project focused on the 8th & Wake LS assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.
LSP.19	Alder Canal - Villa Ave Lift Station Rehabilitation Project	19	A project focused on the Alder Canal - Villa Ave assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.
LSP.20	3rd & Ross Lift Station Rehabilitation Project	20	A project focused on the 3rd & Ross LS assets that require rehabilitation or replacement and are not included in the preceding Lift Station CIP projects.

1. *For more detailed Lift Station CIP project descriptions, refer to Attachment A: Lift Station CIP Project Cutsheets.*

4.3.1 Project Prioritization

Project prioritization scores were developed at the asset, asset discipline, and project level. Each asset was evaluated for criticality, risk of injury, condition, and remaining useful life. These ratings were weighted by relative importance and combined to generate a total asset score.

For each project, asset discipline scores (mechanical, structural, site civil, and electrical/instrumentation) were calculated by averaging the total asset scores of all assets within that discipline. The discipline scores were then averaged to produce a total project score, which was further weighted by project criticality. The resulting weighted project prioritization score established the relative priority of each project. The Lift Station CIP project prioritization scoring methodology is outlined on Figure 219. The results of the prioritization ranking are shown in Table 64.

The calculated prioritization scores were used to identify three distinct tiers and split the projects into near-term, mid-term, and long-term priority timelines. The priority timeline assignments also considered the City's input on available resources (e.g., funds, staff) and the City's risk tolerance.

It is important to note that maintenance improvements were separated from the Lift Station CIP, as they are routine in nature and expected to be addressed by the City's Operations and Maintenance (O&M) staff rather than through capital projects. The following subsection describes the near-term, mid-term, and long-term priority timelines in more detail.

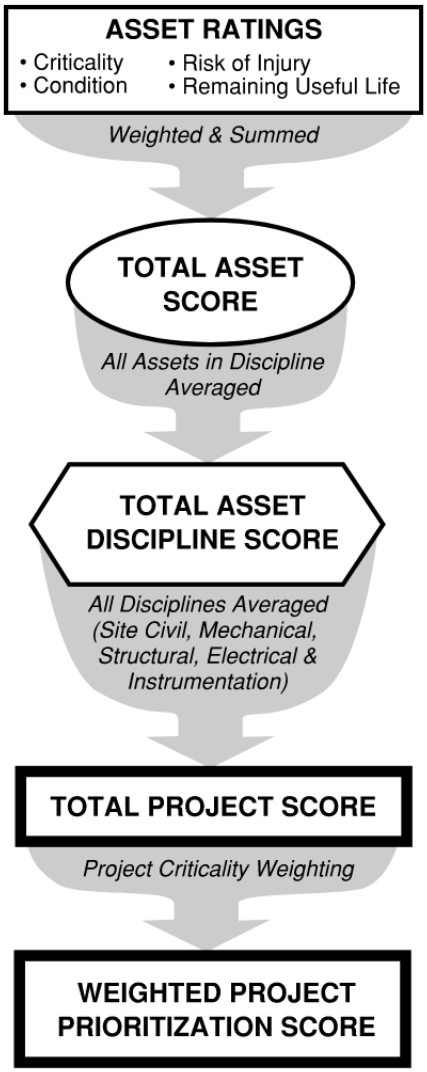


Figure 219. Lift Station CIP Project Prioritization Methodology

4.3.1.1 Maintenance Improvements

Maintenance projects consist of improvements that can be carried out by the City's operations and maintenance staff. These improvements tend to include proactive actions intended to extend the useful life of a lift station and its component asset. Maintenance improvements can also include reactive actions which mitigate an existing issue or violation. Maintenance improvements have not been included in a Lift Station CIP project due to the nature of the action.

4.3.1.2 Near-Term Projects

Near-term Lift Station CIP projects are high priority projects that should be completed in the next two to five years, or FY 2027 to FY 2030. The majority of appurtenances within these projects are in poor condition. Based on the lift station condition assessment and prioritization summarized in Table 64, the following prioritization of the near-term projects was developed:

1. Structures, Hatches / Doors, and Bypass Connection Program – Phase 1
2. Arc Flash / Short Circuit Study
3. Testing and Studies Program
4. Instrumentation and Control Program - Phase 1
5. Force Main Program - Phase 1
6. Power and Generator Program

4.3.1.3 Mid-Term Projects

Mid-term Lift Station CIP projects are moderate priority projects that should be completed in the next six to nine years, or FY 2031 to FY 2034. The majority of appurtenances within these projects are in fair condition. Based on the lift station condition assessment and prioritization summarized in Table 64, the following prioritization of the mid-term projects was developed:

1. Structures, Hatches / Doors and Bypass Connection Program - Phase 2
2. Instrumentation and Control Program - Phase 2
3. Pumps, Piping, Supports, and HVAC Program
4. Main Lift Station Rehabilitation Project
5. East Side Lift Station Rehabilitation Project
6. Buena Vista Lift Station Rehabilitation Project
7. Legacy Lift Station Decommissioning Project
8. 4th & Wake Lift Station Decommissioning Project
9. Force Main Program - Phase 2

4.3.1.4 Long-Term Projects

Long-term Lift Station CIP projects are low priority projects or improvements that should be completed in the next ten years to twenty years, or FY 2035-46. The majority of appurtenances within these projects are in either fair or good condition. Based on the lift station condition assessment and prioritization summarized in Table 64, the following prioritization of the long-term projects was developed:

1. Gios Lift Station Rehabilitation Project
2. Lift Station No. 3 Rehabilitation Project
3. 8th & Wake Lift Station Rehabilitation Project
4. Alder Canal - Villa Ave Lift Station Rehabilitation Project
5. 3rd & Ross Lift Station Rehabilitation Project

4.3.2 Project Cost Estimation

As part of this condition assessment, preliminary cost estimates were prepared to help the City plan for the Lift Station CIP projects. The estimates are planning-level (Class 4–5) and are intended to provide order-of-magnitude costs that can be carried forward into the Lift Station CIP. Numbers were developed using a mix of recent bid results, unit cost information from similar work in the region, vendor budget quotes, and engineering judgment.

Each Lift Station CIP project cost estimate includes:

- Construction Cost – Major equipment replacement (e.g., pumps, generators, control panels), wet well and structural rehabilitation, mechanical appurtenances, and site civil/electrical work.
- Soft Costs – Engineering, construction management and administrative services were estimated at 15 to 40 percent of construction costs.
- Contingency – Applied at 40 percent to account for uncertainties typical of preliminary planning-level estimates.

The level of soft costs applied depends on the complexity of the project and the amount of design and construction oversight required. Projects that involve significant design effort or carry higher uncertainty in construction were assigned the highest soft cost allowance at 40 percent of construction costs (Soft Cost Class C). Simpler projects were assigned lower soft cost allowance (i.e., Soft Cost Classes A, B, and D). A summary of the soft cost markups used for the Lift Station CIP projects is provided in Table 65.

All costs were calculated in 2025 dollars and were escalated annually to the project midpoint using an assumed inflation rate. The Lift Station CIP project cost distribution is discussed in more detail in Section 4.3.3.

Table 65. Lift Station CIP Projects Soft Cost Markup as Percent of Construction Costs

Markup Category	Soft Cost Class			
	A	B	C	D
Engineering	8%	10%	15%	5%
Construction Management & Engineering Services during Construction	15%	18%	20%	5%
Administration	2%	3%	5%	5%
Total	**25%**	**31%**	**40%**	**15%**

4.3.3 Project Cost Distribution

Lift Station CIP project costs were distributed according to the priorities discussed above and are displayed on Figure 220. Refer to Section 4.3 for Lift Station CIP project prioritization timelines and definitions. Project costs were spread over a two-year period. Approximately 15 percent of the total project cost was assigned to the first year to account for engineering and design and the remaining balance was allocated to the second year for construction. All costs were escalated to the project midpoint from 2025 using an assumed annual inflation rate of 3 percent.

Over 90 percent of the total Lift Station CIP project costs are included within the near-term and mid-term timeframes due to the investment required to address critical deficiencies. The spike on FY 2034 is due to the high costs associated with LSP.15 (Force Main Program – Phase 2), which accounts for approximately on third of the total Lift Station CIP cost. Costs for individual Lift Station CIP projects are summarized in Section 4.3.4.

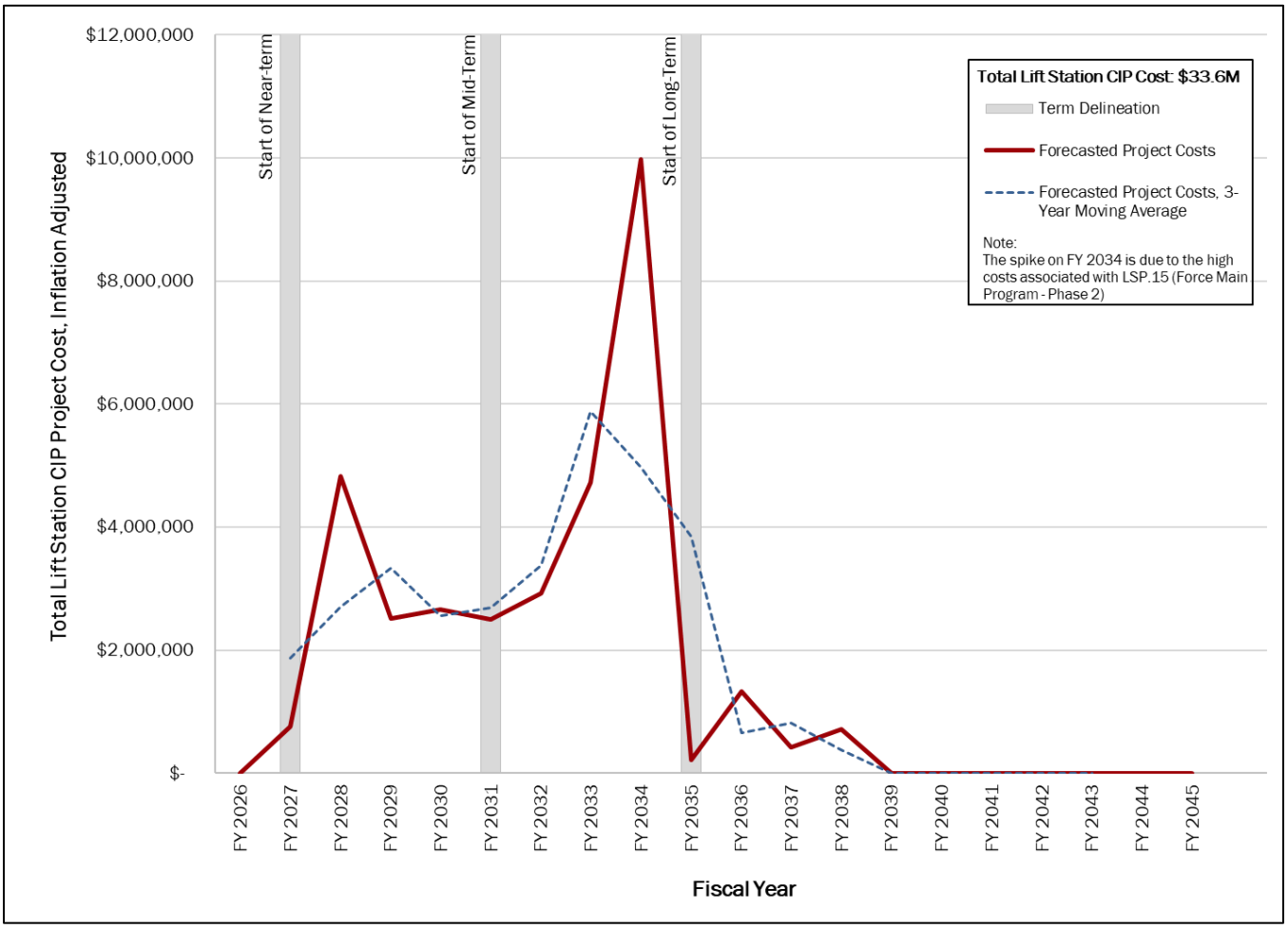


Figure 220: Lift Station CIP Total Project Cost Distribution

4.3.4 Summary of Projects

The Lift Station CIP includes 20 projects that span between FY 2027 to FY 2038 and totals $33.6M, with individual projects ranging from approximately $0.1M to $10.8M. Cutsheets for each Lift Station CIP project are provided in Attachment A and a summary of the Lift Station CIP Projects is provided in Table 66.

Table 66. Lift Station CIP Project List

Project No.	Project Name	Priority	Total Project Cost (Rounded)	Total Project Cost												
				FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038
LSP.01	Structures, Hatches / Doors and Bypass Connection Program - Phase 1	NT	$ 5,225,000		$ 764,000	$ 4,459,000										
LSP.02	Arc Flash / Short Circuit Study Program	NT	$ 225,000			$ 33,000	$ 195,000									
LSP.03	Testing and Studies Program	NT	$ 225,000			$ 34,000	$ 197,000									
LSP.04	Instrumentation and Control Program - Phase 1	NT	$ 2,025,000			$ 297,000	$ 1,732,000									
LSP.05	Force Main Program - Phase 1	NT	$ 1,550,000				$ 226,000	$ 1,317,000								
LSP.06	Power and Generator Program	NT	$ 1,150,000				$ 168,000	$ 983,000								
LSP.07	Structures, Hatches / Doors and Bypass Connection Program - Phase 2	MT	$ 2,450,000					$ 358,000	$ 2,089,000							
LSP.08	Instrumentation and Control Program - Phase 2	MT	$ 1,725,000						$ 253,000	$ 1,476,000						
LSP.09	Pumps, Piping, Supports, and HVAC Program	MT	$ 1,100,000						$ 160,000	$ 931,000						
LSP.10	Main Lift Station Rehabilitation Project	MT	$ 2,025,000							$ 295,000	$ 1,724,000					
LSP.11	East Side Lift Station Rehabilitation Project	MT	$ 325,000							$ 48,000	$ 279,000					
LSP.12	Buena Vista Lift Station Rehabilitation Project	MT	$ 300,000							$ 44,000	$ 259,000					
LSP.13	Legacy Lift Station Decommissioning Project	MT	$ 875,000							$ 129,000	$ 750,000					
LSP.14	4th & Wake Lift Station Decommissioning Project	MT	$ 900,000								$ 132,000	$ 773,000				
LSP.15	Force Main Program - Phase 2	MT	$ 10,800,000								$ 1,578,000	$ 9,210,000				
LSP.16	Gios Lift Station Rehabilitation Project	LT	$ 50,000										$ 6,000	$ 34,000		
LSP.17	Lift Station No. 3 Rehabilitation Project	LT	$ 1,450,000										$ 213,000	$ 1,242,000		
LSP.18	8th & Wake Lift Station Rehabilitation Project	LT	$ 350,000											$ 50,000	$ 294,000	
LSP.19	Alder Canal - Villa Ave Lift Station Rehabilitation Project	LT	$ 750,000												$ 111,000	$ 650,000
LSP.20	3rd & Ross Lift Station Rehabilitation Project	LT	$ 75,000												$ 10,000	$ 59,000
		Total	**$ 33,575,000**	**$ -**	**$ 764,000**	**$ 4,823,000**	**$ 2,518,000**	**$ 2,658,000**	**$ 2,502,000**	**$ 2,923,000**	**$ 4,722,000**	**$ 9,983,000**	**$ 219,000**	**$ 1,326,000**	**$ 415,000**	**$ 709,000**

Attachment A

Lift Station Capital Improvement Program Project Cutsheets

Project No:	**LSP.01**				
Project Name:	**Structures, Hatches / Doors and Bypass Connection Program - Phase 1**				
Description:	This program will address near term rehabilitation and replacement of structural components at lift stations to improve safety, reliability, and long-term performance. Improvements include rehabilitation of wet wells, access hatches and doors, replacement of wet well piping and pipe supports, rehabilitation of wet well liners, replacement of access stairs, replacement of wet well access covers, and wall penetration patching and related structural improvements. The specific scope will vary by facility based on condition assessments, but implementation of this program will extend service life of key structures, improve maintainability, and ensure compliance with safety standards. Additionally, this program involves installing permanent bypass pumping connections at all lift stations that currently lack this critical feature. The bypass assemblies will provide quick and reliable access points for temporary pumps during planned maintenance or emergency events, minimizing the risk of sanitary sewer overflows and service disruptions.				
Priority:	Near-term	**Funding:**	WW		
Location/Facility:	East Side LS, Alder Canal - Villa Ave LS, Countryside LS, Legacy LS, Main LS, Orange LS, 4th & Wake LS, 8th & Wake LS, 3rd & Ross LS Gios LS, Heil & Dogwood LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement	X	Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study		Operations Assessment			
Expansion		Failure Modes & Consequences			

Project Cost:					
Construction Costs:					
General				$	-
Site Civil & Mechanical				$	1,469,000
Structural				$	-
Electrical, Instrumentation & Controls				$	313,000
Equipment				$	1,066,000
Construction Cost Subtotal:				**$**	**2,848,000**
Soft Costs:					
Classification 'B'					
Engineering	10 %	of capital costs		$	285,000
CM & ESDC	18 %	of capital costs		$	513,000
Administration	3 %	of capital costs		$	85,000
Soft Cost Subtotal:				**$**	**883,000**
Contingency:					
Contingency	40 %	of project cost		$	1,492,000
Total Project Cost:				**$**	**5,223,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2027
Project Duration (Years):	2
Comments:	

Project No:	**LSP.02**
Project Name:	**Arc Flash / Short Circuit Study Program**
Description:	This program will improve electrical safety at lift stations through the completion of power system studies and the application of updated arc flash labeling. The work will include short circuit and coordination analyses to confirm system protection settings, along with installation of arc flash hazard warning stickers at eight lift stations. Implementation of this program will enhance worker safety, ensure compliance with electrical safety standards, and reduce risks associated with maintenance and emergency response activities.
Priority:	Near-term **Funding:** WW
Location/Facility:	Main LS, Lift Station No. 3, Countryside LS, Legacy LS, Alder Canal - Villa Ave LS, 3rd & Ross LS, 4th & Wake LS, Gios LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement		Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study	X	Operations Assessment	
Expansion		Failure Modes & Consequences	X

Project Cost:				
Construction Costs:				
General			$	116,000
Site Civil & Mechanical			$	-
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**116,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	17,000
CM & ESDC	20 %	of capital costs	$	23,000
Administration	5 %	of capital costs	$	6,000
Soft Cost Subtotal:			**$**	**46,000**
Contingency:				
Contingency	40 %	of project cost	$	66,000
Total Project Cost:			**$**	**228,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2028
Project Duration (Years):	2
Comments:	

Project No:	**LSP.03**
Project Name:	**Testing and Studies Program**
Description:	This program will complete specialized evaluations and third-party testing to improve safety and reliability of lift station facilities. Planned work includes a dry well seismic evaluation at one facility to assess structural resilience and independent testing of motor control centers (MCCs) and breakers at three facilities to verify electrical safety and performance. Implementation of this program will provide critical data to guide future improvements, reduce operational risks, and ensure compliance with applicable safety and reliability standards.
Priority:	Near-term
Funding:	WW
Location/Facility:	Main LS, Lift Station No. 3, Alder Canal - Villa Ave LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement		Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study	X	Operations Assessment	
Expansion		Failure Modes & Consequences	X

Project Cost:				
Construction Costs:				
General			$	92,000
Site Civil & Mechanical			$	-
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	26,000
Construction Cost Subtotal:			**$**	**118,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	18,000
CM & ESDC	20 %	of capital costs	$	24,000
Administration	5 %	of capital costs	$	6,000
Soft Cost Subtotal:			**$**	**48,000**
Contingency:				
Contingency	40 %	of project cost	$	65,000
Total Project Cost:			**$**	**231,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2028
Project Duration (Years):	2
Comments:	

Project No:	**LSP.04**		
Project Name:	**Instrumentation and Control Program - Phase 1**		
Description:	This program will replace and upgrade critical electrical and control systems at lift stations, including programmable logic controllers (PLCs), motor control centers (MCCs), automatic transfer switches (ATSs), variable frequency drives (VFDs), electrical panels, conduits, site lighting, instrumentation, and control panels. The specific improvements will vary by facility based on existing conditions and operational needs, but will generally focus on standardizing equipment, improving reliability, and extending service life. Implementation of this program will enhance operational efficiency, expand remote monitoring and control capabilities, and ensure compliance with current electrical and safety standards across the collection system.		
Priority:	Near-term	**Funding:**	WW
Location/Facility:	4th & Wake LS, Main LS, Gios LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	680,000
Site Civil & Mechanical			$	426,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**1,106,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	111,000
CM & ESDC	18 %	of capital costs	$	199,000
Administration	3 %	of capital costs	$	33,000
Soft Cost Subtotal:			**$**	**343,000**
Contingency:				
Contingency	40 %	of project cost	$	580,000
Total Project Cost:			**$**	**2,029,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2028
Project Duration (Years):	2
Comments:	

Project No:	**LSP.05**				
Project Name:	**Force Main Program - Phase 1**				
Description:	This program will replace downstream force main of Lift Station No. 3 to address existing operational challenges and capacity limitations. The work will include installation of new force mains designed to accommodate current and projected flows, along with all associated bypass pumping required to maintain service during construction. Implementation of this program will resolve hydraulic constraints, improve system reliability, and ensure the collection system can continue to operate effectively under future demand conditions.				
Priority:	Near-term	**Funding:**	WW		
Location/Facility:	Lift Station No. 3				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade	X		Condition Assessment		
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences		

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	173,000
Structural			$	-
Electrical, Instrumentation & Controls			$	668,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**841,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	84,000
CM & ESDC	18 %	of capital costs	$	151,000
Administration	3 %	of capital costs	$	25,000
Soft Cost Subtotal:			**$**	**260,000**
Contingency:				
Contingency	40 %	of project cost	$	442,000
Total Project Cost:			**$**	**1,543,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2029
Project Duration (Years):	2
Comments:	

Project No:	**LSP.06**
Project Name:	**Power and Generator Program**
Description:	This program will improve the reliability of lift station power systems through installation of permanent backup generators and portable generator connectors with transfer switches. Additional improvements include replacement of corroded generator piping, replacement of utility power poles, and replacement of main breakers. The specific scope will vary by facility based on condition assessments, but implementation of this program will enhance system resiliency, reduce the risk of service interruptions, and ensure compliance with electrical and safety standards.
Priority:	Near-term **Funding:** WW
Location/Facility:	Legacy LS, Main LS, 3rd & Ross LS, Alder Canal - Villa Ave LS, Gios LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	X
Facility/Equip Upgrade	X	Condition Assessment	X
Engineering Study		Operations Assessment	X
Expansion		Failure Modes & Consequences	X

Project Cost:				
Construction Costs:				
General			$	177,000
Site Civil & Mechanical			$	451,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**628,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	63,000
CM & ESDC	18 %	of capital costs	$	113,000
Administration	3 %	of capital costs	$	19,000
Soft Cost Subtotal:			**$**	**195,000**
Contingency:				
Contingency	40 %	of project cost	$	328,000
Total Project Cost:			**$**	**1,151,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2029
Project Duration (Years):	2
Comments:	

Project No:	**LSP.07**
Project Name:	**Structures, Hatches / Doors and Bypass Connection Program - Phase 2**
Description:	This program will address mid term rehabilitation and replacement of structural components at lift stations to improve safety, reliability, and long-term performance. Improvements include rehabilitation of wet wells, access hatches and doors, replacement of wet well piping and pipe supports, rehabilitation of wet well liners, replacement of access stairs, replacement of wet well access covers, and wall penetration patching and related structural improvements. The specific scope will vary by facility based on condition assessments, but implementation of this program will extend service life of key structures, improve maintainability, and ensure compliance with safety standards. Additionally, this program involves installing permanent bypass pumping connections at all lift stations that currently lack this critical feature. The bypass assemblies will provide quick and reliable access points for temporary pumps during planned maintenance or emergency events, minimizing the risk of sanitary sewer overflows and service disruptions.
Priority:	Mid-term **Funding:** WW
Location/Facility:	8th & Wake LS, 3rd & Ross LS, Heil & Dogwood LS, Lift Station No. 3, Alder Canal - Villa Ave LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	594,000
Structural			$	-
Electrical, Instrumentation & Controls			$	119,000
Equipment			$	621,000
Construction Cost Subtotal:			**$**	**1,334,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	133,000
CM & ESDC	18 %	of capital costs	$	240,000
Administration	3 %	of capital costs	$	40,000
Soft Cost Subtotal:			**$**	**413,000**
Contingency:				
Contingency	40 %	of project cost	$	700,000
Total Project Cost:			**$**	**2,447,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2030
Project Duration (Years):	2
Comments:	

Project No:	**LSP.08**		
Project Name:	**Instrumentation and Control Program - Phase 2**		
Description:	This program will replace and upgrade critical electrical and control systems at lift stations, including programmable logic controllers (PLCs), motor control centers (MCCs), automatic transfer switches (ATSs), variable frequency drives (VFDs), electrical panels, conduits, site lighting, instrumentation, and control panels. The specific improvements will vary by facility based on existing conditions and operational needs, but will generally focus on standardizing equipment, improving reliability, and extending service life. Implementation of this program will enhance operational efficiency, expand remote monitoring and control capabilities, and ensure compliance with current electrical and safety standards across the collection system.		
Priority:	Mid-term	**Funding:**	WW
Location/Facility:	Lift Station No. 3, Alder Canal - Villa Ave LS, 3rd & Ross LS, Gios LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	318,000
Site Civil & Mechanical			$	625,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**943,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	94,000
CM & ESDC	18 %	of capital costs	$	170,000
Administration	3 %	of capital costs	$	28,000
Soft Cost Subtotal:			**$**	**292,000**
Contingency:				
Contingency	40 %	of project cost	$	494,000
Total Project Cost:			**$**	**1,729,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2031
Project Duration (Years):	2
Comments:	

Project No:	**LSP.09**		
Project Name:	**Pumps, Piping, Supports, and HVAC Program**		
Description:	This program will address mechanical and ventilation improvements at lift stations to enhance reliability, safety, and operability. Improvements include installation of emergency eye wash stations, replacement of force mains within wet wells, replacement of sump pumps and associated discharge piping, repair of forced air ventilation systems, replacement of pump bases, installation of chemical injection ports, replacement of suction piping in wet wells, and installation of discharge flow meters. The specific scope will vary by facility based on condition and operational needs, but implementation of this program will improve worker safety, extend equipment life, and ensure reliable system performance.		
Priority:	Mid-term	**Funding:**	WW
Location/Facility:	Countryside LS, Lift Station No. 3, Alder Canal - Villa Ave, 3rd & Ross LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	X

Project Cost:			
Construction Costs:			
General			$ -
Site Civil & Mechanical			$ 514,000
Structural			$ -
Electrical, Instrumentation & Controls			$ 81,000
Equipment			$ -
Construction Cost Subtotal:			**$ 595,000**
Soft Costs:			
Classification 'B'			
Engineering	10 %	of capital costs	$ 60,000
CM & ESDC	18 %	of capital costs	$ 107,000
Administration	3 %	of capital costs	$ 18,000
Soft Cost Subtotal:			**$ 185,000**
Contingency:			
Contingency	40 %	of project cost	$ 311,000
Total Project Cost:			**$ 1,091,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2031
Project Duration (Years):	2
Comments:	

Project No:	**LSP.10**				
Project Name:	**Main Lift Station Rehabilitation Project**				
Description:	This project will rehabilitate key electrical, structural, and mechanical systems at the lift station to improve safety, reliability, and long-term performance. Planned improvements include upgrades to site and emergency lighting, replacement of the generator and flow meter, structural repairs to the bar screen vault (including floor grating and access stairs), and enhancements to safety and ventilation systems. Collectively, these improvements will extend facility service life, improve maintainability, and ensure continued reliable operation.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	Main LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement	X	Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study		Operations Assessment			
Expansion		Failure Modes & Consequences	X		

Project Cost:				
Construction Costs:				
General			$	716,000
Site Civil & Mechanical			$	189,000
Structural			$	-
Electrical, Instrumentation & Controls			$	173,000
Equipment			$	23,000
Construction Cost Subtotal:			**$**	**1,101,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	110,000
CM & ESDC	18 %	of capital costs	$	198,000
Administration	3 %	of capital costs	$	33,000
Soft Cost Subtotal:			**$**	**341,000**
Contingency:				
Contingency	40 %	of project cost	$	577,000
Total Project Cost:			**$**	**2,019,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.11**				
Project Name:	**East Side Lift Station Rehabilitation Project**				
Description:	This project will rehabilitate critical components within the wet well to improve reliability and maintainability. Planned improvements include installation of a backup level element, replacement of suction piping, and rehabilitation of the wet well liner, along with associated bypass pumping to support construction activities. Together, these upgrades will extend the service life of the wet well, reduce operational risk, and ensure continued reliable performance of the lift station.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	East Side LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment		
Expansion			Failure Modes & Consequences		

Project Cost:				
Construction Costs:				
General			$	10,000
Site Civil & Mechanical			$	139,000
Structural			$	-
Electrical, Instrumentation & Controls			$	5,000
Equipment			$	13,000
Construction Cost Subtotal:			**$**	**167,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	25,000
CM & ESDC	20 %	of capital costs	$	33,000
Administration	5 %	of capital costs	$	8,000
Soft Cost Subtotal:			**$**	**66,000**
Contingency:				
Contingency	40 %	of project cost	$	94,000
Total Project Cost:			**$**	**327,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.12**		
Project Name:	**Buena Vista Lift Station Rehabilitation Project**		
Description:	This project will address security, structural, and operational needs at the lift station. Planned improvements include installation of intrusion switches to enhance site security, replacement of wet well access covers to improve safety and maintainability, and spot repairs to the wet well liner to extend structural service life. The project will also include bypass pumping to support construction activities. Together, these improvements will reduce operational risks, improve safety, and ensure reliable facility performance.		
Priority:	Mid-term	**Funding:**	WW
Location/Facility:	Buena Vista LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	6,000
Site Civil & Mechanical			$	126,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	23,000
Construction Cost Subtotal:			**$**	**155,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	23,000
CM & ESDC	20 %	of capital costs	$	31,000
Administration	5 %	of capital costs	$	8,000
Soft Cost Subtotal:			**$**	**62,000**
Contingency:				
Contingency	40 %	of project cost	$	86,000
Total Project Cost:			**$**	**303,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.13**				
Project Name:	**Legacy Lift Station Decommissioning Project**				
Description:	This project will decommission the existing lift station that will no longer required for system operation. Planned work will include permanent disconnection of electrical and mechanical equipment, abandonment or removal of wet well piping, and demolition or filling of below-grade structures as required. Additional work may include site restoration and minor utility rerouting to ensure continuity of service. Collectively, these improvements will safely retire the facility, eliminate ongoing maintenance costs, and reduce long-term operational risk.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	Legacy LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement			Predicted Useful Life Expiration	X	
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences	X	

Project Cost:					
Construction Costs:					
General				$	-
Site Civil & Mechanical				$	479,000
Structural				$	-
Electrical, Instrumentation & Controls				$	-
Equipment				$	-
Construction Cost Subtotal:				**$**	**479,000**
Soft Costs:					
Classification 'B'					
Engineering	10 %	of capital costs		$	48,000
CM & ESDC	18 %	of capital costs		$	86,000
Administration	3 %	of capital costs		$	14,000
Soft Cost Subtotal:				**$**	**148,000**
Contingency:					
Contingency	40 %	of project cost		$	252,000
Total Project Cost:				**$**	**879,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.14**				
Project Name:	**4th & Wake Lift Station Decommissioning Project**				
Description:	This project will decommission the existing lift station that will no longer required for system operation. Planned work will include permanent disconnection of electrical and mechanical equipment, abandonment or removal of wet well piping, and demolition or filling of below-grade structures as required. Additional work may include site restoration and minor utility rerouting to ensure continuity of service. Collectively, these improvements will safely retire the facility, eliminate ongoing maintenance costs, and reduce long-term operational risk.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	4th & Wake LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement			Predicted Useful Life Expiration	X	
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences	X	

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	493,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**493,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	49,000
CM & ESDC	18 %	of capital costs	$	89,000
Administration	3 %	of capital costs	$	15,000
Soft Cost Subtotal:			**$**	**153,000**
Contingency:				
Contingency	40 %	of project cost	$	259,000
Total Project Cost:			**$**	**905,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2033
Project Duration (Years):	2
Comments:	

Project No:	**LSP.15**		
Project Name:	**Force Main Program - Phase 2**		
Description:	This program will replace approximately 12,300 linear feet of downstream force main of Alder Canal - Villa Ave LS to address the existing oversized force main. The project will include installation of new piping designed to accommodate current and future flows, along with bypass pumping to maintain service during construction. Implementation of this program will resolve hydraulic constraints, improve reliability, and ensure the collection system continues to perform effectively under future demand conditions.		
Priority:	Mid-term	**Funding:**	WW
Location/Facility:	Alder Canal - Villa Ave LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	
Engineering Study		Operations Assessment	X
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	130,000
Structural			$	-
Electrical, Instrumentation & Controls			$	5,752,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**5,882,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	588,000
CM & ESDC	18 %	of capital costs	$	1,059,000
Administration	3 %	of capital costs	$	176,000
Soft Cost Subtotal:			**$**	**1,823,000**
Contingency:				
Contingency	40 %	of project cost	$	3,083,000
Total Project Cost:			**$**	**10,788,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2033
Project Duration (Years):	2
Comments:	

Project No:	**LSP.16**				
Project Name:	**Gios Lift Station Rehabilitation Project**				
Description:	This project will implement targeted upgrades to improve safety, reliability, and maintainability at the lift station. Planned improvements include installation of an emergency eye wash to improve worker safety, replacement of water service piping to ensure dependable utility connections, and installation of pump lifting chains to facilitate safer and more efficient pump maintenance. Collectively, these improvements will enhance operational safety, reduce risks, and support reliable long-term performance of the facility.				
Priority:	Long-term	**Funding:**	WW		
Location/Facility:	Gios LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement	X	Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study		Operations Assessment			
Expansion		Failure Modes & Consequences			

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	-
Structural			$	-
Electrical, Instrumentation & Controls			$	20,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**20,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	3,000
CM & ESDC	20 %	of capital costs	$	4,000
Administration	5 %	of capital costs	$	1,000
Soft Cost Subtotal:			**$**	**8,000**
Contingency:				
Contingency	40 %	of project cost	$	12,000
Total Project Cost:			**$**	**40,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2035
Project Duration (Years):	2
Comments:	

Project No:	**LSP.17**				
Project Name:	**Lift Station No. 3 Rehabilitation Project**				
Description:	This project will rehabilitate key electrical, structural, and mechanical components of the lift station to improve safety, reliability, and performance. Planned improvements include replacement of wet well lighting, installation of a discharge flow meter with a new vault, site grading to improve drainage and access, and installation of a permanent fixed access ladder for the bar screen motor. Additional work will include replacement of existing 40-HP pumping units, replacement of wet well access hatches, and provision of bypass pumping to support construction activities. Collectively, these improvements will extend the service life of the facility, enhance worker safety, and ensure continued reliable operation.				
Priority:	Long-term	**Funding:**	WW		
Location/Facility:	Lift Station No. 3				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement	X	Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study		Operations Assessment			
Expansion		Failure Modes & Consequences			

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	207,000
Structural			$	-
Electrical, Instrumentation & Controls			$	569,000
Equipment			$	17,000
Construction Cost Subtotal:			**$**	**793,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	79,000
CM & ESDC	18 %	of capital costs	$	143,000
Administration	3 %	of capital costs	$	24,000
Soft Cost Subtotal:			**$**	**246,000**
Contingency:				
Contingency	40 %	of project cost	$	416,000
Total Project Cost:			**$**	**1,455,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2035
Project Duration (Years):	2
Comments:	

Project No:	**LSP.18**				
Project Name:	**8th & Wake Lift Station Rehabilitation Project**				
Description:	This project will replace the existing 5-HP pumps to improve reliability and maintainability of the lift station. The pump replacement will extend equipment service life, reduce the risk of unplanned failures, and ensure continued reliable operation of the facility.				
Priority:	Long-term		**Funding:**	WW	
Location/Facility:	8th & Wake LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment		
Expansion			Failure Modes & Consequences		

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	142,000
Structural			$	-
Electrical, Instrumentation & Controls			$	34,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**176,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	26,000
CM & ESDC	20 %	of capital costs	$	35,000
Administration	5 %	of capital costs	$	9,000
Soft Cost Subtotal:			**$**	**70,000**
Contingency:				
Contingency	40 %	of project cost	$	98,000
Total Project Cost:			**$**	**344,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2036
Project Duration (Years):	2
Comments:	

Project No:	**LSP.19**				
Project Name:	**Alder Canal - Villa Ave Lift Station Rehabilitation Project**				
Description:	This project will rehabilitate key electrical, structural, and site components of the lift station to improve safety, reliability, and performance. Planned improvements include verification of the drywell flood alarm and integration with the RTU, redesign and installation of LED lighting in the drywell, and drainage and grading improvements to prevent water infiltration. Additional work will include installation of outdoor lighting at the chemical area, replacement of exterior and interior lighting at the electrical building, installation of a discharge flow meter with a new vault, and site grading improvements. Station bypass pumping will be provided to support construction activities. Collectively, these improvements will extend the service life of the facility, enhance worker safety, and ensure continued reliable operation.				
Priority:	Long-term	**Funding:**	WW		
Location/Facility:	Alder Canal - Villa Ave LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences	X	

Project Cost:				
Construction Costs:				
General			$	60,000
Site Civil & Mechanical			$	219,000
Structural			$	-
Electrical, Instrumentation & Controls			$	109,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**388,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	58,000
CM & ESDC	20 %	of capital costs	$	78,000
Administration	5 %	of capital costs	$	19,000
Soft Cost Subtotal:			**$**	**155,000**
Contingency:				
Contingency	40 %	of project cost	$	218,000
Total Project Cost:			**$**	**761,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2037
Project Duration (Years):	2
Comments:	

Project No:	**LSP.20**		
Project Name:	**3rd & Ross Lift Station Rehabilitation Project**		
Description:	This project will implement targeted upgrades to improve safety, reliability, and maintainability of the lift station. Planned improvements include installation of new site task lighting and provision of an on-site water connection to support facility operations and maintenance. Collectively, these improvements will enhance worker safety, improve operational efficiency, and ensure continued reliable performance of the facility.		
Priority:	Long-term	**Funding:**	WW
Location/Facility:	3rd & Ross LS		
Project Origin:	El Centro Lift Stations Condition Assessment		
Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	X
Expansion		Failure Modes & Consequences	X

Project Cost:				
Construction Costs:				
General			$	7,000
Site Civil & Mechanical			$	-
Structural			$	-
Electrical, Instrumentation & Controls			$	28,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**35,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	5,000
CM & ESDC	20 %	of capital costs	$	7,000
Administration	5 %	of capital costs	$	2,000
Soft Cost Subtotal:			**$**	**14,000**
Contingency:				
Contingency	40 %	of project cost	$	20,000
Total Project Cost:			**$**	**69,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2037
Project Duration (Years):	2
Comments:	

Appendix B

Wastewater Treatment Plant Condition Assessment Technical Memorandum

TECHNICAL MEMORANDUM

EL CENTRO WASTEWATER TREATMENT PLANT – CONDITION ASSESSMENT

November 2025

Prepared For:

City of El Centro
1275 Main Street
El Centro, CA 92243

Dudek
605 Third Street
Encinitas, CA 92024



15092 Avenue of Science, Suite 200
San Diego, CA 92128

NV5 PROJECT NUMBER 2810224-0001977.00

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Figure 1 – Existing Process Flow Diagram

1.0 INTRODUCTION

1.1 OBJECTIVES

The primary objectives of this technical memorandum (memo) are to 1) describe the existing infrastructure, 2) describe the condition of existing infrastructure, 3) provide a planning level capacity assessment, and 4) recommend improvements for the El Centro Wastewater Treatment Plant.

1.2 BACKGROUND

The City of El Centro (City) is in Imperial County approximately 120 miles east of San Diego, CA and approximately 60 miles west of Yuma, AZ. The City is approximately 11.1 square miles in area and lies approximately 42 feet below sea level. The population of the City is approximately 44,322 as reported by the 2020 United States Census. The City operates and maintains a wastewater collection system and the El Centro Wastewater Treatment Plant (WWTP) located at 2255 North La Brucherie Road.

The WWTP was originally constructed in 1957 with two primary clarifiers, oxidation ponds (lagoons), two sludge digesters, and sludge drying beds. In 1972 the ponds were replaced with a secondary treatment system consisting of four aeration basins and two secondary clarifiers and a chlorine contact basin for disinfection. In 1989 the sludge treatment system was upgraded with the addition of a belt filter press and a third larger digester equipped with a gas mixing system. A sludge heating system for the digesters was also added at that time. In 1994, the last major plant improvements included two additional aeration basins, two additional secondary clarifiers, a gravity belt thickener, and a gas mixing system for Digester No. 2 among many other improvements. In 1997 an ultraviolet disinfection unit was added to replace the chlorine contact basin. In 2009 redundancy improvements were constructed including a second belt filter press unit, a second gravity belt thickener, and a second ultraviolet disinfection unit. In 2017 two blowers were replaced.

The WWTP currently receives an average wastewater flow of approximately 3.52 million gallons per day (mgd) but has capacity and is permitted for an average flow up to 8.0 mgd.

1.3 OVERVIEW OF EXISTING WWTP PROCESS

The WWTP uses a conventional activated sludge process for wastewater treatment. Per the City, the current treatment process works well and the WWTP can consistently produce secondary effluent meeting all discharge requirements. A process flow diagram of the existing treatment process is shown in Figure 1, and a brief description of the process is provided below.

1.3.1 Pretreatment

The WWTP receives screened wastewater collected throughout the City and conveyed through gravity sewer mains and lift stations, and ultimately from two lift stations, the Main Lift Station located offsite and Lift Station No. 3, located at the WWTP. The Main Lift Station conveys approximately 80% of the City's wastewater to the WWTP. Each lift station has a mechanical bar screen with washer/compactor equipment located upstream of the wet well. Wet screenings collected in the bar

screens are washed and compacted to reduce their volume. Compacted solids are collected in a portable bin container, where they are stored prior to being disposed of at a private landfill.

Screened wastewater pumped from the two lift stations combine into a single 24-inch influent force main which runs through a magnetic flow meter located before the influent distribution center. Influent flow measurements are logged on a chart recorded at the control room. The flow then enters the influent distribution structure between the two primary clarifiers. At the influent structure, ferric chloride and polymer are injected for coagulation. The flow is then distributed to the primary clarifiers.

1.3.2 Primary Treatment

There are two circular primary clarifiers at the WWTP. Effluent flows over the weirs into the launder troughs that flow into a separate chamber in the influent distribution structure. From the distribution structure, wastewater flows by gravity to the aeration basins via a 30-inch diameter pipe. Primary sludge collected at the bottom of the clarifiers is pumped to the digesters with two plunger type (suction and discharge flange) pumps. Grease from the primary clarifiers is skimmed into a collection box and removed into a dumpster for disposal at the local landfill.

1.3.3 Secondary Treatment and Disinfection

Secondary (activated sludge) treatment consists of six aeration basins and four secondary (final) clarifiers. Existing influent and effluent channels provide the flexibility of operating the aeration basins in parallel or as a series of reactors. Air is provided to the aeration basins through a system of blowers, pipes and fine bubble diffusers located at the bottom of the aeration basins. Effluent from the aeration basins flows by gravity to a splitter box for distribution to the four secondary clarifiers. Effluent from each of the secondary clarifiers flows over the weirs into the effluent launders and flows to a junction box located north of the secondary clarifiers. Secondary effluent then flows by gravity to the ultraviolet (UV) disinfection facility located at the north end of the site, which has two UV units installed in parallel for disinfection. Disinfected secondary treated wastewater is then discharged into the nearby Central Main Drain, an agricultural drainage channel which is tributary to the Alamo River.

Activated sludge collected off the bottom of the secondary clarifiers flows into the wet well of the sludge pump room which pumps return activated sludge to the aeration basins and pumps waste activated sludge to the gravity belt thickeners.

1.3.4 Sludge Treatment

Sludge treatment consists of thickening, anaerobic digestion, and dewatering. Primary and waste activated sludge are stabilized through digestion and excess water is removed before final disposal. A brief description of the sludge handling and treatment process and existing equipment follows.

Waste activated sludge (WAS) at approximately 1% solids content is pumped from the sludge pump room into a gravity belt thickener (total of two gravity belt thickener units: one duty, one standby). WAS is treated with polyacrylamide emulsion polymer (Clarifloc S462) to enhance the removal of water and then thickened using a gravity belt thickener. Thickened waste activated sludge (TWAS) is

then pumped to the anaerobic digesters by two plunger type pumps, where it mixes with primary sludge from the primary clarifiers. The sludge in the digesters is typically around 3% solids content.

There are three anaerobic digestion tanks at the treatment facility used for sludge stabilization and storage including two primary digesters (Digester Tank No. 1 and Digester Tank No. 2) and one storage digestor (Digester Tank No. 3). Each primary digester has a gas mixing system and there is a centralized sludge heating/recirculation system for both primary digesters. The two primary digesters are currently operating in series. Primary sludge and TWAS are first pumped into Digester Tank No. 1, the largest tank. Then, digested sludge from Digester Tank No. 1 flows by gravity to Digester Tank No. 2. Digested sludge from Digester Tank No. 2 then flows by gravity to Digester Tank No. 3 for final sludge consolidation and storage. Digested sludge from Digester Tank No. 3 is then pumped to the belt filter press (total of two gravity belt thickener units: one duty, one standby) for dewatering. Digested sludge is also periodically pumped from Tank No. 1 and No. 2 to the belt filter press. Dewatered sludge from the filter press is then loaded into dump trucks which haul the sludge to the sludge drying bed located on site for final dewatering. After final dewatering the dried sludge is then transported to Arizona for land disposal.

The digesters were originally designed to collect and return supernatant back to the primary influent structure. However, supernatant is no longer part of the current digester process which produces a more homogeneous sludge mixture.

2.0 EXISTING FACILITIES AND CONDITION EVALUATION

A description of the existing treatment processes and condition assessment based on visual inspection and information received from WWTP operation staff is summarized below.

2.1 HEADWORKS

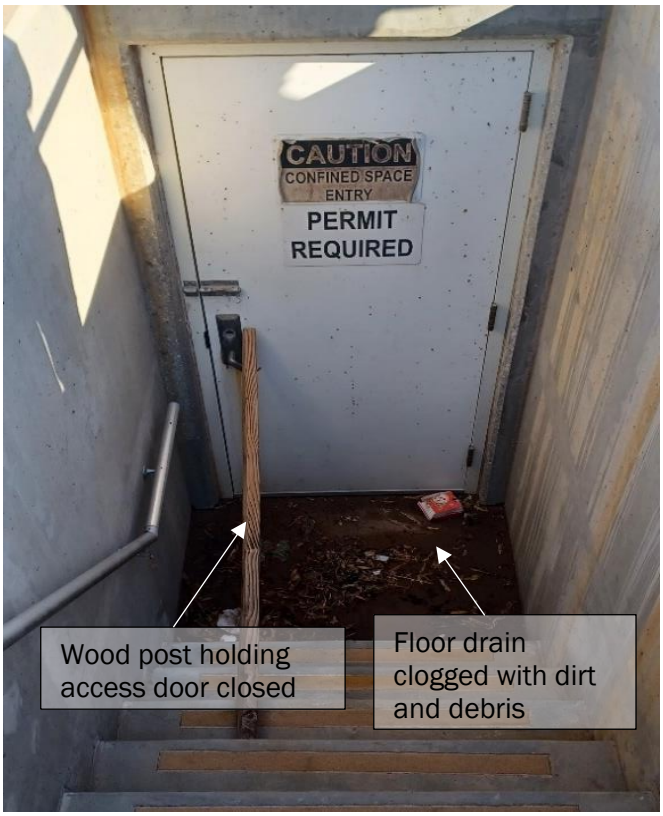
The headworks facilities at the WWTP site consist of a bar screen structure upstream of Lift Station No. 3 which screens approximately 20% of the influent (gravity flow) into the facility. Most of the influent (approximately 80%) is screened at the Main Lift Station (offsite) and pumped through a force main directly into the WWTP influent structure. This section covers the bar screen at the WWTP.

The bar screen structure is equipped with a mechanical bar screen to remove solids and a washer/compactor to clean and reduce the volume of screenings. The compacted screenings are collected in a portable waste container that is emptied and hauled to a private landfill. Screened wastewater flows by gravity to Lift Station No. 3, is pumped, and combines with screened wastewater from the Main Lift Station in a 24-inch influent force main that flows to the influent distribution structure. A magnetic flow meter is installed on the 24-inch force main just upstream of the influent structure to meter the influent flow into the plant.

Due to high H2S off-gassing of the influent sewer and hazardous conditions it creates, entry to the bar screen structure is restricted access (confined space), therefore the condition of the interior of the structure was not assessed as part of this study. Following confined space entry procedures, plant operators enter the structure approximately twice a year to inspect the interior equipment and structure. Based on conversations with the plant supervisor, the equipment and structure are in good condition, except for grating hardware that has corroded due to the corrosive environment.

A visual inspection was completed of the exterior of the bar screen structure, access stairs and door, and above ground equipment (see photos below). The bar screen exterior and the washer/compactor have rust staining from leaking but are operating without issues. The access door interior hardware has corroded, including the intrusion switch, requiring the door to be propped closed from the exterior with a wood post. In addition, the floor drain at the access staircase landing is clogged with dirt and debris which could result in accumulation of rainwater by the access door.

The condition assessment of Lift Station No. 3 is covered separately and is not included in this report.





2.2 INFLUENT DISTRIBUTION STRUCTURE

The influent distribution structure is a reinforced concrete structure located between the two primary clarifiers, all of which were constructed in 1957. The structure, which has multiple chambers, splits screened influent to the two primary clarifiers and receives the effluent from each clarifier before it is conveyed to the aeration basins. Record structural drawings for the structure were not available, but based on available improvement plans, the structure has a footprint of 12 ft by 13 ft and has 12-inch-thick side walls with a total height of 18.5 ft (approximately 12 ft of which is below grade).

Ferric chloride and polymer are added to the influent from chemical totes and chemical feed pumps located at the influent structure.

Per WWTP staff, the interior of the structure has not been cleaned or inspected in recent history. A detailed inspection of the structure exterior was not conducted for this study, but in general the exterior of the concrete walls are in poor condition. There is a very large crack, and the concrete is spalling on the east wall of the structure. The concrete roof deck appears to be in poor condition with visible cracking. WWTP staff also indicated that the storm drain inlets and pipelines between the digesters and the influent structure are clogged.

A detailed inspection of the structure exterior and interior should be conducted by a structural engineer when the structure is emptied and cleaned, but it appears that at least the top portion of the walls and the roof deck should be replaced with new concrete. In addition, many of the metallic/safety components (grating, handrail, light pole, shade structure, and sampling shed

platform) show heavy rust and should be replaced. The condition of the five sluice gates is unknown but it is assumed that they also need to be replaced. All temporary hoses should be replaced with permanent piping and the existing chemical feed pumps should be permanently mounted. The existing 6-inch diameter digester supernatant pipeline (blue pipe in image below) is not active and abandoned in place, removal and disposal is recommended.






Heavy rust on sluice gate handles and railings
Cracking on roof deck


Inactive digester supernatant pipe (Blue Pipe)

2.3 PRIMARY TREATMENT

The two primary clarifiers are circular reinforced-concrete clarifiers with v-notch weirs originally constructed in 1957. Each clarifier has an interior diameter of 65 ft with 10-inch-thick weir walls and a side water depth of 8.75 ft. Each clarifier The overflow rate of each clarifier is 1,205 gpd/ft^2 at the permitted flow of 8 mgd. The total exterior diameter of each clarifier is 71.5 ft, including the integral effluent launders (troughs) which have 8-inch-thick exterior walls. Per WWTP staff, the top portion of the effluent launder walls for both clarifiers were reconstructed after the 2010 earthquake. A detailed inspection of the primary clarifier structure was not conducted for this technical memo, but in general the reconstructed effluent launder walls appear to be in good condition based on a visual inspection. However, some of the original concrete that is visible has large cracks and is spalling, such as the scum box walls for each clarifier. The weir of Clarifier No. 2 is clogged with grease, causing some of the v-notches to not flow. The weirs of Clarifier No. 1 are in better condition with less overall clogging. Clarifier No. 1 also appears to receive more flow than Clarifier No. 2 which could indicate a flow splitting issue.

Per WWTP staff, the primary clarifiers operate over capacity during wet weather conditions. During heavy rain events, operations personnel throttle back the pumps at the Main Lift Station and use the collection system for storage to attenuate peak flows to the WWTP.

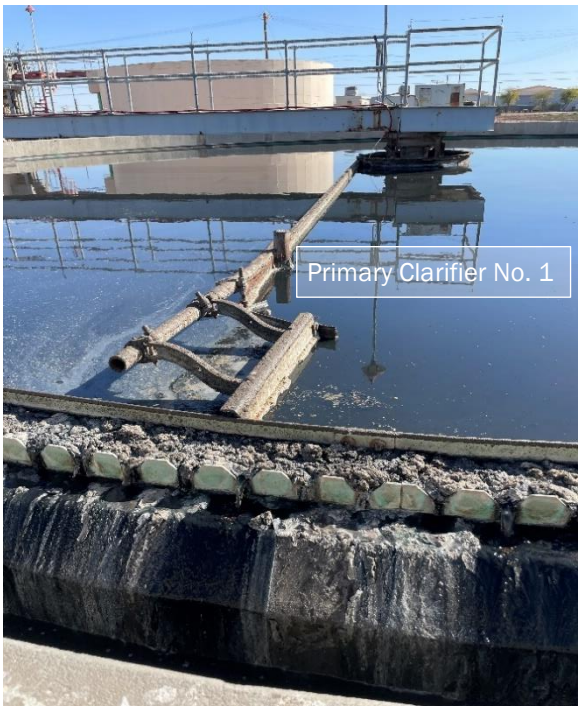
A detailed inspection of the clarifier exterior and interior should be conducted by a structural engineer when the structure is emptied and cleaned, but some concrete rehabilitation is needed.





2.3.1 Primary Clarifier Mechanical Equipment

The mechanisms for both clarifiers, including the drive unit, center column, feed well, scraper arms, skimmer arms, and associated components were last replaced in 1989 with Eimco (now Ovivo) clarifier mechanisms. The mechanisms are operable, but the exposed parts show heavy rust and should be replaced. The access bridge/walkway and drive platform are also in poor condition and should be replaced at the same time. The coated steel v-notched weirs and scum baffles appear to be in fair condition but are recommended to be replaced with the clarifier equipment and bridge to take advantage of the process shutdown and for cost effectiveness.


Primary Clarifier No. 1


Primary Clarifier No. 2

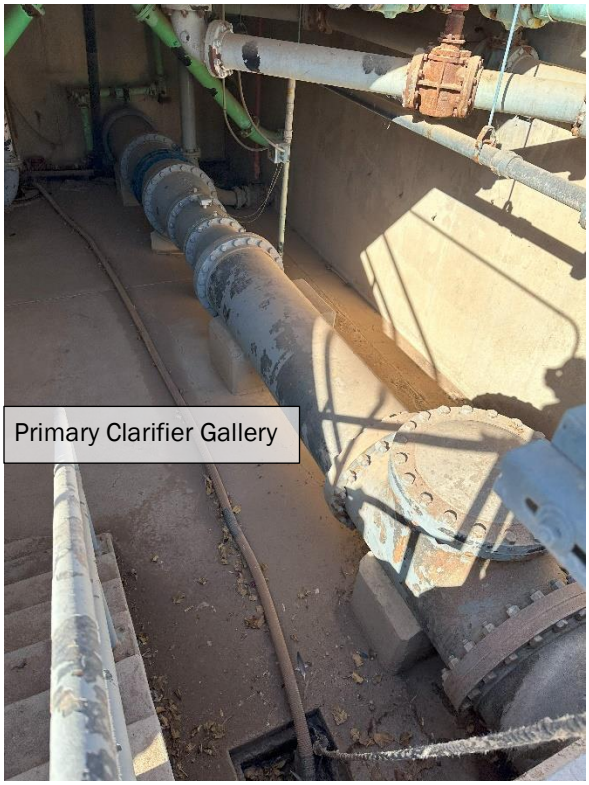
2.3.2 Primary Clarifier Gallery Piping and Sludge Pumps

The primary clarifier gallery, also constructed in 1957, is a reinforced concrete structure located between the two primary clarifiers and shares a common wall with the influent distribution structure on the west side of the gallery. The exposed walls and roof deck appear to be in fair condition. However, a detailed inspection should be conducted by a structural engineer.

The gallery contains multiple exposed process pipes including the 24-inch screened influent pipe, 6-inch primary sludge piping, 6-inch scum piping, and other active process pipes (water, drain, and sump pump discharge piping). The gallery also contains inactive 6-inch digester supernatant return piping and inactive 6-inch recirculation piping, which are no longer used for the current WWTP process. The 24-inch influent line includes an 18-inch magnetic flow meter (with 24x18 reducers) which was manufactured in 2008. There is a section of the main influent line is partially supported by six wooden boards stacked on top of one another.

Primary sludge pumps and associated primary sludge and scum piping are located on the roof deck of the gallery. The two primary sludge pumps were recently replaced by the WWTP staff. One of the pumps is a Lobe Pro SM50 rotary pump (serial number 103104). The second pump is a Vogelsang (serial number 11-09623) that has not been permanently mounted yet. Both pumps have temporary flexible piping and temporary supports. The control panels for both pumps are exposed to the sun and unprotected.

The exterior condition of the gallery and sludge pump piping varies but is in poor condition overall and the interior condition is unknown. All the smaller diameter piping (6-inch and less), valves, and appurtenances should be replaced and piping that is no longer necessary for the current or future operation should be removed, including the 6-inch supernatant piping that is no longer in use. The interior condition of the 24-inch influent line should be inspected before determining if the pipeline should be rehabilitated or replaced. At a minimum, the exterior of the 24-inch pipe should be re-coated. The City is considering replacing the 18-inch flow meter due to its age. Wood blocks supporting the influent pipeline should be replaced with concrete or steel supports. The controls for the new primary sludge pumps should also be covered to protect the equipment, and all temporary hoses should be replaced with coated metal piping.







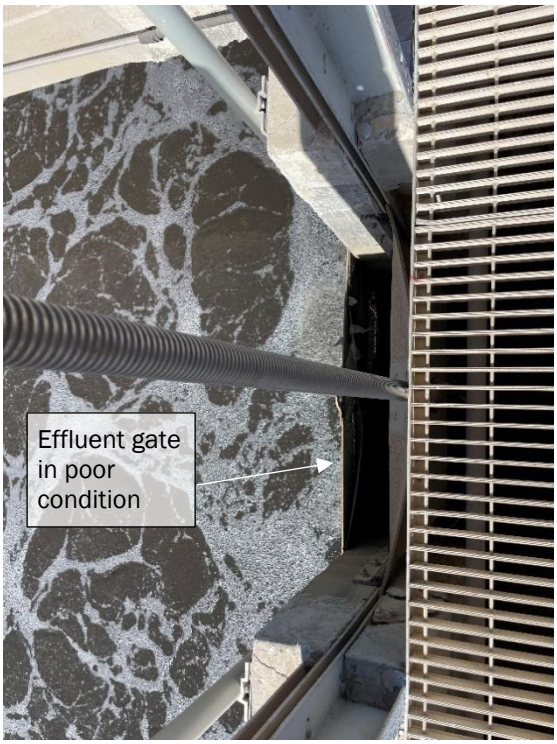
2.4 SECONDARY TREATMENT

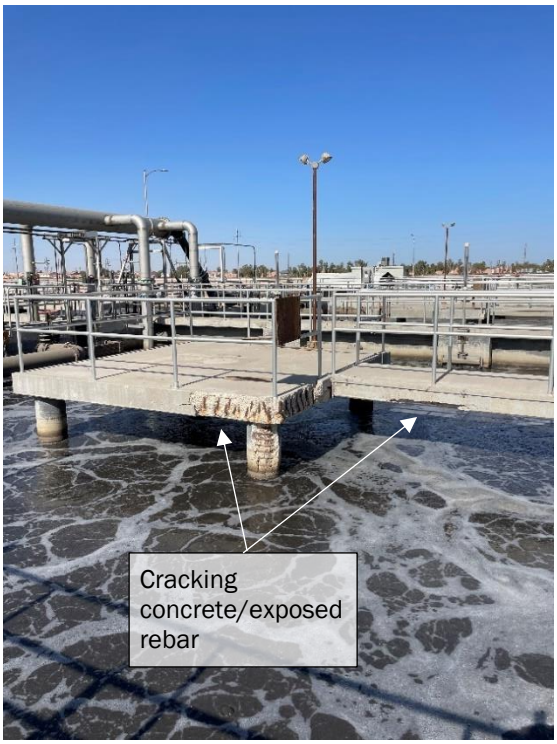
2.4.1 Aeration Basins

The secondary treatment process includes six aeration basins operating in series. Aeration Basins No. 1 through 4 were installed in 1972 and Aeration Basins No. 5 and 6 were added to the secondary treatment process by repurposing two basins formerly used for aerobic sludge digestion. (1994 upgrade). Aeration Basins No. 1 through 4 are 50 ft by 50 ft basins with a side water depth (SWD) of 12.05 ft, providing a total volume of 120,500 ft^3. Aeration Basins No. 5 and 6 are 55 ft by 55 ft with a SWD of 12.05 ft, which provide a total volume of 72,903 ft^3. The six aeration basins have a combined volume of 193,403 ft^3.

Effluent from the primary clarifiers enters the influent distribution structure which flows into the aeration basin influent channel. Existing influent and effluent channels provide the flexibility of operating the aeration basins in parallel or in series and provide flexibility to operate the basins in different combinations.

A visual inspection of the main components of the aeration basins was conducted during the site visit, and information on known issues provided by WWTP operators documented. Six sluice gates in the aeration basin were replaced in 2020. The remaining 36 sluice gates are in poor condition and should be replaced. The interior condition of the basins is unknown and should be inspected during maintenance. Some of the exterior walls of the aeration basins are in poor condition with spalling and cracks that should be repaired. The concrete platforms for the mechanical mixers (no longer in place) are not in use and deteriorating, with concrete spalling and rebar visible. The 16-inch return activated sludge (RAS) piping is halfway submerged in the aeration basin influent channel and in poor condition. The RAS piping should be replaced and positioned outside of the water.





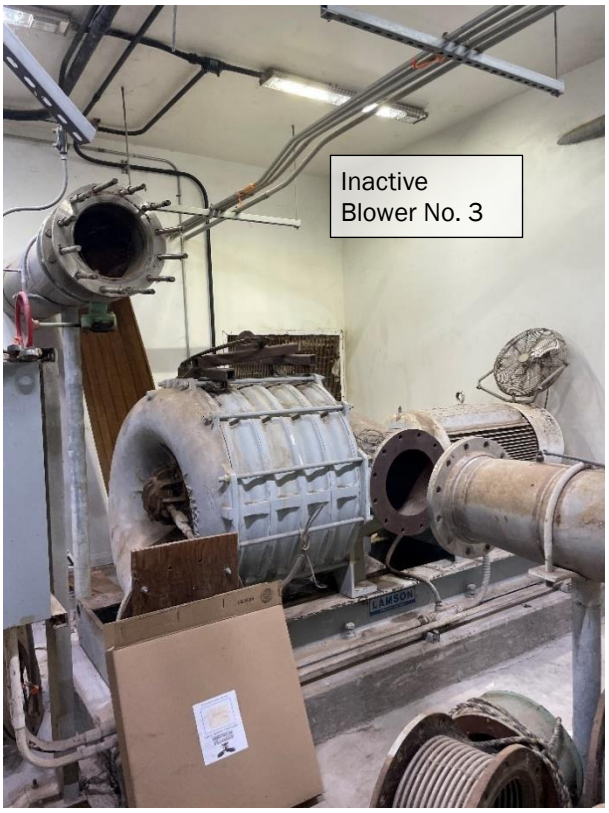
2.4.2 Aeration System

Air is supplied to the aeration basins through a system of blowers, aeration headers and distribution piping, and fine bubble diffusers. Above ground stainless-steel aeration piping is in good condition, including pipe supports and isolation valves. Per WWTP staff, a small number of aeration heads have detached from diffusers due to age and condition, which have been replaced when basins are drained. WWTP staff also indicated that air piping within the basins is in poor condition and in need of replacement.

Three blowers (two duty, one standby) supply air to the aeration basins and are housed inside a building by the aeration basins. Blowers No. 1 and 2 were replaced in 2019 with variable frequency drive (VFD) Sulzer blowers and integrated into an automated most open valve system to better meet oxygen demand in the aeration basins and reduce energy consumption. Blowers No. 1 and No. 2 are Sulzer model number HST9500-U250-1-L-48 (serial number 100193999 and 100193998 respectively). Blower No. 3 remained as a standby but is currently not operational and disconnected from the aeration system. A temporary blower was installed outside under a shade structure as standby while Blower No. 3 is replaced. The temporary blower is a 250 HP Siemens PE 21 Plus blower (type RGZESD). Replacement of Blower No. 3 is currently under design with the same Sulzer VFD blower model as Blowers No. 1 and 2, including required air discharge piping modifications. The blower replacement design also includes a permanent concrete ramp for the blower west rollup door entrance, to replace a temporary gravel ramp (see photo below). Once Blower No. 3 is replaced, the temporary blower will be removed.

Air supplied by the three blowers enters a 24-inch header pipe into the aeration basins. From the header pipe, branch lines supply air to each basin, through a 12-inch pipe for aeration basins No. 1 through 4, and through a 14-inch pipe for aeration basins No. 5 and No. 6. These pipes provide air to the diffusers located at the bottom of the aeration basins. Manually operated butterfly valves are provided at each basin to shut down air supply if needed. Motor actuated valves at each basin automatically modulate air volume into each basin based on dissolved oxygen levels.







2.5 SECONDARY CLARIFIERS

2.5.1 Splitter Boxes

Effluent from the aeration basins flows by gravity through a series of splitter boxes before entering the four secondary clarifiers. The influent first enters a central splitter box that distributes flow to two secondary splitter boxes (east and west) which distribute flow to the clarifiers. The west splitter box distributes flow to Clarifiers No. 1 and 2 while the east splitter box distributes flow to Clarifiers No. 3 and 4. The west splitter box was installed in 1972 with Clarifiers No. 1 and 2. The central splitter box and east splitter box were later installed in 1994 when Clarifiers No. 3 and 4 were installed at the WWTP.

The exterior of the central splitter box structure appears to be in good condition. Per WWTP staff, the sluice gates on the central splitter box are in poor condition and should be replaced. The west splitter box structure is in poor condition with large visible cracking and should be replaced. The west splitter box sluice gates are also in poor condition and should be replaced. The east splitter box structure and sluice gates appear to be in good condition.


Central Splitter Box


West Splitter Box



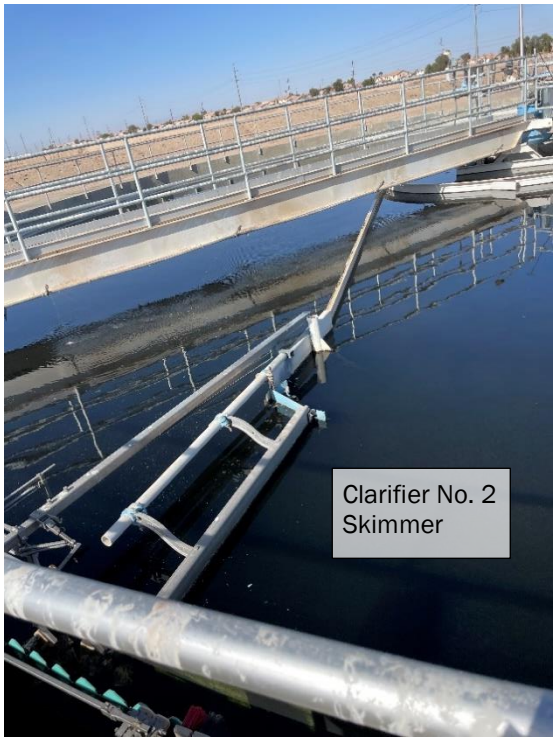
2.5.2 Secondary Clarifiers

There are four circular secondary clarifiers with v-notch weirs. Clarifiers No. 1 and 2 were installed in 1972 and Clarifiers No. 3 and 4 were later constructed during the 1994 upgrade. During the summer, all four clarifiers are typically run to protect the equipment from the sun, and during the winter, three clarifiers are typically run. The secondary clarifiers have a diameter of 80 ft, an average SWD of 9.95 ft, and provide a total volume of 200,057 ft^3. They are designed to operate at a hydraulic detention time of 4.5 hours, with an overflow rate of 400 gpd/ft^2 and a weir loading rate of 7,958 gal/ft-day at the design flow of 8 mgd. The sludge collected from the bottom of the secondary clarifiers flows into four sludge diversion lines that flow into the sludge pump room wet well where some sludge will become return activated sludge (RAS) and pumped back into the aeration basins. Clarifiers No. 1 and 2 have 10-inch sludge diversion lines and Clarifiers No. 3 and 4 have 18-inch sludge diversion lines.

Effluent from each of the secondary clarifiers flows over the weirs into the effluent launder and into 18-inch pipes. The effluent from Clarifiers No. 3 and 4 is combined into a 24-inch pipe, and the effluent from Clarifiers No. 1 and 2 is combined into a separate 24-inch pipe. Both secondary effluent pipes flow into the wet well of the Plant Water Pump Station located northwest of the secondary clarifiers. From the Plant Water Pump Station wet well, secondary effluent flows by gravity to the to the ultraviolet (UV) disinfection system through a 30-inch pipe.

The equipment in Clarifiers No. 3 and 4 was refurbished in 2020, and Clarifiers No. 1 and 2 were refurbished in 2024. Refurbishments included replacing the arms, drum, box, standpipe, and gears

for each clarifier. Clarifier No. 4 was out of service and drained during a site visit on January 23, 2025. The interior structure and equipment appeared to be in good condition. The secondary clarifiers overall appear to be in good condition.

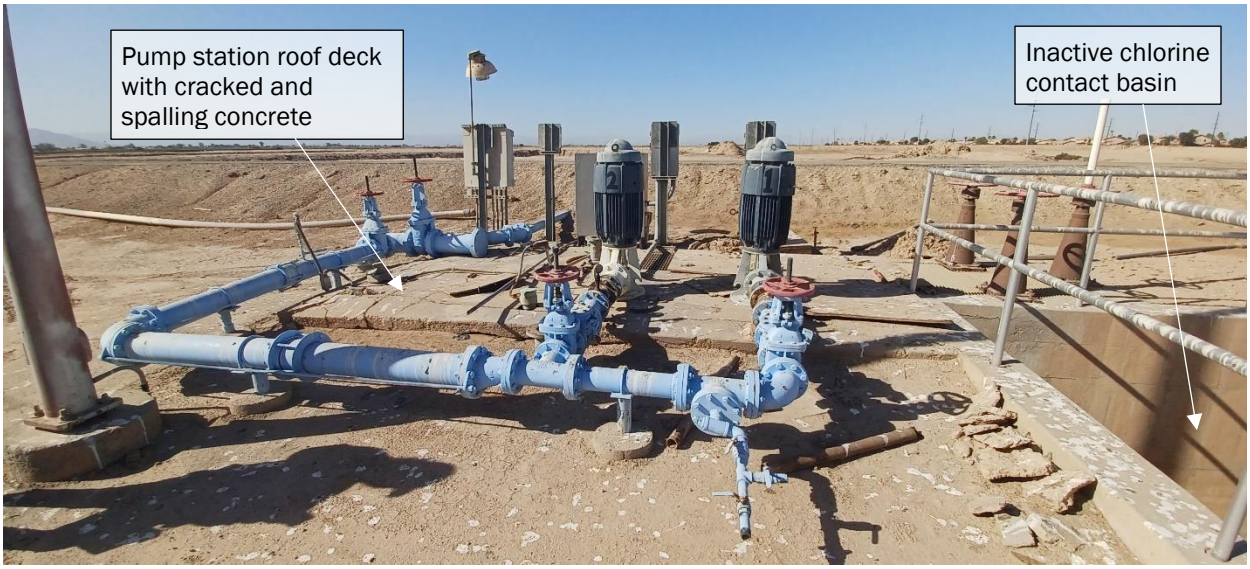




2.5.3 Plant Water Pump Station and Raw Water Supply

The plant water pump station is located northwest of the secondary clarifiers next to the inactive chlorine contact basin. The plant water pump station provides process water to various treatment processes (sludge thickening and dewatering, and spray water for the primary and secondary treatment processes). The plant water pump station reinforced concrete structure originally constructed in 1972, but the pumps and the above grade piping were replaced in 1994. The pump station has two vertical turbine pumps, Plant Water Pumps No. 1 and 2, which are mounted to the roof deck of the pump station wet well. Plant Water Pump No. 1 is the backup pump (model number JMM3312T, serial F0505230800) and Plant Water Pump No. 2 is the main operating pump (model number 2VD 215TTFL7009DB L).

The visible portion of the pump station structure, the concrete roof deck, is in very poor condition with severe cracking and spalling concrete. A detailed inspection of the structure exterior and interior should be conducted by a structural engineer when the structure is emptied and cleaned, but as a minimum the roof deck should be replaced. Per WWTP staff, the pumps, piping, and other equipment at the plant water station are all in fair condition. However, the City should consider replacing the other equipment at the plant water pump station when the roof deck is replaced.



The WWTP has a water connection to the Imperial Irrigation District raw water (untreated) system pipeline (gravity system) along La Brucherie Road, which is used for landscape irrigation within the plant. A booster pump system adjacent to the raw water connection (by the main access road entrance to the facility) pressurizes and supplies the irrigation system.

2.5.4 Sludge Pump Room

The sludge pump room is a below grade structure located between Secondary Clarifiers No. 1 and 2 and was constructed in 1972. The room has a footprint of 29.5 feet by 31 feet with 16-inch-thick side walls and has a total height of approximately 15 feet. RAS Pumps No. 1 and 2 were installed and a stub out was installed for a future RAS pump. Waste Activated Sludge (WAS) Pumps No. 1 and 2 were also installed. RAS Pump No. 3 was installed between 1972-1994. In 1994, RAS Pumps No. 1 and 2 and WAS Pumps No. 1 and 2 were replaced along with their associated equipment pads and piping, and a 3-foot by 8-foot aluminum roof access hatch in the southwest corner of the structure.

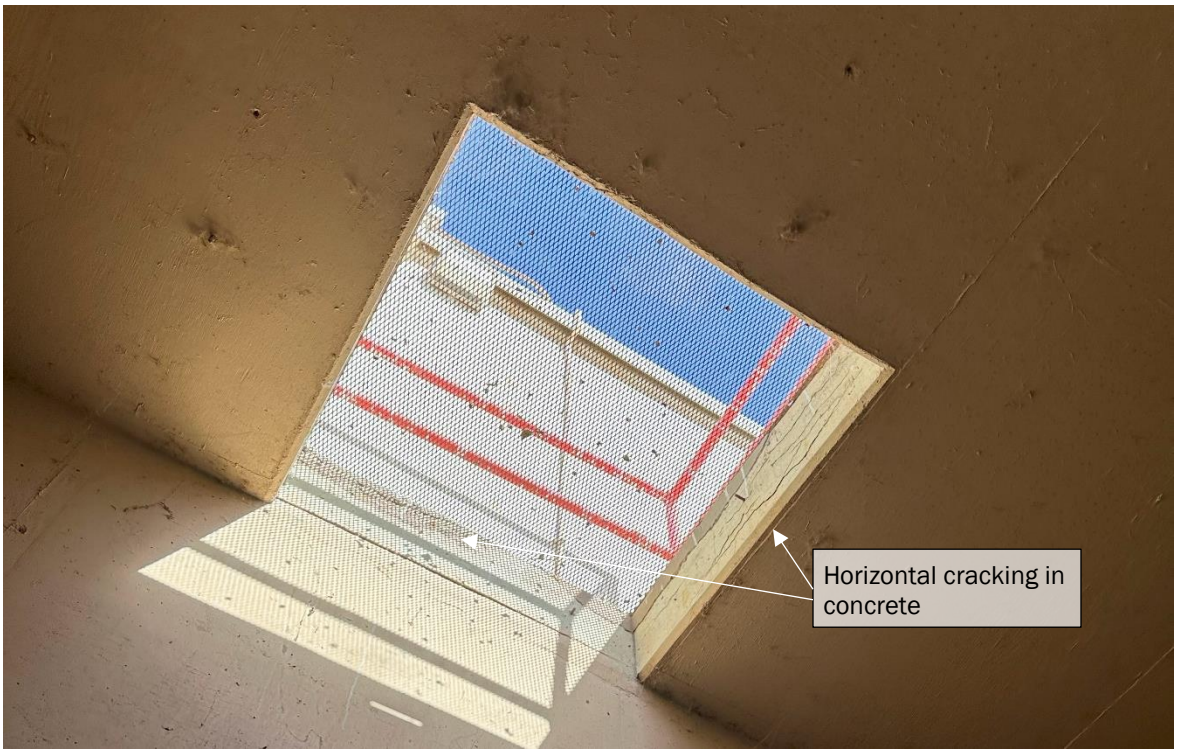
The northwest roof access hatch (4-ft x 4-ft) appears to be in fair condition with horizontal cracking on the inner concrete which should be repaired. The concrete curb surrounding the southwest aluminum hatch has large cracks on the northwest edge of the curb and should be rehabilitated.

RAS Pumps No. 1, 2, and 3 are Gorman Rupp self-priming centrifugal pumps (Model No. T10A3-B) and appear to be in good condition, including the piping. The concrete pad for RAS Pump No. 1 appears to be in good condition, but the concrete pads for RAS Pumps No. 2 and 3 have cracks and should be repaired.

WAS Pumps No. 1 and 2 are Gorman Rupp self-priming centrifugal pumps (Model No. T4A3-B) and appear to be in good condition, including suction and discharge piping. The concrete pads for WAS Pumps No. 1 and 2 appear to be in poor condition with multiple large cracks in the concrete pads and should be replaced.


Cracking concrete curb around access hatch

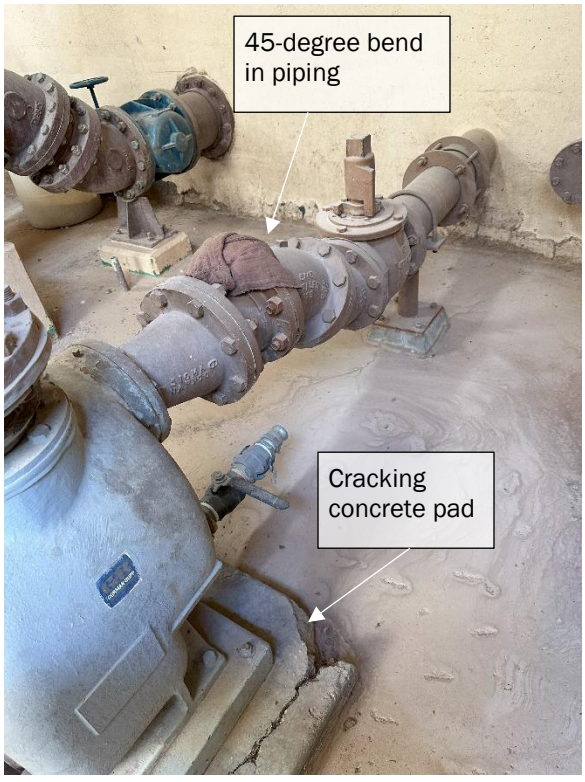

Uncovered sump pump

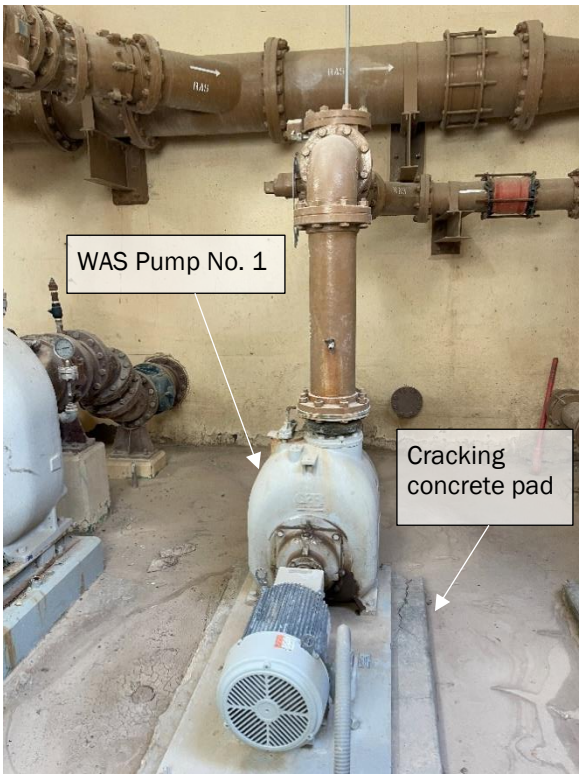

Horizontal cracking in concrete

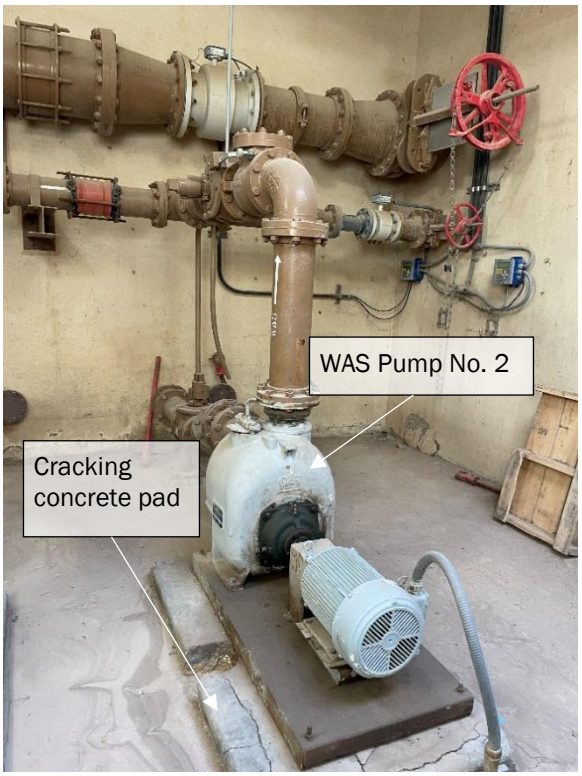

RAS Pump No. 1


RAS Pump No. 2


RAS Pump No. 3


45-degree bend in piping
Cracking concrete pad





2.6 UV DISINFECTION SYSTEM

Disinfection is achieved with two ultraviolet (UV) units installed in parallel. One of the UV units was installed in 1997 and the second was installed in 2009. The existing UV units are the UV40000 model manufactured by Trojan Technologies, Inc (Trojan). The UV disinfection channel and units are located near the north side of the treatment plant site. The existing UV units are mounted on an open concrete channel that is 4 ft wide and 70 ft long with a depth of 9 ft. Each UV reactor, located inside the channel, is a contact type reactor with lamps encased in a quartz sleeve and positioned parallel to the flow direction. Each unit consists of two banks of lamps, each having four modules and each module has four lamps. The UV units provide a UV radiation intensity of 125 mW/cm^2 and the administered dose is dependent on the wastewater flow through the system.

The City is currently in the process of replacing both existing UV units with new TrojanUV Signa units manufactured by Trojan. The construction for the upgraded UV disinfection system is currently ongoing. The UV replacement project will also include modifications to the existing UV channels and two small, prefabricated buildings for electrical and controls equipment for the new UV system. The existing UV structure and metal shade structure over the UV units are in good condition.

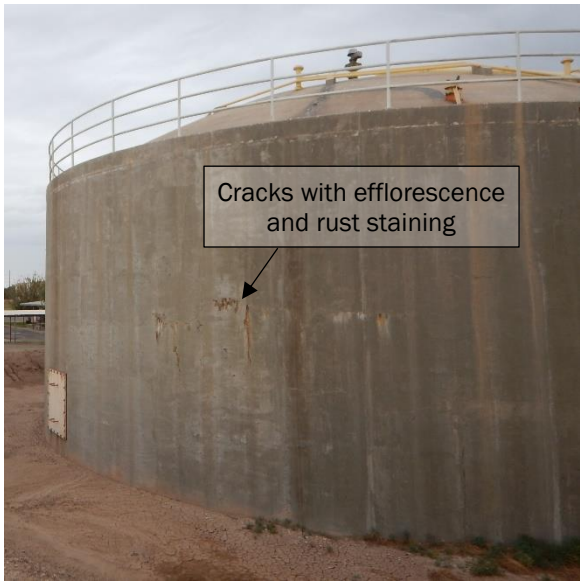


2.7 SLUDGE DIGESTERS

2.7.1 Digester Tanks

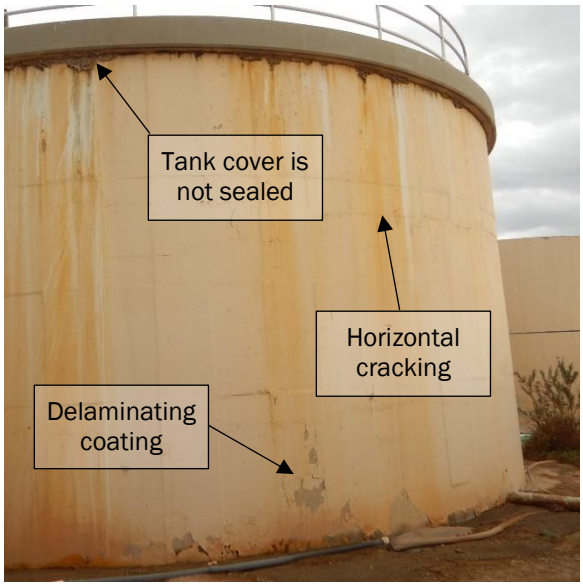
Digester Tank No. 1, a circular reinforced concrete tank constructed in 1989, has an interior diameter of 60 ft, 16-inch-thick side walls with a height of 30 ft (approximately 9 ft of which is below grade), a relatively flat floor, an integral domed reinforced concrete cover, and an approximate working volume of 590,000 gal. The tank was last cleaned and re-lined in 2001. Per WWTP staff the lining appeared to be in good condition during a 2015 inspection. The interior of the tank has not been inspected since then. A detailed inspection of the tank exterior was not conducted for this tech memo, but in general the exterior of the concrete walls appears to be in good condition. The cementitious coating is delaminating in some areas and should be repaired. There are also some cracks showing efflorescence and rust staining that should be examined closer and potentially repaired. A detailed inspection of the tank exterior and interior should be conducted by a structural engineer when the tank is emptied and cleaned.

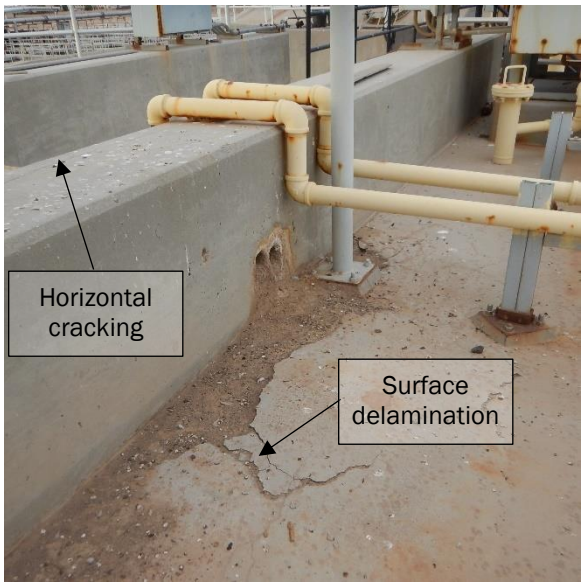




Digester Tank No. 2, a circular reinforced concrete tank constructed in 1957, has an interior diameter of 40 ft, 12-inch-thick side walls with a height of 21.5 ft (approximately 2 ft of which is below grade), a hopper bottom which extends down another 5 ft below grade, and an approximate working volume of 200,000 gal. The tank has a flat reinforced concrete cover which was constructed in 1994 to replace the original floating cover. Per record drawings the cover has a T-lock PVC liner. Per WWTP staff, the interior of the tank has not been cleaned, inspected, or lined in recent history. A detailed inspection of the tank exterior was not conducted for this tech memo, but in general the exterior of the concrete walls appears to be in fair condition. The exterior coating is delaminating in many areas and should be re-coated. There are some horizontal cracks showing under the coating that may need to be repaired prior to re-coating. The tank cover does not appear to be fully sealed, indicating the sealant between the tank walls and cover should be replaced. In addition, the concrete cover has some areas of surface delamination and cracking that should be repaired. A detailed inspection of the tank exterior and interior should be conducted by a structural engineer when the tank is emptied and cleaned.

There are four 36-inch manways on the tank cover for access. WWTP staff stated that they would like to retrofit a new access point on the side wall of the tank, like Tank No. 1 which has two hatches, each a few feet above grade. However, retrofitting a new access hatch is not recommended because it would be difficult to provide steel reinforcement around the new opening, coring and testing of concrete would be required, record structural plans for the tank are not available and destructive testing would be needed to identify the location and size of steel reinforcement, the interior condition of the tank walls is unknown, and the tank is approximately 68 years old.





Digester Tank No. 3, a circular reinforced concrete tank, also constructed in 1957, has an interior diameter of 40 ft, 12-inch-thick side walls with a height of 21 ft (approximately 2 ft of which is below grade), a hopper bottom which extends down another 4.5 ft below grade, and an approximate working volume of 190,000 gal. The tank has a floating steel cover which was installed in 1994 to replace the original floating cover. Like Tank No. 2, the interior of the tank has not been cleaned, inspected, or lined in recent history. Portions of the tank interior visible above the floating cover appear to be in fair condition. There are some old anchor points showing rust stains that should be inspected closer and may need to be repaired if the rust is coming from rebar. A detailed inspection of the tank exterior was not conducted for this tech memo, but in general the exterior of the concrete walls appears to be in fair condition. The exterior coating is delaminating in some areas and should be recoated. There are some horizontal cracks showing under the coating that may need to be repaired prior to re-coating. A detailed inspection of the tank exterior and interior should be conducted by a structural engineer when the tank is emptied and cleaned. The coated steel floating cover is heavily rusted and should be completely recoated or replaced.





2.7.2 Digester Mixing Systems

Each of the primary digesters (Tank No. 1 and Tank No. 2) have a vertical lance gas mixing system which takes digested gas produced from the digester using a positive displacement blower and then sequentially injects the gas back into the digester via a rotary valve and seven vertical lance assemblies located throughout each digester. The digester mixing system for Tank No. 1 was installed in 1989 when the tank was constructed and the digester mixing system for Tank No. 2 was installed in 1994. Per WWTP staff, both systems work well. However, the equipment and piping are old and are showing heavy rust. The entire mixing system and associated piping should be replaced.







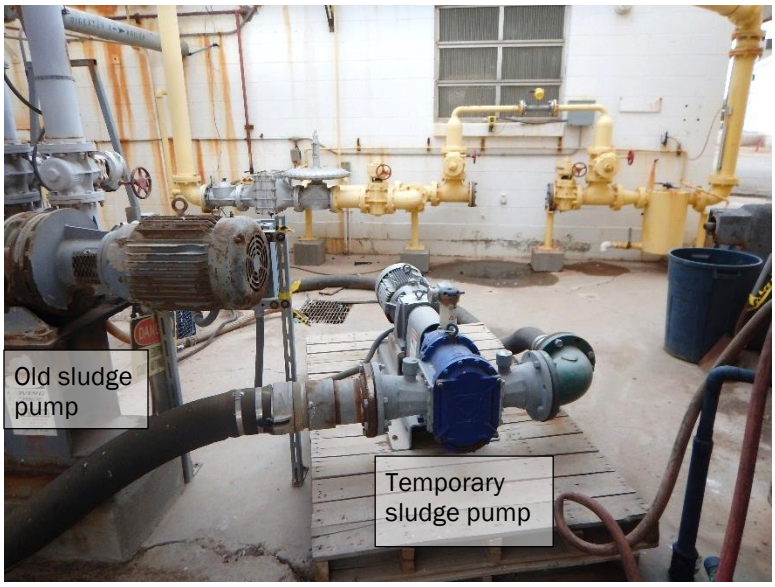


2.7.3 Sludge Treatment Infrastructure

The sludge heating system, located in the primary control/boiler building east of Digester Tanks No. 2 and No. 3, was upgraded in 2016 with a new heat exchanger/boiler. The heat exchanger is fueled by digested gas from the three digesters and recirculated sludge is heated to a temperature of approximately 95°F. Per WWTP staff the sludge heating system is in good condition and does not need to be replaced.

There are two active sludge pumps located between Digester Tanks No. 2 and No. 3; one for digested sludge transfer to the belt filter presses and one for sludge recirculation/heating.

The digested sludge pump currently being used is a rotary lobe pump (Vogelsang Model VX136-210Q). The pump is installed in a temporary setup to replace the old sludge pump that is no longer operable. Per WWTP staff, the lobe pump works very well and is easier to maintain than the old pump. The pump currently draws digested sludge from the bottom of Tank No. 3 and pumps sludge to the belt filter presses for dewatering, but occasionally the piping is reconfigured to pump sludge from either Tank No. 1 or Tank No. 2. The old sludge pump needs to be removed, and a new rotary lobe pump needs to be installed on a permanent equipment pad with permanent piping and electrical equipment. WWTP staff would also like to install a second sludge pump for redundancy. The current rotary lobe pump would then be stored by the WWTP for backup.



The sludge recirculation pump currently being used is a Vaughn chopper pump installed in 2008. The pump draws sludge from the two primary digester tanks (Tank No. 1 and Tank No. 2) and then pumps sludge through the sludge heat exchanger and back to the primary digester tanks as part of the sludge heating system. Per WWTP staff, the pump is in good condition and does not need to be replaced.



The existing sludge piping and valves between the digestors, between the digestors and the primary clarifiers, and between the digestors and the belt presses consists primarily of 6-inch ductile or cast-iron pipe. Some of the pipes are exposed and some are buried underground. Most of the piping appears to have been installed in 1989 along with the construction of Digester Tank No. 1. However, some of the piping connected to Tanks No. 2 and 3 may be original piping when the tanks were constructed in 1957. The exterior condition of the piping varies but is in poor condition overall

and the interior condition is unknown. All the sludge piping, valves, and appurtenances should be completely replaced and piping that is no longer necessary for the current or future operation, including supernatant piping, should be removed.

WWTP staff would also like a new digested sludge bypass line installed from Tank No. 1 to Tank No. 3 (around Tank No. 2) so that the primary digesters (Tank No. 1 and No. 2) can be operated in parallel, which would allow either tank to be taken offline independently. Currently Tank No. 1 can be taken offline independently but Tank No. 2 cannot because digested sludge from Tank No. 1 overflows into Tank No. 2.


Primary sludge piping


Digested sludge piping

2.7.4 Digested Gas Piping and Burner

Digested gas (from all three digester tanks) not used by gas mixing systems is piped to a manifold assembly outside of the primary control/boiler building where some gas is used by the sludge heating system and any remaining gas is piped to the waste gas burner (torch) located east of the digesters across the access road. Like the sludge piping, the piping consists primarily of 6-inch pipe and appears to be ductile iron or steel pipe. Most of the gas piping is exposed except for the underground line running between the boiler building and the waste gas burner. Most of the piping was installed in 1989 with Digester Tank No. 1 or in 1994 with the installation of the gas mixing system for Digester Tank No 2. The exterior condition of the piping varies but is in poor condition overall and the interior condition is unknown. The waste gas burner and all the digested gas piping, valves, and appurtenances should be completely replaced.





2.7.5 Digesters Site

The existing concrete flatwork around all the digesters is in poor condition and should be replaced. Per the WWTP there is also a storm drain between Tank No. 2 and No. 3 that has collapsed and should also be replaced.

A detailed inspection of the existing stairways and platforms for the digesters was not conducted for this tech memo, but in general they appear to be in fair condition except that the spiral stairway and platforms between Tank No. 2 and No. 3 need to be recoated. WWTP staff have indicated that both stairways interfere with maintenance operations and would like the stairway between Tank No. 1 and No. 2 relocated to provide better forklift access to the gas mixing blower and would like the spiral stairway between Tank No. 2 and No. 3 relocated closer to one of the tanks. WWTP staff also indicated that the spiral stairway between Tank No. 2 and No. 3 could be shortened to only provide access to the lower platform since the upper platform can be accessed from the other stairway.





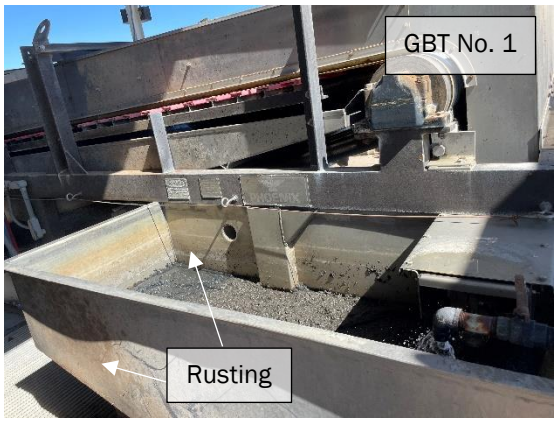
2.8 SOLIDS HANDLING AND DEWATERING

2.8.1 Gravity Belt Thickeners

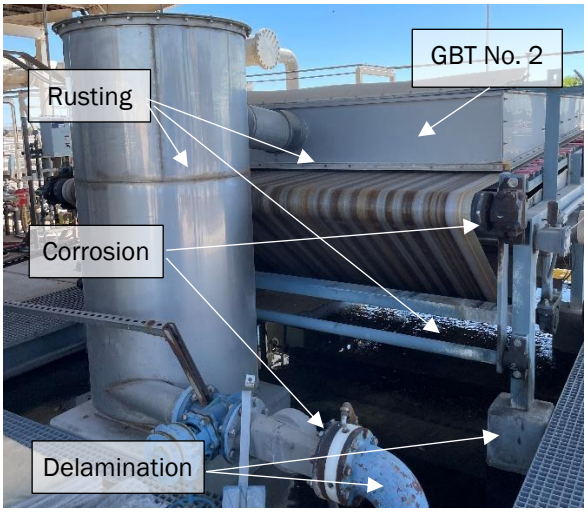
Waste activated sludge (WAS) at about 1% solids content is pumped from the sludge pump station into a gravity belt thickener (total of two gravity belt thickener units installed: one duty, one standby). Each gravity belt thickener has a maximum hydraulic loading capacity of 560 gpm and a maximum solids loading capacity of 917 lb/hr at design average flow. The gravity belt thickeners are model No. TT-30 manufactured by Phoenix, installed in 1994 and 2008 (GBT No. 1 and No. 2, respectively). WAS is treated with polyacrylamide emulsion polymer (Clarifloc S462) to enhance the removal of water. The gravity belt equipment has the capacity to thicken sludge to 4% solids content.

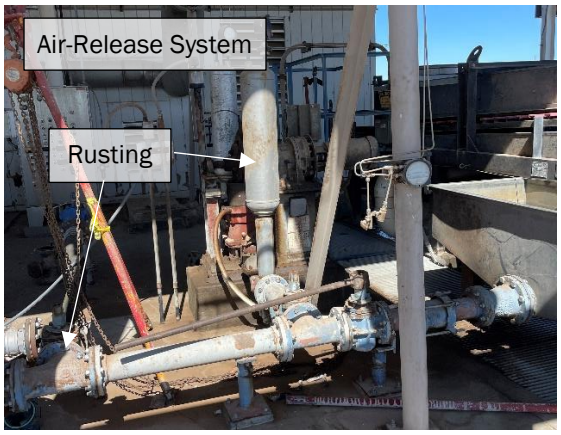
Thickened sludge is then pumped into the anaerobic primary digester, where it mixes with primary sludge. The sludge pumping is accomplished by two plunger type pumps, which have a maximum capacity of 85 gpm at a total head of 170 ft. Each pump is driven by a 7.5 HP motor.

GBT No.1 shows minor rusting on the joints of the exterior unit and the flocculation chamber. The concrete pad under the mixing tank has minor concrete spalling but otherwise appears to be in good condition. The influent and effluent piping, valves, and appurtenances have delaminated coatings and rusting. Grating around the unit appears to be in good condition. The support beams have delaminated coatings and rusting. The concrete slabs under the GBT No. 1 unit have minor cracking and spalling but otherwise appear to be in good condition. The discharge hopper has rusting on the interior and exterior. GBT No. 1 is at the end of its lifecycle (30 years of operation) and should be replaced, including all piping and appurtenances. The concrete structures are in fair condition and are not necessary to be replaced, however rehabilitation is recommended.



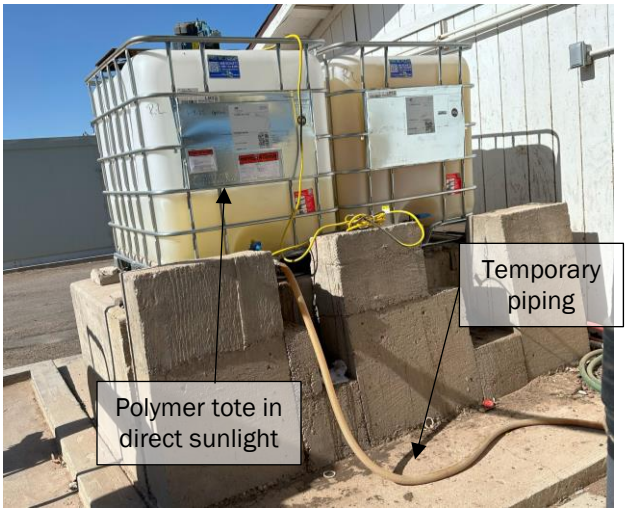
GBT No. 2 appears to have solids leaking through the seal on the exterior of the unit. There is rusting on the exterior unit and metal beams as well. Grating over the sump is in good condition. The sump has significant algae growth. The GBT No. 2 discharge hopper has rust on the interior. The effluent piping and appurtenances have a delaminated coating and rusting. The motor has heavily rusted and has delamination as well. Minor spalling and delamination is evident on the concrete slabs under GBT No. 2 but are otherwise in good condition. GBT No. 2 is reaching the end of its useful life and should be replaced in the next 5 to 10 years. including piping and appurtenances. Rehabilitation is recommended for the concrete slabs when the unit is replaced.

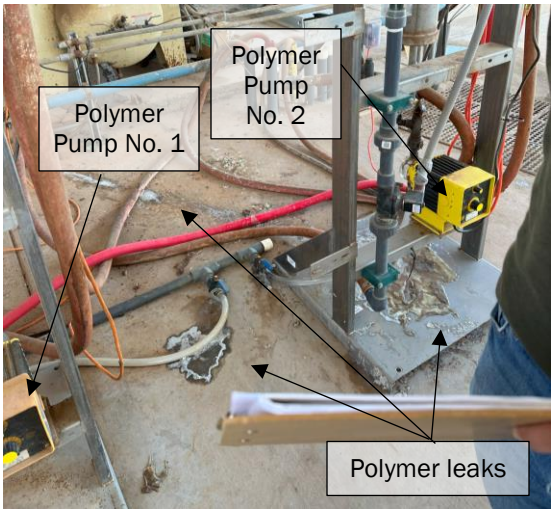


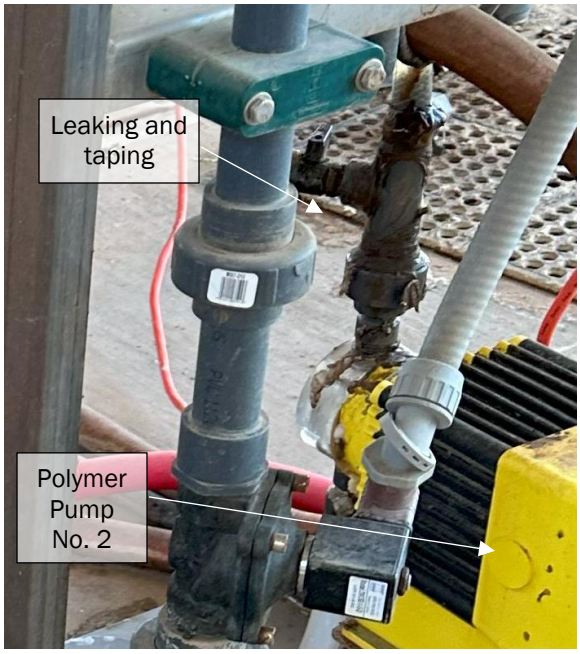


The polymer feed system is used for both the GBTs and belt filter presses (BFP). Polymer is stored in totes and are outside and in direct sunlight. Polymer to and from chemical feed pumps presents leaks and should be replaced. Polymer Feed Pumps No. 1 appears to be in good condition. Polymer feed pump No. 2 appears to be in poor condition. The outlet connection from Polymer Feed Pump No. 2 to the hose is damaged and wrapped in tape, with visible leaks.

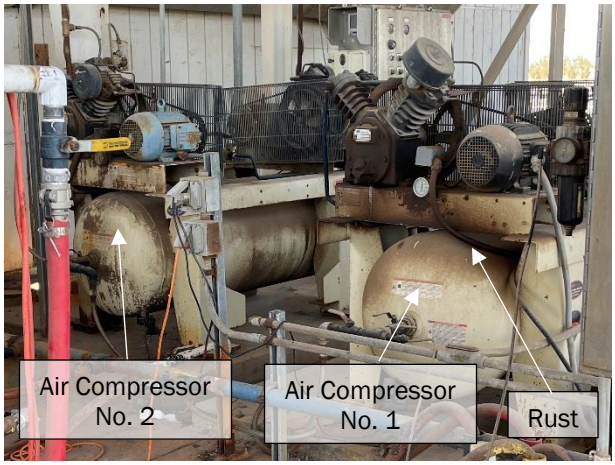
The shade structure over GBTs No. 1 and No. 2 and TWAS pumps No. 1 and No. 2 is rusted and should be repaired and recoated.









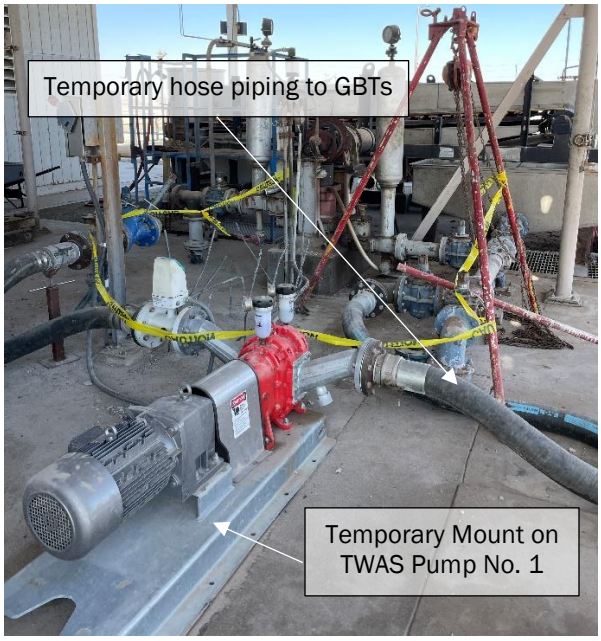


2.8.2 TWAS Pumps

The plant has two TWAS pumps located under the shade structure in the solids handling area, TWAS Pumps No. 1 and No. 2. TWAS Pump No. 2 is currently disconnected and set to be replaced in 2025. TWAS pumps pump thickened sludge from the GBTs to the digester. TWAS Pumps No. 1 and No. 2 were installed in 1994. TWAS Pump No. 1 was replaced with a Vogelsang progressive cavity pump sometime between 2008 and 2025 and is temporarily mounted and in good condition. TWAS Pump No. 1 is the only TWAS pump currently in operation. TWAS Pump No.1 is connected to the GBTs via temporary hose piping. Only one GBT is operated at a time and the temporary piping to TWAS Pump No. 1 is connected to the GBT currently in operation. Until TWAS Pump No. 2 is replaced, the existing TWAS Pump No. 2 will likely remain disconnected. TWAS pump No. 2 is a piston pump set to be replaced with a Vogelsang progressive cavity pump in 2025. The piston pump was used along with

the existing air-release system. The air-release system, installed in 1994, includes a vertical air-release tank upstream and downstream of the TWAS pumps, pressure gauges, piping, and appurtenances. Because TWAS Pumps No. 1 and the future TWAS Pump No. 2 are progressive cavity pumps, the air-release system will not be needed.

TWAS Pumps No. 1 and No. 2 should be permanently mounted on concrete pedestals. The air-release system including tanks, piping, and appurtenances should be removed along with TWAS Pump No. 2. Because the air-release system would no longer be in operation, the air-release system should be removed along with the existing TWAS Pump No. 2.

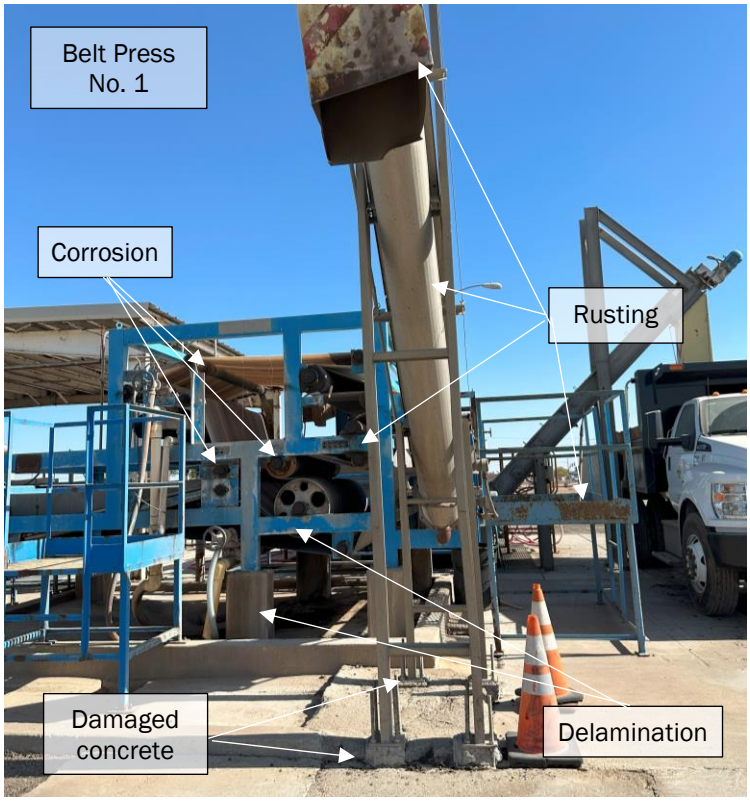


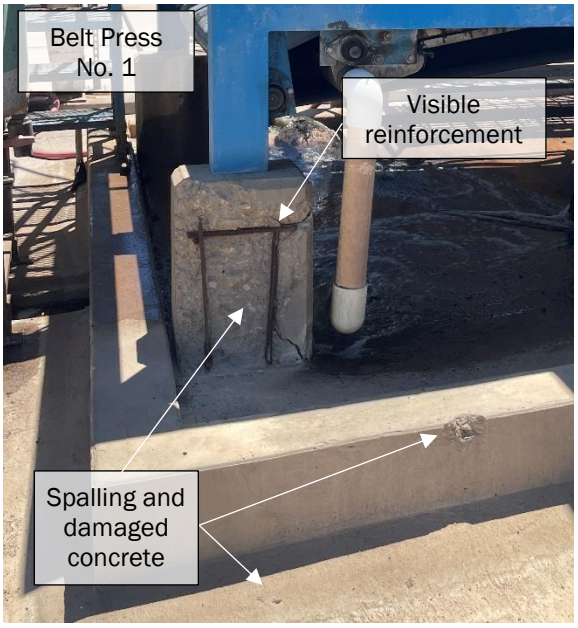
2.8.3 Sludge Dewatering Belt Filter Presses

The belt filter presses (BFP) take digested sludge from the digesters to further dewater prior to drying in the sludge drying beds. The sludge dewatering system consists of two belt filter presses, one duty and one standby. Belt Press No. 1 (Parkson Model No. MPL-80) was installed in 1994 and is scheduled for replacement in 2025. Belt Press No. 2 (Model No. SER 1000-20 OH) was installed in 2008 for redundancy. Both belt presses are fed polymer from Polymer Feed Pump No. 2 to their respective flocculation/mixing tanks.

Belt Filter Press No. 1 is in poor condition and has reached the end of its useful life cycle. The metal frame, fixtures, and access platforms and ladders show corrosion and coating delamination. The dewatered sludge conveyor shows areas of rust, and the support concrete slab is in poor condition presenting cracks. Concrete support columns for BFP have cracked and spalled, exposing reinforcement rebar. The concrete slab surrounding the belt press, including the curb, has cracks, fractures, spalling, and visible aggregate in several areas. The drain south of the belt press has no grate and is a safety hazard. The grate surrounding the sump has rusted. The influent piping, flocculation tank and motor are rusted and corroded. As part of the replacement of BFP No. 1 in

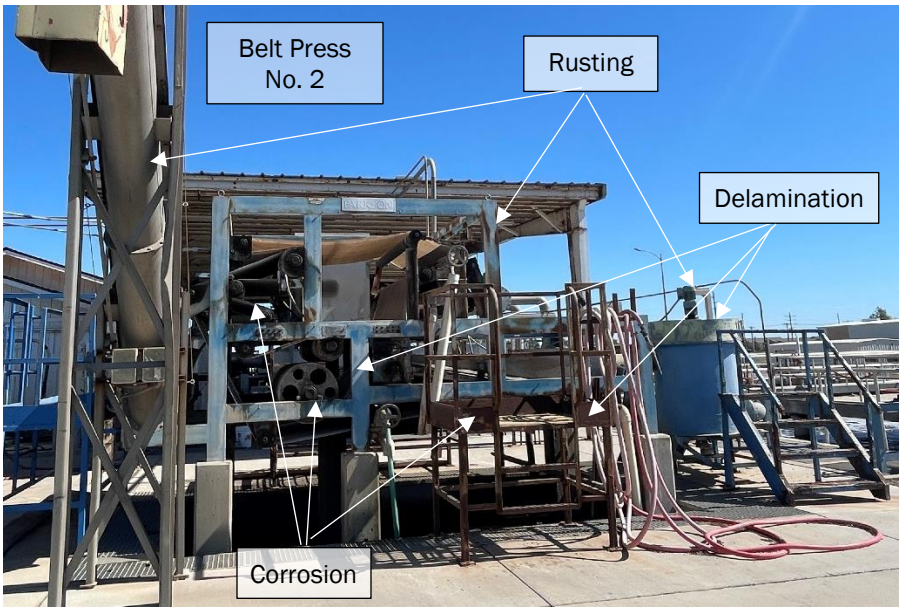
2025, piping, valves, mixing tank, concrete sump and slabs, and auxiliary components should be rehabilitated or replaced.





Belt Press No. 2 is in poor condition. The metal beams for the unit have delaminated coatings and are heavily rusted. All fixtures and appurtenances are rusted with delaminated coatings. The

conveyor, motor, and all access ladders are rusted and corroded. The east access ladder has steps with large holes caused by corrosion. The concrete pillars supporting the belt press have delamination, spalling, and solids buildup. The grate surrounding Belt Press No. 2 has rusted. The surrounding concrete of the belt press has rust stains, visible aggregate, and spalling. The flocculation tank, motor, and associated piping and appurtenances are rusted and corroded. Belt Press No. 2, including valves and appurtenances, influent piping and appurtenances, the flocculation tank and motor, the conveyor, and the concrete slabs are all in poor condition and should be replaced.



Belt press No. 1 and No. 2 are in direct sunlight and should be covered by a shade structure



2.8.4 Sludge Drying Bed

The drying bed is a 209-foot by 209-foot 6" thick concrete slab with a single reinforcement mat installed in 2008 and is in good condition. Dewatered sludge from the belt filter presses are conveyed into dump trucks and transported to the onsite sludge drying bed. City staff has indicated that additional sludge drying area would facilitate handling and storage of drying sludge prior to transporting offsite. An additional 209-feet by 209-feet sludge drying bed is recommended be added adjacent to the existing.



2.9 BUILDINGS

Several of the buildings around the plant are in poor condition and need to be refurbished or replaced.

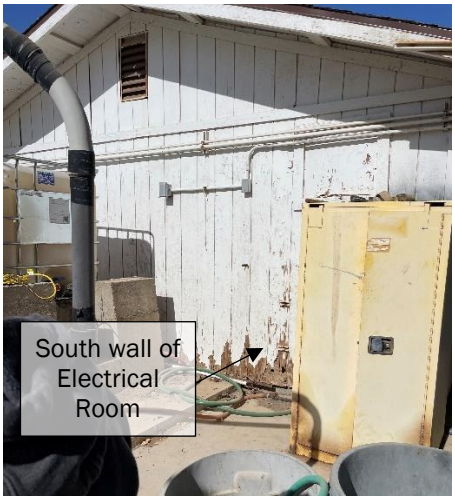
2.9.1 Blower Building

The blower building is a timber structure which was originally constructed in 1988. The building has two rooms, a blower room and an electrical room. The blower room, which contains the blowers described in Section 2.4.2, was modified in 2017 to raise the walls and roof for the replacement blowers.

The electrical room, which contains Motor Control Center (MCC) No. 3 and control panels used for a variety of treatment processes, was not rehabilitated as part of the blower upgrade project in 2017. The exterior wood siding of the electrical room is in poor condition and should be replaced or refurbished and should be re-painted. The roof of the electrical room is also in poor condition and should be replaced.

The electrical room has some equipment that is no longer in use, some of which was replaced with new equipment in the MCC No. 3A building, a prefabricated metal building in good condition located west of the blower building installed in 1994.





2.9.2 Main Office Building

The main office building was constructed in 1972. The building has a footprint of approximately 50 feet by 37 feet. The main office building has a control room, laboratory, storage room, bathroom, and janitor closet. The building is in good condition. There have been no modifications to the main office building since it was constructed as part of several plant improvements and expansions since it was originally built. There is insufficient space for the operations staff along with outdated appliances and poor internet connection. As such, WWTP staff has requested the installation of a new office building.

The new building should include a larger control room, a men's and a separate women's locker room with showers, a break room with a kitchen, a conference room, a storage room, a bathroom, an operator's lab, offices for the managerial WWTP staff, and reliable internet connection/Wi-Fi. The new main office building could be located north of the existing office building. The lab in the existing building should remain as is and the rest of the building should be repurposed as the WWTP staff see fit.

3.0 PRELIMINARY CAPACITY ASSESSMENT

A preliminary capacity assessment was performed to determine the ability of the main treatment processes to meet existing average dry weather flow, maximum daily flow, projected 2045 average dry weather flow. and projected peak wet weather flow conditions. For the purposes of this technical memorandum, the primary clarifiers, aeration basins, and secondary clarifiers are defined as the main treatment processes and were included in the capacity evaluation. This capacity evaluation is a planning level assessment and not a detailed process analysis or model of the treatment process intended to compare the operation of the units under anticipated flow conditions to typical operation parameters for each process.

3.1 DATA ACQUISITION

Flow data for the WWTP was obtained from the City's Supervisory Control and Data Acquisition (SCADA) system which included instantaneous flow measurements every 15 minutes. The City also provided wastewater characteristics data for the treatment plant and its components through their Discharge Monitoring Report (DMR) monthly monitoring reports. As-builts were obtained from the City for the dimensions of the primary clarifiers, aeration basins, and secondary clarifiers.

The results obtained for the capacity assessment were compared to recommended standards described in industry literature, including *Wastewater Engineering: Treatment and Resource Recovery; Fifth Edition* by Metcalf & Eddy and *Wastewater Treatment Plants: Planning, Design, and Operation* by Syed R. Qasim.

3.2 FLOW SCENARIOS

Four flow scenarios were evaluated for the capacity assessment including: 1) existing average dry weather flow (ADWF), 2) existing maximum daily flow, 3) projected future ultimate (2045) average dry weather flow, and 4) projected peak wet weather flow (PWWF). The flows used for each scenario are summarized in Table 1 below.

Table 1 – Flow Scenarios

Existing ADWF (MGD)	Existing Maximum Daily Flow (MGD)	Projected 2045 ADWF (MGD)	Projected PWWF (MGD)
3.52	5.16	4.68	9

Existing average flow was calculated by averaging influent flow data from the City's SCADA system between July 13, 2023 and July 13, 2024, which yielded an average flow of approximately 3.52 MGD. The maximum daily flow was obtained from the same period, averaging the flows for each day, and determining the maximum value of average daily flows, estimated at 5.16 MGD. The projected future ultimate ADWF was provided by Dudek as part of the City's updated master plan based on planned developments, which estimated at 4.68 MGD in 2045. The peak wet weather hourly flow was provided by City staff based on recent wet weather events as measured at the WWTP at 9 MGD, with all lift stations fully operational.

3.3 MAIN TREATMENT PROCESSES CAPACITY ASESSMENT

The following sections further describe the capacity assessment for each treatment process. The primary clarifiers were assessed for surface loading capacity, detention time, and weir loading capacity. The aeration basins were assessed for hydraulic retention time (HRT) and Biological Oxygen Demand (BOD) Loading. The secondary clarifiers were assessed for surface loading capacity, HRT, and solids loading.

3.3.1 Primary Clarifiers

The capacity of the primary clarifiers was evaluated by calculating the surface loading, detention time, and weir loading for each flow scenario. Surface loading is a standard measurement to determine clarifier capacity, which represents the ratio of the surface area of the clarifier divided by the flow rate. Operating clarifiers at a high surface loading rate can result in solids not adequately settling and not being captured prior to secondary treatment. The hydraulic detention time was also calculated and compared to the recommended operating range. Low detention times can result in unfavorable flow conditions in the clarifier and don't allow sufficient time for solids to settle. Weir-loading rates were calculated for each flow scenario which represent flow volume per length of effluent. Weir loading rates above the recommended range can result in turbulent conditions in the clarifier that could prevent adequate settling of solids.

The primary treatment process consists of two (2) circular clarifiers, each clarifier has a diameter of 65 ft, side water depth (SWD) of 8.75 ft, and a surface area of approximately 3,318 ft^2. The surface loading, detention time, and weir loading rate for each flow scenario was calculated and is presented in Table 2 below.

Table 2 – Preliminary Capacity Assessment of Primary Clarifiers

Parameter	Recommended Operating Range	Existing ADWF	Existing Maximum Daily Flow	Projected 2045 ADWF	Projected PWWF
Flow Rate (MGD)	-	3.52	5.16	4.68	9
Surface Loading (gpd/ft^2)	800-1,200	530	777	705	**1,356**
Detention Time (hr)	1.5-2.5	2.96	2.02	2.48	**1.16**
Weir Loading Rate (gal/ft-day)	10,000-40,000	8,613	12,630	11,459	22,037

As shown above, for the existing ADWF, maximum ADWF, and projected ADWF scenarios, the primary clarifiers operate within or below the recommended operating range for surface loading, detention time, and weir loading rate. However, for the projected peak wet weather flow scenario the surface loading exceeds the recommended range and detention time is lower than the minimum recommended.

3.3.2 Aeration Basins

The capacity of the aeration basins was evaluated by calculating the hydraulic retention time (HRT) and biological oxygen demand (BOD) loading for each flow scenario. HRT represents the time required for influent to flow through the aeration basins and is calculated by dividing the total volume of the aeration basins by the influent flow rate. Sufficient HRT is required for the biological process to remove organics from the wastewater prior to separating solids in the secondary clarifiers. BOD loading is a measure of the dissolved organic content in the wastewater is calculated by taking the aeration basin influent BOD concentration and multiplying by the flow rate. Higher BOD concentrations in the influent will result in a higher BOD loading to the aeration basins, requiring a larger volume to achieve treatment.

There are six (6) rectangular aeration basins with a combined volume of approximately 193,403 ft^3, and their dimensions are shown in Table 3.

Table 3 –Dimensions of Aeration Basins

Dimension	Unit	Result
Basins 1-4		
Length	ft	50
Width	ft	50
SWD	ft	12.05
Volume of Each Basin	ft^3	30,125
Total Volume	ft^3	120,500
Basins 5-6		
Length	ft	55
Width	ft	55
SWD	ft	12.05
Volume of Each Basin	ft^3	36,451
Total Volume	ft^3	72,903

The HRT and BOD loading were calculated based on the dimensions from Table 3 above. The HRT and BOD loading for the aeration basins for each flow scenario are presented in Table 4 below.

Table 4 – Preliminary Capacity Assessment of Aeration Basins

Parameter	Recommended Operating Range	Existing ADWF	Existing Maximum Daily Flow	Projected 2045 ADWF	Projected PWWF
Flow Rate (MGD)	-	3.52	5.16	4.68	9
Hydraulic Retention Time (hr)	4 - 8	9.9	6.7	7.4	**3.9**
BOD Loading (lbs/1,000 ft^3-day)	20 – 40[2]	28	**41**	37	**71**

As shown in the table above, the HRT for the existing ADWF, existing maximum ADWF, and projected ADWF scenarios is within or exceeds the recommended operating range which indicates the aeration basis provide adequate detention time for these flow conditions. For the projected PWWF scenario, the HRT is below the recommended operating range.

The aeration basins operate within the recommended operating range for BOD loading for the existing ADWF and projected 2045 ADWF scenarios. However, under the other two (2) flow conditions, the aeration basins exceed the recommended BOD loading.

3.3.3 Secondary Clarifiers

The capacity of the secondary clarifiers was evaluated by calculating the HRT, surface loading, and solids loading for each flow scenario. HRT represents the time required for influent to flow through the secondary clarifiers and is calculated by dividing the total volume of the clarifiers by the influent flow rate. If the HRT is too low, solids may not be adequately removed impacting effluent quality. Surface loading is a standard measurement to determine clarifier capacity, which represents the ratio of the surface area of the clarifier divided by the flow rate. Operating clarifiers at a high surface loading rate can result in solids not adequately settling and not being captured prior to UV disinfection. Solids loading represents the quantity of solids in the influent entering the secondary clarifiers. Solids loading is calculated by dividing the quantity of mixed liquor suspended solids (MLSS) in the water, calculated as gallons per day (gpd), by the total surface area of the clarifiers.

There are four (4) secondary clarifiers at the WWTP, each with a diameter of 80 ft and a SWD of 9.95 ft. The secondary clarifiers have a total volume of 120,500 ft^3 and a combined surface area of 20,106 ft^2.

The HRT, surface loading, and solids loading for the secondary clarifiers for each flow scenario were calculated and presented in Table 5 below.

Table 5 – Preliminary Capacity Assessment of Secondary Clarifiers

Parameter	Recommended Operating Range	Existing ADWF	Existing Maximum Daily Flow	Projected 2045 ADWF	Projected PWWF
Flow Rate (MGD)	-	3.52	5.16	4.68	9
Hydraulic Retention Time (hr)	4 – 8[1]	10.2	7.0	7.7	4.0
Surface Loading (gpd/ft²)	400-600[1]	197	257	233	448
Solids Loading (lbs/ft²-hr)	0.4-1.2[2]	0.1	0.2	0.2	0.4

As shown above, the HRT for the existing ADWF scenario exceeds the recommended operating range. However, this indicates the secondary clarifiers are operating under capacity and can handle the flow scenario. This means at least one (1) secondary clarifier can be taken offline for maintenance during the existing ADWF scenario while still operating within the recommended range. The HRT is within the recommended operating range for the remaining three flow scenarios.

For the projected PWWF scenario, the surface loading rate is within the recommended range. During the remaining three (3) flow scenarios, the surface loading is less than the recommended range. However, this indicates the secondary clarifiers are operating under capacity for these flow conditions.

During projected PWWF conditions, the solids loading rate is within the recommended solids loading range. Under the remaining three (3) flow conditions, the solids loading rate is less than the recommended minimum loading rate. However, this indicates the secondary clarifiers are operating under capacity for these flow conditions.

3.4 SUMMARY OF RESULTS AND RECOMMENDATIONS

Table 6 below summarizes the capacity assessment results for the primary clarifiers, aeration basins, and secondary clarifiers for each flow scenario. Values in red are values that exceed the recommended operating range for a given parameter.

Table 6 – Preliminary Capacity Assessment Results Summary

Treatment Process	Parameter	Existing ADWF	Existing Maximum Daily Flow	Projected 2045 ADWF	Projected PWWF
-	**Flow Rate (MGD)**	3.52	5.16	4.68	9
Primary Clarifiers	**Surface Loading (gpd/ft²)**	530	777	705	**1,356**
	Detention Time (hr)	1-2	2.96	2.48	1.16
	Weir Loading Rate (gal/ft-day)	8,613	12,630	11,459	22,037
Aeration Basins	**Hydraulic Retention Time (hr)**	9.9	6.7	7.4	**3.9**
	BOD Loading (lbs/1,000 ft³-day)	28	**41**	37	**71**
Secondary Clarifiers	**Hydraulic Retention Time (hr)**	10.2	7.0	7.7	4.0
	Surface Loading (gpd/ft²)	197	257	233	448
	Surface Loading (gpd/ft²)	0.1	0.2	0.2	0.4

3.4.1 Primary Clarifiers Capacity Alternatives

Since the primary clarifiers do not have capacity to meet projected PWWF hourly scenario (9 mgd), two alternatives were developed to increase the capacity. Alternative A considers adding two clarifiers to match the size of the existing clarifiers (total of four clarifiers) to meet anticipated PWWF conditions. Alternative B considers installing two larger clarifiers to replace the existing clarifiers to provide the required capacity. Both alternatives are described below.

3.4.1.1 Alternative A

Constructing another primary clarifier with the same dimensions as the existing clarifiers would allow the WWTP to operate within the recommended range for surface loading during the peak wet weather flow scenario with a surface loading of approximately 904 gpd/ft². However, it is recommended that two (2) new primary clarifiers be installed for redundancy purposes and even flow distribution. Two new clarifiers would be installed just west of the existing units with the same dimensions. Based on the conditions of the existing clarifiers, the two existing units would still be

required to be refurbished (replace equipment, bridge, motors, piping), and the influent structure and piping to be replaced to allow flow splitting to all four units.

3.4.1.2 Alternative B

Alternative B considers replacing the existing clarifiers with two larger units with all new equipment, just west of the existing clarifiers. A new influent structure would be required to split flow to the two new units. Once the new units are operational, the existing clarifiers could be demolished. The existing primary clarifiers would be replaced with two (2) with a diameter of approximately 85 feet and SWD of 12 feet. Having two new units as considered in Alternative B will reduce operation and maintenance cost compared to four units considered in Alternative A.

3.4.1.3 Recommended Alternative

Table 7 below compares the operation of the existing clarifiers, Alternative A and Alternative B.

Table 7 – Characteristics of Existing and Proposed Primary Clarifiers

Treatment Process	Parameter	Existing ADWF	Existing Maximum Daily Flow	Projected 2045 ADWF	Projected PWWF
-	**Flow Rate (MGD)**	3.52	5.16	4.68	9
Existing Primary Clarifiers	**Surface Loading (gpd/ft²)**	530	777	705	**1,356**
	Detention Time (Hr)	2.96	2.02	2.48	**1.16**
	Weir Loading Rate (gal/ft-day)	8,613	12,630	11,459	22,037
Alternative A	**Surface Loading (gpd/ft²)**	265	389	353	678
	Detention Time (Hr)	5.93	4.04	4.96	2.32
	Weir Loading Rate (gal/ft-day)	4,307	6,315	5,730	11,018
Alternative B	**Surface Loading (gpd/ft²)**	310	455	412	793
	Detention Time (Hr)	6.95	4.74	4.79	2.72
	Weir Loading Rate (gal/ft-day)	6,587	9,658	8,763	16,852

Both Alternatives A and B are able to meet the capacity required for peak hourly wet weather conditions. Alternative B offers several advantages over Alternative A including the ability to complete construction of the two new units with minimal disturbance to the operation of the WWTP, a lower anticipated construction cost, and lower future operation and maintenance costs by operating only two units instead of the four units considered in Alternative A. Based on these advantages, Alternative B to install two larger units to replace the two existing units is recommended.

4.0 RECOMMENDATIONS

Recommended improvements for the WWTP are listed below to address the condition deficiencies described in Section 2.0 and the capacity deficiencies described in Section 3.0. These improvements are broken down into treatment processes and summarized in Tables 8 through 14. See the sections below for an overview of these recommended improvements.

CIP project descriptions will be prepared following the Draft WWTP Condition Assessment TM review by City Engineering and Operations staff. Estimated construction value for each CIP project will also be prepared following City's review.

4.1 HEADWORKS AND PRIMARY TREATMENT

Table 8 - Headworks and Primary Treatment Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Mechanical	Bar screen structure - replace entrance door hardware and intrusion switch	The door trigger is faulty, and a wooden post is currently holding the door shut to prevent the door from opening.	Operational Failure
Mechanical	Repair floor drain at staircase landing, bar screen structure lower-level entrance.	Unclog/repair floor drain to prevent accumulation of water in the staircase landing.	Operational Failure
Mechanical	Replace channel grating hardware, bar screen structure.	Grating hardware has corroded and grating is not secured at influent channel inside the bar screen structure.	Safety
Structural	Install shade structure over primary sludge pumps	A shade structure should be installed to protect the primary sludge pumps and control panel from the elements.	Structural Failure
Mechanical	Replace all piping that is 6-inches or less, scum piping, plug valves, and all other related valves and appurtenances in the primary clarifier gallery	The smaller diameter piping and related appurtenances have delaminated coatings and rust. These are in poor condition and should be replaced.	Operational Failure

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Mechanical	Remove all unused piping and related appurtenances in primary clarifier gallery	Remove piping not in use that continues to deteriorate.	Unused Equipment
Mechanical	Replace temporary piping connected to primary sludge pumps with permanent piping in primary clarifier gallery	Temporary hoses should be removed, and properly supported ductile iron piping should be installed to and from primary sludge pumps.	Operational Failure/Safety
Mechanical	Replace the five sluice gates and metallic safety components including the grating, handrail, light pole, shade structure, and sampling shed platform in the primary clarifier gallery	Structural, lighting, and safety components have reached the end of their useful like, are heavily rusted and in poor condition. The condition of the sluice gates is unknown but are assumed to be in need of replacement based on age.	Operational Failure
Structural and Mechanical	Recoat and inspect 24-inch influent line and replace temporary wooden supports with permanent concrete or steel supports	The exterior of the influent line has a delaminated coating that should be replaced. The interior condition is unknown and should be inspected to determine to replacement is necessary.	Coating Delamination/ Operational Failure
Structural	Empty, clean, and have a structural engineer inspect the interior and exterior of the influent distribution structure to determine proposed structural improvements.	The interior has not been cleaned or inspected in recent history and the concrete walls and concrete roof deck are in poor condition with large cracks and spalling. The storm drains between digesters and influent distribution structure are clogged.	Structural Failure
Mechanical	Replace existing clarifiers with two larger clarifiers (Alternative B)	Replacing the existing clarifiers with larger ones would solve the above problem while not adding an operational burden to the operators by having four clarifiers.	Capacity

4.2 SECONDARY TREATMENT

4.2.1 Aeration Basins

Table 9 - Aeration Basins Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Structural	Empty, clean, and inspect interior and exterior of each basin	The interior condition of each basin is unknown. An inspection should be conducted to determine if rehabilitation is necessary.	Structural Failure
Structural	Rehabilitate concrete	The exterior concrete of the basin is spalling and cracking and should be rehabilitated.	Structural Failure
Structural	Remove mechanical mixer concrete pads	The aeration basins no longer use mechanical mixers, so the concrete platforms are no longer in use and should be removed. Concrete is spalling and rebar is exposed.	Unused Structure/safety
Mechanical	Replace diffusers and piping	The diffuser heads have reached their useful service life, occasionally diffuser heads have detached. Submerged piping and diffuser heads should be replaced.	Operational Failure
Mechanical	Replace 36 sluice gates	The effluent sluice gates that were not replaced in 2020 are in poor condition and should be replaced.	Operational Failure

4.2.2 Secondary Clarifiers and Ancillary Pumps

Table 10 - Secondary Clarifies Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Mechanical and Structural	Replace west splitter box and sluice gates	The west splitter box has large cracks and is in poor condition. The related sluice gates should also be replaced.	Operational/ Structural Failure
Mechanical	Replace sluice gates for central splitter box	The sluice gates on the central splitter box are in poor condition.	Operational Failure

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Structural	Inspect interior and exterior of plant water pump station	A structural engineer should inspect the interior and exterior condition of the plant water pump station after it has been emptied and cleaned to determine if replacement or rehabilitation is necessary.	Structural Failure
Structural	Replace roof deck of plant water pump station	The concrete roof deck has large cracks and is spalling and is in poor condition.	Structural and Operational Failure
Mechanical	Inspect plant water pumps, piping, and appurtenances	The plant water pumps, piping, and appurtenances are in fair condition, but further inspection or replacements should be considered when replacing the roof deck.	Operational Failure
Structural	Refurbish concrete for northwest access hatch of sludge pump room and rehabilitate concrete curb surrounding southwest aluminum hatch	The northwest access hatch has cracking on the inner concrete and the concrete curb surrounding the southwest aluminum hatch has large cracks on the northwest edge of the curb.	Structural Failure
Structural	Replace concrete pads for WAS Pumps No. 1 and No. 2	The concrete pads are in poor condition with multiple large cracks. The current pads are too high and should be replaced with shorter concrete pads.	Structural Failure
Structural	Install cover to the wet well in the sludge pump room	The wet well not having a cover is a safety hazard.	Injury Risk

4.3 SOLIDS TREATMENT

4.3.1 Digesters

Table 11 - Digesters Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Structural	Reline each digester	The interior of each digester has not been cleaned, inspected, or lined in recent history.	Coating Delamination/ Failure
Structural	Replace exterior coating on Digesters No. 2 and No. 3	The exterior coating is delaminating and has horizontal cracks visible under the coating that should be repaired.	Coating Delamination/ Failure
Structural	Replace floating cover on Digester No. 3	The floating cover is not fully sealed and has surface delamination and cracking.	Operational Failure
Mechanical	Remove old digested sludge pump and replace with new rotary lobe pump on a permanent equipment pad. Add one digested sludge pump.	The old sludge pump is no longer operable. The temporary sludge pump currently in use is not permanently mounted and has temporary hose piping. A permanent equipment pad, permanent piping, and electrical equipment should be installed.	Operational Failure
Mechanical	Replace gas mixing system with new pump-type mixing system for Digesters No. 1 and No. 2	Gas mixing system technology is becoming obsolete, and replacement components are no longer available.	Operational Failure
Mechanical	Replace all sludge piping, plug valves, and appurtenances between the digesters and primary clarifiers and between the digesters and the belt presses	The existing sludge piping was installed from 1957 - 1981 and the exterior of the piping is in poor condition.	Operational Failure

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Mechanical	Replace all waste gas piping and appurtenances for each digester	A majority of the piping was installed in 1981 or in 1994 and the exterior of the piping and related appurtenances are in poor condition.	Operational Failure
Mechanical	Remove unused piping, including the digester supernatant piping, for each digester	There is existing piping that is no longer in use and will not be used for future operation.	Unused Equipment
Structural	Recoat spiral stairway and remove lower section by Digester No. 2 and No. 3	The spiral stairway is delaminating and rusting. The stairway should be relocated closer to one of the tanks to allow better forklift access.	Coating Delamination/ Failure
Structural	Relocate stairway by Digester No. 1 and No. 2	The stairway should be relocated to allow better forklift access.	Structural Failure
Structural	Recoat the platforms for Digesters No. 2 and No. 3	The platform has visible delamination.	Coating Delamination/ Failure
Structural	Replace storm drain between digesters and primary clarifier gallery	The storm drain has collapsed.	Injury Risk / Operational Failure
Structural	Replace concrete flatwork for each digester	The concrete flatwork is damaged and in poor condition.	Structural Failure

4.3.2 Gravity Belt Thickeners

Table 12 - Gravity Belt Thickener Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Mechanical	Replace GBTs and related piping and appurtenances	GBTs No. 1 and No. 2 are at the end of their useful life. The GBTs and related piping and appurtenances are in poor condition with rusting, corrosion, and delamination.	End of Useful Life
Mechanical	Replace air compressors	Air Compressors No. 1 and No. 2 are at the end of their useful life. They are heavily rusted and in poor condition.	End of Useful Life
Structural	Rehabilitate concrete slabs	The concrete slabs under GBTs No. 1 and No. 2 have spalling but are otherwise in fair condition.	Structural Failure
Mechanical	Replace temporary polymer piping with permanent piping	All polymer piping is currently temporary hose piping and appears to have leaks that are causing a safety hazard.	Operational Failure/ Injury Risk
Mechanical	Replace Polymer Feed Pump No. 2 and outlet connection joint	Polymer feed pump No. 2 is in poor condition and the related appurtenances are damaged.	Operational Failure
Structural	Install shade structure over polymer totes that reach over the belt presses and cover polymer totes with plastic covering	The polymer totes are currently in direct sunlight so a shade structure would prevent damage from the elements. Because the belt presses are located next to the polymer totes, the structure should extend over the belt presses as well to shield them from the elements.	Operational Failure
Structural	Rehabilitate existing shade structure	The existing shade structure is rusting in some areas but is otherwise in fair condition.	Structural Failure
Mechanical	Permanently mount TWAS Pumps No. 1 and No. 2	TWAS Pump No. 1 is temporarily mounted and should be mounted on a permanent concrete pedestal. TWAS Pump No. 2 Is currently disconnected and should be permanently mounted when it is replaced in 2025.	Injury Risk/ Operational Failure

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Mechanical	Replace temporary piping for TWAS Pump No. 1 with permanent piping and install permanent piping for TWAS Pump No. 2	TWAS Pump No. 1 is connected via temporary hose piping and permanent piping should be installed for both TWAS Pumps No. 1 and No. 2.	Injury Risk/ Operational Failure

4.3.3 Dewatering

Table 13 - Dewatering Recommended Improvements

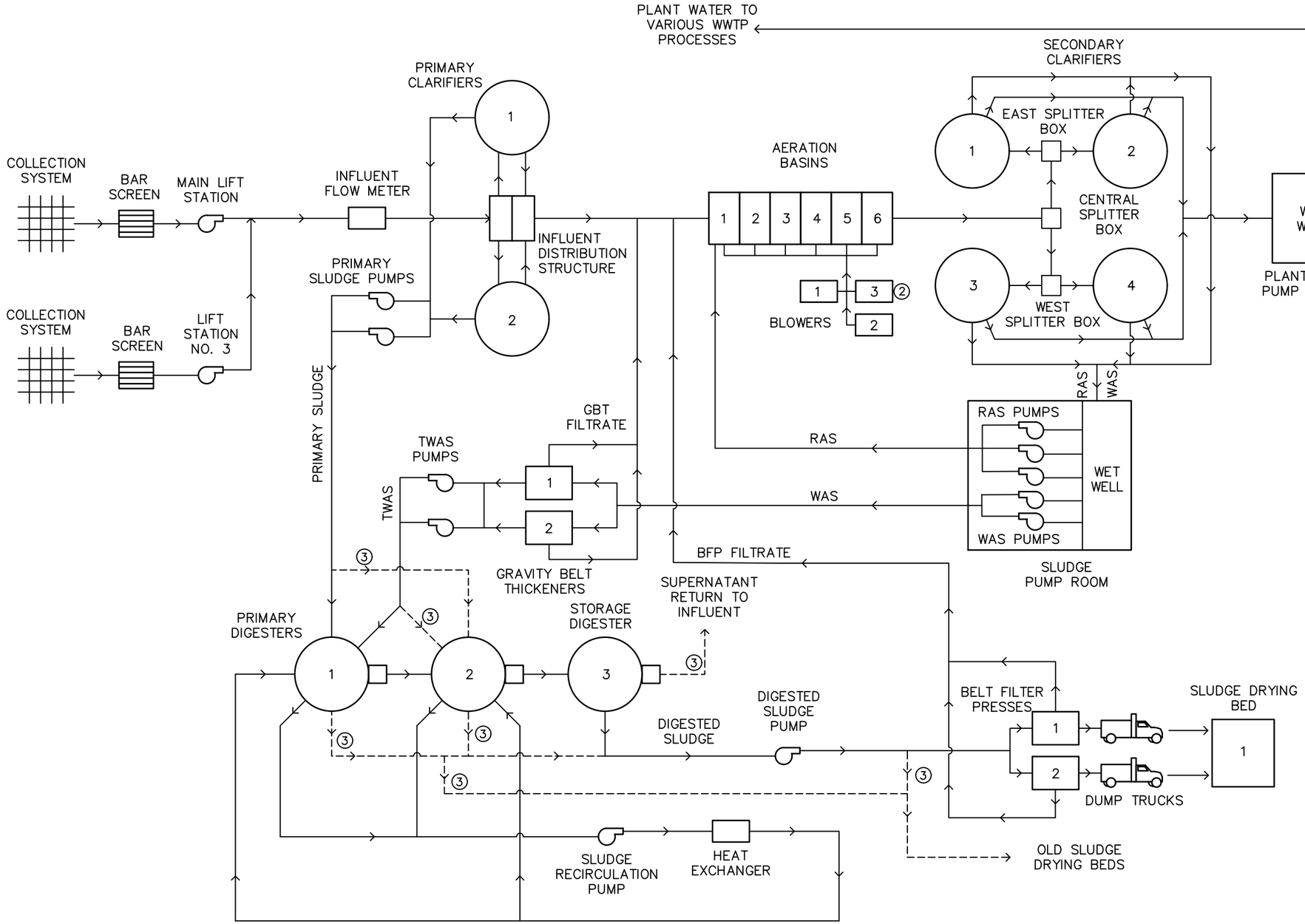
Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Mechanical	Replace Belt Press No. 1	Belt Press No. 2 is in poor condition and is set to be replaced in 2025. Belt press No. 1 has rusting and corrosion on the piping, fixtures, and on the unit itself.	Operational Failure/ End of Useful Life
Structural	Replace concrete pads under both belt presses	The concrete slabs are damaged, showing visible reinforcement, spalling, fractured, and have visible aggregate in several areas.	Structural Failure
Structural	Replace access ladders for both belt presses	The access ladders are heavily corroded and have holes in the steps.	Injury Risk
Structural	Install shade structure over both belt presses	The belt presses are in direct sunlight and should be covered by a shade structure to protect the units from the elements. The shade structure should not cover the conveyors.	Operational Failure
Structural	Install new 209-feet x 209-feet x 6-inch sludge drying bed north of the existing sludge drying bed	The current sludge drying bed is not large enough for the current solids load.	Lack of Capacity

4.4 OPERATIONS BUILDING IMPROVEMENTS

Table 14 - Buildings Recommended Improvements

Asset Discipline	Recommended Improvement Description	Justification	Type of Issue/ Risk
Structural	Construct a new main office building Northeast of the existing building.	The existing office building is too small to accommodate the staff and has one shared locker room for male and female staff. The new building should include two locker rooms, a kitchen/break room, an operations room, a conference room, an operator's lab, office spaces for management, a laundry room, and a storage room. Parking should be extended to the length of the building.	Operation Difficulty
Structural and Electrical	Remove used electrical equipment from the blower building electrical room (MCC No. 3) and refurbish the exterior of the electrical room	The exterior building and roof are in poor condition with delaminated paint and damaged wood paneling. The exterior building should be refurbished with a new roof, new wood paneling, and fresh paint. An electrical engineer should inspect the electrical equipment to determine which equipment is unused and can be removed.	Structural Failure/ Unused Equipment

FIGURE 1 – EXISTING PROCESS FLOW DIAGRAM



NOTES	
(1)	REPLACEMENT IN PROGRESS
(2)	BLOWER NO. 3 IS CURRENTLY OFFLINE AND A REPLACEMENT PROJECT IS IN DESIGN
(3)	NORMALLY CLOSED

PRELIMINARY

NOT FOR CONSTRUCTION

DATE: 11/3/25 TIME: 9:44:43 AM
SERVER: NONE LAYOUT: Layout2
PATH: T:\24-0001977\CADD\EXHIBIT
DRAWING NAME: FIGURE 1 - PROCESS FLOW DIAGRAM.DWG
PAGE SETUP: 11x17_PDF-NoMerge
DESIGNER: GB PROJ. MGR: JP

NV5
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
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TECHNICAL MEMORANDUM
EL CENTRO WASTEWATER TREATMENT PLANT
EXISTING PROCESS FLOW DIAGRAM

PREPARED FOR: CITY OF EL CENTRO **DATE SUBMITTED: NOV 2025**

SHEET NUMBER 1

JOB NUMBER 2810224-0001977.00

GENEVIEVE.BURYE



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Appendix C

Planned Near-Term Developments Table

APPENDIX C
PLANNED NEAR-TERM DEVELOPMENTS

Map ID	Development Name	Location Description	Proposed Land Use	Proposed Dwelling Units (DU)	Total Development Area (acres)	Status	Projected ADWF (GPD)	Assumed Sewer Point of Connection (Trunk Model Manhole ID)
1	Surya Hotel	Weakley St north of Wake Ave	Commercial		1.30	Planning Review Complete	1,560.00	18-17-103
2	Lotus Place Residential Subdivision	SEC Ross Ave and Austin Rd	Low Density Residential	561	160.00	Pre-Application	98,175.00	20-11-130
3	Courtyard Villas	SEC W Orange Ave and Glenwood Rd	Low Density Residential	53	19.43	Pre-Application	9,275.00	20-11-130
4	Spear & 6th Street Apartments	NEC Spears Ave and 6th St	High-Medium Density Residential	288	14.11	Planning Review	33,864.00	17-14-114
5	CR&R Transfer Station	Ross Ave, approximately 250 ft east of Montenegro Way	Industrial		8.75	Planning Review	1,750.00	20-15-123
6	Town Center Industrial Park - Residential	NWC Cruickshank Dr and N 8th St	Medium Density Residential	102	11.71	Planning Review	17,850.00	25-13-99
	Town Center Industrial Park - Industrial	NWC Cruickshank Dr and N 8th St	Industrial		33.00	Planning Review	6,600.00	25-13-100
7	Willowbend Residential Subdivision	West side of S 4th St, approximately 600 ft south of W Horne Rd	Low Density Residential	134	37.04	Planning Review	23,450.00	17-13-149
8	Parkview Residential Subdivision	East side of S 8th St, approximately 700 ft south of W Horne Rd	Low Density Residential	114	26.05	Planning Review	19,950.00	18-13-127
9	Town Center Self Storage	SWC Cruickshank Dr and N 8th St	Commercial		7.74	Building/Grading Permit Review	6,192.00	25-13-100
10	Restaurant	751 E Danenberg Dr	Commercial		0.11	Planning Review Complete	21.00	17-17-104
11	Town Center Industrial Condominiums	SWC Cruickshank Dr and N 8th St	Industrial		0.79	Planning Review Complete	157.00	25-13-100
12	Food 4 Less Gas Station	2420 Cottonwood Dr	Commercial		1.92	Planning Review Complete	1,536.00	25-12-106
13	Dogwood Bar	411 E Aurora Dr	Commercial		0.10	Planning Review Complete	82.40	20-15-141
14	Police Station	150 N 11 St	Institution		1.07	Under construction	853.60	21-13-102
15	Dunkin Donuts	3063 N Imperial Ave	Commercial		0.70	Under construction	561.52	25-12-117
16	Dairy Queen	3065 N Imperial Ave	Commercial		1.05	Completed	838.59	25-12-117
17	Town Center Village IV	NWC Bradshaw Ave and N 8th St	High-Medium Density Residential	180	11.59	Under construction	27,816.00	24-13-102
18	Penske	502 E Main St	Commercial		3.41	Completed	2,729.24	22-15-106
19	Vo Medical Center	1699 N Imperial Ave	Commercial		4.87	Completed	3,894.16	23-12-112
20	Maverik Gas Station	1402 S Dogwood Rd	Commercial		6.74	Completed	5,395.41	20-15-141
21	Jersey Mike's / The UPS Store	1002 N Imperial Ave	Commercial		1.17	Completed	934.10	23-12-113
22	Lotus Ranch	West of S La Brucherie Rd and south of I-8	Medium Density Residential	609	100.76	Under construction	106,575.00	18-11-110
23	California Highway Patrol Station	2802 S 4th St	Institution		1.02	Under construction	816.00	17-14-112
24	El Dorado Family Apartments	1805 N 8th St	High-Medium Density Residential	136	5.99	Under construction	14,376.00	23-13-101
25	U-Haul Expansion	1745 S 4th St	Commercial		6.94	Completed	5,552.01	18-14-100
26	La Brucherie and Main Apartments	303 S La Brucherie Rd	High-Medium Density Residential	177	11.90	Planning Review Complete	28,554.16	21-11-139
27	Gomez Park	East side of S Hope St, approximately 300 ft south of E Hamilton Ave	Park		7.15	In design	1,429.44	20-15-141
28	Buena Vista Park	SWC Manuel Ortiz Ave and S 8th St	Park		11.33	Under construction	2,266.24	16-12-100
29	Home 2 Suites	3105 S Dogwood Rd	Commercial		2.90	Under construction	3,481.02	17-17-104
30	Residence Inn Hotel	3409 S Dogwood Rd	Commercial		3.99	Building/Grading Permit Review	4,790.11	17-17-104
31	Jamba Juice and Wing Stop	1497 Adams Ave	Commercial		0.69	Completed	554.09	23-14-133
32	Valley Pediatric	1446 W Pico Ave	Commercial		1.77	Completed	1,416.38	23-13-101
33	Jacaranda Gardens I Apartments	1625 N Waterman Ave	Residential	96	4.36	Completed	10,469.20	23-12-112
34	Bark Park	NEC Park Ave and N 7th St	Park		1.65	Completed	329.78	22-14-113
35	Gas Station with Carwash	3003 S 4th St	Commercial		0.14	Planning Review	110.40	17-14-112
36	Hyundai Dealership	2202 Merrill Center Dr	Commercial		0.42	Building/Grading Review	504.00	17-13-149
37	One Stop Meats La Carniceria	2033 S 4th St	Commercial		0.03	Planning Review Complete	25.60	18-14-110
38	Dogwood and Villa Annexation	South of E Villa Ave, east of N Dogwood St, and west of Cooley Rd	Industrial		320.00	Planning Review	32,000.00	23-17-101
39	Dutch Bros Coffee	740 N Imperial Ave	Commercial		0.06	Planning Review	66.00	22-12-103
40	Innercare Medical Facility	E Danenberg Dr, approximately 275 ft east of IV Commons Dr	Commercial		0.49	Planning Review Complete	591.60	17-13-121
41	Big J Fencing new warehouse with offices	336 Main St	Commercial		0.19	Planning Review Complete	152.00	21-15-115
42	4:13 Fitness Center	1531 W Main St	Commercial		0.43	Under construction	516.00	21-12-128
43	Villa Ocotillo Apartments	1080 Adams Ave	High Density Residential	38	0.75	Planning Review Completed	1,797.60	23-14-133
44	Maresca Apartments	718 Adams Ave	High-Medium Density Residential	8	0.42	Planning Review	1,003.58	22-14-113
45	El Centro Shopping Center	SEC Wake Ave and Imperial Ave	Commercial		3.56	Planning Review	4,272.00	17-13-127
46	Wal-Mart Fuel Station	2150 N Waterman Ave	Commercial		2.99	Planning Review	2,389.73	25-12-108
47	Town Center Single-Family Residential Tract	NWC Cruickshank Dr and N 8th St	Medium Density Residential	102	13.10	Planning Review	17,850.00	25-13-103
48	Zadeh Self Storage	NEC Cruickshank Dr and N 8th St	Commercial		0.05	Planning Review	36.80	25-13-106
49	Humane Society	S Hope St, approximately 650 ft north of E Ross Ave	Commercial		0.18	Planning Review	144.00	20-15-141
50	Raising Canes	2297 N Imperial Ave	Commercial		1.31	Planning Review	1,047.60	25-12-102
51	Cross Rd and Villa Ave -- Septic to Sewer	Cross Road and Villa Ave neighborhood	Low Density Residential	32	68.27	Planning Review	5,600.00	23-14-109
52	Ross and Dogwood -- Industrial Development	Ross Ave and Dogwood	Industrial		483.65	Planning Review	92,507.35	20-15-141

Appendix D

City of El Centro Temporary Sewer Flow Metering Report

City of El Centro Temporary Sewer Flow Metering

Final Report Submitted to **Dudek**
April 16, 2025



ADS ENVIRONMENTAL SERVICES

4820 Mercury St #C
San Diego, CA 92111

800-633-7246
www.adsenv.com

City of El Centro Temporary Flow Metering

Prepared For:

Elizabeth Caliva, P.E.
Dudek
2280 Historic Decatur Rd, Ste 200
San Diego, CA 92106

Prepared By:

ADS, LLC
4820 Mercury St #C
San Diego, CA 92111

April 16, 2025

Elizabeth Caliva, P.E.
Dudek
2280 Historic Decatur Rd, Ste 200
San Diego, CA 92106

SUBJECT: City of El Centro Temporary Sewer Metering

Dear Elizabeth Caliva,

ADS is pleased to submit the report for the City of El Centro Temporary Sewer Flow Metering, completed on behalf of Dudek. The metering was conducted at ten (10) locations. The study was conducted during the period of Thursday, 06 March 2025 to Wednesday, 19 March 2025.

The report contains depth, velocity, and quantity hydrographs as well as daily long tables for the metering period. An Excel file containing depth, quantity, and velocity entities for the monitoring location in 5-minute format has been provided.

In addition, we would be happy to further explain any details about the report that may seem unclear. Should you have any questions or comments, you may contact the Project Manager, Ashura Aby Takanohara at 256.929.0075.

It has been our pleasure to be of service to you in the performance of this project. Thank you for choosing ADS products and services to meet your flow monitoring needs.

Sincerely,
ADS ENVIRONMENTAL SERVICES

Chris Kong
Hydraulic Data Analyst

Scope and Methodology

Introduction

Dudek entered into an agreement with ADS Environmental Services to conduct flow monitoring at (9) nine flow metering locations, and (1) one rain gauge location in El Centro. The study was scheduled for a period of (14) fourteen days. Once in place, the flow monitoring equipment was to be used to measure depth, velocity, and to quantify flows. The objective of this study was to confirm flows for sewer masterplan and hydraulic model calibration.

Project Scope

The scope of this study involved using a flow monitor to quantify wastewater flow at the designated locations for the study period. Specifically, the study included the following key components.

- Investigate the proposed flow-monitoring site for adequate hydraulic conditions
- Flow monitor installation
- Flow monitor confirmations and data collections
- Flow data analysis

Additionally, temporary rain gauge monitors were used to measure and record rainfall at the designated locations. Specifically, the study involved the following key components.

- Investigate the proposed rain gauge sites for sufficient exposure and security
- Rain Gauge installations
- Manually confirming rain gauge tipping bucket operation and date collections
- Rain data analysis

Equipment installation was completed on February 27th, 2025. The monitoring period began on March 3rd, 2025, and was completed on March 19th, 2025. Upon completion of the study, equipment was removed from the system.

Flow Monitoring Equipment



The ***ADS Triton+*** monitor was selected for this project. This flow monitor is an area velocity flow monitor that uses both the Continuity and Manning's equations to measure flow.

The ADS Triton+ monitor consists of data acquisition sensors and a battery-powered microcomputer. The microcomputer includes a processor unit, data storage, and an on-board clock to control and synchronize the sensor recordings. The monitor was programmed to acquire and store depth of flow and velocity readings at 5-minute intervals.

The Triton+ monitor features cross-checking using multiple technologies in each sensor for continuous running of comparisons and tolerances. The Triton+ monitor can support two (2) sets of sensors. The sensor option used for this project was:

The Peak Combo Sensor installed at the bottom of the pipe includes three types of data acquisition technologies

The ***up looking ultrasonic depth*** uses sound waves from two independent transceivers to measure the distance from the sensor upward toward the flow surface; applying the speed of sound in the water and the temperature measured by sensor to calculate depth.

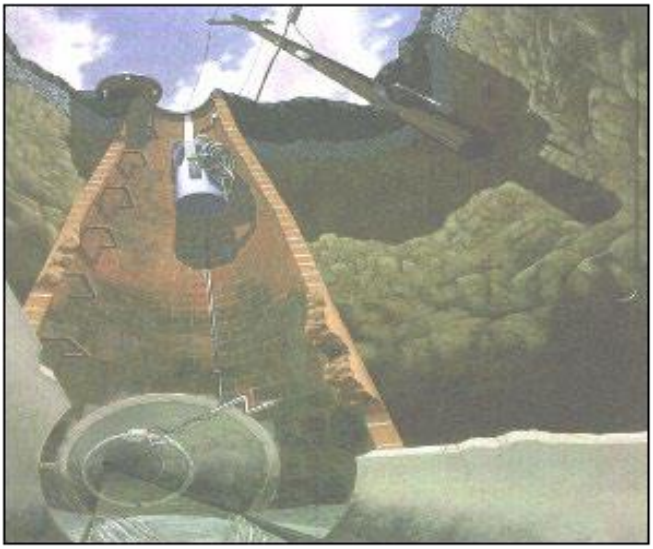
The ***pressure depth*** is calculated by using a piezo-resistive crystal to determine the difference between hydrostatic and atmospheric pressure. The pressure sensor is temperature compensated and vented to the atmosphere through a desiccant filled breather tube.

To obtain ***peak velocity*****,** the sensor sends an ultrasonic signal at an angle upward through the widest cross-section of the oncoming flow. The signal is reflected by suspended particles, air bubbles, or organic matter with a frequency shift proportional to the velocity of the reflecting objects. The reflected signal is received by the sensor and processed using digital spectrum analysis to determine the peak flow velocity.

Installation

Installation of flow monitoring equipment typically proceeds in four steps. First, the site is investigated for safety and to determine physical and hydraulic suitability for the flow monitoring equipment. Second, the equipment is physically installed at the selected location. Third, the monitor is tested to assure proper operation of the velocity and depth of flow sensors and verify that the monitor clock is operational and synchronized to the master computer clock. Fourth, the depth and velocity sensors are confirmed and line confirmations are performed.

In pipes up to 42 inches in diameter, the sensors were mounted on expandable stainless-steel rings, inserted at least a foot upstream into influent pipes and tightened against the inside walls of the pipes. Influent pipe installations reduce the influences of turbulence and backwater often caused by changes in channel geometry in manholes.





Data Collection, Confirmation, and Quality Assurance

Data collects were done remotely via wireless connect on a weekly basis. As needed, during the monitoring period, field crews visit each monitoring location to verify proper monitor operation and document field conditions. The following quality assurance steps are taken to assure the integrity of the collected data:

Measure power supplies: monitors were powered by dry cell battery packs. Voltages were recorded and battery packs replaced, as necessary. Separate batteries provided back-up power to memory allowing primary batteries to be replaced without loss of data.

Clock synchronization: Field crews synchronized monitor clocks to master clocks.

Confirm depth and velocity readings: Field crews descended into meter manholes to manually measure depths and velocities and compare the meter readings to confirm that they agreed. The site met the criteria for confirmation for depth and velocity unless noted otherwise in the site commentary section. They also measured silt levels, if any, in the inverts of the pipes. Silt areas were subtracted from flow areas to compute true areas of flow.

Confirm average velocities through cross-sectional velocity profiles: Since ADS velocity sensors measure peak velocity, field crews collected cross-sectional velocity profiles in order to develop a relationship between peak and average velocity in lines that meet the hydraulic criteria.

Upload and Review Data: Data collected from the monitors were uploaded and reviewed by a Data Analyst for completeness, outliers and deviations in the flow patterns, which indicate system anomalies or equipment failure.

Rainfall Logging Equipment



The ***ADS RainAlert III*** monitor was selected for this project. This monitor provides rainfall data acquisition and intelligent alarming to support wastewater capital improvement.

The ADS RainAlert III monitor measures rainfall using a tipping bucket containing a funnel and a small tipping mechanism that can collect a specific amount of rainfall. Once the tipping mechanism is full it empties and records that a tip has occurred. Typically, each tip is equivalent to 0.01 inches (or 0.2mm) of rainfall. The monitor records the number of tips that occur over each 5-minute interval to calculate discrete rainfall amounts for each of those 5-minute intervals.

Installation

Installation of rainfall logging equipment typically proceeds in five steps. First, investigating and selecting the appropriate location to install the tipping bucket and monitor. Second, installing the Sun Shield involves properly placing the sun shield and securing it to an appropriate structure or surface, or mounting it to a pole, as applicable. Third, involves mounting the tipping bucket on the sun shield at the designated rainfall collection location and connecting the wires from the monitor to the tipping bucket. Fourth, involves testing and adjusting the tipping bucket and internal tipping mechanism to ensure it accurately measures rainfall amounts. The final step involves installing the monitor at the appropriate location.

Flow Quantification Methods

There are two main equations used to measure open channel flow: the ***Continuity Equation*** and the ***Manning Equation.*** The Continuity Equation, which is considered the most accurate, can be used if both depth of flow and velocity are available. In cases where velocity measurements are not available or not practical to obtain, the Manning Equation can be used to estimate velocity from the depth data based on certain physical characteristics of the pipe (i.e. the slope and roughness of the pipe being measured). However, the Manning equation assumes uniform, steady flow hydraulic conditions with non-varying roughness, which are typically invalid assumptions in most sanitary sewers. The Continuity Equation was used exclusively for this study.

Continuity Equation

The Continuity Equation states that the flow quantity (Q) is equal to the wetted area (A) multiplied by the average velocity (V) of the flow.

$$Q = A * V$$

This equation is applicable in a variety of conditions including backwater, surcharge, and reverse flow.

Data Analysis and Presentation

Data Analysis

A flow monitor is typically programmed to collect data at 5-minute intervals throughout the monitoring period. The monitor stores raw data consisting of (1) the ultrasonic depth, (2) the peak velocity and (3) the pressure depth. The data is imported into ADS's proprietary software and is examined by a data analyst to verify its integrity. The data analyst also reviews the daily field reports and site visit records to identify conditions that would affect the collected data.

Velocity profiles and the line confirmation data developed by the field personnel are reviewed by the data analyst to identify inconsistencies and verify data integrity. Velocity profiles are reviewed and an average to peak velocity ratio is calculated for the site. This ratio is used in converting the peak velocity measured by the sensor to the average velocity used in the Continuity equation. The data analyst selects which depth sensor entity will be used to calculate the final depth information. Silt levels present at each site visit are reviewed and representative silt levels established.

Occasionally the velocity sensor's performance may be compromised resulting in invalid readings sporadically during the monitoring period. This is generally caused by excessive debris (silt) blocking the sensor's crystals, shallow flows (~< 1") that may drop below the top of the sensor or very clear flows lacking the particles needed to measure rate. In order to use the Continuity equation to quantify the flow during these periods, a Data Analyst and/or Engineer will use the site's historical pipe curve (depth vs. velocity) data along with valid field confirmations to reconstitute and replace the false velocity recordings with expected velocity readings for a given historical depth along the curve.

Selections for the above parameters can be constant or can change during the monitoring period. While the data analysis process is described in a linear manner, it often requires an iterative approach to accurately complete.

Data Presentation

This type of flow monitoring project generates a large volume of data. To facilitate review of the data, results have been provided in graphical and tabular formats. The flow data is presented graphically in the form of scattergraphs and hydrographs.
Hydrographs are based on 15-minute data. Tables are provided in daily average format. These tables show the flow rate for each day, along with the daily minimum and maximums, the times they were observed, the total daily flow, and total flow for the month (or monitoring period). The following explanation of terms may aid in interpretation of the flow data table and hydrograph.

DFINAL - Final calculated depth measurement (in inches)

QFINAL - Final calculated flow rate (in MGD)

VFINAL - Final calculated flow velocity (in feet per second)

RAIN – Final calculated rainfall (in inches)

REPORT TOTAL - Total volume of flow recorded for the indicated time period (in MG)

EC_FM01_23-12-122

Site Commentary

SITE INFORMATION

Pipe	Elliptical (15 in H x 14.88 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Site operated under freeflow conditions for the duration of the study. This location is downstream from FM06, a review of balancing shows no complications.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	8.05	2.22	0.961
Minimum	4.91	1.82	0.471
Maximum	10.66	2.61	1.308
Min Time	03/17/2025 4:10:00 AM	03/11/2025 4:20:00 AM	03/16/2025 4:35:00 AM
Max Time	03/11/2025 9:15:00 PM	03/17/2025 1:00:00 AM	03/11/2025 10:00:00 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.
Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025** is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

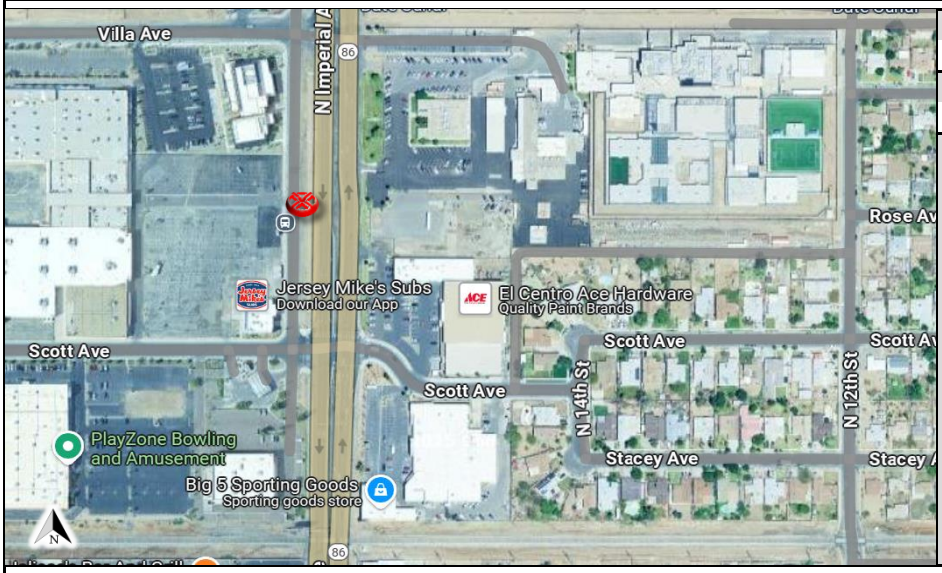
Flow Monitoring Site Report

ADS ENVIRONMENTAL SERVICES®

23124.11.325

EC_FM01_23-12-122

Site Address /Location:	1198 N Imperial Ave, El Centro, CA 92243			Monitor Series	Location Type
				TRITON+ VZ	Temporary
Site Access Details:	DRIVE	Latitude:	32.8026276	Pipe Size (H x W)	Pipe Shape
		Longitude:	115.5701255	15.00'' x 14.88''	Circular



Manhole #	System Characteristics
23-12-122	Residential/Commercial
Access	Traffic
Drive	Light







Installation Information

Installation Date:	Installation Type:
Wednesday, February 26, 2025	Pulse Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 5 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
4:19:00 AM	15.00'' x 14.88''
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
5.63''	
Downlooker Physical Offset (in)	Measurement Confidence (in)
NA	0.25''
Peak Velocity (fps)	Velocity Sensor Offset (in)
1.67 fps	0''
Silt (in)	Silt Type
0	Sandy / Gravel

Hydraulic Comments:

Small waves with medium depth and moderate velocity.

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
197''	Single
Manhole Material:	Manhole Condition:
Brick	Fair
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
vented	Normal
Active Drop Connections	Air Quality:
No	High H2S
Pipe Material	Pipe Condition:
Vitrified Clay Pipe	Fair

Communication Information:

Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole

Additional Site Info. / Comments:

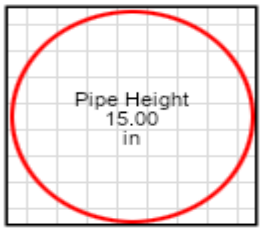
ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

Hydrograph Report

EC_FM01_23-12-122

Flow Monitor

EC_FM01_23-12-122

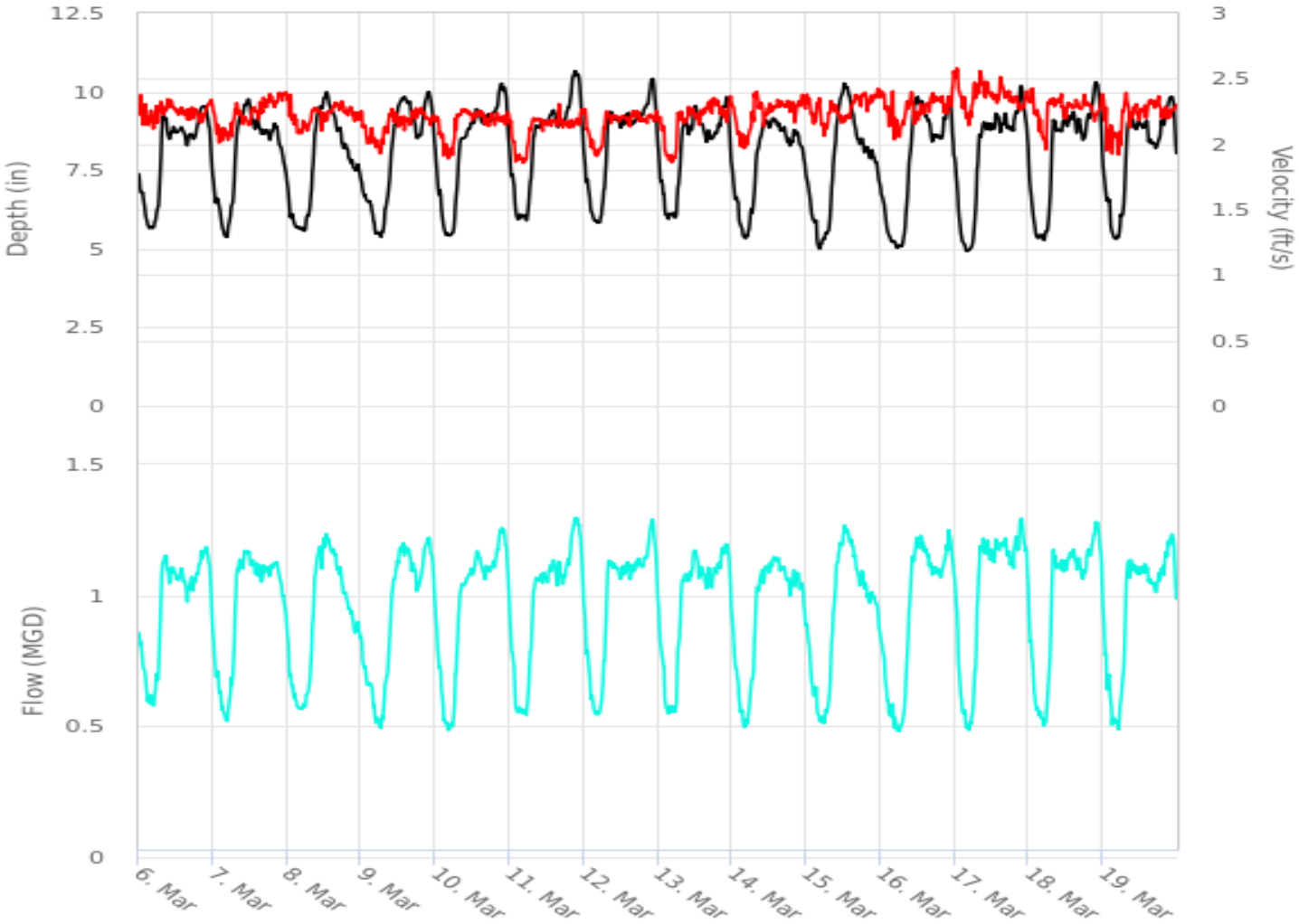


Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL



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Scattergraph Report

EC_FM01_23-12-122

Flow Monitor

EC_FM01_23-12-122

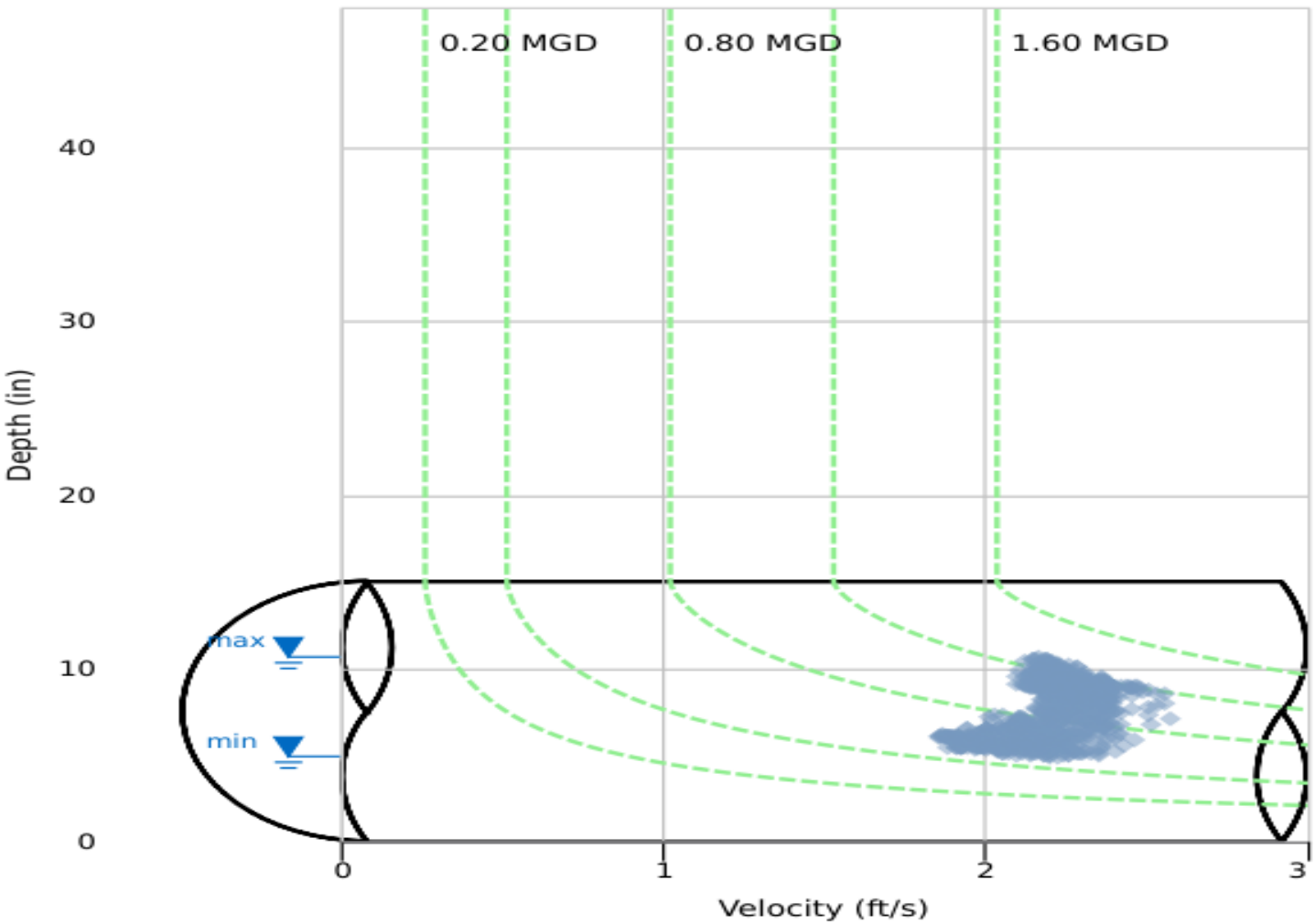
Pipe Height
15.00
in

Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL - VFINAL
Iso-Q™
Min-Max Depth



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59
EC_FM01_23-12-122Pipe: Elliptical (15 in H x 14.88 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	04:30	5.62	21:00	9.54	8.05	02:55	2.04	06:00	2.40	2.25	04:50	0.570	22:00	1.190	0.967	0.967
03/07/2025	04:25	5.37	11:35	9.78	8.02	02:10	1.92	23:45	2.46	2.23	04:55	0.516	11:15	1.201	0.959	0.959
03/08/2025	05:35	5.55	12:50	10.01	7.76	03:25	1.98	01:20	2.40	2.22	03:25	0.540	12:55	1.250	0.916	0.916
03/09/2025	06:30	5.37	22:00	10.00	8.03	06:35	1.88	00:10	2.29	2.15	06:35	0.477	13:45	1.241	0.930	0.930
03/10/2025	04:45	5.41	21:40	10.27	8.24	04:15	1.87	07:05	2.31	2.16	04:15	0.481	21:40	1.264	0.964	0.964
03/11/2025	05:40	5.88	21:15	10.66	8.47	04:20	1.82	16:05	2.32	2.11	04:20	0.541	22:00	1.308	0.974	0.974
03/12/2025	04:40	5.82	22:25	10.44	8.44	04:15	1.89	08:30	2.29	2.16	04:15	0.539	22:20	1.293	0.989	0.989
03/13/2025	03:30	5.93	22:30	9.86	8.22	04:40	1.85	23:30	2.39	2.18	03:40	0.538	22:05	1.211	0.971	0.971
03/14/2025	04:35	5.34	13:20	9.20	7.83	04:05	1.90	07:15	2.42	2.24	04:05	0.479	13:40	1.155	0.937	0.937
03/15/2025	04:30	4.99	12:25	10.39	7.70	05:50	2.04	23:15	2.47	2.28	05:50	0.503	12:25	1.288	0.927	0.927
03/16/2025	05:45	5.02	11:55	9.86	7.73	04:35	1.95	23:55	2.59	2.27	04:35	0.471	12:00	1.264	0.935	0.935
03/17/2025	04:10	4.91	21:30	10.21	8.02	04:00	2.11	01:00	2.61	2.37	04:00	0.477	21:15	1.300	1.017	1.017
03/18/2025	05:15	5.27	21:40	10.35	8.12	05:40	1.89	00:50	2.52	2.27	05:00	0.477	22:15	1.300	0.990	0.990
03/19/2025	04:25	5.31	22:20	9.84	8.05	05:55	1.86	07:35	2.40	2.22	05:05	0.482	22:25	1.236	0.962	0.961

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			13.437
Average	8.05	2.22	0.960

EC_FM02_22-14-120

Site Commentary

SITE INFORMATION

Pipe	Elliptical (22.25 in H x 22 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Site operated under freeflow conditions for the duration of the study. This location is downstream from FM03, FM04, and FM05, a review of balancing shows no complications.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	3.30	5.22	0.844
Minimum	2.11	4.78	0.398
Maximum	4.38	5.51	1.323
Min Time	03/09/2025 6:45:00 AM	03/17/2025 5:15:00 AM	03/09/2025 6:45:00 AM
Max Time	03/13/2025 11:45:00 AM	03/13/2025 11:45:00 AM	03/13/2025 11:45:00 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

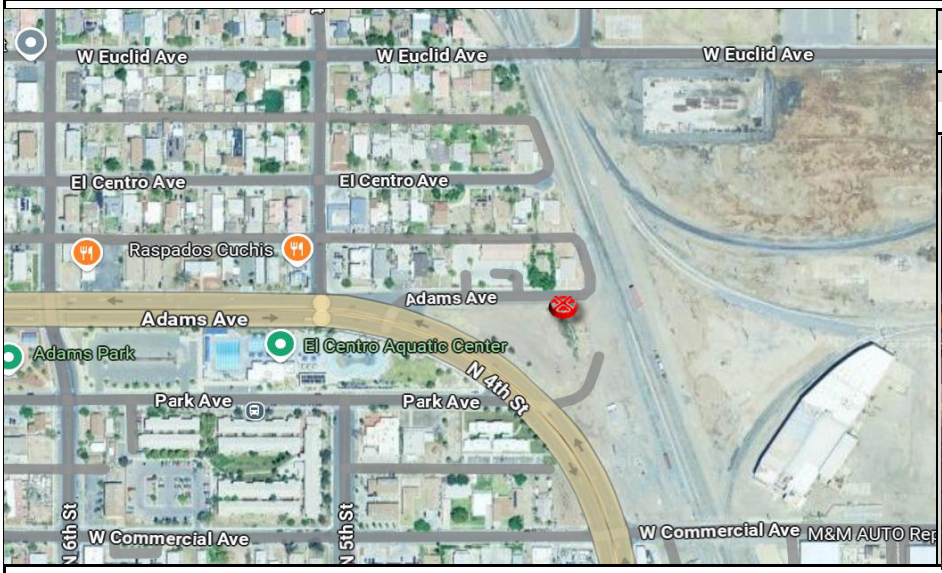
Flow Monitoring Site Report

23124.11.325

EC_FM02_22-14-120

Site Address /Location:	402 Adams Ave, El Centro, CA 92243		
Site Access Details:	DRIVE	Latitude:	32.7966037
		Longitude:	115.5527602

Monitor Series	Location Type
TRITON+ VZ	Temporary
Pipe Size (H x W)	Pipe Shape
22.25'' x 22.00''	Circular



Manhole #	System Characteristics
22-14-120	Residential/Commercial
Access	Traffic
Drive	Light







Installation Information

Installation Date:	Installation Type:
Wednesday, February 26, 2025	Pulse Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 5 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
2:50:00 AM	22.25'' x 22.00''
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
2.75''	
Downlooker Physical Offset (in)	Measurement Confidence (in)
NA	0.25''
Peak Velocity (fps)	Velocity Sensor Offset (in)
5.45 fps	0''
Silt (in)	Silt Type
0	Sandy / Gravel

Hydraulic Comments:

Smooth shallow depths and fast velocity.

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
205''	Single
Manhole Material:	Manhole Condition:
Unknown	Fair
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
vented	Normal
Active Drop Connections	Air Quality:
No	High H2S
Pipe Material	Pipe Condition:
Concrete	Fair

Communication Information:

Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole

Additional Site Info. / Comments:

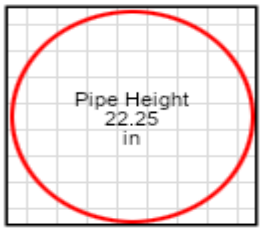
ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

Hydrograph Report

EC_FM02_22-14-120

Flow Monitor

EC_FM02_22-14-120

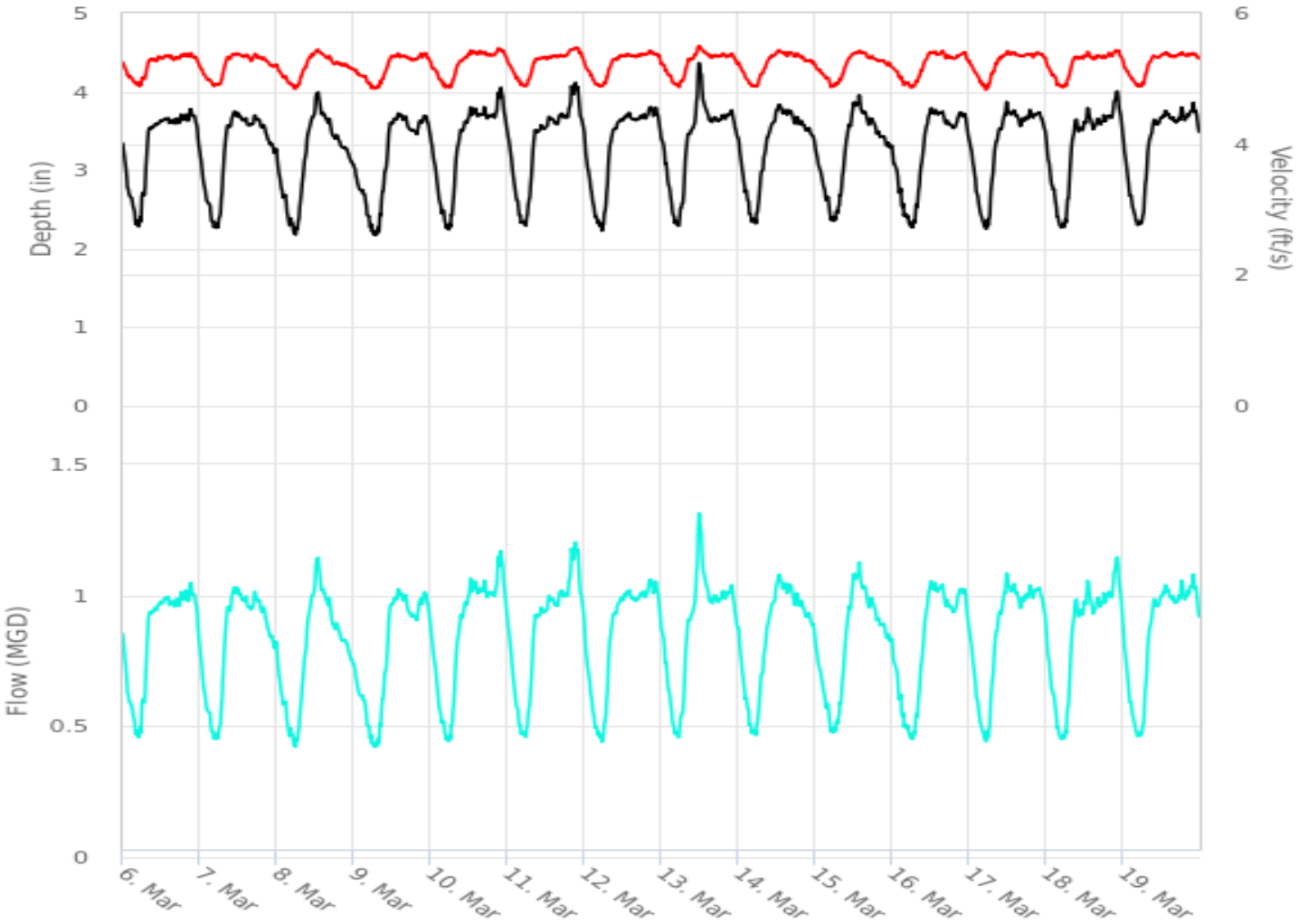


Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL



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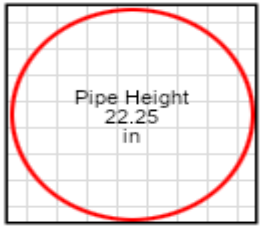
Scattergraph Report

EC_FM02_22-14-120

Flow Monitor

EC_FM02_22-14-120



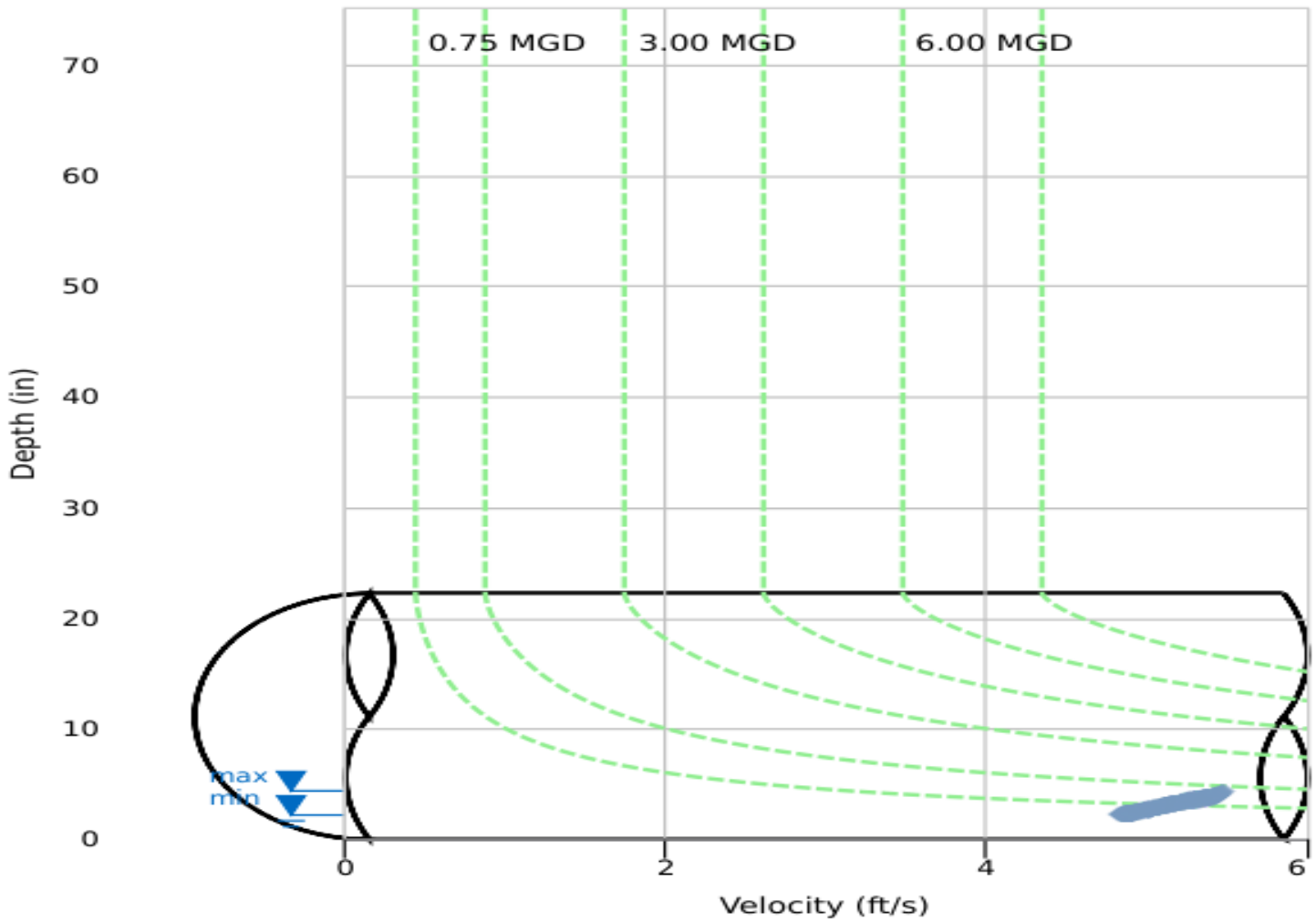
Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL - VFINAL
Iso-Q™
Min-Max Depth

ADS ENVIRONMENTAL SERVICES



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59
EC_FM02_22-14-120Pipe: Elliptical (22.25 in H x 22 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	05:05	2.25	21:15	3.80	3.32	05:25	4.86	21:25	5.40	5.22	05:05	0.445	21:15	1.054	0.851	0.851
03/07/2025	05:00	2.22	11:00	3.77	3.25	04:35	4.84	11:50	5.40	5.21	04:35	0.434	11:00	1.043	0.825	0.825
03/08/2025	05:45	2.14	13:05	4.04	3.16	05:45	4.82	12:45	5.45	5.18	05:45	0.408	13:05	1.167	0.790	0.790
03/09/2025	06:45	2.11	14:05	3.75	3.15	06:45	4.80	13:55	5.40	5.18	06:45	0.398	14:05	1.035	0.787	0.787
03/10/2025	05:55	2.20	22:10	4.07	3.35	05:30	4.84	21:15	5.47	5.24	05:30	0.428	22:10	1.179	0.869	0.869
03/11/2025	04:45	2.25	21:15	4.16	3.36	05:30	4.85	21:15	5.48	5.25	04:45	0.443	21:15	1.224	0.873	0.873
03/12/2025	05:40	2.21	21:00	3.84	3.32	04:45	4.86	20:35	5.43	5.23	05:40	0.432	21:00	1.077	0.857	0.857
03/13/2025	05:15	2.24	11:45	4.38	3.39	05:40	4.85	11:45	5.51	5.25	05:15	0.442	11:45	1.323	0.882	0.882
03/14/2025	04:25	2.27	12:50	3.85	3.31	06:00	4.86	12:45	5.45	5.22	04:25	0.448	12:50	1.088	0.849	0.849
03/15/2025	05:55	2.32	13:45	3.99	3.25	05:05	4.85	14:35	5.44	5.20	05:55	0.464	13:45	1.141	0.823	0.823
03/16/2025	05:45	2.24	12:30	3.80	3.25	06:10	4.85	13:20	5.43	5.21	05:45	0.440	12:30	1.061	0.827	0.827
03/17/2025	05:15	2.21	11:40	3.90	3.33	05:15	4.78	12:05	5.44	5.24	05:15	0.426	11:40	1.095	0.862	0.862
03/18/2025	05:00	2.24	22:05	4.04	3.32	05:00	4.84	21:55	5.45	5.23	05:00	0.440	22:05	1.164	0.856	0.856
03/19/2025	04:35	2.28	22:00	3.92	3.33	04:55	4.85	18:30	5.41	5.24	04:55	0.453	22:00	1.107	0.861	0.860

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			11.810
Average	3.29	5.22	0.844

EC_FM03_21-15-101

Site Commentary

SITE INFORMATION

Pipe	Elliptical (10.38 in H x 10.25 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Site operated under freeflow conditions for the duration of the study. This location is upstream of FM02.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	4.99	0.50	0.090
Minimum	3.99	0.26	0.035
Maximum	6.15	0.74	0.153
Min Time	03/17/2025 3:10:00 AM	03/17/2025 3:55:00 AM	03/17/2025 3:55:00 AM
Max Time	03/06/2025 1:55:00 PM	03/11/2025 4:25:00 AM	03/12/2025 8:30:00 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

Flow Monitoring Site Report

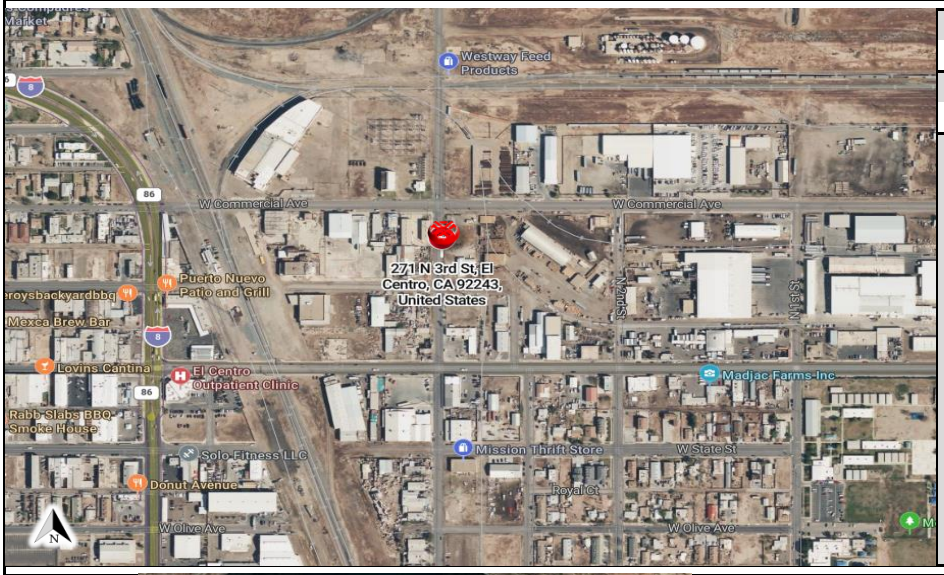
ADS ENVIRONMENTAL SERVICES®

23124.11.325

EC_FM03_21-15-101

Site Address /Location:	271 N 3rd St, El Centro, CA 92243		
Site Access Details:	DRIVE	Latitude:	32.7942515
		Longitude:	115.5487587

Monitor Series	Location Type
TRITON+ VZ	Temporary
Pipe Size (H x W)	**Pipe Shape**
10.38'' x 10.25''	Circular



Manhole #	System Characteristics
21-15-101	Residential/Commercial
Access	**Traffic**
Drive	Light







ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

Installation Information

Installation Date:	Installation Type:
Tuesday, February 25, 2025	Pulse Standard Ring and Crank
Monitoring Location (Sensors):	**Monitor Location:**
Upstream 0-5 FT	Manhole
Sensors / Devices:	**Pressure Sensor Range (psi)**
Peak Combo (CS4)	0 - 5 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
6:51:00 AM	10.38'' x 10.25''
Depth of Flow (Wet DOF) (in)	**Range (Air DOF) (in)**
4.63''	
Downlooker Physical Offset (in)	**Measurement Confidence (in)**
NA	0.25"
Peak Velocity (fps)	**Velocity Sensor Offset (in)**
0.49	0''
Silt (in)	**Silt Type**
0	Sandy / Gravel

Hydraulic Comments:

Smooth flow with moderate depth and slow velocity. Flow felt thick from oil like material.

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
107"	Single
Manhole Material:	**Manhole Condition:**
Brick	Fair
Manhole Opening Diameter (in)	**Manhole Diameter (Approx.):**
26''	54''
Manhole Cover	**Manhole Frame**
Unbolted	Normal
Active Drop Connections	**Air Quality:**
No	Normal
Pipe Material	**Pipe Condition:**
Vitrified Clay Pipe	Good

Communication Information:

Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole

Additional Site Info. / Comments:

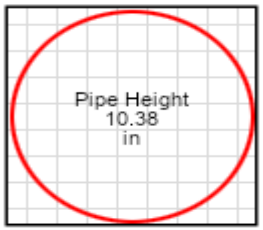
The flow possibly has oil that seems to be from a car and there is a strong smell of gasoline in the manhole.

Hydrograph Report

EC_FM03_21-15-101

Flow Monitor

EC_FM03_21-15-101

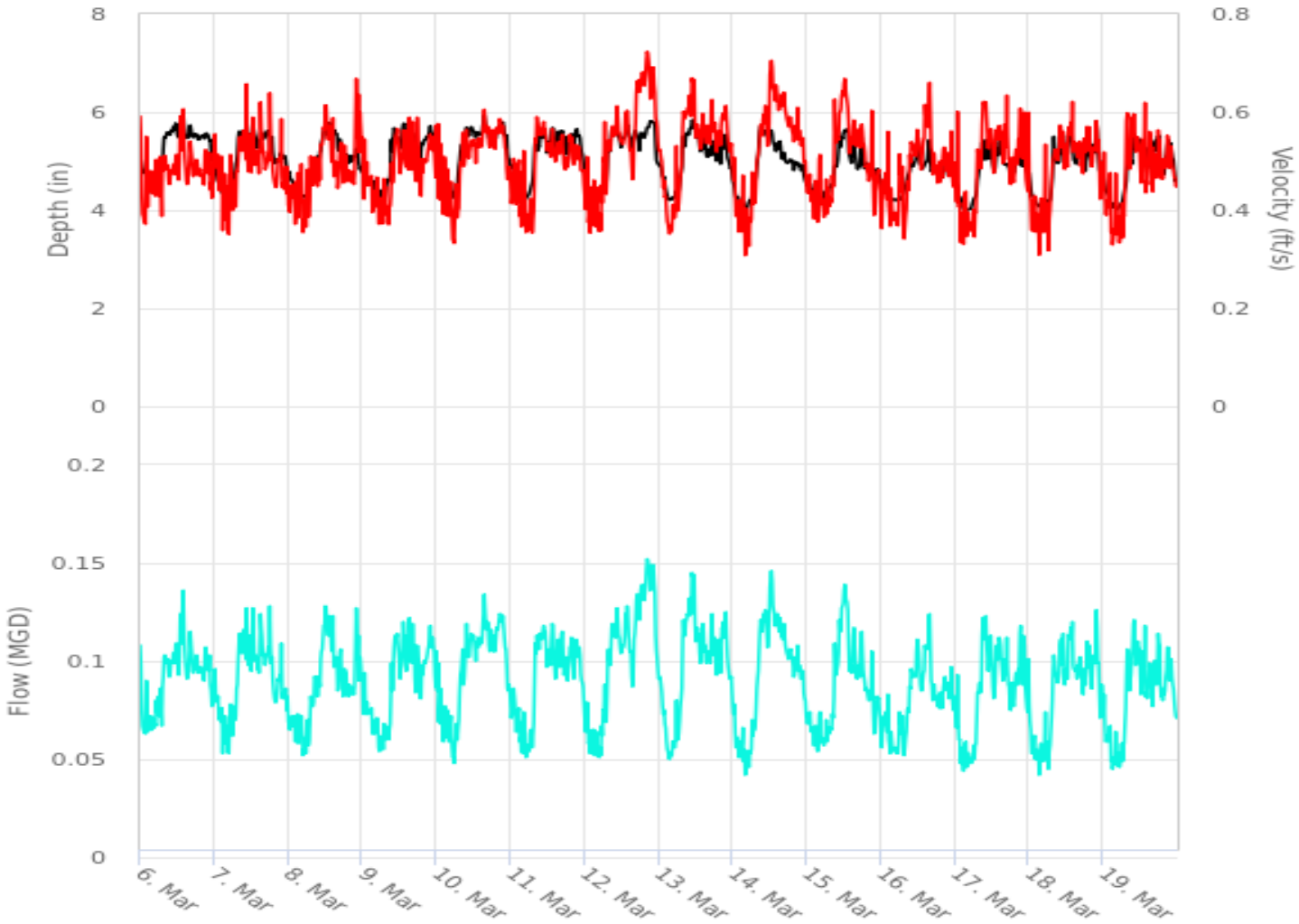


Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL



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Scattergraph Report

EC_FM03_21-15-101

Flow Monitor

EC_FM03_21-15-101

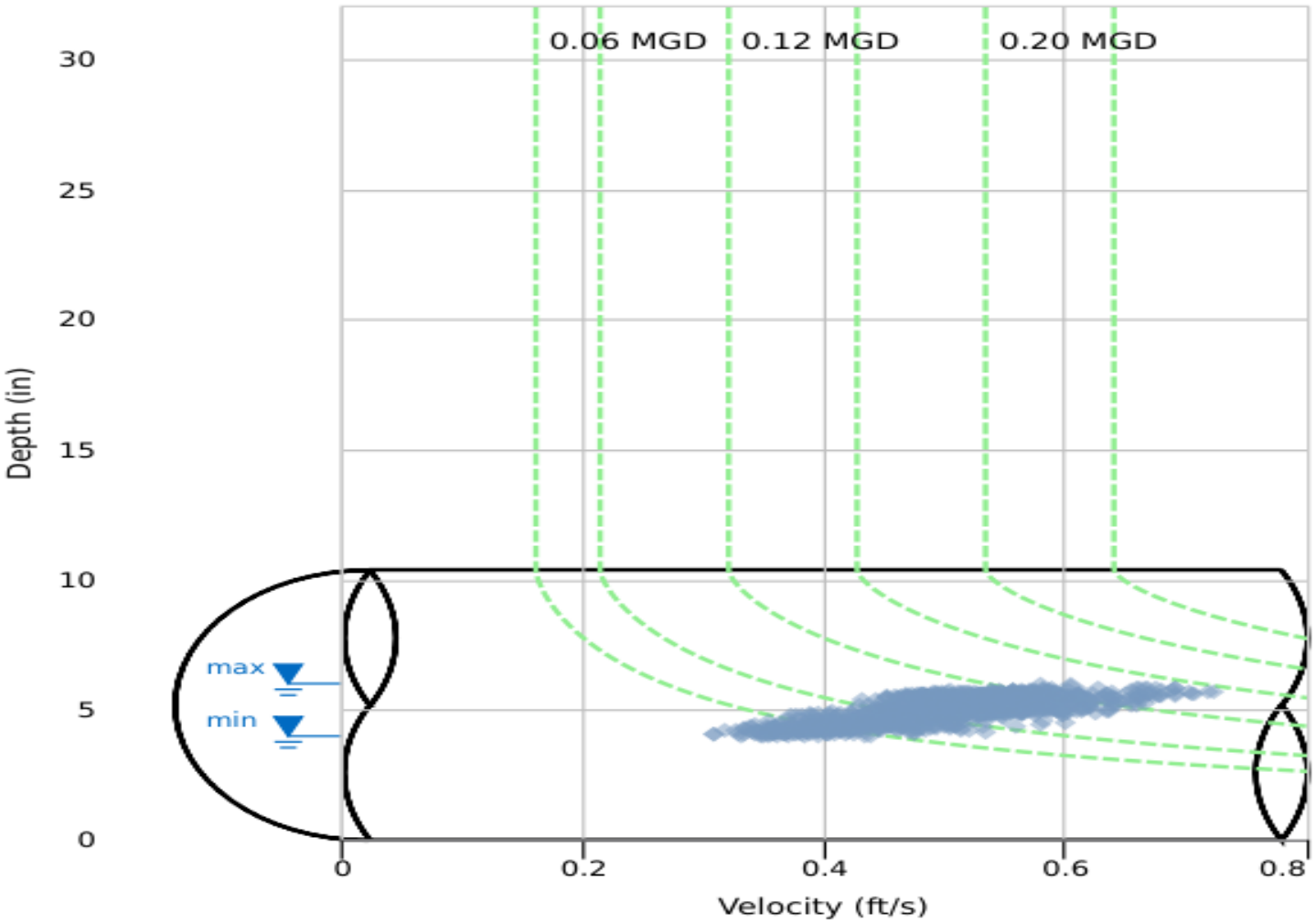
Pipe Height
10.38
in

Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL - VFINAL
Iso-Q™
Min-Max Depth



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59
EC_FM03_21-15-101Pipe: Elliptical (10.38 in H x 10.25 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	03:45	4.36	13:55	6.15	5.26	03:55	0.32	06:35	0.69	0.48	03:55	0.048	14:00	0.144	0.092	0.092
03/07/2025	04:35	4.32	12:30	5.83	5.11	04:45	0.32	10:30	0.71	0.49	04:45	0.047	18:05	0.140	0.091	0.091
03/08/2025	06:15	4.25	13:30	5.79	4.99	04:55	0.33	21:55	0.73	0.49	04:55	0.048	12:05	0.138	0.088	0.088
03/09/2025	05:40	4.09	10:30	5.87	5.09	05:30	0.32	17:55	0.67	0.48	05:30	0.047	15:20	0.135	0.089	0.089
03/10/2025	06:05	4.24	15:35	6.05	5.22	05:15	0.31	02:40	0.72	0.50	05:15	0.045	15:35	0.137	0.096	0.096
03/11/2025	04:35	4.17	13:45	5.68	5.09	04:40	0.29	04:25	0.74	0.49	04:40	0.041	08:40	0.134	0.091	0.091
03/12/2025	03:00	4.19	21:30	5.82	5.15	05:15	0.30	20:20	0.73	0.54	05:15	0.043	20:30	0.153	0.103	0.103
03/13/2025	03:25	4.20	10:55	5.88	5.07	03:30	0.35	17:10	0.73	0.53	03:30	0.050	10:55	0.151	0.098	0.098
03/14/2025	04:40	4.03	09:05	5.71	4.89	04:00	0.29	12:35	0.71	0.52	04:00	0.040	12:35	0.147	0.093	0.093
03/15/2025	05:15	4.21	13:10	5.65	4.81	03:35	0.34	09:00	0.69	0.50	03:35	0.048	12:15	0.141	0.086	0.086
03/16/2025	04:35	4.19	15:40	5.44	4.70	05:35	0.31	02:25	0.72	0.48	05:35	0.044	15:40	0.136	0.080	0.080
03/17/2025	03:10	3.99	11:35	5.45	4.77	03:55	0.26	09:40	0.70	0.49	03:55	0.035	09:40	0.126	0.085	0.085
03/18/2025	04:35	4.04	21:50	5.83	4.86	04:45	0.28	14:00	0.70	0.49	04:45	0.038	14:00	0.132	0.085	0.085
03/19/2025	04:25	4.02	10:05	5.55	4.84	03:50	0.28	13:30	0.70	0.48	03:15	0.039	13:30	0.128	0.083	0.083

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			1.260
Average	4.99	0.50	0.090

EC_FM04_22-15-116

Site Commentary

SITE INFORMATION

Pipe	Elliptical (16.88 in H x 16 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Site operated under freeflow conditions for the duration of the study. This location is upstream of FM02

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	9.26	0.69	0.373
Minimum	7.56	0.38	0.167
Maximum	11.80	1.05	0.744
Min Time	03/18/2025 5:50:00 AM	03/19/2025 5:05:00 AM	03/19/2025 5:05:00 AM
Max Time	03/13/2025 11:30:00 AM	03/13/2025 11:30:00 AM	03/13/2025 11:30:00 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

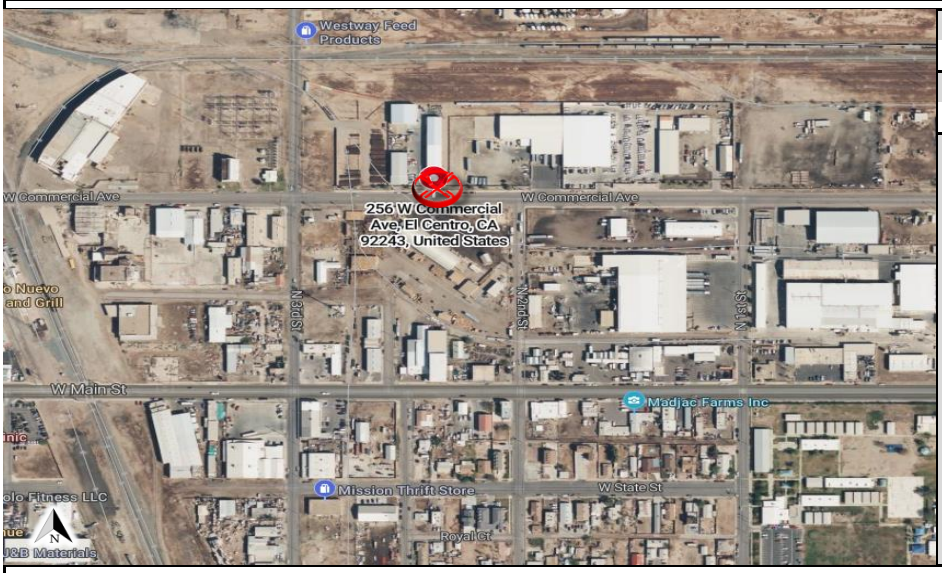
Flow Monitoring Site Report

ADS ENVIRONMENTAL SERVICES®

23124.11.325

EC_FM04_22-15-116

Site Address /Location:	256 W Commercial Ave, El Centro, CA 92243			Monitor Series	Location Type
				TRITON+ VZ	Temporary
Site Access Details:	DRIVE	Latitude:	32.7949301	Pipe Size (H x W)	Pipe Shape
		Longitude:	115.5473569	16.88'' x 16.00''	Elliptical



Manhole #	System Characteristics
22-15-116	Commercial
Access	Traffic
Drive	Medium







Installation Information

Installation Date:	Installation Type:
Tuesday, February 25, 2025	Pulse Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 5 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
11:56:00 AM	16.88'' x 16.00''
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
10.00''	
Downlooker Physical Offset (in)	Measurement Confidence (in)
NA	0.25''
Peak Velocity (fps)	Velocity Sensor Offset (in)
0.8	2.63''
Silt (in)	Silt Type
0	Sandy / Gravel

Hydraulic Comments:

Smooth flow deep depth and slow velocity. Concrete obstruction in the middle of the pipe

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
224''	Single
Manhole Material:	Manhole Condition:
Concrete	Fair
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
Unbolted	Normal
Active Drop Connections	Air Quality:
No	Normal
Pipe Material	Pipe Condition:
Vitrified Clay Pipe	Good

Communication Information:

Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole

Additional Site Info. / Comments:

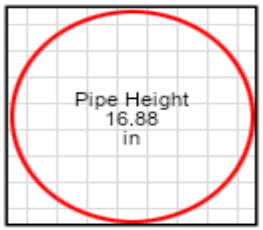
ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

Hydrograph Report

EC_FM04_22-15-116

Flow Monitor

EC_FM04_22-15-116



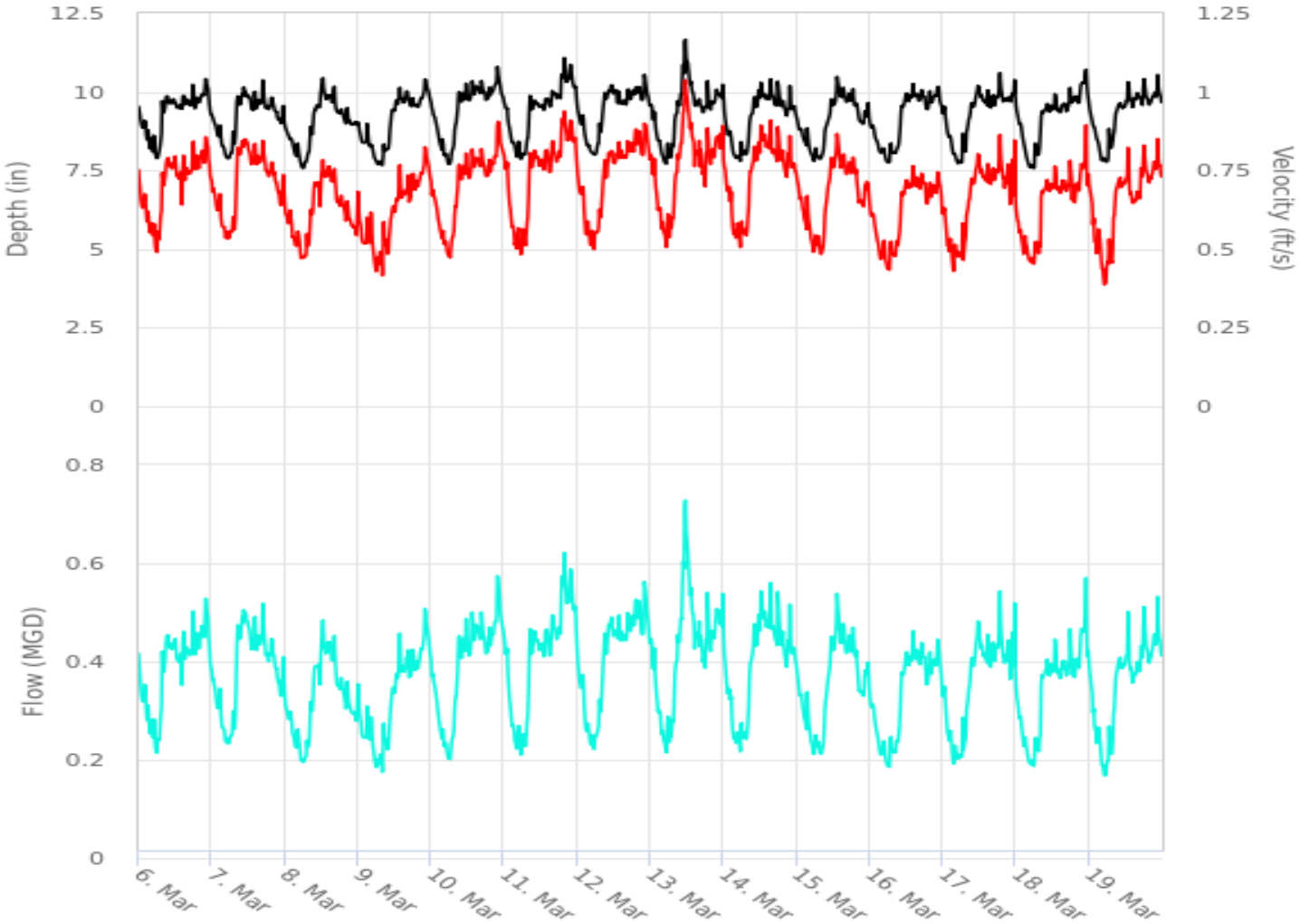
Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL





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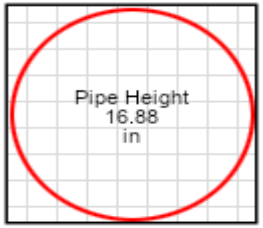
Scattergraph Report

EC_FM04_22-15-116

Flow Monitor

EC_FM04_22-15-116



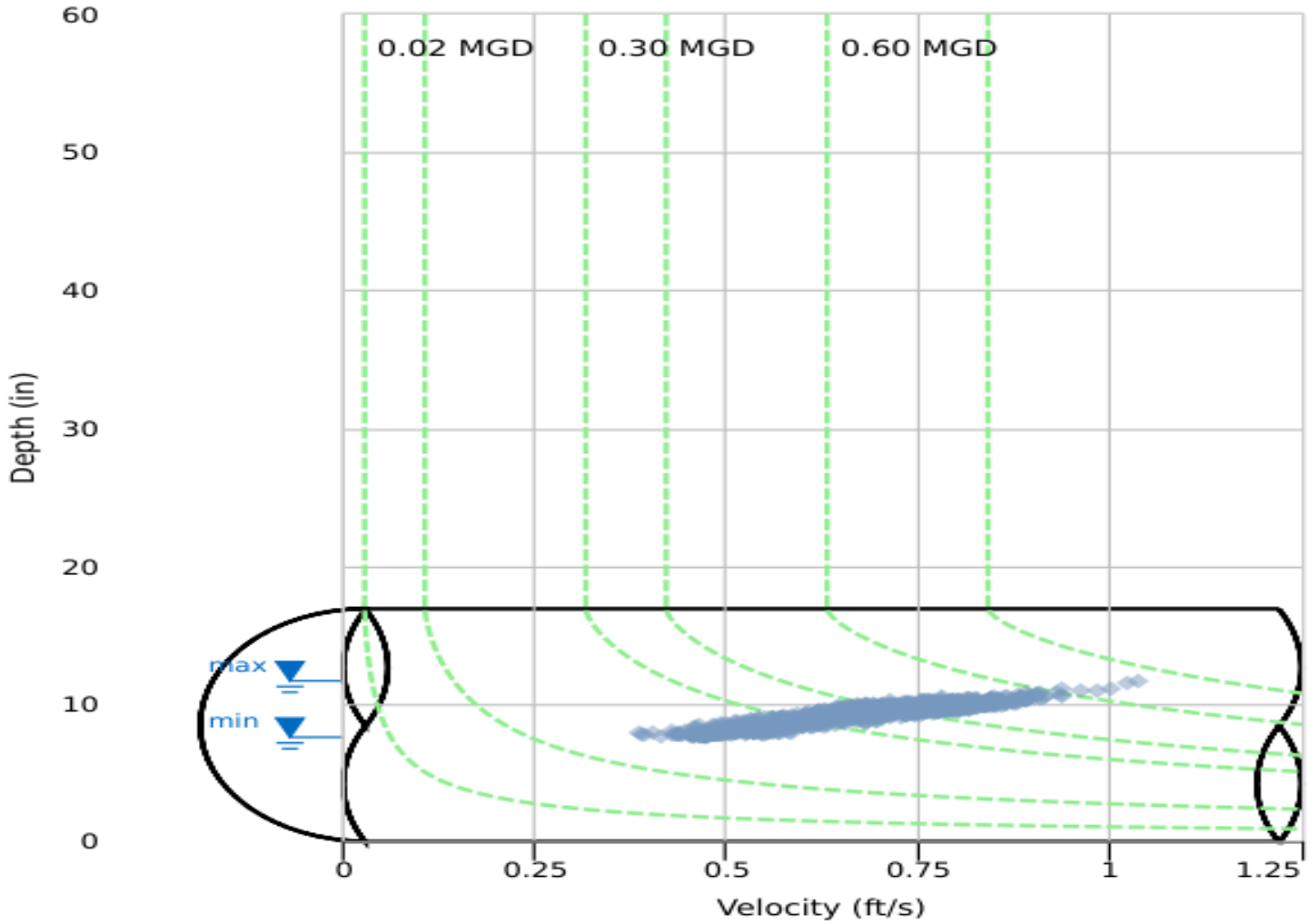
Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL - VFINAL
Iso-Q™
Min-Max Depth

ADS ENVIRONMENTAL SERVICES



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59
EC_FM04_22-15-116Pipe: Elliptical (16.88 in H x 16 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	06:10	7.88	22:00	10.48	9.34	06:00	0.49	22:00	0.86	0.71	06:00	0.213	22:00	0.532	0.389	0.389
03/07/2025	05:30	7.87	16:50	10.39	9.23	04:50	0.49	11:10	0.86	0.71	04:50	0.218	16:50	0.521	0.384	0.384
03/08/2025	06:10	7.57	12:30	10.53	8.99	05:40	0.46	12:30	0.80	0.62	05:40	0.193	12:30	0.497	0.325	0.325
03/09/2025	08:00	7.66	22:10	10.55	9.06	06:15	0.40	22:05	0.85	0.62	06:15	0.171	22:05	0.531	0.329	0.329
03/10/2025	05:55	7.69	21:50	10.81	9.46	06:15	0.47	21:55	0.91	0.70	06:15	0.198	21:55	0.588	0.393	0.393
03/11/2025	05:35	7.86	19:50	11.11	9.44	05:35	0.48	19:45	0.94	0.74	05:35	0.208	19:50	0.624	0.412	0.412
03/12/2025	05:45	8.00	22:05	10.56	9.44	05:25	0.49	22:05	0.91	0.74	05:25	0.219	22:05	0.568	0.409	0.409
03/13/2025	05:20	7.71	11:30	11.80	9.42	05:25	0.50	11:30	1.05	0.77	05:25	0.212	11:30	0.744	0.426	0.426
03/14/2025	05:40	7.77	15:30	10.53	9.22	05:40	0.49	15:30	0.92	0.74	05:40	0.211	15:30	0.575	0.397	0.397
03/15/2025	06:00	7.79	13:15	10.50	9.08	08:00	0.48	13:15	0.87	0.67	05:40	0.209	13:15	0.541	0.356	0.356
03/16/2025	06:10	7.75	14:10	10.38	9.15	06:30	0.43	14:10	0.78	0.62	06:30	0.184	14:10	0.476	0.332	0.332
03/17/2025	05:05	7.71	18:45	10.73	9.29	03:55	0.41	18:45	0.89	0.66	03:55	0.181	18:45	0.568	0.361	0.361
03/18/2025	05:50	7.56	22:55	10.90	9.21	07:30	0.40	23:00	0.92	0.64	07:30	0.180	23:00	0.597	0.347	0.347
03/19/2025	05:45	7.77	22:30	10.60	9.29	05:05	0.38	22:30	0.87	0.65	05:05	0.167	22:30	0.547	0.355	0.355

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			5.216
Average	9.26	0.69	0.373

EC_FM05_21-14-145

Site Commentary

SITE INFORMATION

Pipe	Elliptical (14.5 in H x 14.25 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Site operated under freeflow conditions for the duration of the study. This location is upstream of FM02

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	4.18	1.10	0.198
Minimum	2.78	0.69	0.068
Maximum	5.30	1.41	0.300
Min Time	03/14/2025 3:40:00 AM	03/16/2025 4:55:00 AM	03/07/2025 3:50:00 AM
Max Time	03/10/2025 8:55:00 PM	03/12/2025 7:55:00 AM	03/18/2025 10:10:00 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

Flow Monitoring Site Report

23124.11.325

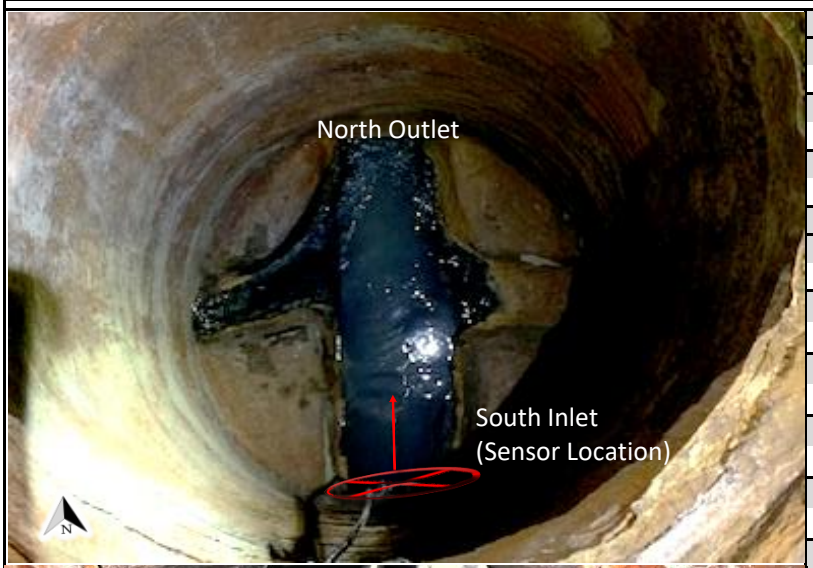
EC_FM05_21-14-145

Site Address /Location:	315 S 4th St, El Centro, CA 92243			Monitor Series	Location Type
				TRITON+ VZ	Temporary
Site Access Details:	DRIVE	Latitude:	32.7901562	Pipe Size (H x W)	Pipe Shape
		Longitude:	115.5525879	14.50'' x 14.25''	Circular



Manhole #	System Characteristics
21-14-145	Residential/Commercial
Access	Traffic
Drive	Heavy







ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

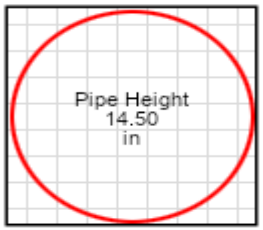
Installation Information	
Installation Date:	Installation Type:
Thursday, February 27, 2025	Pulse Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 15 psi
Installation Confirmation:	
Confirmation Time:	Pipe Size (HxW)
3:08:00 AM	14.50'' x 14.25''
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
3.13''	
Downlooker Physical Offset (in)	Measurement Confidence (in)
NA	0.25''
Peak Velocity (fps)	Velocity Sensor Offset (in)
0.89 fps	0''
Silt (in)	Silt Type
0	Sandy / Gravel
Hydraulic Comments:	
Smooth flow medium depth and slow velocity.	
Manhole / Pipe Information:	
Manhole Depth (Approx. FT):	Manhole Configuration
123''	Single
Manhole Material:	Manhole Condition:
Vitrified Clay Pipe	Fair
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
Unbolted	Normal
Active Drop Connections	Air Quality:
No	Normal
Pipe Material	Pipe Condition:
Vitrified Clay Pipe	Fair
Communication Information:	
Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole
Additional Site Info. / Comments:	
Moved location 1 manhole downstream to MH 21-14-145 due to traffic hazard.	

Hydrograph Report

EC_FM05_21-14-145

Flow Monitor

EC_FM05_21-14-145



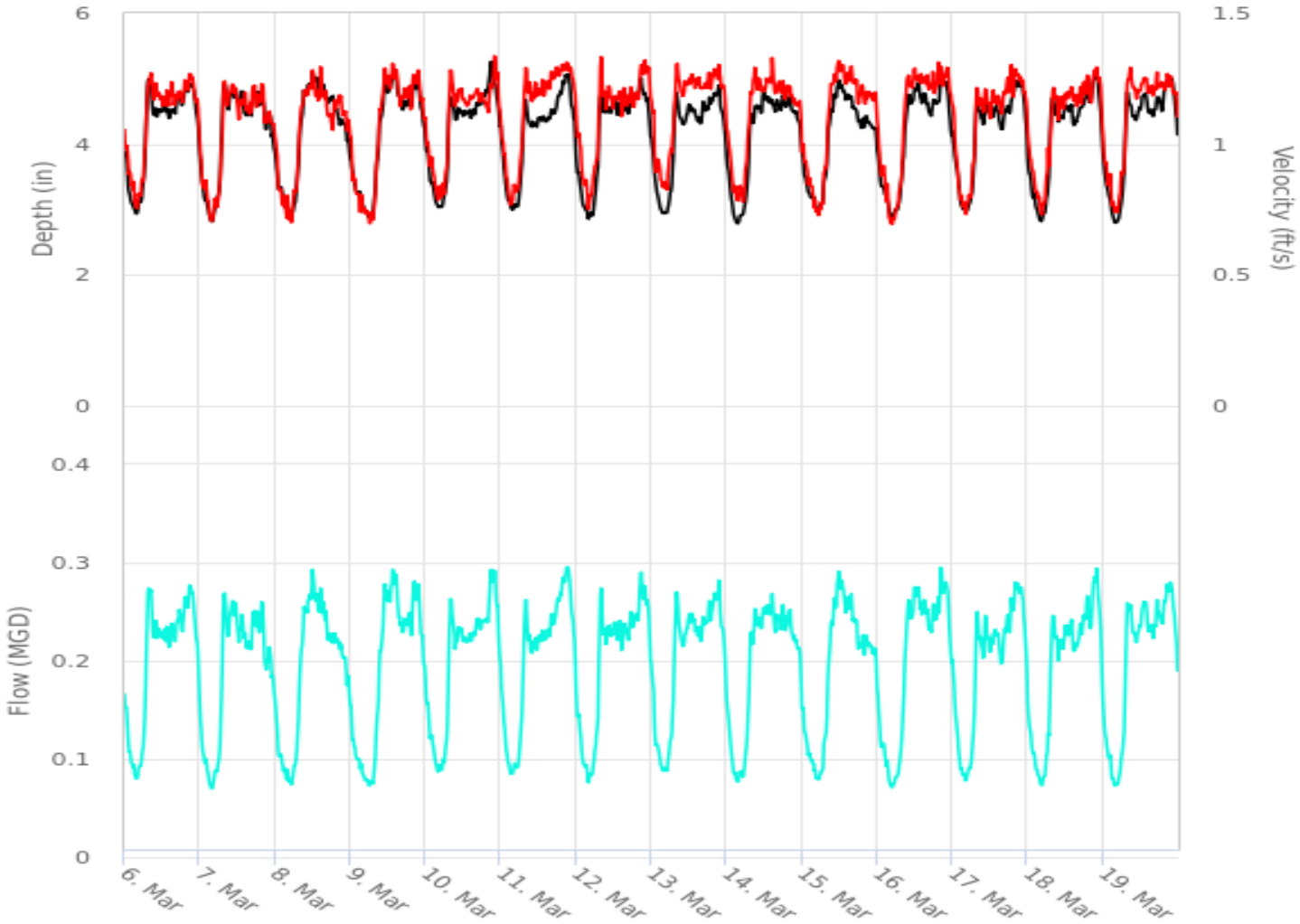
Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL





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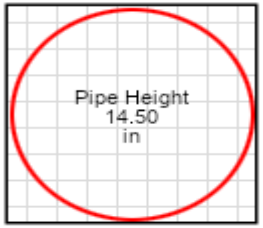
Scattergraph Report

EC_FM05_21-14-145

Flow Monitor

EC_FM05_21-14-145

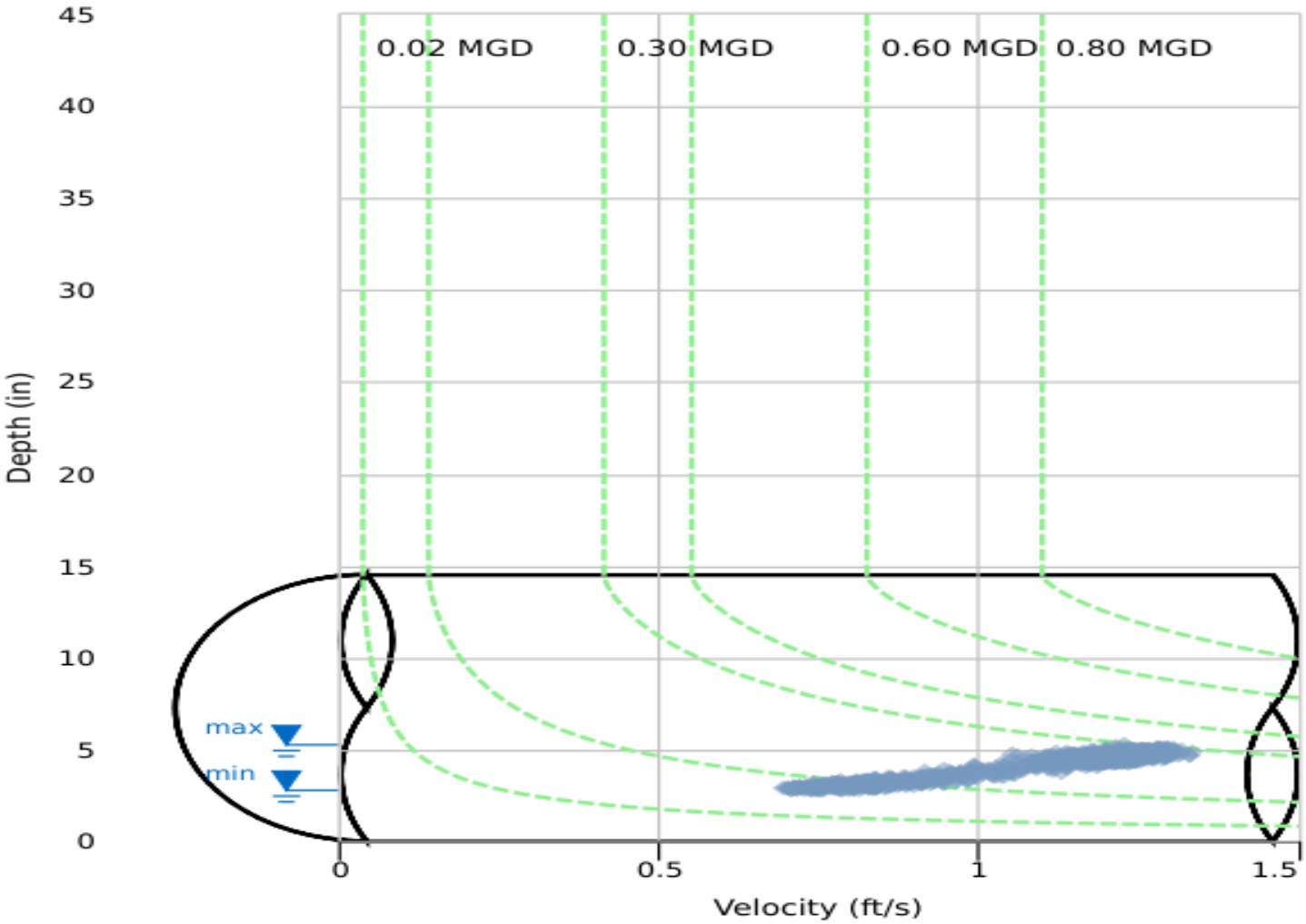


Report Period

03/06/2025
To
03/19/2025

Legend

- DFINAL - VFINAL
- Iso-Q™
- Min-Max Depth



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59

EC_FM05_21-14-145Pipe: Elliptical (14.5 in H x 14.25 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	03:55	2.93	07:50	4.99	4.24	04:00	0.75	20:55	1.30	1.10	04:00	0.079	20:55	0.284	0.202	0.202
03/07/2025	04:05	2.81	08:10	4.91	4.17	03:50	0.69	16:50	1.24	1.06	03:50	0.068	08:05	0.269	0.190	0.190
03/08/2025	05:00	2.92	12:10	5.10	4.17	05:25	0.69	14:30	1.33	1.05	05:25	0.073	12:10	0.294	0.190	0.190
03/09/2025	06:05	2.88	14:00	5.06	4.16	06:10	0.69	13:35	1.31	1.06	06:10	0.071	13:35	0.295	0.192	0.192
03/10/2025	04:15	3.03	20:55	5.30	4.24	04:10	0.78	22:10	1.34	1.10	04:10	0.086	21:00	0.298	0.201	0.201
03/11/2025	03:55	2.99	21:45	5.07	4.18	03:15	0.74	19:35	1.32	1.13	03:15	0.082	21:40	0.297	0.204	0.204
03/12/2025	04:00	2.85	20:45	5.03	4.19	04:05	0.75	07:55	1.41	1.11	04:05	0.076	20:45	0.293	0.200	0.200
03/13/2025	03:40	2.93	21:35	4.90	4.14	03:55	0.81	08:15	1.31	1.14	03:55	0.086	21:35	0.283	0.203	0.203
03/14/2025	03:40	2.78	11:45	4.82	4.12	03:50	0.77	14:35	1.41	1.11	03:50	0.076	14:35	0.285	0.197	0.197
03/15/2025	04:45	2.98	11:55	4.99	4.10	05:20	0.73	11:50	1.32	1.09	05:20	0.079	11:55	0.293	0.192	0.192
03/16/2025	04:50	2.87	20:35	5.12	4.16	04:55	0.69	19:35	1.33	1.09	04:55	0.070	20:20	0.297	0.199	0.199
03/17/2025	04:25	2.96	20:50	4.97	4.19	04:15	0.73	18:40	1.34	1.09	04:15	0.078	20:10	0.281	0.197	0.197
03/18/2025	04:30	2.81	22:10	5.11	4.16	04:30	0.72	22:10	1.31	1.09	04:30	0.072	22:10	0.300	0.195	0.195
03/19/2025	03:50	2.79	21:50	5.01	4.19	04:05	0.74	21:35	1.33	1.11	04:05	0.072	21:35	0.296	0.201	0.201

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			2.764
Average	4.17	1.10	0.197

EC_FM06_21-12-135

Site Commentary

SITE INFORMATION

Pipe	Elliptical (11.63 in H x 11.5 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Site operated under freeflow conditions for the duration of the study. This location is upstream of FM01.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	8.92	1.37	0.538
Minimum	6.61	0.86	0.239
Maximum	10.57	1.76	0.790
Min Time	03/16/2025 5:45:00 AM	03/16/2025 6:15:00 AM	03/16/2025 6:15:00 AM
Max Time	03/11/2025 8:55:00 PM	03/12/2025 9:50:00 PM	03/12/2025 9:50:00 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

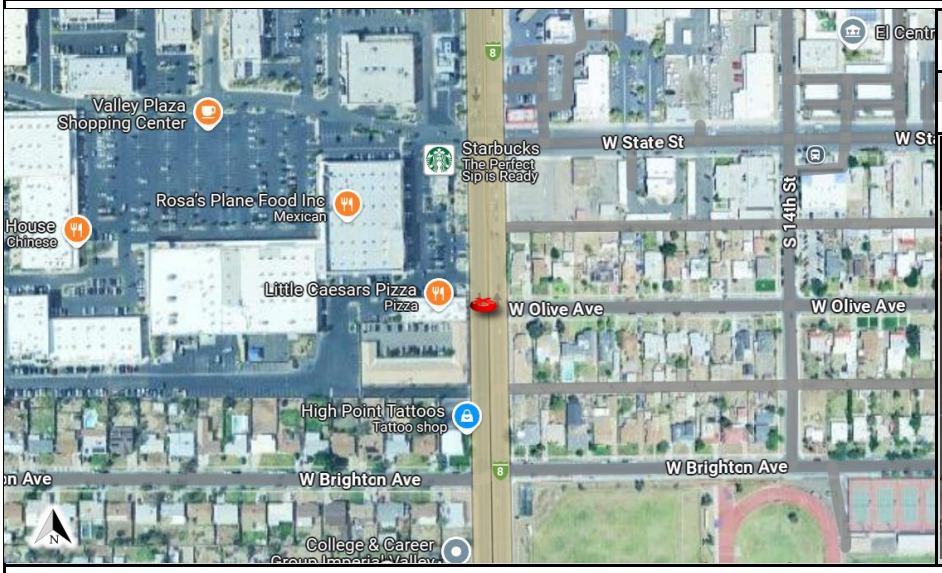
ElCentro.Dudek.TFM.CA24

Flow Monitoring Site Report

23124.11.325

EC_FM06_21-12-135

Site Address /Location:	242 S Imperial Ave, El Centro, CA 92243			Monitor Series	Location Type
				TRITON+ VZ	Temporary
Site Access Details:	DRIVE	Latitude:	32.7906171	Pipe Size (H x W)	Pipe Shape
		Longitude:	115.5698898	11.63'' x 11.50''	Circular



Manhole #	System Characteristics
21-12-135	Residential/Commercial
Access	Traffic
Drive	Heavy







ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

Installation Information

Installation Date:	Installation Type:
Thursday, February 27, 2025	Pulse Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 15 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
1:24:00 AM	11.63'' x 11.50''
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
7.25''	
Downlooker Physical Offset (in)	Measurement Confidence (in)
NA	0.25''
Peak Velocity (fps)	Velocity Sensor Offset (in)
1.23 fps	0''
Silt (in)	Silt Type
0	Sandy / Gravel

Hydraulic Comments:

Smooth deep flows with moderate velocity.

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
142"	Single
Manhole Material:	Manhole Condition:
Unknown	Good
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
Unbolted	Normal
Active Drop Connections	Air Quality:
No	Normal
Pipe Material	Pipe Condition:
PVC	Good

Communication Information:

Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole

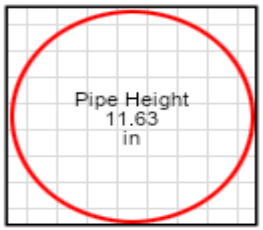
Additional Site Info. / Comments:

Hydrograph Report

EC_FM06_21-12-135

Flow Monitor

EC_FM06_21-12-135



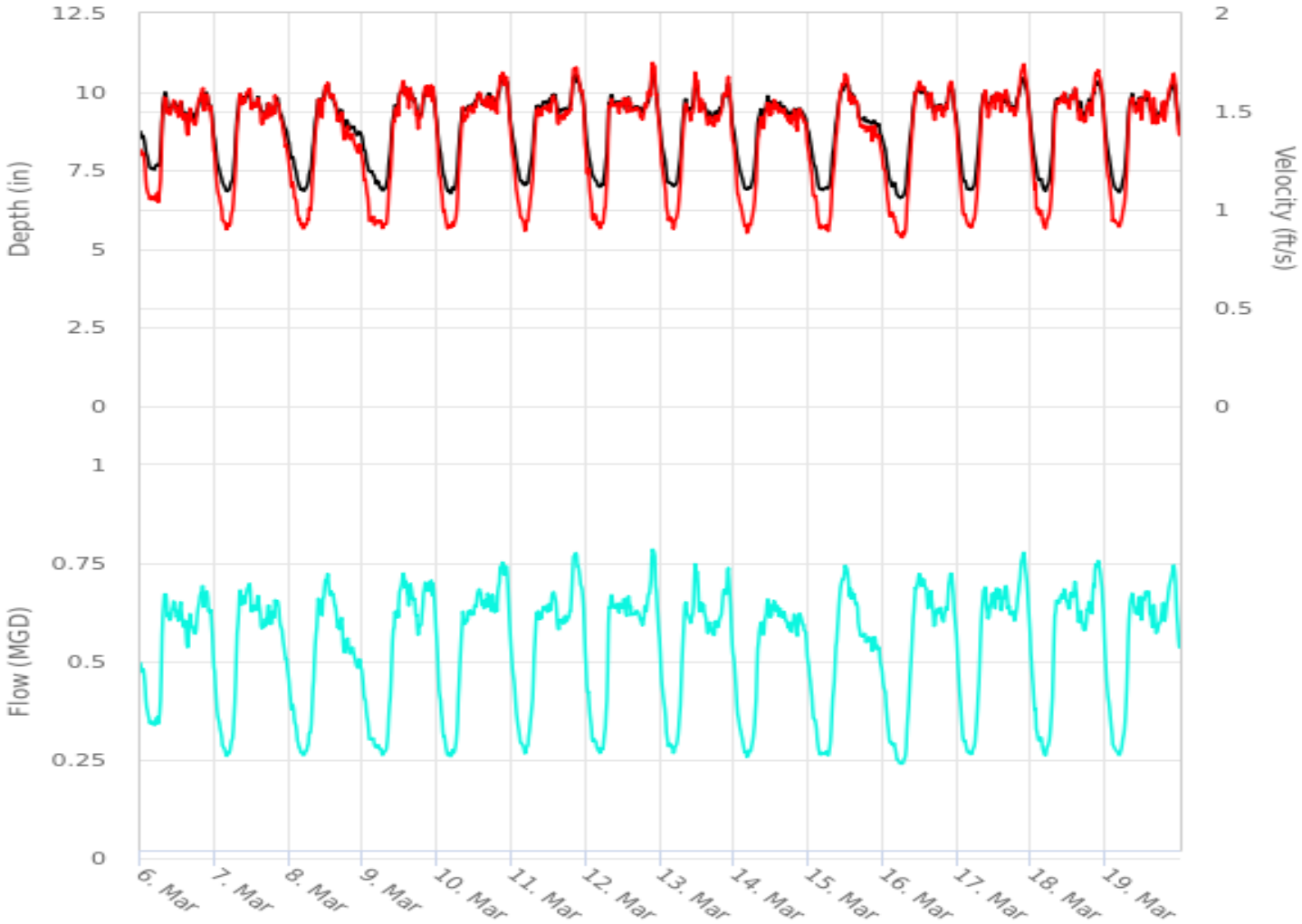
Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL





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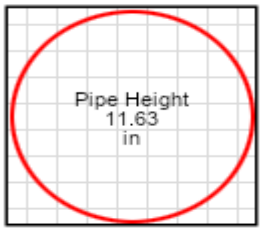
Scattergraph Report

EC_FM06_21-12-135

Flow Monitor

EC_FM06_21-12-135

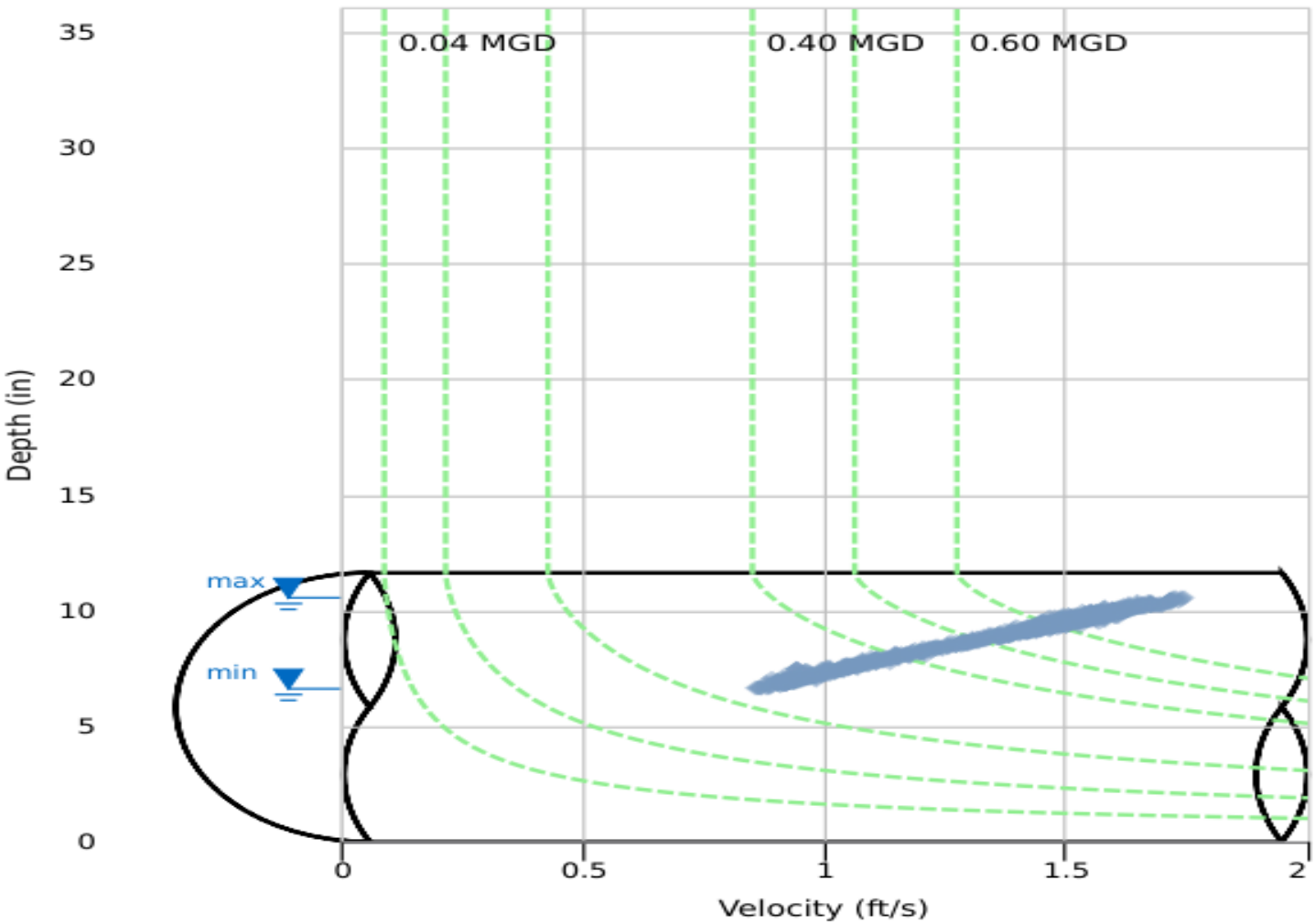


Report Period

03/06/2025
To
03/19/2025

Legend

- DFINAL - VFINAL
- Iso-Q™
- Min-Max Depth



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59

EC_FM06_21-12-135Pipe: Elliptical (11.63 in H x 11.5 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	04:35	7.51	08:00	9.99	9.04	05:45	1.03	20:20	1.67	1.39	04:35	0.337	20:20	0.711	0.552	0.552
03/07/2025	04:05	6.83	11:05	10.06	8.86	03:50	0.90	11:30	1.67	1.36	03:50	0.259	11:30	0.713	0.532	0.532
03/08/2025	05:05	6.85	12:35	10.24	8.66	04:40	0.90	12:35	1.65	1.31	04:40	0.261	12:35	0.727	0.499	0.499
03/09/2025	06:35	6.86	13:10	10.18	8.83	07:30	0.90	13:00	1.67	1.34	06:25	0.262	13:05	0.728	0.523	0.523
03/10/2025	04:15	6.75	21:50	10.41	9.02	03:20	0.90	21:10	1.71	1.39	04:15	0.256	21:10	0.760	0.552	0.552
03/11/2025	04:25	7.02	20:55	10.57	9.06	04:20	0.89	21:00	1.73	1.39	04:20	0.264	20:55	0.779	0.554	0.554
03/12/2025	04:35	6.97	21:55	10.56	9.02	04:30	0.90	21:50	1.76	1.39	04:30	0.266	21:50	0.790	0.552	0.552
03/13/2025	04:30	6.98	22:00	10.28	8.96	04:25	0.89	11:25	1.70	1.37	04:25	0.262	11:25	0.750	0.542	0.542
03/14/2025	04:10	6.89	10:55	9.87	8.80	04:00	0.87	10:45	1.58	1.33	04:00	0.253	10:45	0.675	0.517	0.517
03/15/2025	04:35	6.87	11:50	10.26	8.71	06:10	0.88	11:55	1.69	1.32	06:10	0.256	11:55	0.745	0.507	0.507
03/16/2025	05:45	6.61	21:55	10.22	8.80	06:15	0.86	11:45	1.66	1.34	06:15	0.239	11:45	0.728	0.524	0.524
03/17/2025	04:40	6.86	21:35	10.45	9.06	04:40	0.91	21:30	1.75	1.40	04:40	0.262	21:25	0.780	0.559	0.559
03/18/2025	04:35	6.84	21:45	10.36	9.05	04:35	0.90	21:40	1.72	1.39	04:35	0.260	21:40	0.761	0.557	0.557
03/19/2025	04:20	6.80	22:00	10.27	8.97	04:30	0.91	21:55	1.70	1.38	04:30	0.261	22:00	0.749	0.548	0.548

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			7.520
Average	8.92	1.36	0.537

EC_FM07_21-11-103

Site Commentary

SITE INFORMATION

Pipe	Elliptical (27.25 in H x 27.13 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Flow at this site is influenced by a nearby pumpstation. This location is downstream from FM08, a review of balancing shows no complications.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	5.96	1.66	0.764
Minimum	3.01	0.76	0.120
Maximum	8.42	2.41	1.573
Min Time	03/15/2025 5:50:00 AM	03/08/2025 6:40:00 AM	03/08/2025 6:40:00 AM
Max Time	03/09/2025 10:35:00 PM	03/17/2025 8:30:00 PM	03/09/2025 10:35:00 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

Flow Monitoring Site Report

23124.11.325

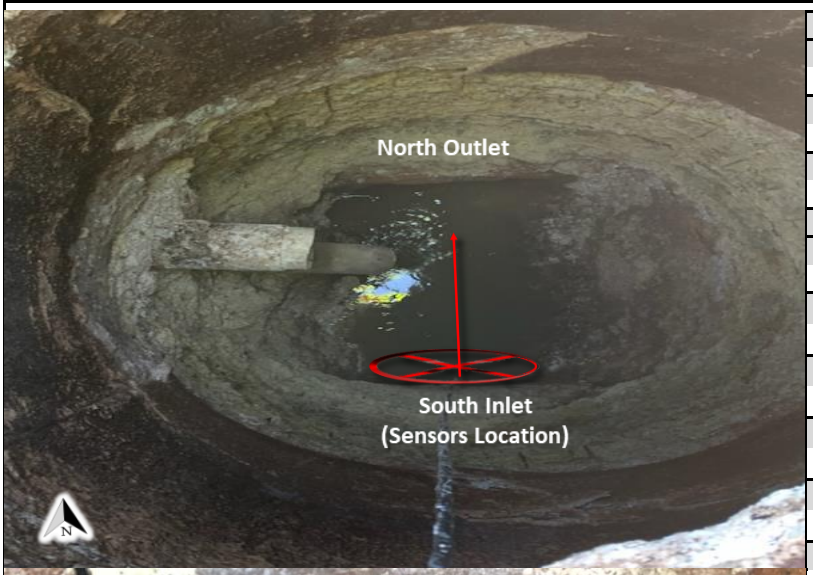
EC_FM07_21-11-103

Site Address /Location:	2003 W Adams Ave, El Centro, CA 92243			Monitor Series	Location Type
				TRITON+ VZ	Temporary
Site Access Details:	DRIVE	Latitude:	32.7955651	Pipe Size (H x W)	Pipe Shape
		Longitude:	-115.5787039	27.25'' x 27.13''	Circular



Manhole #	System Characteristics
22-11-103	Residential/Commercial
Access	Traffic
Drive	Medium







Installation Information	
Installation Date:	Installation Type:
Wednesday, February 26, 2025	Pulse Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 15 psi
Installation Confirmation:	
Confirmation Time:	Pipe Size (HxW)
10:53:00 AM	27.25'' x 27.13''
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
7.00''	
Downlooker Physical Offset (in)	Measurement Confidence (in)
NA	0.25''
Peak Velocity (fps)	Velocity Sensor Offset (in)
1.44 fps	0''
Silt (in)	Silt Type
0	Sandy / Gravel
Hydraulic Comments:	
Smooth flow with medium depth and velocity. Pumpstation influenced.	
Manhole / Pipe Information:	
Manhole Depth (Approx. FT):	Manhole Configuration
174"	Single
Manhole Material:	Manhole Condition:
Brick	Fair
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
vented	Normal
Active Drop Connections	Air Quality:
No	High H2S
Pipe Material	Pipe Condition:
Vitrified Clay Pipe	Fair
Communication Information:	
Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole
Additional Site Info. / Comments:	
Moved location 1 manhole downstream to MH 22-11-103 due to traffic hazard. Manhole ID on site name is incorrect.	

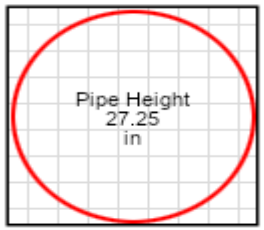
ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

Hydrograph Report

EC_FM07_21-11-103

Flow Monitor

EC_FM07_21-11-103

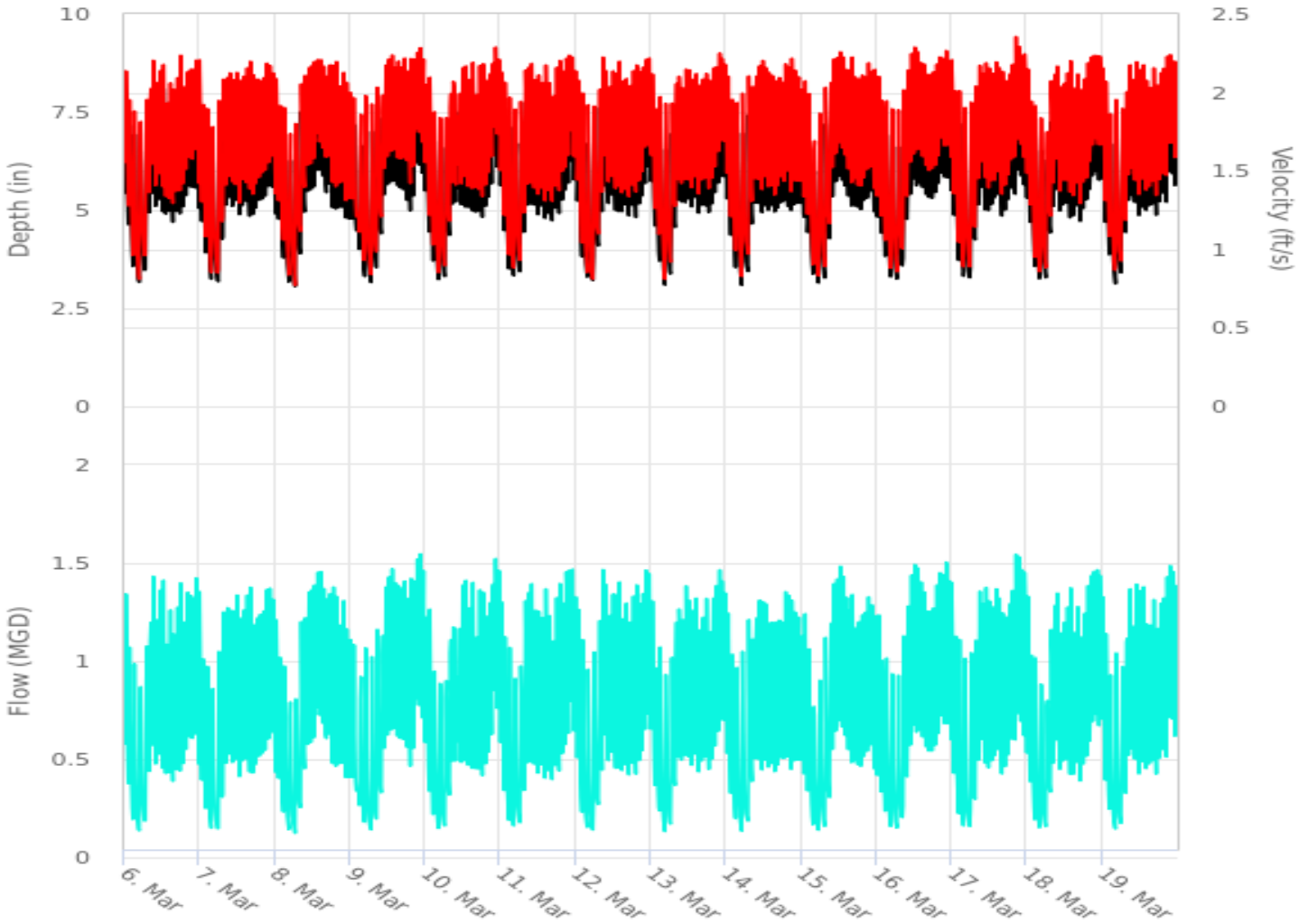


Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL



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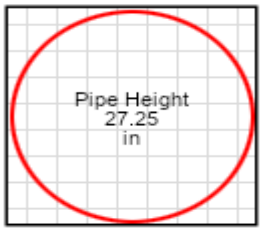
Scattergraph Report

EC_FM07_21-11-103

Flow Monitor

EC_FM07_21-11-103

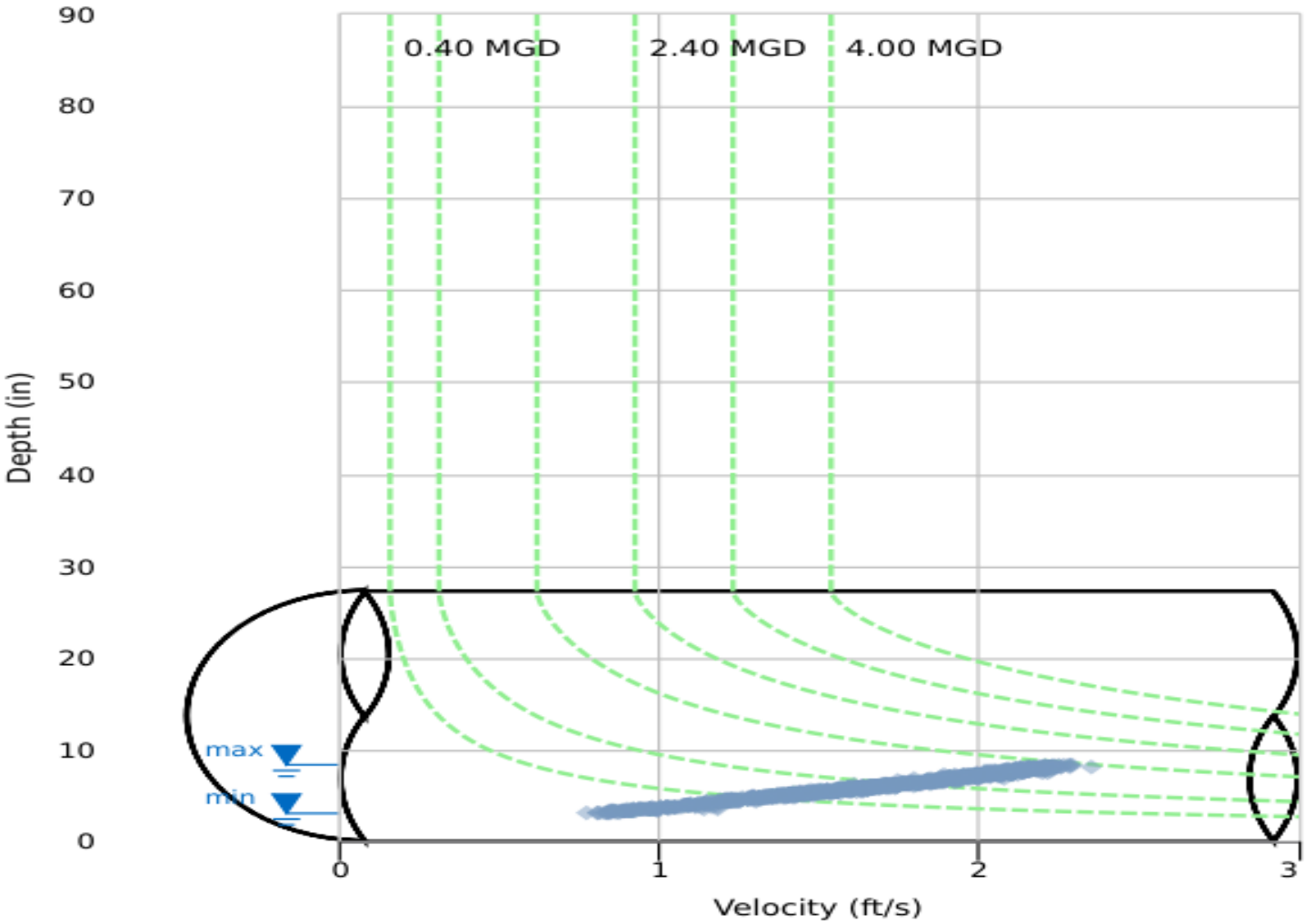


Report Period

03/06/2025
To
03/19/2025

Legend

- DFINAL - VFINAL
- Iso-Q™
- Min-Max Depth



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59
EC_FM07_21-11-103Pipe: Elliptical (27.25 in H x 27.13 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	05:00	3.13	12:35	8.21	5.94	05:00	0.80	18:00	2.33	1.64	05:00	0.133	22:10	1.469	0.752	0.752
03/07/2025	04:05	3.07	19:25	8.11	5.93	04:05	0.78	00:05	2.23	1.65	04:05	0.126	19:25	1.435	0.754	0.754
03/08/2025	06:40	3.03	13:50	8.28	5.93	06:40	0.76	14:50	2.22	1.65	06:40	0.120	13:50	1.487	0.753	0.753
03/09/2025	06:55	3.13	22:35	8.42	5.95	06:55	0.83	22:35	2.29	1.66	06:55	0.138	22:35	1.573	0.769	0.769
03/10/2025	04:35	3.19	22:40	8.33	6.00	04:35	0.84	22:35	2.30	1.66	04:35	0.142	22:40	1.548	0.773	0.773
03/11/2025	04:35	3.13	21:10	8.40	5.99	04:35	0.81	21:10	2.28	1.66	04:35	0.136	21:10	1.554	0.766	0.766
03/12/2025	05:40	3.20	22:40	8.36	6.00	05:35	0.81	08:50	2.23	1.64	05:35	0.139	22:40	1.512	0.763	0.763
03/13/2025	04:40	3.03	22:00	8.17	5.99	04:40	0.78	22:00	2.27	1.67	04:40	0.124	22:00	1.492	0.769	0.769
03/14/2025	05:10	3.05	19:00	7.99	5.83	05:10	0.81	21:05	2.27	1.65	05:10	0.129	19:00	1.424	0.735	0.735
03/15/2025	05:50	3.01	12:35	8.20	5.88	05:50	0.77	12:35	2.27	1.65	05:50	0.121	12:35	1.496	0.752	0.752
03/16/2025	06:50	3.17	22:20	8.29	5.95	06:50	0.83	12:35	2.33	1.68	06:50	0.140	22:20	1.533	0.775	0.775
03/17/2025	04:05	3.17	21:35	8.34	6.01	04:05	0.84	20:30	2.41	1.68	04:05	0.142	21:35	1.565	0.782	0.782
03/18/2025	04:20	3.14	22:30	8.30	5.94	04:20	0.82	22:30	2.28	1.66	04:20	0.137	22:30	1.534	0.760	0.760
03/19/2025	04:20	3.10	22:45	8.35	6.01	04:20	0.81	22:40	2.27	1.67	04:20	0.132	12:10	1.517	0.776	0.776

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			10.679
Average	5.95	1.66	0.763

EC_FM08_UNK

Site Commentary

SITE INFORMATION

Pipe	Elliptical (17.88 in H x 17.75 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

Site operated under freeflow conditions for the duration of the study. This location is upstream of FM07.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	5.30	0.67	0.190
Minimum	3.67	0.20	0.034
Maximum	8.19	1.05	0.438
Min Time	03/06/2025 4:45:00 AM	03/17/2025 3:25:00 AM	03/17/2025 3:25:00 AM
Max Time	03/19/2025 10:45:00 AM	03/06/2025 9:10:00 AM	03/06/2025 9:10:00 AM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

Flow Monitoring Site Report

ADS ENVIRONMENTAL SERVICES®

22843.22.325

EC_FM08_UNK

Site Address /Location:	1498 Manuel Ortiz Ave, El Centro, CA 92243			Monitor Series	Location Type
				TRITON+ VZ	Temporary
Site Access Details:	DRIVE	Latitude:	32.76336358	Pipe Size (H x W)	Pipe Shape
		Longitude:	115.5693255	17.75" X 17.88"	Circular



Manhole #	System Characteristics
UNK	Residential/Commercial
Access	Traffic
Drive	None







ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	22843.22.325

Installation Information

Installation Date:	Installation Type:
Tuesday, February 25, 2025	Doppler Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 5 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
3:50am	17.75" X 17.88"
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
4.63"	
Downlooker Physical Offset (in)	Measurement Confidence (in)
NA	0.25"
Peak Velocity (fps)	Velocity Sensor Offset (in)
0.77	0''
Silt (in)	Silt Type
0	Hard Packed

Hydraulic Comments:

Smooth flow with medium depth and slow velocity

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
165"	Single
Manhole Material:	Manhole Condition:
Concrete	Poor
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
vented	Normal
Active Drop Connections	Air Quality:
No	Normal
Pipe Material	Pipe Condition:
Vitrified Clay Pipe	Fair

Communication Information:

Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole

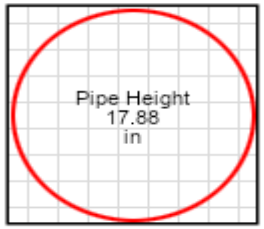
Additional Site Info. / Comments:

Hydrograph Report

EC_FM08_UNK

Flow Monitor

EC_FM08_UNK

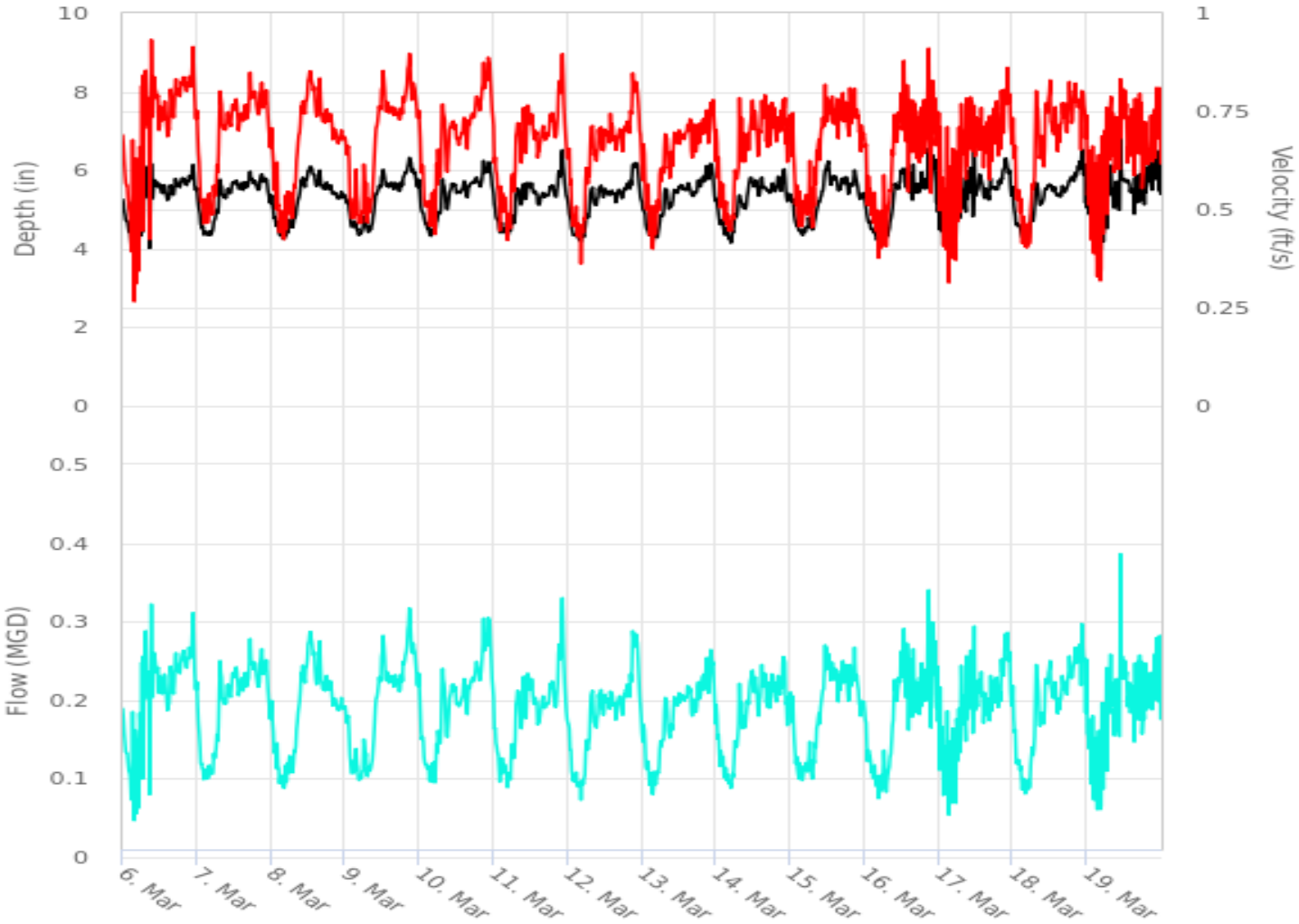


Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL



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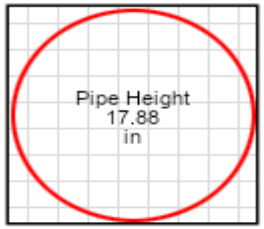
Scattergraph Report

EC_FM08_UNK

Flow Monitor

EC_FM08_UNK

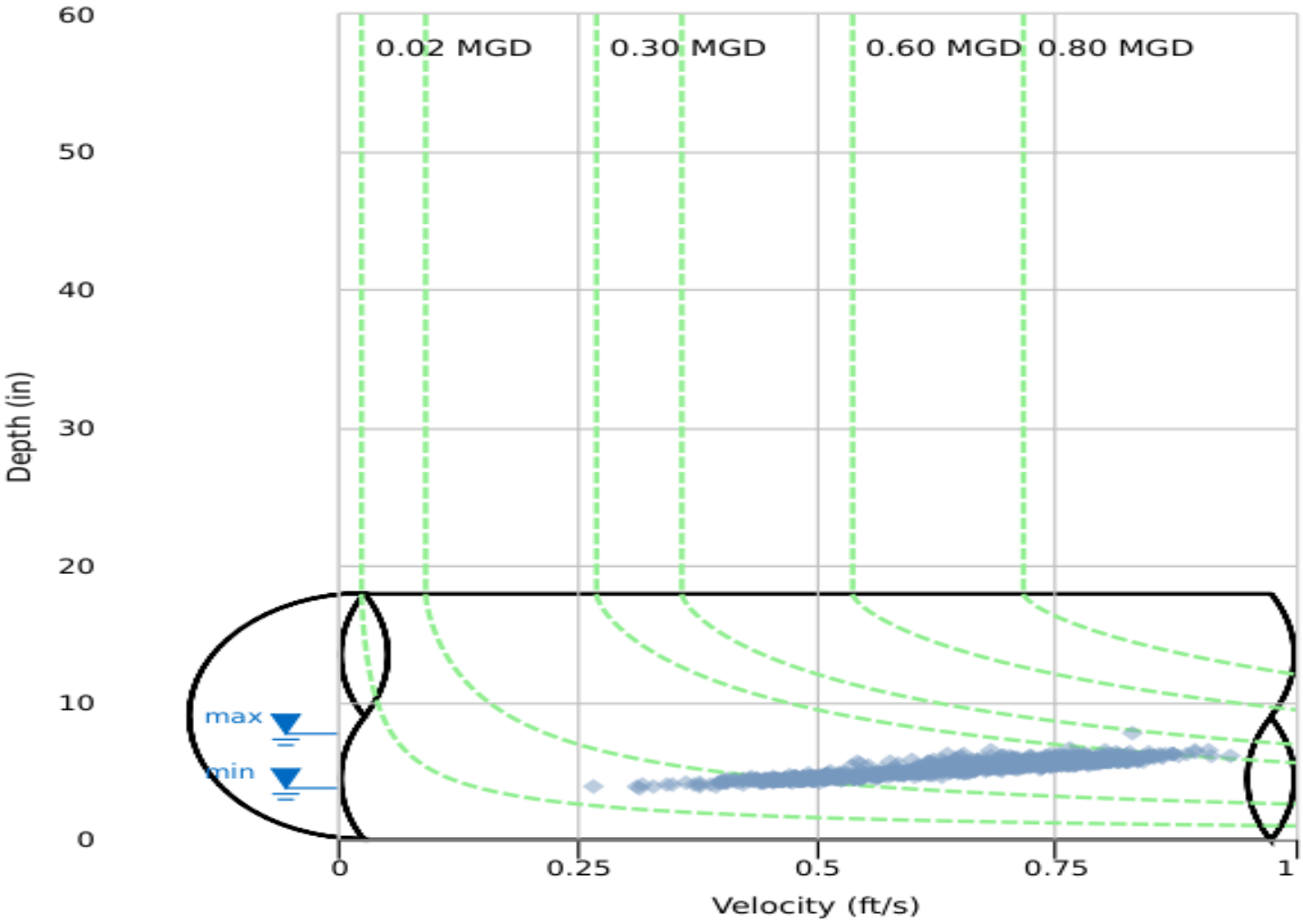


Report Period

03/06/2025
To
03/19/2025

Legend

- DFINAL - VFINAL
- Iso-Q™
- Min-Max Depth



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59
EC_FM08_UNKPipe: Elliptical (17.88 in H x 17.75 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	04:45	3.67	09:10	7.12	5.31	03:50	0.23	09:10	1.05	0.71	03:50	0.040	09:10	0.438	0.204	0.204
03/07/2025	03:40	4.10	17:20	6.01	5.32	04:30	0.37	17:20	0.86	0.69	03:40	0.072	17:20	0.282	0.197	0.197
03/08/2025	04:25	3.99	12:40	6.10	5.26	04:25	0.29	12:50	0.86	0.67	04:25	0.054	12:50	0.289	0.188	0.188
03/09/2025	04:25	4.14	20:50	6.34	5.31	04:30	0.36	20:50	0.90	0.68	04:25	0.071	20:50	0.319	0.195	0.195
03/10/2025	03:50	4.07	20:50	6.29	5.36	03:50	0.38	22:25	0.90	0.68	03:50	0.072	20:50	0.310	0.197	0.197
03/11/2025	04:40	4.05	22:15	6.54	5.24	05:30	0.38	22:15	0.90	0.66	03:00	0.077	22:15	0.333	0.184	0.184
03/12/2025	04:20	3.90	22:00	6.21	5.22	04:20	0.29	21:10	0.86	0.65	04:20	0.053	21:10	0.293	0.180	0.180
03/13/2025	05:00	4.01	22:25	6.19	5.26	03:50	0.32	23:05	0.83	0.64	03:50	0.063	22:25	0.280	0.179	0.179
03/14/2025	05:00	3.86	22:00	6.08	5.25	04:10	0.30	22:00	0.90	0.66	04:10	0.055	22:00	0.302	0.183	0.183
03/15/2025	04:00	4.05	12:25	6.26	5.29	04:25	0.36	11:20	0.87	0.67	04:25	0.070	11:55	0.293	0.189	0.189
03/16/2025	04:50	3.91	22:10	6.83	5.29	04:30	0.31	20:45	0.97	0.64	04:30	0.059	20:45	0.378	0.184	0.184
03/17/2025	03:30	3.70	11:30	7.19	5.34	03:25	0.20	11:25	0.93	0.65	03:25	0.034	11:25	0.364	0.190	0.190
03/18/2025	04:45	3.89	22:15	6.91	5.31	03:00	0.32	23:20	0.89	0.67	04:45	0.059	23:20	0.336	0.192	0.192
03/19/2025	03:25	3.76	10:45	8.19	5.39	03:15	0.24	06:15	0.91	0.64	03:15	0.044	10:45	0.435	0.190	0.190

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			2.652
Average	5.30	0.66	0.189

EC_FM09_22-17-104

Site Commentary

SITE INFORMATION

Pipe	Elliptical (26 in H x 27 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 06 March 2025 to Wednesday, 19 March 2025**, along with observed minimum and maximum data, are provided in the following table.

During the monitoring of this site, a large amount of silt and debris was observed. Equipment was removed on March 4th, 2025 for line cleaning and reinstalled on March 5th, 2025.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	4.87	0.73	0.236
Minimum	3.61	0.45	0.099
Maximum	6.63	1.08	0.391
Min Time	03/19/2025 6:10:00 AM	03/12/2025 7:20:00 AM	03/19/2025 6:10:00 AM
Max Time	03/13/2025 2:15:00 PM	03/15/2025 10:20:00 PM	03/09/2025 4:50:00 PM

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions are based off the five minute average.

Values in the graphical reports are based off the fifteen minute average.

Values in the tabular report are based off the five minute average.

DATA UPTIME

Data uptime observed during Thursday, 06 March 2025 to Wednesday, 19 March 2025 is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ElCentro.Dudek.TFM.CA24

Flow Monitoring Site Report

22843.22.325

EC_FM09_22-17-104

Site Address /Location:	202 N Earls St			Monitor Series	Location Type
				TRITON+ VZ	Temporary
Site Access Details:	DRIVE	Latitude:	32.7945838	Pipe Size (H x W)	Pipe Shape
		Longitude:	115.5269849	26.00'' x 27.00''	Elliptical



Manhole #	System Characteristics
22-17-104	Residential/Commercial
Access	Traffic
Drive	Light







ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	22843.22.325

Installation Information

Installation Date:	Installation Type:
Tuesday, February 25, 2025	Doppler Standard Ring and Crank
Monitoring Location (Sensors):	Monitor Location:
Upstream 0-5 FT	Manhole
Sensors / Devices:	Pressure Sensor Range (psi)
Peak Combo (CS4)	0 - 5 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
6:42am	26.00'' x 27.00''
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
6.00"	N/A
Downlooker Physical Offset (in)	Measurement Confidence (in)
2.88"	0.25"
Peak Velocity (fps)	Velocity Sensor Offset (in)
0.23	0''
Silt (in)	Silt Type
1.5"	Sandy / Gravel

Hydraulic Comments:

Smooth flow with medium depth and slow velocity. Some silt/debris

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
174"	Single
Manhole Material:	Manhole Condition:
Concrete	Fair
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
26''	54''
Manhole Cover	Manhole Frame
Vented	Normal
Active Drop Connections	Air Quality:
No	Normal
Pipe Material	Pipe Condition:
Concrete	Fair

Communication Information:

Communication Type	Antenna Location
Wireless	Manhole Pick / Vent Hole

Additional Site Info. / Comments:

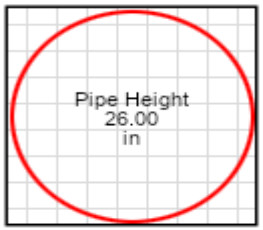
After installation a flow change was noted and during field service lots of new debris was observed. City performed a line cleaning and flow meter was reinstalled. There is a data gap due to the debris but 2-weeks of data from March 6th- 19th was collected.

Hydrograph Report

EC_FM09_22-17-104

Flow Monitor

EC_FM09_22-17-104



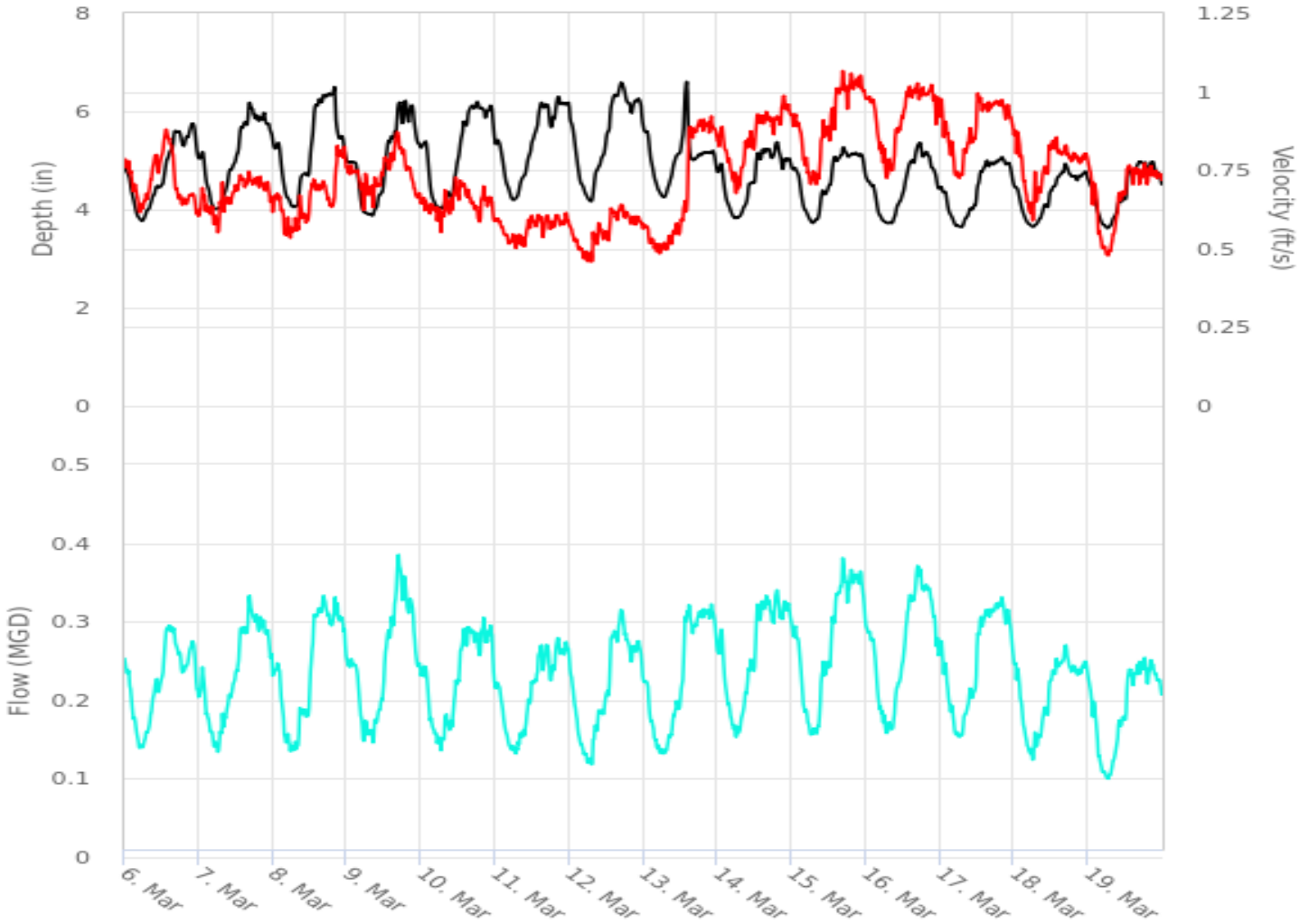
Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL
QFINAL
VFINAL
RAIN FINAL





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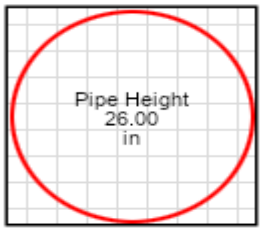
Scattergraph Report

EC_FM09_22-17-104

Flow Monitor

EC_FM09_22-17-104



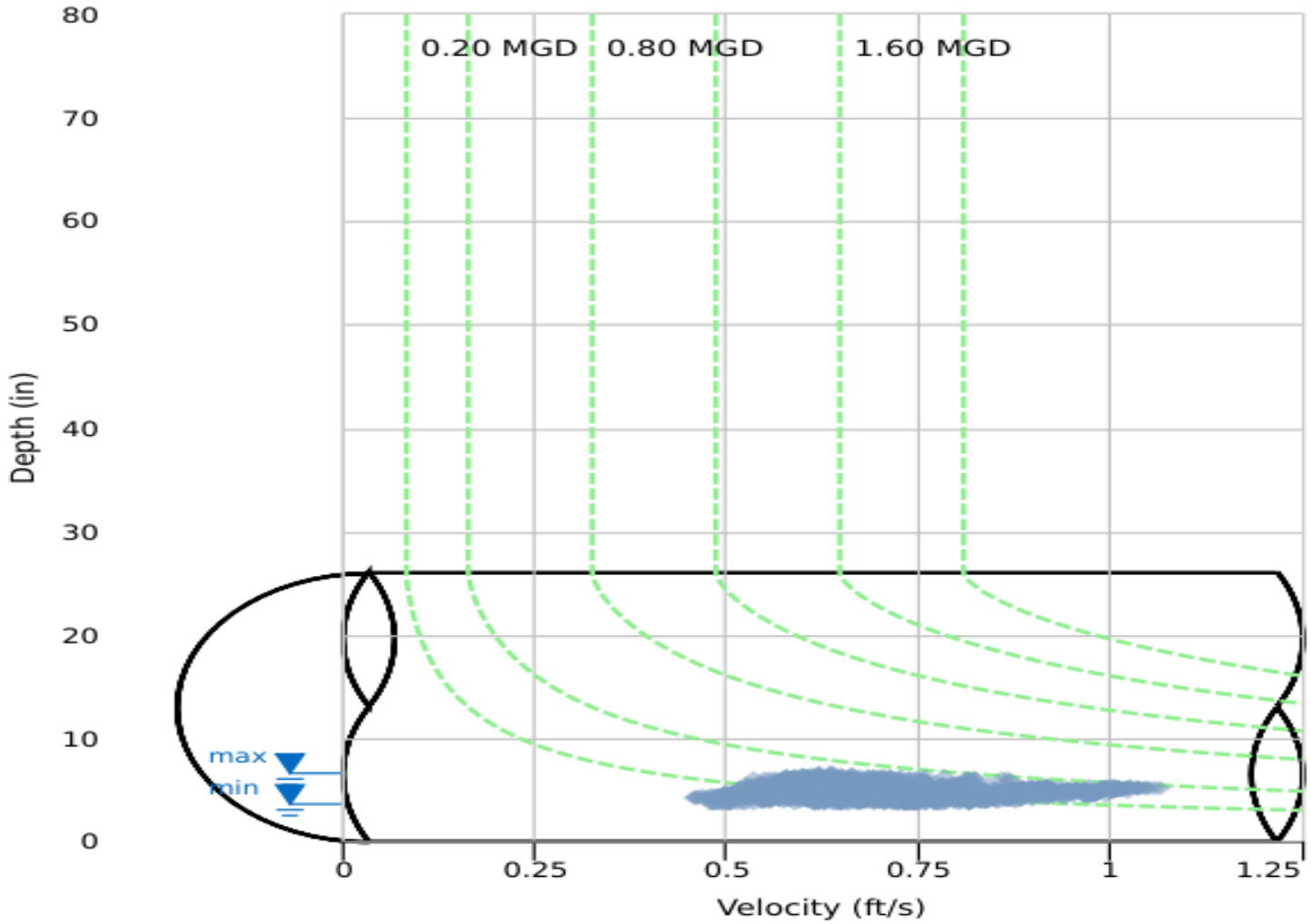
Report Period

03/06/2025
To
03/19/2025

Legend

DFINAL - VFINAL
Iso-Q™
Min-Max Depth

ADS ENVIRONMENTAL SERVICES



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Daily Tabular Report

03/06/2025 00:00 - 03/19/2025 23:59
EC_FM09_22-17-104Pipe: Elliptical (26 in H x 27 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
03/06/2025	05:50	3.76	22:05	5.76	4.77	04:50	0.61	13:30	0.89	0.72	04:50	0.137	14:40	0.297	0.225	0.225
03/07/2025	06:05	4.01	16:40	6.18	5.12	06:15	0.52	16:25	0.75	0.67	06:15	0.127	16:30	0.335	0.236	0.236
03/08/2025	07:00	4.05	20:05	6.50	5.26	05:50	0.53	23:20	0.86	0.66	05:50	0.133	20:20	0.336	0.241	0.241
03/09/2025	08:25	3.87	19:05	6.22	5.01	05:20	0.58	16:20	0.87	0.74	05:20	0.138	16:50	0.391	0.251	0.251
03/10/2025	05:55	4.02	18:15	6.20	5.20	06:30	0.53	11:15	0.74	0.65	06:30	0.129	20:15	0.310	0.229	0.229
03/11/2025	06:10	4.19	20:35	6.30	5.36	06:45	0.50	23:10	0.62	0.57	06:45	0.130	20:15	0.281	0.212	0.212
03/12/2025	07:10	4.16	16:55	6.59	5.50	07:20	0.45	16:40	0.64	0.56	07:20	0.115	17:05	0.316	0.218	0.218
03/13/2025	06:50	4.25	14:15	6.63	5.05	04:35	0.46	14:55	0.93	0.68	05:35	0.130	14:55	0.332	0.232	0.232
03/14/2025	05:40	3.82	19:15	5.38	4.67	06:10	0.67	21:30	1.00	0.86	06:10	0.151	19:15	0.341	0.262	0.262
03/15/2025	07:00	3.72	16:50	5.27	4.62	06:20	0.69	22:20	1.08	0.91	06:20	0.152	16:35	0.383	0.275	0.275
03/16/2025	08:30	3.72	17:30	5.37	4.50	07:00	0.72	18:25	1.03	0.92	07:00	0.156	16:50	0.373	0.269	0.269
03/17/2025	07:05	3.64	20:10	5.07	4.42	07:20	0.70	12:15	1.00	0.89	07:20	0.149	20:10	0.332	0.252	0.252
03/18/2025	06:10	3.64	16:40	4.94	4.32	06:10	0.58	00:30	0.88	0.77	06:10	0.123	16:50	0.271	0.210	0.210
03/19/2025	06:10	3.61	16:55	4.98	4.40	06:30	0.48	20:15	0.78	0.67	06:10	0.099	16:55	0.254	0.190	0.190

03/06/2025 00:00 - 03/19/2025 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			3.302
Average	4.87	0.73	0.236

RG_02

Site Commentary

SITE INFORMATION

RainGauge	8" Tipping Bucket

OBSERVATIONS

The Total rainfall recorded during the study period was 0.05 inches.

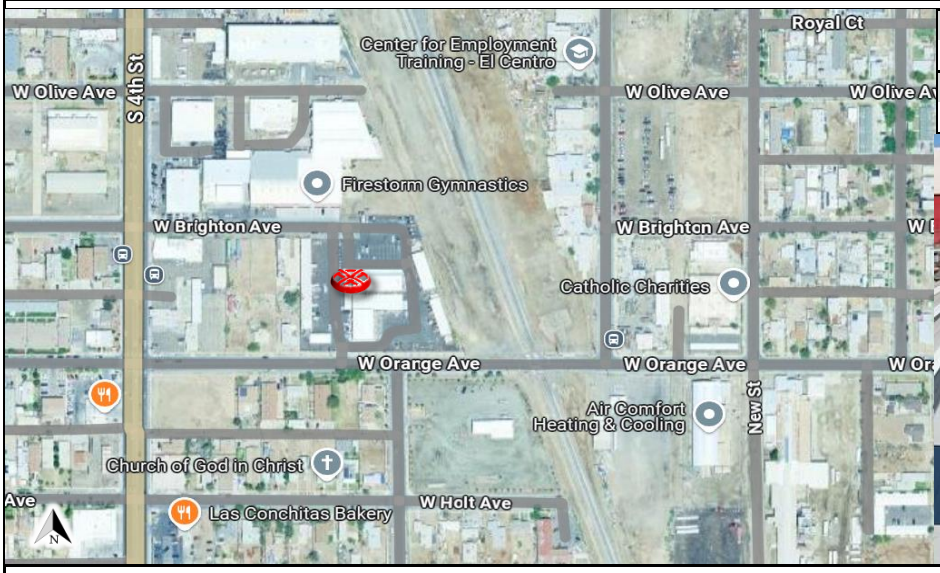
ElCentro.Dudek.TFM.CA24

Flow Monitoring Site Report

23124.11.325

RG_02

Site Address /Location:	307 W Brighton Ave, El Centro, CA 92243			Monitor Series	Location Type
				Rain Alert III	Temporary
Site Access Details:	DRIVE	Latitude:	32.7893899	Pipe Size (H x W)	Pipe Shape
		Longitude:	115.550877	0	



Manhole #	System Characteristics
N /A	Other
Access	Traffic
Drive	None



Installation Information

Installation Date:	Installation Type:
Wednesday, February 26, 2025	Rain Gauge
Monitoring Location (Sensors):	Monitor Location:
Rooftop	Building
Sensors / Devices:	Pressure Sensor Range (psi)
Rain Gauge Tipping Bucket	0 - 5 psi

Installation Confirmation:

Confirmation Time:	Pipe Size (HxW)
8:35:00 AM	0
Depth of Flow (Wet DOF) (in)	Range (Air DOF) (in)
0.00	
Downlooker Physical Offset (in)	Measurement Confidence (in)
N/A	0.25"
Peak Velocity (fps)	Velocity Sensor Offset (in)
N/A	0''
Silt (in)	Silt Type
0	Sandy / Gravel

Hydraulic Comments:

Manhole / Pipe Information:

Manhole Depth (Approx. FT):	Manhole Configuration
0	Single
Manhole Material:	Manhole Condition:
Unknown	Good
Manhole Opening Diameter (in)	Manhole Diameter (Approx.):
0	0
Manhole Cover	Manhole Frame
vented	Normal
Active Drop Connections	Air Quality:
No	
Pipe Material	Pipe Condition:
Unknown	Fair

Communication Information:

Communication Type	Antenna Location
Wireless	Cabinet

Additional Site Info. / Comments:

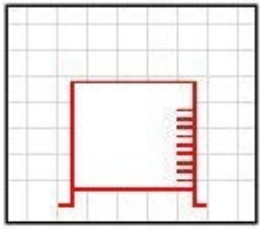
ADS Project Name:	ElCentro.Dudek.TFM.CA24
ADS Project Number:	23124.11.325

Hydrograph Report

RG_02

Rain Gauge

RG_02

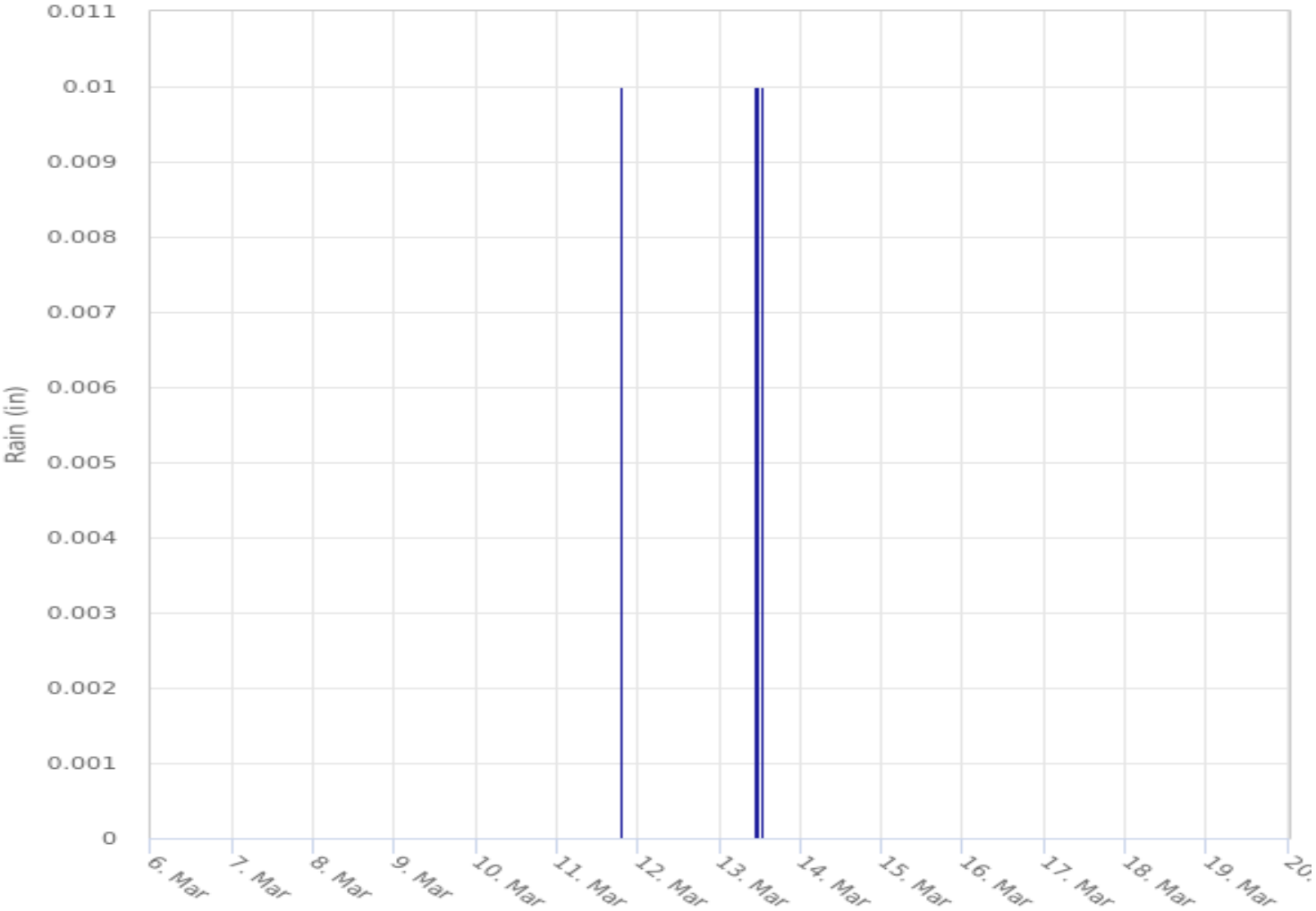


Report Period

03/06/2025
To
03/19/2025

Legend

Rain



Daily Tabular Report

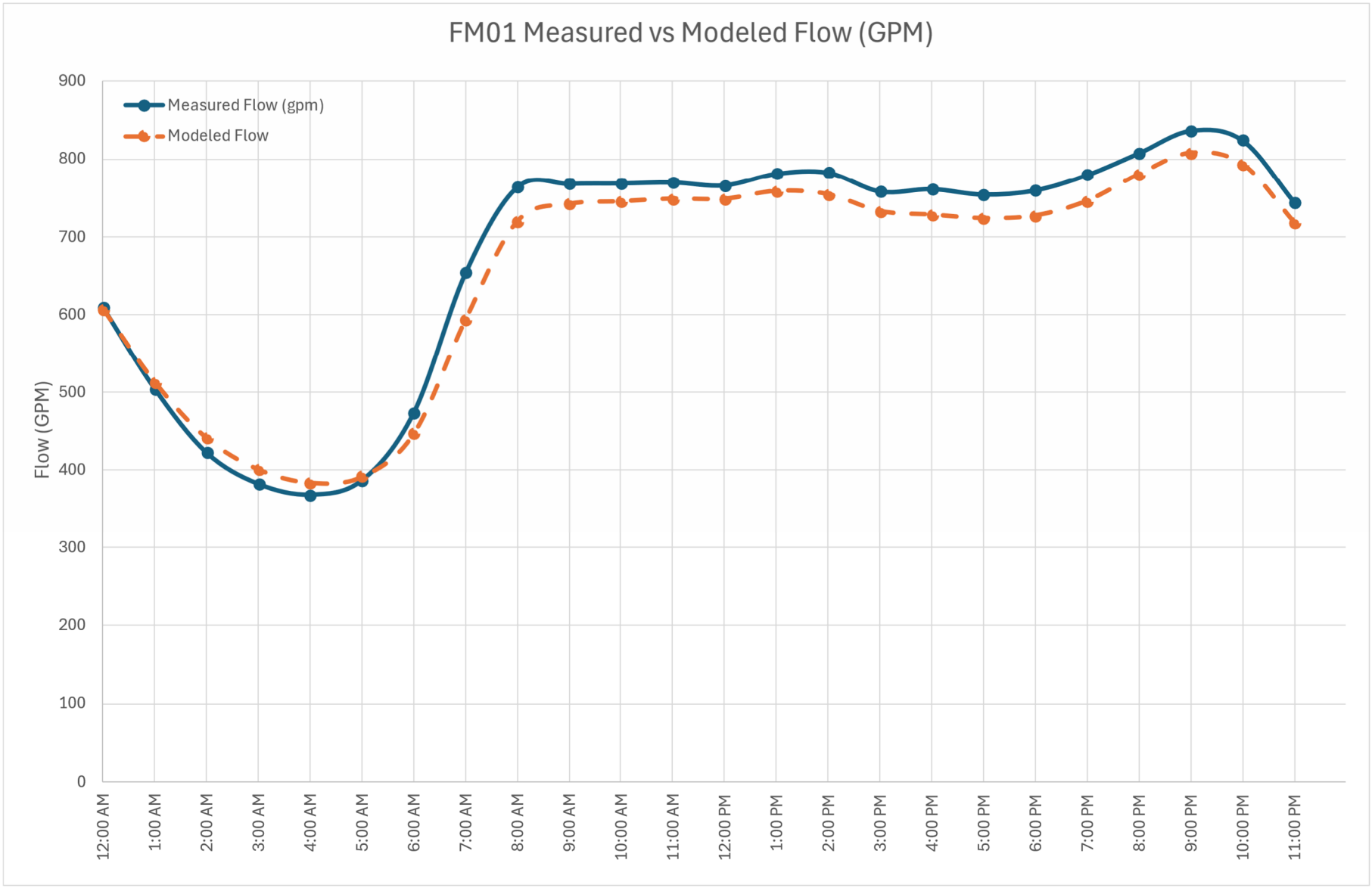
03/06/2025 00:00 - 03/19/2025 23:59
RG_02 Rain Gauge:

	Rain (in)
Date	Total
03/06/2025	-
03/07/2025	-
03/08/2025	-
03/09/2025	-
03/10/2025	-
03/11/2025	0.01
03/12/2025	-
03/13/2025	0.04
03/14/2025	-
03/15/2025	-
03/16/2025	-
03/17/2025	-
03/18/2025	-
03/19/2025	-

03/06/2025 00:00 - 03/19/2025 23:59

	Rain (in)
Total	0.05
Average	

Appendix E
Dry Weather Model Calibration Results


FM01 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow
Flow (GPM)
900
800
700
600
500
400
300
200
100
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
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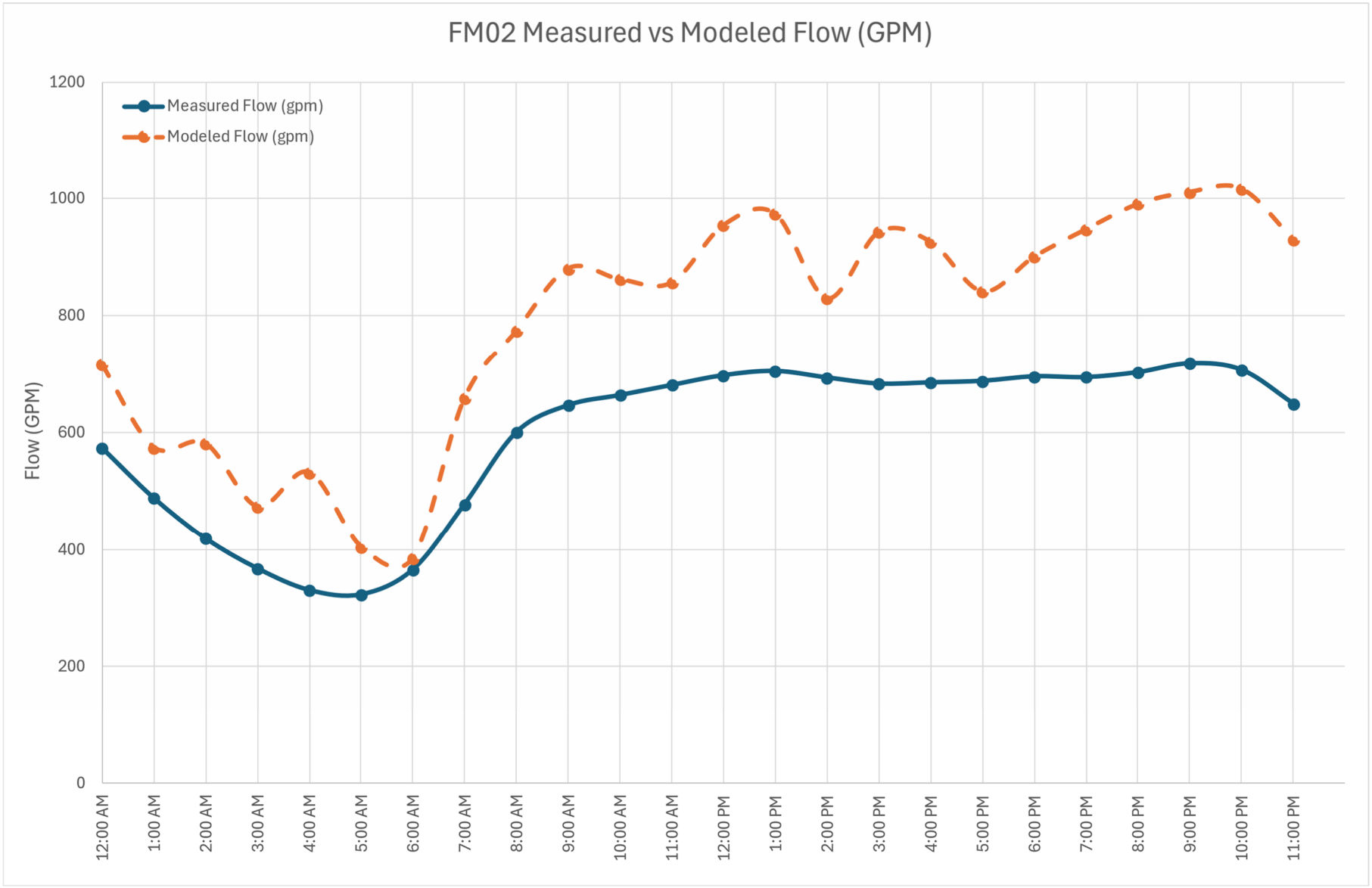
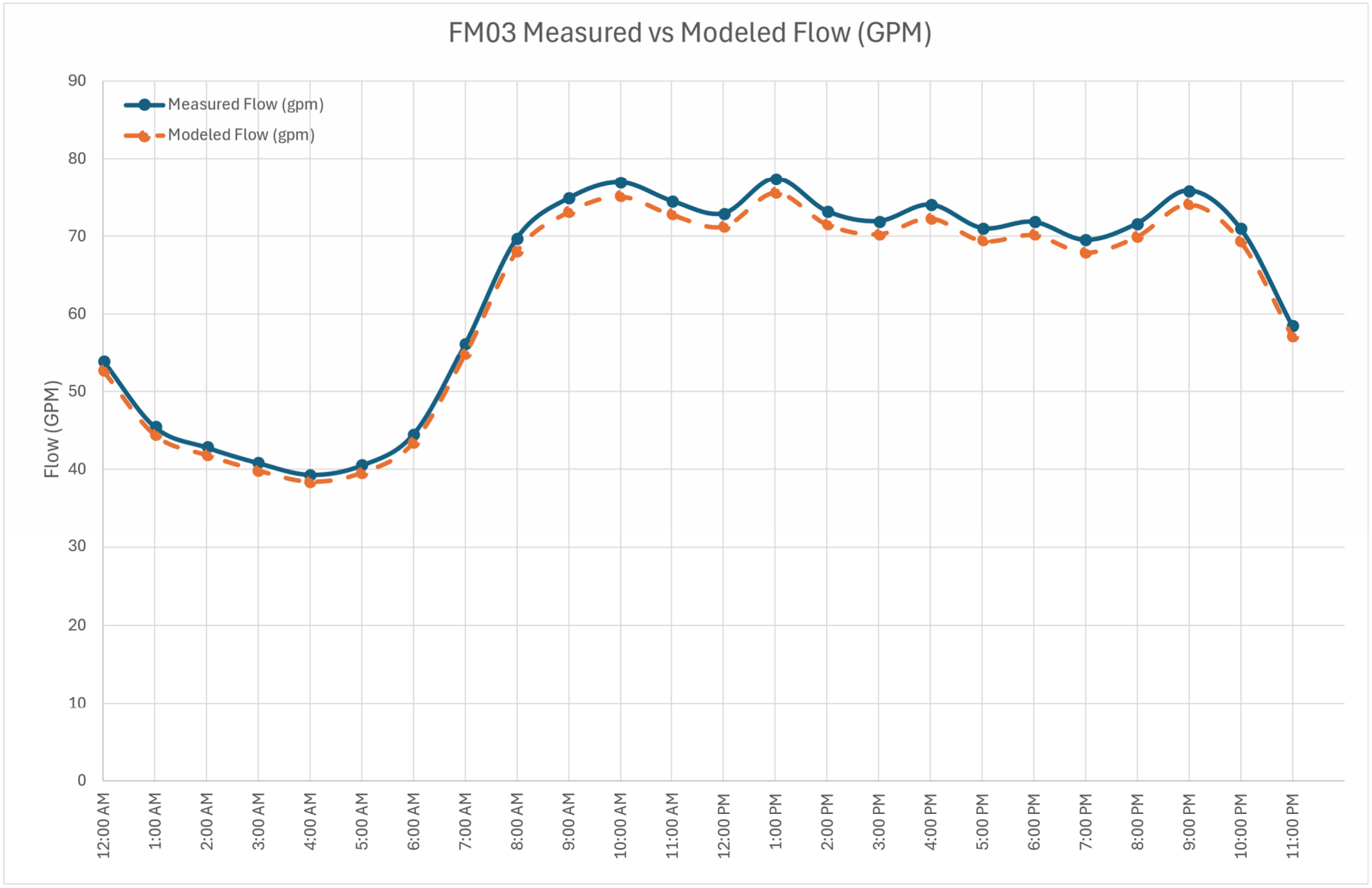
9:00 PM
10:00 PM
11:00 PM


FM02 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow (gpm)
Flow (GPM)
1200
1000
800
600
400
200
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM


FM03 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow (gpm)
Flow (GPM)
90
80
70
60
50
40
30
20
10
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
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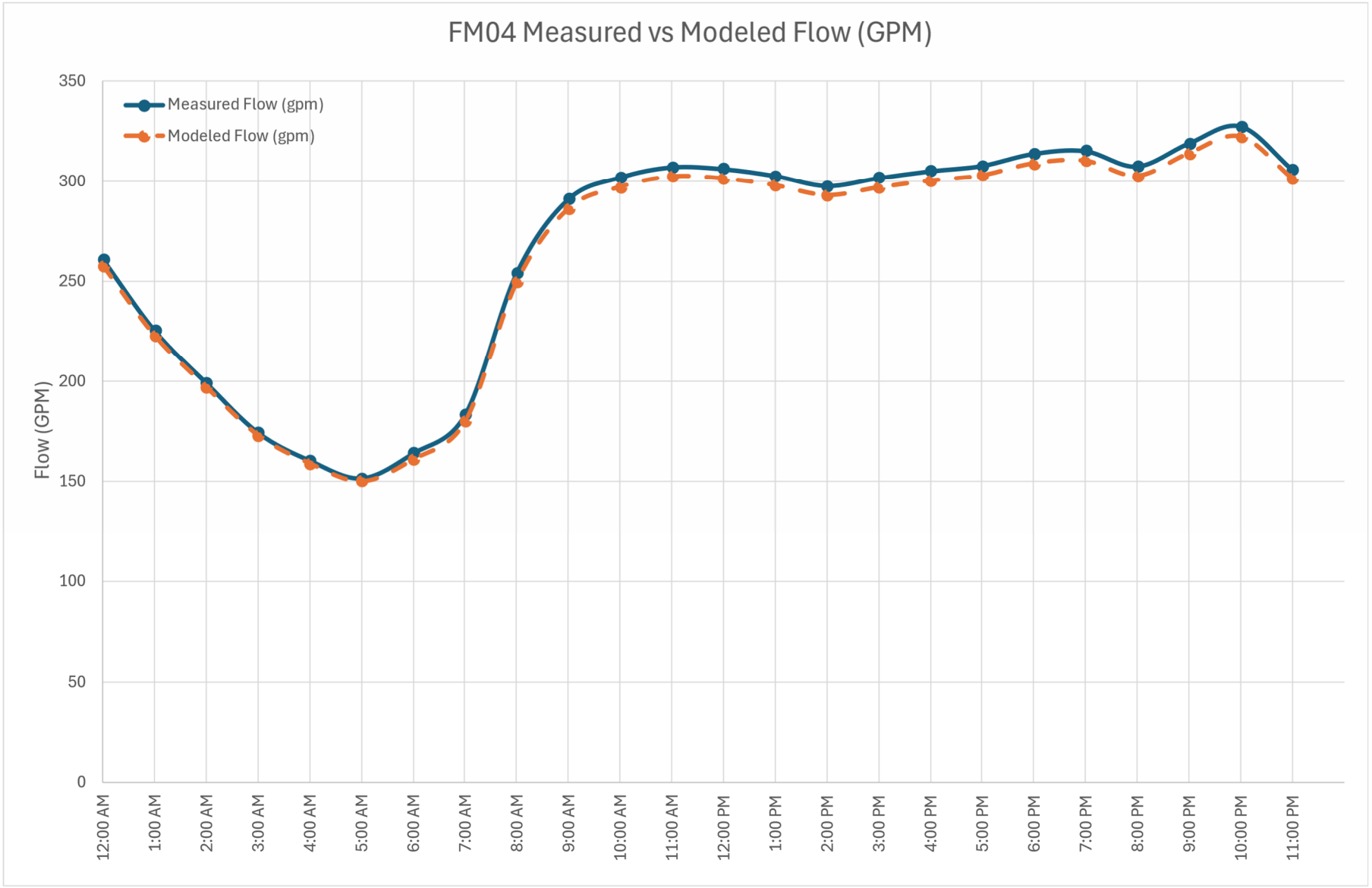
8:00 PM
9:00 PM
10:00 PM
11:00 PM


FM04 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow (gpm)
Flow (GPM)
350
300
250
200
150
100
50
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
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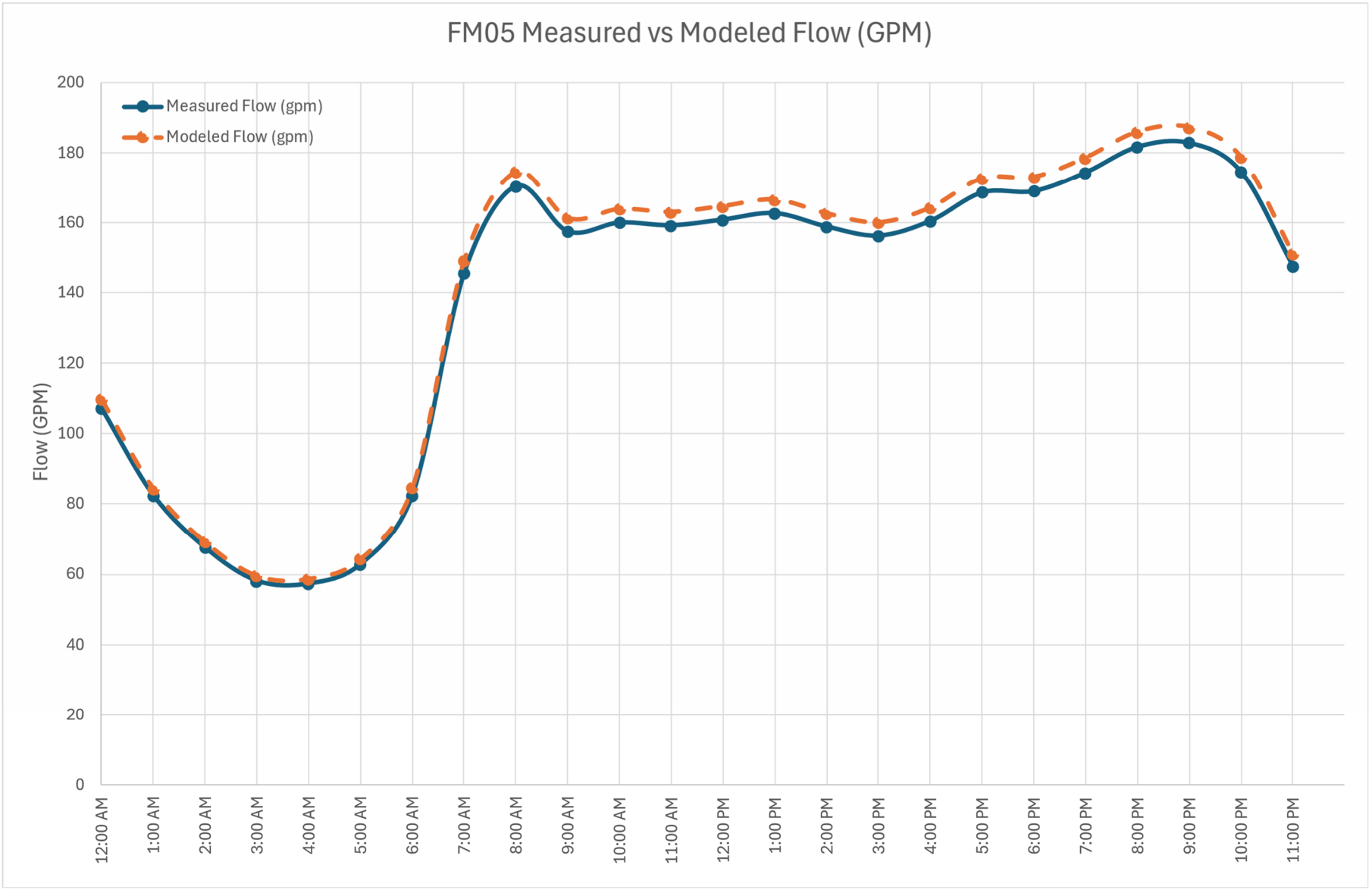
9:00 PM
10:00 PM
11:00 PM


FM05 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow (gpm)
Flow (GPM)
200
180
160
140
120
100
80
60
40
20
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
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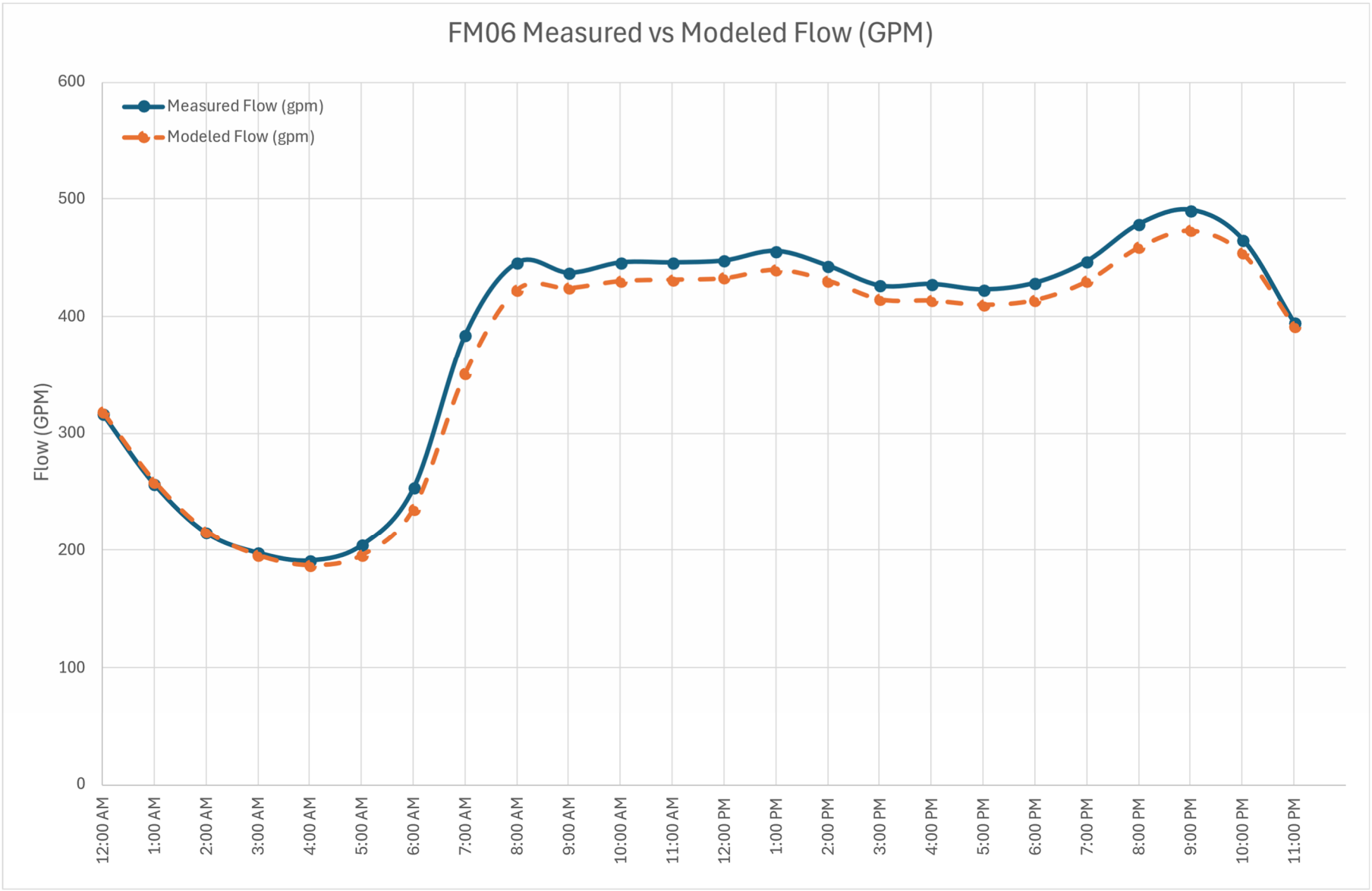
10:00 PM
11:00 PM


FM06 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow (gpm)
Flow (GPM)
600
500
400
300
200
100
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
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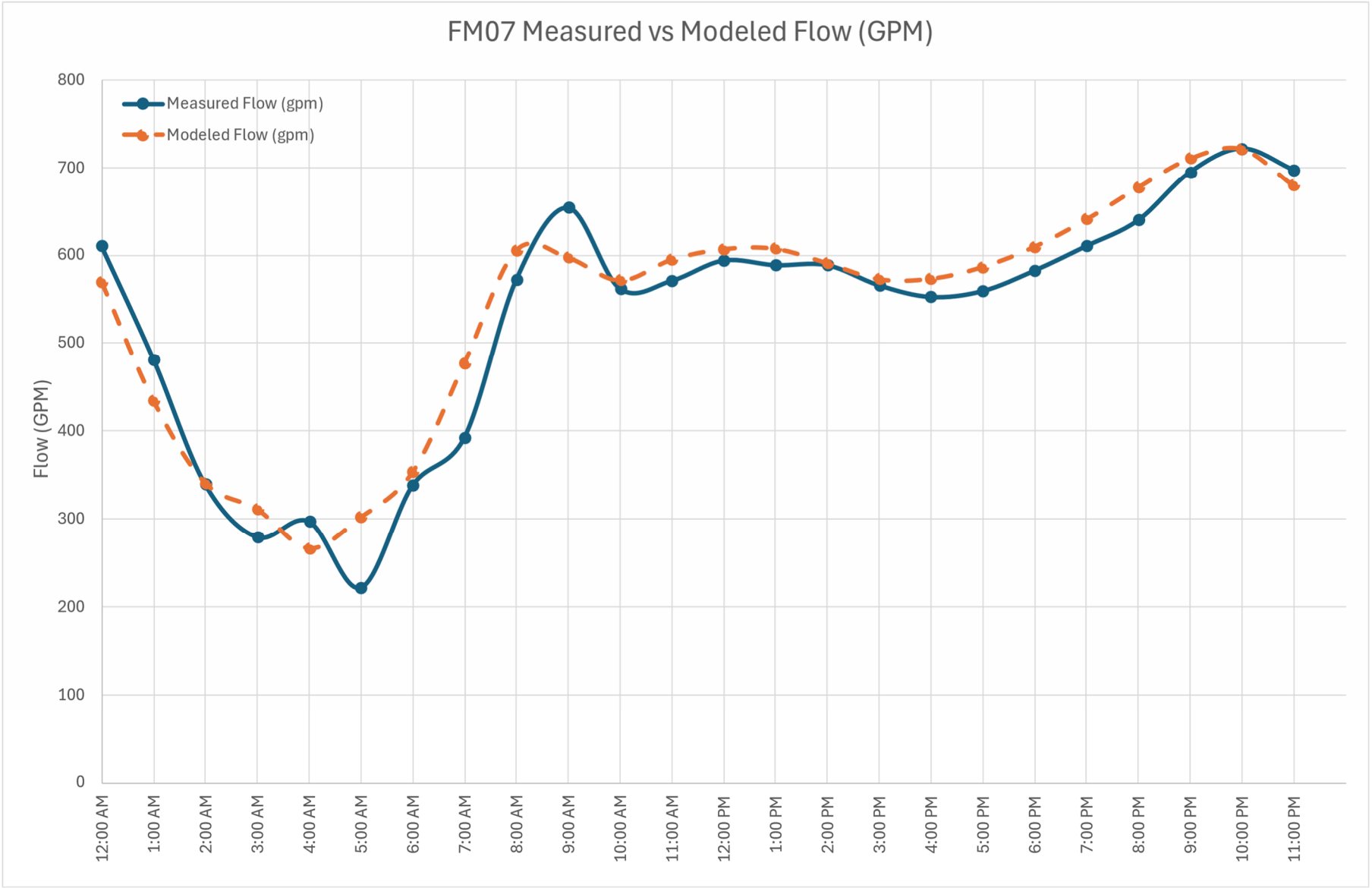
11:00 PM


FM07 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow (gpm)
Flow (GPM)
800
700
600
500
400
300
200
100
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
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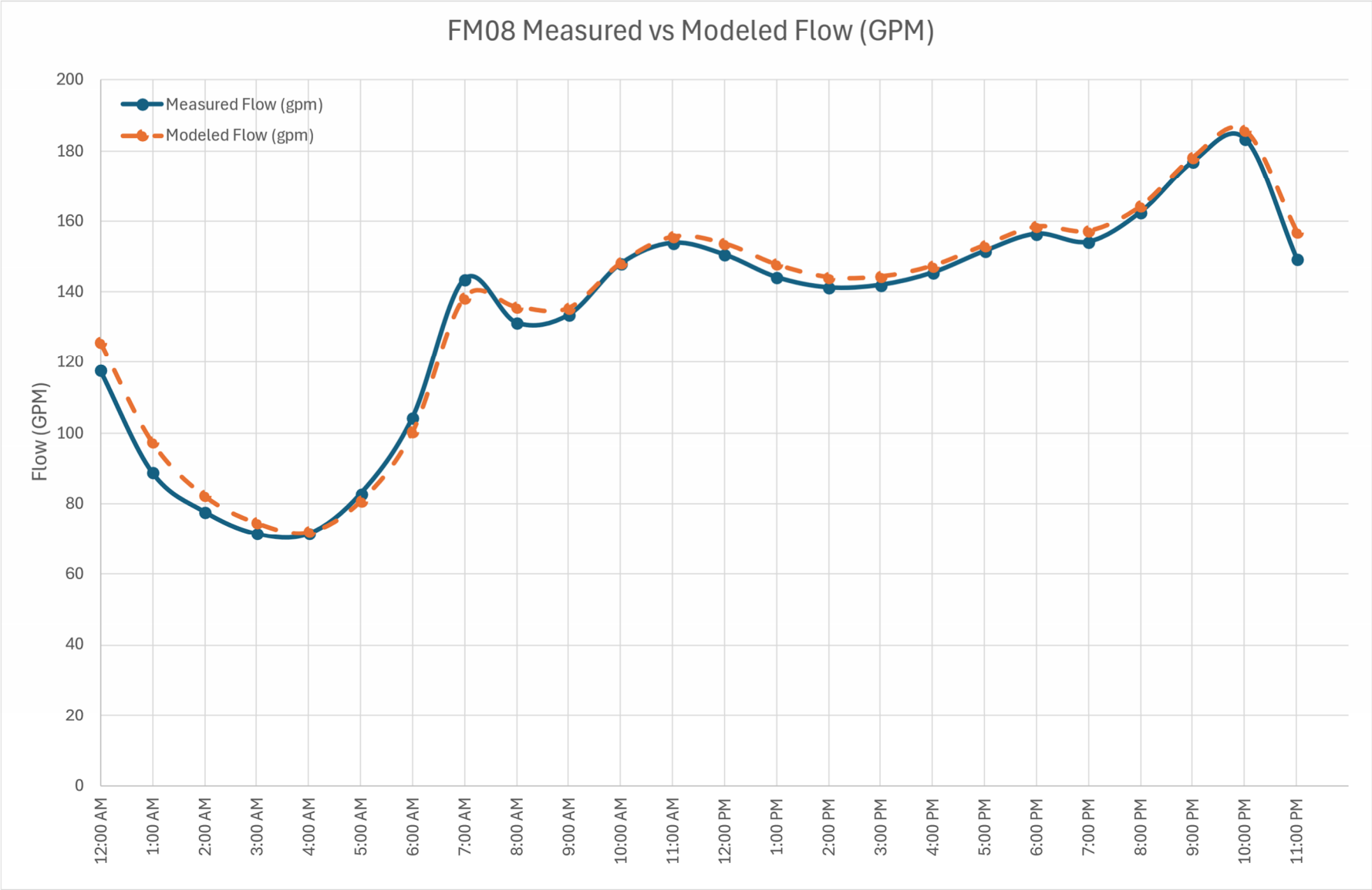
9:00 PM
10:00 PM
11:00 PM


FM08 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow (gpm)
Flow (GPM)
200
180
160
140
120
100
80
60
40
20
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
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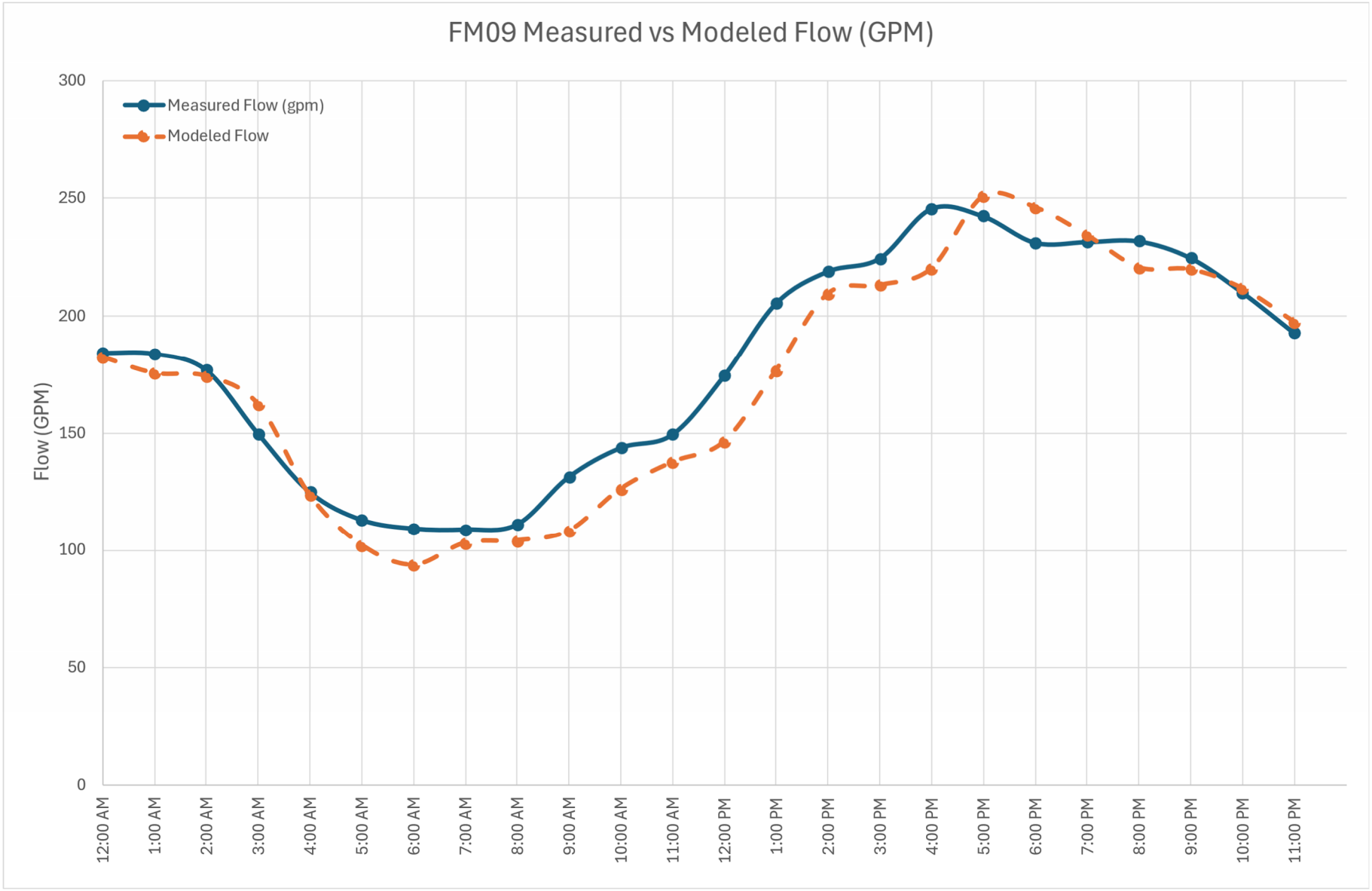
9:00 PM
10:00 PM
11:00 PM


FM09 Measured vs Modeled Flow (GPM)
Measured Flow (gpm)
Modeled Flow
Flow (GPM)
300
250
200
150
100
50
0
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
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11:00 PM

Appendix F

Pipeline Condition Assessment Data & Recommendations Log

APPENDIX F: CONDITION ASSESSMENT DATA

Pipeline Data					Inspection Data				Condition Assessment					
Street Name / Location Description	Pipeline ID	Pipe Length (ft)	Diameter (inch)	Material	CCTV Report file name	Date Televised	Direction Televised	Length Televised (ft)	Reviewer	General Condition Notes	Lateral Notes	Recommendation Notes	Final Recommendation	Project ID
Imperial Ave	GM-121025	167.3	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/23/2024	DS	167.3	KJ	DAGS JOS CS CL (many) IDJ CC JSM		LINE	LINE	PCON-2
Imperial Ave	GM-18-121050	90.6	8	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/7/2024	DS	90.6	KJ	IDJ JOS DAGS 5%			NO REPAIR	-
Imperial Ave	GM-18-121052	321.0	12	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/8/2014	DS	321.0	KJ	DAGS JOS IDJ	TF (3)		NO REPAIR	-
Imperial Ave/South of Ross Ave	GM-19-121011	173.5	8	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/9/2024	DS	173.5	KJ	DAGS JOS CL	TF	EXT PT RP Crack is near tap factory	EX PT RP	PCON-1
Imperial Ave/South of Ross Ave	GM-19-121031	308	8	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/9/2024	DS	308	KJ	JOS DAGS			NO REPAIR	-
Imperial Ave /Pepper	GM-19-121049	332	12	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/8/2014	DS	332	KJ	JOS DAGS			NO REPAIR	-
Imperial Ave/Wesley	GM-19-121049	304.8	8	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/1/2024	DS	304.8	KJ	JOS DAGS CL	TF	EXT PT RP	EX PT RP	PCON-1
Imperial Ave	GM-19-121050	374.4	12	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/8/2014	DS	374.4	KJ	JOS DAGS	TF		NO REPAIR	-
Imperial Ave/South of Ross Ave	GM-19-121051	434	12	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/8/2014	DS	434	KJ	JOS DAGS			NO REPAIR	-

APPENDIX F: CONDITION ASSESSMENT DATA

Pipeline Data					Inspection Data				Condition Assessment					
Street Name / Location Description	Pipeline ID	Pipe Length (ft)	Diameter (inch)	Material	CCTV Report file name	Date Televised	Direction Televised	Length Televised (ft)	Reviewer	General Condition Notes	Lateral Notes	Recommendation Notes	Final Recommendation	Project ID
Imperial Ave/Ross Ave	GM-19-121051	433.8	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	9/30/2024	DS	433.8	KJ	JOS DAGS IDJ			NO REPAIR	-
Imperial Ave/South of Ross Ave	GM-19-121066	473.6	12	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/8/2014	DS	473.6	KJ	DAGS JOS IDJ CL (14 in)	TF (2)	EXT PT RP Trim (1) lateral near crack HEAVY CLEANING to remove deposits	EX PT RP, HEAVY CLEANING	PCON-1
Imperial Ave/South of Ross Ave	GM-20-121017	305.1	8	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/9/2024	DS	305.1	KJ	JOS DAGS	TF		NO REPAIR	-
Imperial Ave/Wesley	GM-20-121017	60.9	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/1/2024	DS	60.9	KJ	JOS DAGS			NO REPAIR	-
Imperial Ave	GM-20-121025	152.1	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/23/2024	DS	152.1	KJ	JOS DAGS CM JON CC IDJ		LINE	LINE	PCON-2
Imperial Ave/South of Ross Ave	GM-20-121033	140.2	8	CLC	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	11/9/2024	DS	140.2	KJ	JOS DAGS	TF		NO REPAIR	-
Imperial Ave	GM-20-121039	180.0	8	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/2/2024	DS	180.0	KJ	JOS DAGS			NO REPAIR	-
Imperial Ave	GM-20-121042	235.5	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/2/2024	DS	235.5	KJ	JOS DAGS IDJ FL CL		LINE	LINE	PCON-2
Imperial Ave	GM-20-121043	277.7	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/2/2024	DS	277.7	KJ	JOS DAGS			NO REPAIR	-

APPENDIX F: CONDITION ASSESSMENT DATA

Pipeline Data					Inspection Data				Condition Assessment					
Street Name / Location Description	Pipeline ID	Pipe Length (ft)	Diameter (inch)	Material	CCTV Report file name	Date Televised	Direction Televised	Length Televised (ft)	Reviewer	General Condition Notes	Lateral Notes	Recommendation Notes	Final Recommendation	Project ID
Imperial Ave	GM-20-121049	32.4	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/2/2024	DS	32.4	KJ	JOS CM DAGS JON FC		LINE	LINE	PCON-2
Imperial Ave	GM-20-121053	35.7	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/2/2024	DS	35.7	KJ	JOM DAGS JOS		LINE Line joint offset medium between 1.7 and 6.1 ft	LINE	PCON-2
Imperial Ave	GM-20-121055	226.0	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/22/2024	DS	226.0	KJ	JOS CL (many) DAGS IDJ CM		LINE	LINE	PCON-2
Imperial Ave	GM-20-121066	87.5	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/2/2024	DS	87.5	KJ	JOS CH3 CC CL FC DAGS IDJ		LINE	LINE	PCON-2
Imperial Ave/Ross Ave	GM-20-121069	448.1	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/1/2024	DS	448.1	KJ	JOS DAGS IDJ ID			NO REPAIR	-
Imperial Ave	GM-20-121070	150.3	12	VCP	CCTV_FINAL Report_12-22-2024 Imperial Ave - Ocotillor Dr to Brighton Ave.pdf	10/23/2024	DS	150.3	KJ	SSS CL (many) JOS		LINE	LINE	PCON-2
Main St	GM-21-131023	181.1	8	VCP	Section_1_5_21_2025 7_24_05 AM.pdf	5/21/2025	DS	181.1	KJ	CL CC CM	TF(2), TFA(3)	LINE	LINE	PCON-2
Main St	GM-21-131045	188.6	8	VCP	Section_1_5_21_2025 5_51_40 AM.pdf	5/21/2025	US	188.6	KJ	CC TBA CL CM	TF(6), TBA, TFA(5)	LINE	LINE	PCON-2
Main St	GM-21-131046	168.3	8	VCP	Section_1_5_21_2025 6_28_45 AM.pdf	5/21/2025	DS	168.3	KJ	CC CL	TF(3), TFA(5)	LINE	LINE	PCON-2

Pipeline Data					Inspection Data				Condition Assessment					
Street Name / Location Description	Pipeline ID	Pipe Length (ft)	Diameter (inch)	Material	CCTV Report file name	Date Televised	Direction Televised	Length Televised (ft)	Reviewer	General Condition Notes	Lateral Notes	Recommendation Notes	Final Recommendation	Project ID
Main St	GM-21-141027	363.5	8	CLAY	Section_1_5_20_2025 9_39_20 AM.pdf	5/20/2025	DS	363.5	KJ	HSV CC CL CM TB TBA	TF(16), TFA (11), TBA, TB,	LINE, PRIORITIZE BASED ON LARGE SECTIONS OF BROKEN PIPE	LINE	PCON-2
State St	GM-21-141024	145.7	8	VCP	Report 3-17-2025.pdf	3/17/2025	DS	145.7	KJ	BSV SMW B CC CL CM TSB TBA	TF(3), TSB, TBA, TFA	LINE, PRIORITIZE BASED ON LARGE SECTIONS OF BROKEN PIPE	LINE	PCON-2
Villa Ave	GM-23-131016	370.0	27	VCP	V51-V52, 20190212_VillaAveSwrMHs.pdf	4/10/2015	DS	370.0	KJ			Already Lined	NO REPAIR	-
Villa Ave	GM-23-131009	100.0	27	VCP	V51-V52, 20190212_VillaAveSwrMHs.pdf	4/10/2015	DS	100.0	KJ			Already Lined	NO REPAIR	-
Villa Ave	GM-23-131008	328.0	27	PVC	V52-V53, 20190212_VillaAveSwrMHs.pdf	4/14/2015	DS	270.0	KJ	Multiple sags in pipe, varying water level, material changes to PVC to Con to VCP		Re-CCTV prior to final recommendaion; if not already lined, LINE. PRIORITIZE DUE TO SEVERE SAGS	Re-CCTV and LINE	PCON-2
Villa Ave	GM-23-131017	270.0	27	VCP	V53-V54, 20190212_VillaAveSwrMHs.pdf	4/15/2015	DS	250.0	KJ			Re-CCTV prior to final recommendaion; if not already lined, LINE. PRIORITIZE DUE TO SEVERE SAGS	Re-CCTV and LINE	PCON-2
Villa Ave	GM-23-131029	42.0	27	VCP	V54-V55, 20190212_VillaAveSwrMHs.pdf	4/15/2015	DS	84.0	KJ	Materila changes to PVC, high fluctuations in flow (5% to 40%) due to sag		Re-CCTV prior to final recommendaion; if not already lined, LINE. PRIORITIZE DUE TO SEVERE SAGS	Re-CCTV and LINE	PCON-2
Villa Ave	GM-23-131020	200.0	27	PVC	V55-V56, 20190212_VillaAveSwrMHs.pdf	4/15/2015	DS	23.0	KJ	High water level		Re-CCTV prior to final recommendaion; if not already lined, LINE. PRIORITIZE DUE TO SEVERE SAGS	Re-CCTV and LINE	PCON-2

Pipeline Data					Inspection Data				Condition Assessment					
Street Name / Location Description	Pipeline ID	Pipe Length (ft)	Diameter (inch)	Material	CCTV Report file name	Date Televised	Direction Televised	Length Televised (ft)	Reviewer	General Condition Notes	Lateral Notes	Recommendation Notes	Final Recommendation	Project ID
Villa Ave	GM-23-131020	200.0	27	VCP	V57- V58, 20190212_VillaAveSwrMHs.pdf	4/15/2015	US	163.0	KJ	Severe sag at U/S MH, Survey Abandoned due to severe sag at 163', 80% water level where sag occurs, infiltration drip @ 16'10" and 33'3"		Re-CCTV prior to final recommendaion; if not already lined, LINE. PRIORITIZE DUE TO SEVERE SAGS	Re-CCTV and LINE	PCON-2
Adams Ave & 4th St	GM-22-141024	423.0	22	VCP	MH 1_MH 2 _2025-01-14_0.pdf	1/14/2025	DS	432.0	KJ	Tap Break, SEVERE Root Intrusion Throughout, Cracks and significantly reduced capacity due to roots		Root Removal pre-lining, and then LINE	Root Removal and LINE	PCON-2
Adams Ave & 4th St	GM-22-141023	112.0	27	Brick	MH 2_MH 3 _2025-01-14_1.pdf	1/14/2025	DS	120.0	KJ	Root Intrusion, Cracks, Water mist throughout makes visibility low		Re-CCTV due to low video quality and to ensure no inflitration is occuring, LINE due to old age of Brick Sewer	Re-CCTV and LINE	PCON-2
Adams Ave & 4th St	GM-22-141019	61.0	27	Brick	MH 3_MH 4 _2025-01-14_2.pdf	1/14/2025	DS	55.0	KJ	Water mist throughout makes visibility low, droplets likely due to condensation or to infiltration		Re-CCTV due to low video quality and to ensure no inflitration is occuring, LINE due to old age of Brick Sewer	Re-CCTV and LINE	PCON-2
Adams Ave & 4th St	GM-22-141022	341.0	27	Brick	MH 4_MH 5 _2025-01-15_0.pdf	1/15/2025	DS	335.0	KJ	Possible Infiltration throughout (could also be condensation),		Re-CCTV due to low video quality and to ensure no inflitration is occuring, LINE due to old age of Brick Sewer	Re-CCTV and LINE	PCON-2

Appendix G
Staffing Plan Technical Memorandum

TECHNICAL MEMORANDUM – STAFFING STUDY

To:	Abraham Campos and Liz Zarate, City of El Centro
From:	Dudek
Subject:	Staffing Study for City of El Centro
Date:	October 23, 2025

This Technical Memorandum (TM) provides high level investigations and analysis to date, along with recommended next steps to support the City of El Centro (City) in evaluating staffing needs for the water, sewer, and engineering divisions of the City's Public Works Department.

1 Introduction

As part of the City of El Centro's Water and Sewer Master Plans and Rate Study, this staffing analysis has been developed to estimate the additional personnel required to support the City's objectives for effective management of its water and wastewater systems. The scope of work considered in this study includes routine maintenance activities such as pipeline cleaning, lift station and booster station inspections, closed-circuit television (CCTV) inspections, infrastructure rehabilitation and replacement, and operations and maintenance of the water amd wastewater treatment plants.

By expanding its workforce, the City aims to enhance system reliability and operational efficiency. This study also establishes a staffing framework for the divisions within the Public Works Department responsible for managing both water and sewer systems. Key staff groups include personnel at the Water Treatment Plant (WTP), Wastewater Treatment Plant (WWTP), Underground Utilities staff within the Streets and Utilities Division, and Engineering staff.

As a full-service municipality, the City of El Centro provides potable water and sanitary sewer services to approximately 43,000 residents within an 11-square-mile service area. The City oversees the treatment and distribution of drinking water at the El Centro Water Treatment Plant and the collection and treatment of wastewater at the El Centro Wastewater Treatment Plant. A summary of the City's major infrastructure assets is presented in **Table 1.**

Table 1. City of El Centro's Sewer System and Water System Assets

Facilities	Quantity
Sewer Collection System	
Gravity Mainlines	123 miles
Pressure Force Mains	6.4 miles
Lift Stations	15
WWTP	
Rated Capacity / Current Average Daily Flow	8 MGD / 3.5 MGD
Potable Water System	
Water Pipelines (transmission mains and distribution mains)	157 miles
Booster Stations	2
Storage Reservoirs/ Tanks	8

Facilities	Quantity
WTP	
Rated Capacity / Current Average Daily Production	21 MGD / 7.2 MGD

The following sections outline the methodology used to estimate staffing requirements to maintain the City's WTP, WWTP, sewer collection system, and potable water system.

Sources of data used for this analysis include:

- publicpay.ca.gov, a website that lists government compensation in the state of California
- Publicly listed agency NPDES permits
- Publicly listed agency organizational charts

2 Limitations of the Evaluation

Several limitations should be considered when interpreting the results of this staffing evaluation:

- A comprehensive staffing analysis is typically conducted by a financial consultant and includes detailed financial modeling and long-term budgeting, which were beyond the scope of this study.
- Complete staffing plans or evaluations were obtained from only one agency. Most of the data used in this analysis was gathered through online research and publicly available documents.
- The full scope of staffing roles and responsibilities across agencies was not assessed. For example, while staff in the City of El Centro's Wastewater Treatment Plant (WWTP) Division also maintain lift stations, other agencies may assign lift station operations to dedicated collection system staff.
- The extent to which neighboring agencies may be understaffed is unknown.
- Information regarding the implementation of 24/7 staffing rotations at comparable facilities is not available.
- Staffing levels are influenced by each agency's available funding, which varies based on numerous factors.
- Sewer System Management Plans (SSMPs), which often include organizational charts for sewer system staffing, were more readily available online than those for water system staffing. As a result, more detailed information was obtained for sewer-related staffing.

Given these limitations, the analysis presented herein is based on the best available data and is intended to provide a general framework for evaluating staffing needs.

3 Current Staffing Structure

The current organizational structure of the City of El Centro's Public Works Department is illustrated in **Figure 1**. The department is divided into six functional groups: Administration, Building and Facility Maintenance, Wastewater

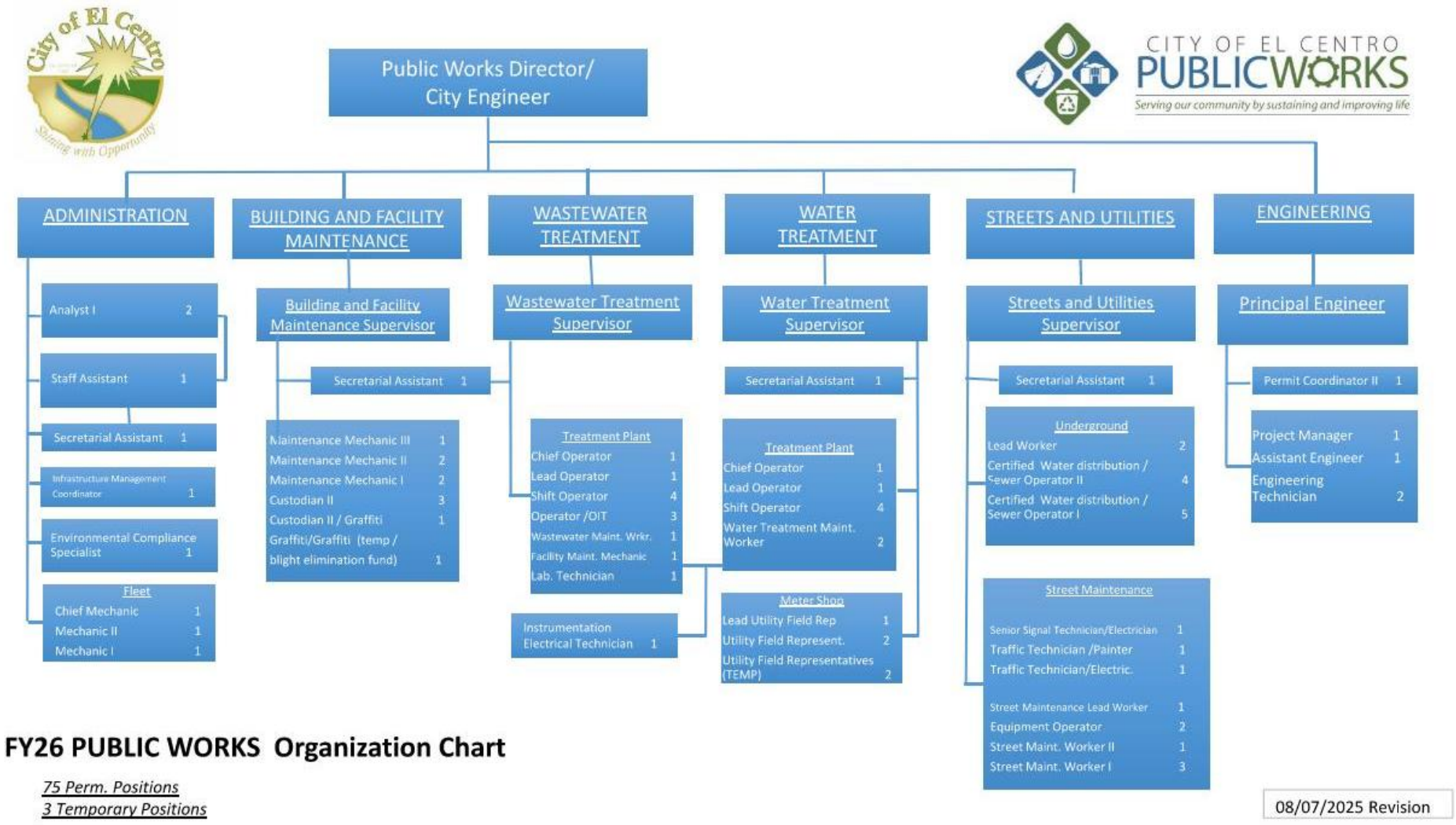
Treatment Plant (WWTP) staff (including lift station operations), Water Treatment Plant (WTP) staff, Streets and Utilities staff, and Engineering.

Table 2 outlines the number of full-time equivalents (FTEs) currently assigned to divisions responsible for maintaining the sewer collection and potable water distribution systems. Based on discussions with City staff, eight operators within the Streets and Utilities group are dedicated to the water system, while three operators are assigned to sewer system operations. Additionally, a single Instrumentation Electrical Technician supports both the WWTP and WTP teams.

Table 2. City of El Centro Public Works Department's Number of Full Time Employees

Department	Number of FTEs Currently
WWTP/Lift Station Staff	13
WTP Staff *WTP Operations Staff* *Meter Staff (included in WTP Group)* *Backflow Prevention*	13.5 *8* *5* *0.5*
Instrumentation Electrical Technician (shared between Water and Sewer)	1
Underground Utilities Staff – Water	8
Underground Utilities Staff – Sewer	3
Engineering	5
Administration (excluding Fleet Staff)	6

Figure 1. City of El Centro Public Works Department Organizational Structure



4 Staffing Studies

A review of El Centro's job description data was performed. The primary services of staff that maintain the sewer collection system are outlined in **Table 3. T**he services related to the maintenance of the potable water system are outlined in Table 4.

Table 3. City of El Centro Main Services for Maintenance of Sewer Collection System

Department	Services
WWTP Staff	• Inspects, operates, and maintains sewer lift stations, stormwater lift stations, and wastewater treatment plant facilities. • Ensures compliance with all local, state, and federal rules and regulations • Works to improve efficiency and effectiveness of operations. • Oversees and coordinates lift station operations and maintenance. • Confers with contractors, consultants, and the public on engineering and construction matters. • Prepares reports on public works projects. • Performs routine cleaning duties of City buildings and facilities. • Performs basic maintenance and repair of facilities and grounds by performing semi-skilled work involving plumbing, painting, electrical, mechanical and carpentry repairs. • Performs water quality and other laboratory testing for regulatory compliance, industrial waste source control, and plant process control; perform related responsibilities as required. • Performs specialized and skilled work in the design, construction, installation, calibration, and maintenance of electrical and instrumentation equipment at City's wastewater facilities.
Underground Utilities Staff – Sewer Operator	• Cleans, unplugs, maintains and services sewer lines • Operates backhoe, dump truck, skip loader, forklift, and other equipment • Install, taps, repairs, and relocates sewer lines
Instrumentation Electrical Technician	• Installs, maintains, troubleshoots, and repairs electronic components and instrumentation pertinent to the wastewater treatment process • Inspects and maintains medium voltage electrical power distribution equipment (i.e. switchgear, transformers, circuit breakers, selector switches, feeder cables, etc.)
Engineering	• Monitor and assess the condition of the sewer collection system, including pipelines, manholes, lift stations, and related infrastructure. • Coordinate routine inspections, cleaning, and emergency repairs. • Maintain GIS and asset management databases for sewer infrastructure. • Ensure compliance with local, state, and federal regulations (e.g., NPDES, SWRCB). • Collaborate with Operations and Maintenance teams to prioritize work orders and system upgrades. • Develop and manage the City's CIP for sewer and related infrastructure. • Prepare engineering designs, specifications, and cost estimates. • Oversee bidding, contracting, and construction management. • Track project budgets, schedules, and performance metrics. • Coordinate with consultants, contractors, and other departments.

Table 4. City of El Centro Main Services for Maintenance of Water Distribution System

Department	Services
WTP Staff	• Inspects, operates, and maintains water pump stations and water treatment plant facilities. • Ensures compliance with all local, state, and federal rules and regulations. • Works to improve efficiency and effectiveness of operations. • Oversees and coordinates pump station operations and maintenance. • Confers with contractors, consultants, and the public on engineering and construction matters. • Prepares reports on public works projects. • Performs routine cleaning duties of City buildings and facilities. • Performs basic maintenance and repair of facilities and grounds by performing semi-skilled work involving plumbing, painting, electrical, mechanical and carpentry repairs. • Performs water quality and other laboratory testing for regulatory compliance, and plant process control; perform related responsibilities as required. • Performs specialized and skilled work in the design, construction, installation, calibration, and maintenance of electrical and instrumentation equipment at City's water facilities.
Underground Utilities Staff – Water Operator	• Installs, taps, maintains, repairs, and relocates water lines • Monitors water pressure to ensure proper water flow to customers • Operates and maintains pump stations
Instrumentation Electrical Technician	• Installs, maintains, troubleshoots, and repairs electronic components and instrumentation pertinent to the water treatment process • Inspects and maintains medium voltage electrical power distribution equipment (i.e. switchgear, transformers, circuit breakers, selector switches, feeder cables, etc.)
Engineering	• Monitor and evaluate the performance of the water distribution system, including pipelines, valves, hydrants, reservoirs, and pump stations. • Coordinate routine inspections, repairs, and replacements to ensure system integrity and water quality. • Maintain and update GIS and asset management systems for water infrastructure. • Ensure compliance with state and federal drinking water regulations (e.g., SWRCB, EPA). • Collaborate with Operations staff to prioritize maintenance activities and emergency response. • Develop and manage the City's CIP for water infrastructure projects. • Prepare engineering designs, technical specifications, and cost estimates. • Oversee project bidding, contracting, and construction management. • Monitor project budgets, schedules, and performance metrics. • Coordinate with consultants, contractors, and other departments to ensure successful project delivery.

4.1 Methodology

To support the development of this staffing study, the following resources were reviewed:

- Organizational charts from various water and sewer service districts

- Staffing plans from peer agencies
- The City of El Centro's Sewer System Management Plan
- The City's ongoing Water and Sewer Master Plan
- Notes from interviews with City staff

The methodology for estimating staffing needs began with a review of organizational structures and staffing plans from multiple agencies to identify common workforce models. Staffing ratios relative to service area size and service volume were used as benchmarks to inform the recommended structure for the City of El Centro.

Key operational metrics from the City's Sewer System Management Plan and Water and Sewer Master Plans—including treatment capacity, production volumes, average flow rates, and total pipeline mileage—were incorporated into the analysis. These metrics served as scaling factors and were applied to peer agency staffing ratios to estimate the City's FTE staffing requirements.

4.2 Sewer System Staffing Analysis

4.2.1 WWTP Staff

For the Wastewater Treatment Plant staffing analysis, similar agencies and municipalities were compared based on the capacity (MGD) of their WWTPs and their average daily flows. These comparisons are presented in **Table 5**. **Figures 2** and **3** compare FTEs for various agencies against WWTP average daily flows and wages, respectively. Note that while the City of El Centro includes lift station maintenance in the WWTP staff, most agencies utilize collection system staff for lift station maintenance, resulting in El Centro's WWTP staffing being proportionately higher.

Table 5. Number of Wastewater Operators in Various Districts

Agency	Lift Station Count	Average Daily Dry Weather Flow (MGD)	Number of FTEs in WWTP	FTEs per WWTP Flow (persons/ MGD)	Wages ($)[1]	Population Served
Novato Sanitary District	2	7	10	1.4	1,166,664	60,000
City of Imperial	0	2.4	6	2.5	1,551,074	22,866
City of Coachella	1	4.5	8	1.7	788,269	345,056
City of Brawley	3	5.9	8	1.4	448,153	28,952
City of Calexico	0	4.3	7	1.6	551,502	40,073
City of Petaluma	9	6.7	28	4.2	3,490,673	59,094

Agency	Lift Station Count	Average Daily Dry Weather Flow (MGD)	Number of FTEs in WWTP	FTEs per WWTP Flow (persons/ MGD)	Wages ($)[1]	Population Served
City of El Centro	15	3.5	13	3.7	937,256	44,000

Note:

[1] Wage values per publicpay.ca.gov.

Figure 2. Full Time Equivalent Staff Members Relative to Average Daily Dry Weather Flow

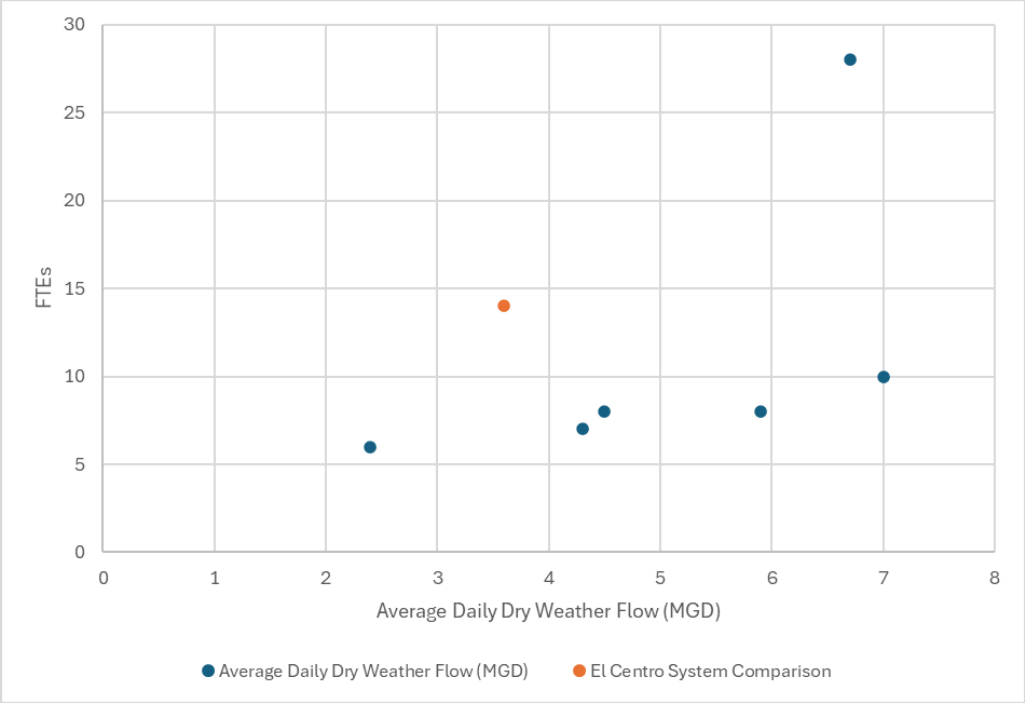
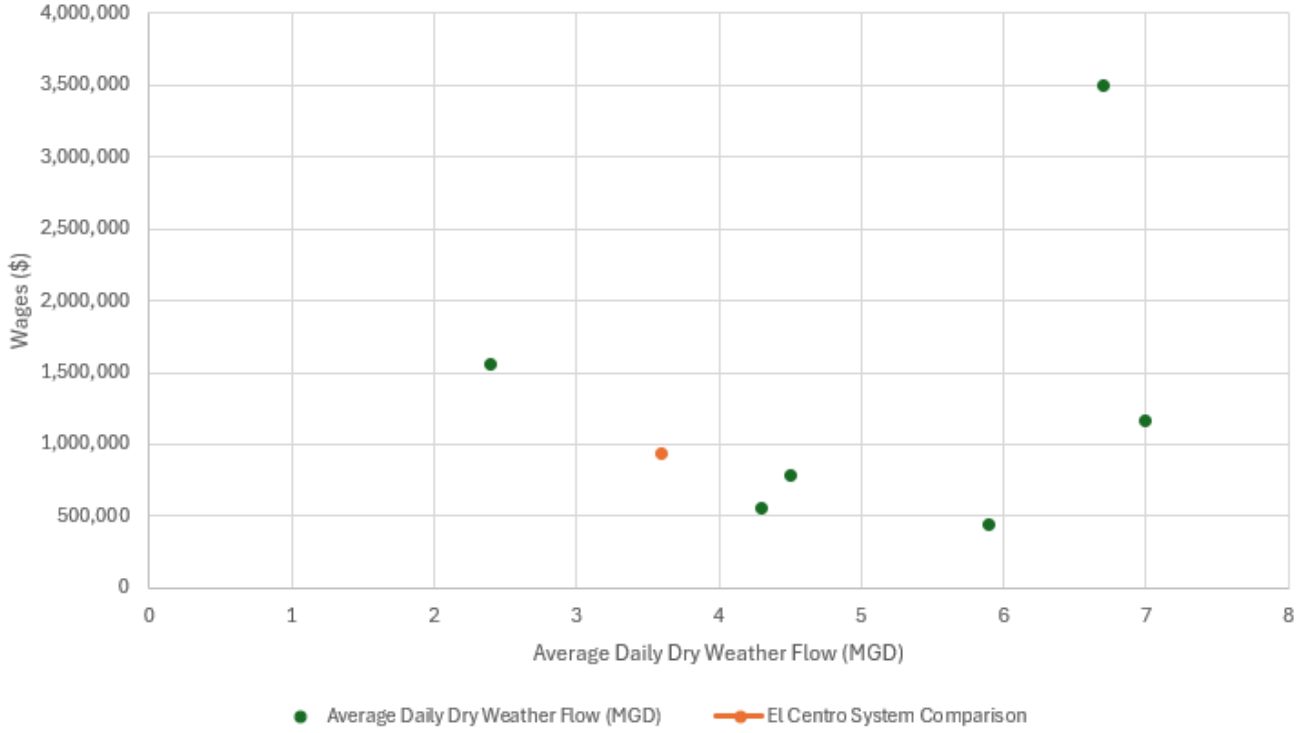


Figure 3. Staff Wages Relative to Average Daily Dry Weather Flow



El Centro's projected 2045 average dry weather flow of 4.7 MGD and peak wet weather flow of 9 MGD require a workforce capable of managing routine operations as well as high-flow events. Comparative analysis with other municipalities indicates that El Centro's staffing levels are within the typical range of staffing observed in similar municipalities, but given El Centro's larger quantity of lift stations, an additional operator with a mechanical technologist certificate as well as a dedicated instrumentation electrician technician is recommended, as shown in **Table 6**.

Table 6. Current and Recommended WWTP FTEs in El Centro

Current Staffing and Productivity	
Lift Station Count	8
Current Average Dry Weather Flow (MGD)	3.5
Current Peak Wet Weather Flow (MGD)	8.0
Current WWTP Operations and Maintenance FTEs	13
Current Instrumentation Electrical Technicians	0.5 (shared with WTP)

Recommended Future Staffing and Productivity	
Projected Dry Weather Flow (MGD)	4.7
Projected Peak Wet Weather Flow (MGD)	9.0
Recommended WWTP Operations & Maintenance FTEs	14
Recommended WWTP Instrumentation Electrical Technicians	1 (dedicated to WWTP)

4.2.2 Sewer Collection System Staff

To conduct a staffing analysis specifically for the maintenance of the sewer system, CCTV inspection and cleaning requirements will be reviewed to determine the staffing needs for each task. This analysis also considers the number of days staff are available throughout the year, as detailed in **Table 7.**

Table 7. Annual Crew Availability

Workday Availability		Notes
Days Available/Year/Crew	260	5 days a week for 52 weeks
Allowance for Benefits (15%)	39	12 holidays, 10 sick, 3 weeks (17 days) paid vacation
Allowance for Field Resolution (15%)	39	Equipment down time
Allowance for Special Events (5%)	13	Trainings, meetings
Net Annual Available Days/Crew	169	

According to the City's SSMP, the goal is to CCTV inspect 20% of the sewer system each year in order to meet their goal of inspecting the entire system, 157 miles or 828,960 linear feet (LF), every five years. Currently, inspections are done on an as-needed basis and are conducted manually by CCTV camera crews, with an assumed production rate of 1,000 linear feet (LF) per day. This rate is a standard estimate used to calculate staffing needs based on crew availability throughout the year. **Table 8** outlines the assumptions used to determine the number of additional staff required.

The City also plans to purchase a CCTV inspection truck within the next five to ten years. Once implemented, this automated method is expected to significantly increase the inspection production rate.

Table 8. Recommended CCTV Crew Staffing

System Overview	
Total System Length (LF)	828,960
Annual CCTV Inspection Goal (%)	20[1]
Annual CCTV Inspection Goal (LF)	165,792
Required CCTV Production Rate (LF/day)	981[2]
Staffing & Productivity	
Assumed Production Rate (LF/day)	1000
Number of days needed in a year to accomplish annual inspection goal at 1000 LF/day	166
Net Annual Available Days/Crew	169[3]
Required Crews	1[4]

Notes:
[1] Assuming the entire system is cleaned every five years.
[2] Annual CCTV inspection goal (LF) divided by the net annual available days per crew from Table 7.
[3] Calculated in Table 7.
[4] One crew is assumed to be made up of two people for this analysis.

Using the same approach as outlined for CCTV inspections, the City plans to reach their goal of cleaning the entire system every 5 years by cleaning 20% of the system each year, along with cleaning 125,000 LF of enhanced maintenance areas annually. A standard, yet conservative, cleaning production rate of 1,500 linear feet per day was used in **Table 9** to estimate the staffing requirements necessary to meet this goal.

Table 9. Recommended Cleaning Crew Staffing

System Overview	
Total System Length (LF)	828,960
Annual Cleaning Goal (%)	20[1]
Annual Cleaning Goal (LF)	165,792
Annual Cleaning Goal of Enhanced Maintenance Areas (Hot Spots) (LF)	125,000
Required Cleaning Production Rate (LF/day)	1,721[2]
Staffing & Productivity	
Assumed Production Rate (LF/day)	1,500
Number of days needed in a year to clean the entire system at 1000 LF/day	194
Net Annual Available Days/Crew	169[3]
Required Crews	**1.5 to 2**[4]

Notes:
[1] Assuming the entire system is cleaned every five years.
[2] Annual cleaning goal (LF) plus annual cleaning goal of enhanced maintenance areas (LF) divided by the net annual available days per crew from Table 7.
[3] Calculated in Table 7.
[4] Two crews is assumed to be made up of four people for this analysis.

Table 10 presents the final sewer collection system staffing recommendations, based on Tables 8 and 9.

Table 10. Summary of Staffing Requirements

Current Crews Staffed for both CCTV inspection and Cleaning	1.5
Required Number of Crews Total for both CCTV inspection and Cleaning	2.5 to 3
Additional 2-Person Crews Needed	**1 to 1.5** (2-3 people)

Based on the findings in Tables 7 through 10, the staffing requirement for CCTV inspections alone is one crew consisting of two people. Sewer system cleanings require two crews of two people. Currently, 1.5 crews, or three staff members, are dedicated to sewer system maintenance. To meet the City's goals of inspecting and cleaning 20 percent of the entire system annually and clean all their enhanced maintenance areas annually, it is recommended that staffing be increased to 2.5 to three full crews, totaling five to six people. Therefore, it is recommended two to three new staff members are hired for the sewer collection system maintenance team.

In addition to reviewing the City's cleaning and CCTV inspection requirements, **Table 11** below outlines the number of sewer operators by comparable city agencies and districts, or their recommended staffing levels. These figures were scaled and compared to the size of City of El Centro's sewer system to assess staffing adequacy.

Table 11. Number of Sewer Collection System Staff in Various Districts

Agency	Population Served	Size of Sewer Distribution System (miles)	Number of FTEs in Sewer Distribution Division	Miles of Collection System per FTE
Novato Sanitary District	60,000	235	7	33.5
Coachella Sanitary District	345,056	107	6	17.8
City of Placentia	52,000	84	7	12
City of Laguna Beach	22,723	98	8	12.3
City of El Centro	44,000	123	3	41

As shown in Table 11., Coachella Sanitary District's staffing plan recommends employing six full-time staff, including sewer operators and crew supervisors, to maintain a 107-mile system. In contrast, the City of El Centro operates a larger system spanning 157 miles, with only three operators currently assigned to its maintenance. Other cities, including Placentia and Laguna Beach, manage smaller systems of 84 and 98 miles respectively, yet employ seven and eight sewer distribution operators. The table also presents the ratio of system miles per full-time employee (FTE), highlighting that El Centro has the highest ratio at 41 miles per FTE, indicating the greatest workload per staff member among the cities compared. Based on these comparisons, it is recommended that the City of El Centro hire two to three additional full-time employees, bringing the total to five or six, to adequately support the maintenance of its sewer collection system, which supports the findings in Table 10.

4.2.3 Sewer Staffing Summary

Table 12 summarizes the total number of full-time employees needed to maintain both the sewer collection system and the WWTP, based on the analysis in Section 4.2. Based on the analysis of the sewer collection system maintenance requirements and the organizational charts for the WWTP staff, it is recommended that the City staff a total of 13 employees for the WWTP, five to six operators for sewer collection system maintenance, and one dedicated WWTP Instrumentation Electrical Technician.

Table 12. Summary of Total Recommended Full Time Employees for City of El Centro's Sewer System

Department	Current Number of FTTs	Recommended Additional FTEs	Recommended Total FTEs
WWTP Staff	13	1	14
Instrumentation Electrical Technician	0.5	0.5	1
Underground Utilities Staff (Sewer Operators)	3	2 to 3	5 to 6

4.3 Water System Staffing Analysis

4.3.1 WTP Staff

El Centro currently staffs 13 FTEs to operate its 21 MGD capacity Water Treatment Plant. This includes 8 FTEs to staff the WTP and 5 FTEs for the meter shop. The WTP is currently operating with one 8-hour shift, though the City anticipates the State of California to require staffing 16-hours per day in the next five years. Maybe WTPs in California operate with 24-hour staffing. To assess the adequacy of this staffing level, a comparative analysis was conducted using the methodology outlined in Section 4.1. This approach involved benchmarking El Centro's staffing against similar sized municipal water treatment facilities, as shown in **Table 13.** The staffing of the WTP is noted in the table, if known. The comparison reveals that municipalities with smaller treatment capacities often maintain similar or even higher staffing levels. The average FTEs per MGD of WTP Capacity for the comparison agencies is 1.06, with the City of El Centro operating at a ratio of 0.4. This value indicates that increased staffing at the plant

at the current 8-hour staffing would be supportive. To accommodate the anticipated regulatory-required shift from a single 8-hour schedule to 16-hour or 24-hour operations, a WTP staffing increase from the current 8 FTEs to up to 11 FTEs for the current 8-hour staffing and up to 22 FTEs for 16- to 24-hour staffing is justifiable. Additionally, a dedicated Instrumentation Electrical Technician is also justified. This adjustment would bring El Centro's staffing levels in line with regional norms and ensure sufficient personnel to maintain safe, efficient, and compliant operations.

Table 13. Number of Water Treatment Plant Staff in Various Districts

Agency/WTP (Staffed hours)	WTP Rated Capacity (MGD)	Number of FTEs in WTP	FTEs per MGD Capacity	Wages ($)[1]	Population Served
City of Imperial (8-hrs)	7	8	1.1	535,991	22,866
City of Corona	11.5	23	2	1,928,795	160,000
City of Calexico (24-hrs)	14	11	0.8	1,040,035	40,073
City of Brawley (18-hrs)	15	11	0.7	721,032	28,952
Baker Water Treatment Plant	28.1	20	0.7	3,120,175	183,000
City of El Centro (8-hrs)	21	8	0.4	957,559	44,000

Note:

[1] Wage values per publicpay.ca.gov.

The City currently staffs five FTEs in the meter shop—three permanent and two temporary employees. Based on operational needs and input from City staff, it is recommended that the meter program transition to six permanent full-time positions. This change would eliminate reliance on temporary staffing and enhance consistency, reliability, and long-term operational support.

For the backflow prevention program, the City currently relies on one part-time employee. To effectively manage hazard assessments, inspections, and regulatory compliance, it is recommended that the program be staffed with two additional FTE positions. This level of staffing would ensure consistent oversight and reduce the need for contracted support in critical public health and safety functions.

If additional support is required for backflow prevention and hazard assessment activities, the City may supplement its workforce with outside contractors. While comparative staffing data from peer agencies was not available, the City's stated operational needs support the recommendation for these additional FTEs. Should the two recommended backflow prevention FTEs not be approved, the City plans to allocate equivalent funding toward contracted services to maintain program continuity.

4.3.2 Water Distribution System Staff

Using the methodology outlined in Section 4.1, organizational charts from various districts were analyzed and scaled to align with the City of El Centro's system. This approach was used to help determine the appropriate number of water distribution system operators needed. Some comparisons were made with districts significantly larger than El Centro due to limited data from similarly sized agencies. Nevertheless, ratios were applied to adjust for El Centro's scale and ensure a more accurate analysis. **Table 14** below summarizes the number of operators employed by comparable city agencies and districts as compared to the City of El Centro.

Table 14. Number of Water Distribution Staff in Various Districts

Department	Population Served	Size of Water Distribution System (miles)	Number of FTEs in Water Distribution Division	Miles of Distribution Pipeline per FTE
Calexico	38,000	106	6	18
City of Lomita	20,175	46	4	11.5
Brawley	28,000	75	2	38
Coachella Valley Water District	260,000	2,075	6	346
City of Corona	160,000	800	9	89
City of El Centro	44,000	157	8	20

The City of El Centro currently employs eight water distribution system operators, organized into two crews of four, to maintain its 157-mile water distribution system. Based on comparative data presented in Table 14, other water systems with significantly greater pipeline mileage operate with either fewer personnel or only one additional staff member. El Centro's ratio of system miles per FTE is on the low end at 20. This suggests that the City's current staffing level for water distribution system maintenance is generally appropriate for the size of its system.

In addition to staffing for water distribution system maintenance, valve maintenance is an important operational responsibility of waterline distribution staff. The City's goal is to perform maintenance on all valves within the system annually. However, Table 14 does not clarify whether the staff included in the counts for comparison agencies are specifically assigned to valve maintenance or if a separate division is responsible for this task. Given the substantial effort required for both water distribution and valve maintenance, it is reasonable to assume that the staffing figures reflect only water distribution personnel, although this cannot be confirmed.

For example, Coachella Sanitary District employs 6 people for a water distribution system consisting of 2,000 miles of pipeline. This would result in a considerable about of valves requiring maintenance. It is unknown whether or not the valve maintenance staff is included in this count or is part of a separate department or division.

Last year, only 40 percent of the valves received maintenance due to limited staffing. Although the City did not provide specific data on the total number of valves or a detailed maintenance schedule, staff have indicated through their operational knowledge and experience that two additional personnel would be necessary to meet the annual maintenance goal. Therefore, it is recommended that two full-time water operators be added, dedicated specifically to valve maintenance.

4.3.3 Water Staffing Summary

Table 15 summarizes the total number of full-time employees needed to maintain the WTP, the water distribution, the meter shop and the backflow prevention program, based on the analysis in Section 4.3. Based on the findings, it is recommended that the City staff an additional 3 to 14 employees for the WTP, three permanent FTE positions for the meter shop (eliminating the two temporary positions), two backflow prevention staff, and one dedicated WWTP Instrumentation Electrical Technician.

Table 15. Summary of Total Recommended Full Time Employees for City of El Centro's Water System

Department	Current Number of FTEs	Recommended Additional FTEs	Recommended Total FTEs
WTP Staff[1]	11.5	8 / 17	19.5 to 30.5
WTP Only (8-hr/16+hr shifts)	*8*	*3 / 14*[1]	*11 / 22*
Meter Shop	*3*[2]	*3*	*6*
Backflow Prevention Program	*0.5*	*2*	*2.5*
Underground Utilities Staff (including Water Operators)	8	2	10
Dedicated Instrumentation Control Electrician	0.5	0.5	1

Note:
[1] WTP staffing recommendations offered for both 8-hour and 16+hr staffing options.
[2] Currently the City has 5 total meter staff, including 3 permanent staff and 2 temporary staff. The City would like all meter staff to be permanent.

4.4 Engineering and Administration Staff

Following the methodology outlined in Section 4.1, organizational charts from various districts were reviewed and scaled to align with the City of El Centro's organizational structure. The City's Engineering Department oversees a water distribution system spanning 157 miles, including 2 booster stations and 7 storage reservoirs, as well as a sewer collection system of approximately 130 miles and 15 lift stations for approximately 44,000 residents. The City's Engineering Department is not dedicated to utilities projects; it also oversees roads projects, development projects, grants and more. To ensure the City's water and sewer systems are effectively maintained and that rehabilitation and replacement projects remain on schedule, it is essential that the Engineering Department is adequately staffed. **Table 16** below summarizes the number of employees in the engineering department employed by comparable city agencies and districts.

The City of El Centro currently employs five staff members in its engineering division, with two being dedicated to water and sewer utilities projects and the remaining three concentrating primarily on roads projects. As shown in Table 16, this staffing level of two utilities engineers appears low when compared to other similar sized agencies. For example, Novato Sanitary District and the Cities of Placentia and Laguna Beach manage approximately 15 to 21 miles of system per Engineering FTE while the City of El Centro is managing closer to 145. The average of the four comparative agencies included in Table 16 is 92 miles per Engineering FTE.

Many agencies also utilize outside consultants to augment engineering staff. The availability of outside consultants varies by location. Due to the more remote location of the City of El Centro, the City may seek to be generally more self-sufficient. To effectively manage both the water and sewer systems, and specifically to support water and sewer CIP projects, additional Engineering FTEs would support the City. Based on comparative analysis, it is recommended the City hire between 1 and 5 additional Engineering FTEs dedicated to water and sewer utilities work.

Table 16. Number of Employees in Engineering Division in Various Districts

Department	Population Served	Size of Sewer Collection System (miles)	Size of Water Distribution System (miles)	Number of FTEs in Engineering Division	Total Miles of Systems per FTE
City of Corona (Utilities Only)	160,000	444	800	4	311
Novato Sanitary District	60,000	235	N/A	16	15
City of Placentia[1]	52,000	84	N/A	4	21
City of Laguna Beach[1]	22,723	100	N/A	5	20
City of El Centro (Utilities Only)[2]	44,000	130	157	2	143.5

Notes:
[1] Water service for the Cities of Placentia and Laguna Beach is provided by other agencies. These cities manage their sewer collection systems only.
[2] While the City of El Centro Engineering Department consists of five FTEs, only two are dedicated to the water and sewer systems, while the remaining three handle roads projects and other work.

The City currently has six non-fleet administrative FTEs that support the Engineering Department. While data on administrative staffing was not available for comparative agencies, to support the additional FTEs in the Engineering Department, an additional one to two administrative staff would be beneficial.

5 Conclusions and Recommendations

To continue delivering high-quality services to the City of El Centro and to further enhance public health and safety, the following recommendations are provided to help the City address both current and future challenges. Based on the staffing study conducted and considering the number of existing employees in each department, **Table 17** identifies the additional personnel needed beyond the City's current staffing levels. A total of up to 31 additional FTEs would support the City in improved water and sewer systems operation.

Table 17. Summary of Recommended Additional FTEs

Department	Number of FTEs Currently	Recommended Additional FTEs	Recommended Total FTEs
WWTP/LS Staff	13	1	14
WTP Staff *WTP Operations Staff (8-hr/16+hr)*[1] *Meter Staff* *Backflow Prevention*	11.5 *8* *3*[2] *0.5*	8 to 19 *3 / 14* *3* *2*	19.5 to 30.5 *11 / 22* *6* *2.5*
Instrumentation Electrical Technicians (Total between Water and Sewer)	1	1	2
Underground Utilities Staff – Water	8	2	10
Underground Utilities Staff – Sewer	3	2 to 3	5 to 6
Engineering	5	1 to 5	6 to 10
Administration (excluding Fleet staff)	6	1 to 2	7 to 8

Note:
[1] Recommendations for WTP Operations staff provided for current (8-hour) staffing as well as the anticipated increase to 16-hour or even 24-hour staffing in the future.
[2] Currently the City has 5 total meter staff, including 3 permanent staff and 2 temporary staff. The City would like all meter staff to be permanent.

Appendix H

Detailed Engineer's Opinion of Probable Costs for Recommended CIP Projects

APPENDIX H: RECOMMENDED CIP PROJECT COST ESTIMATE DETAILS

City of El Centro
2025 Sewer Master Plan Update
Recommended Condition Improvement Projects Cost Summary

Project ID	Project Name	Description	Justification	Total Project Cost ($)
PCON-1	Excavation Point Repairs	Excavation point repair on the following gravity segments: Two (2) 8-inch mains; One (1) 12-inch mains	Pipeline segments have one significant structural defect or encrusted/compacted deposits that severely impact normal sewer flow.	$ 358,000
PCON-2	CIPP Lining - No Excavation	CIPP lining of thirteen (13) gravity segments, from manhole to manhole: 1,047 LF of 8-inch main; 1,087 LF of 12-inch main. Heavy cleaning of 2,134 LF of main prior to CIPP lining.	Pipeline segments have multiple cracks or minor fractures.	$ 4,382,000
PCON-3	Annual CIPP Lining Program	$1M Annual Ongoing Pipeline CIPP Program from Year 11 through 20.	Continued rehab of aging pipeline infrastructure to ensure system reliability.	$ 10,000,000
			TOTAL:	**$ 14,740,000**

PCON-1: Excavation Point Repairs (No Lining)

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Point Repair of 8-inch Pipe by Excavation up to 10 ft long	EA	2	$ 30,000	$ 60,000
2	Point Repair of 12-inch Pipe by Excavation up to 10 ft long	EA	1	$ 35,000	$ 35,000
3	Reconnect Lateral after Open Trench Pipe Replacement	EA	2	$ 1,500	$ 3,000
4	Sewage Bypass and Pumping Plan (Small Diameter, <10")	EA	2	$ 10,000	$ 20,000
5	Sewage Bypass and Pumping Plan (10-18")	EA	1	$ 50,000	$ 50,000
				Subtotal	**$ 168,000**
				General Requirements (10%)	$ 17,000
				Contingency (30%)	$ 51,000
				Construction Total:	**$ 236,000**
				Soft Costs (Small Project):	
				Engineering (30%)	$ 71,000
				Construction Management (15%)	$ 36,000
				Engineering Services During Construction (2%)	$ 5,000
				Environmental (2%)	$ 5,000
				Administration (2%)	$ 5,000
				Project Total	**$358,000**

PCON-2: CIPP Lining - No Excavation

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	CIPP Lining of 8-inch Pipe (includes cleaning, pre and post video inspection, traffic control, removal and disposal of debris)	LF	1,050	$ 120	$ 126,000
2	CIPP Lining of 12-inch Pipe (includes cleaning, pre and post video inspection, traffic control, removal and disposal of debris)	LF	1,090	$ 180	$ 196,200
3	CIPP Lining of 22-inch Pipe (includes cleaning, pre and post video inspection, traffic control, removal and disposal of debris)	LF	435	$ 330	$ 143,550
4	CIPP Lining of 27-inch Pipe (includes cleaning, pre and post video inspection, flow diversion, traffic control, removal and disposal of debris)	LF	1,300	$ 405	$ 526,500
5	Reinstate Active Lateral Connection after CIPP Lining	EA	78	$ 400	$ 31,000
6	Sewage Bypass and Pumping Plan (Small Diameter,	EA	4	$ 10,000	$ 40,000
7	Sewage Bypass and Pumping Plan (10-18")	EA	4	$ 50,000	$ 200,000
8	Sewage Bypass and Pumping Plan (21" and up)	EA	6	$ 200,000	$ 1,200,000
9	Specialty and Heavy Cleaning	LF	474	$ 25	$ 11,840
10	Trim Intruding Lateral	EA	1	$ 600	$ 600
11	Service Lateral Connection Seal (Lateral Liner)	EA	16	$ 400	$ 6,200
				Subtotal	**$ 2,482,000**
				General Requirements (10%)	$ 249,000
				Contingency (30%)	$ 745,000
				Construction Total:	**$ 3,476,000**
				Soft Costs (Medium Project):	
				Engineering (10%)	$ 348,000
				Construction Management (10%)	$ 348,000
				Engineering Services During Construction (2%)	$ 70,000
				Environmental (2%)	$ 70,000
				Administration (2%)	$ 70,000
				Project Total	**$4,382,000**

APPENDIX H: RECOMMENDED CIP PROJECT COST ESTIMATE DETAILS

City of El Centro
2025 Sewer Master Plan Update
Recommended Capacity Improvement Projects Cost Summary

Project ID	Project Name	Description	Justification	Project Cost
PCAP-1	Eastside Basin Inflow and Infiltration Study	Focused I&I study of the Eastside LS tributary area, including CCTV inspection and smoke testing.	Significant I&I defect flows have been observed at the Eastside LS sub-basin. In order to avoid unnecessary upsizing of the sewer collection system, it is recommended that the infiltration sources be found and addressed.	$ 466,000
PCAP-2	Main LS Gravity Influent Reconfiguration	Reconfigure influent sewer into Main LS wet well and construct separate gravity lines from Villa and Imperial Ave.	Improve conveyance into Main LS wet well and provide redundancy for Villa and Imperial Ave trunk sewers.	$ 3,849,000
			TOTAL:	**$ 4,315,000**

PCAP-1: Inflow & Infiltration Study

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Smoke Testing	LF	20,000	$3.00	$ 60,000
2	CCTV Inspection	LF	80,000	$2.00	$ 160,000
3	TDS Sampling	LS	1	$50,000	$ 50,000
				Subtotal	**$ 270,000**
				General Requirements (10%)	**$ 27,000**
				Contingency (30%)	**$ 81,000**
				Construction Total:	**$ 378,000**
					Soft Costs:
				Engineering (15%)	$ 57,000
				Environmental (6%)	$ 23,000
				Administration (2%)	$ 8,000
				Project Total	**$ 466,000**

PCAP-2: Main LS Gravity Influent Reconfiguration

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Construct New 27-inch Pipe and Manholes	LF	2,100	$891	$ 1,871,100
2	Main LS Wet Well Modifications	EA	1	$50,000	$ 50,000
3	Sewage Bypass and Pumping Plan	EA	4	$10,000	$ 40,000
				Subtotal	**$ 1,961,100**
				General Requirements (10%)	$ 197,000
				Contingency (30%)	$ 589,000
				Construction Total:	**$ 2,748,000**
					Soft Costs:
				Engineering (15%)	$ 413,000
				Construction Management (15%)	$ 413,000
				Engineering Services During Construction (2%)	$ 55,000
				Environmental (6%)	$ 165,000
				Administration (2%)	$ 55,000
				Project Total	**$ 3,849,000**

Project No:	**LSP.01**
Project Name:	**Structures, Hatches / Doors and Bypass Connection Program - Phase 1**
Description:	This program will address near term rehabilitation and replacement of structural components at lift stations to improve safety, reliability, and long-term performance. Improvements include rehabilitation of wet wells, access hatches and doors, replacement of wet well piping and pipe supports, rehabilitation of wet well liners, replacement of access stairs, replacement of wet well access covers, and wall penetration patching and related structural improvements. The specific scope will vary by facility based on condition assessments, but implementation of this program will extend service life of key structures, improve maintainability, and ensure compliance with safety standards. Additionally, this program involves installing permanent bypass pumping connections at all lift stations that currently lack this critical feature. The bypass assemblies will provide quick and reliable access points for temporary pumps during planned maintenance or emergency events, minimizing the risk of sanitary sewer overflows and service disruptions.
Priority:	Near-term **Funding:** WW
Location/Facility:	East Side LS, Alder Canal - Villa Ave LS, Countryside LS, Legacy LS, Main LS, Orange LS, 4th & Wake LS, 8th & Wake LS, 3rd & Ross LS Gios LS, Heil & Dogwood LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	1,469,000
Structural			$	-
Electrical, Instrumentation & Controls			$	313,000
Equipment			$	1,066,000
Construction Cost Subtotal:			**$**	**2,848,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	285,000
CM & ESDC	18 %	of capital costs	$	513,000
Administration	3 %	of capital costs	$	85,000
Soft Cost Subtotal:			**$**	**883,000**
Contingency:				
Contingency	40 %	of project cost	$	1,492,000
Total Project Cost:			**$**	**5,223,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2027
Project Duration (Years):	2
Comments:	

Project No:	**LSP.02**
Project Name:	**Arc Flash / Short Circuit Study Program**
Description:	This program will improve electrical safety at lift stations through the completion of power system studies and the application of updated arc flash labeling. The work will include short circuit and coordination analyses to confirm system protection settings, along with installation of arc flash hazard warning stickers at eight lift stations. Implementation of this program will enhance worker safety, ensure compliance with electrical safety standards, and reduce risks associated with maintenance and emergency response activities.
Priority:	Near-term **Funding:** WW
Location/Facility:	Main LS, Lift Station No. 3, Countryside LS, Legacy LS, Alder Canal - Villa Ave LS, 3rd & Ross LS, 4th & Wake LS, Gios LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement		Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study	X	Operations Assessment	
Expansion		Failure Modes & Consequences	X

Project Cost:				
Construction Costs:				
General			$	116,000
Site Civil & Mechanical			$	-
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**116,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	17,000
CM & ESDC	20 %	of capital costs	$	23,000
Administration	5 %	of capital costs	$	6,000
Soft Cost Subtotal:			**$**	**46,000**
Contingency:				
Contingency	40 %	of project cost	$	66,000
Total Project Cost:			**$**	**228,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2028
Project Duration (Years):	2
Comments:	

Project No:	**LSP.03**				
Project Name:	**Testing and Studies Program**				
Description:	This program will complete specialized evaluations and third-party testing to improve safety and reliability of lift station facilities. Planned work includes a dry well seismic evaluation at one facility to assess structural resilience and independent testing of motor control centers (MCCs) and breakers at three facilities to verify electrical safety and performance. Implementation of this program will provide critical data to guide future improvements, reduce operational risks, and ensure compliance with applicable safety and reliability standards.				
Priority:	Near-term	**Funding:**	WW		
Location/Facility:	Main LS, Lift Station No. 3, Alder Canal - Villa Ave LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement		Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study	X	Operations Assessment			
Expansion		Failure Modes & Consequences	X		

Project Cost:					
Construction Costs:					
General				$	92,000
Site Civil & Mechanical				$	-
Structural				$	-
Electrical, Instrumentation & Controls				$	-
Equipment				$	26,000
Construction Cost Subtotal:				**$**	**118,000**
Soft Costs:					
Classification 'C'					
Engineering	15 %	of capital costs		$	18,000
CM & ESDC	20 %	of capital costs		$	24,000
Administration	5 %	of capital costs		$	6,000
Soft Cost Subtotal:				**$**	**48,000**
Contingency:					
Contingency	40 %	of project cost		$	65,000
Total Project Cost:				**$**	**231,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2028
Project Duration (Years):	2
Comments:	

Project No:	**LSP.04**		
Project Name:	**Instrumentation and Control Program - Phase 1**		
Description:	This program will replace and upgrade critical electrical and control systems at lift stations, including programmable logic controllers (PLCs), motor control centers (MCCs), automatic transfer switches (ATSs), variable frequency drives (VFDs), electrical panels, conduits, site lighting, instrumentation, and control panels. The specific improvements will vary by facility based on existing conditions and operational needs, but will generally focus on standardizing equipment, improving reliability, and extending service life. Implementation of this program will enhance operational efficiency, expand remote monitoring and control capabilities, and ensure compliance with current electrical and safety standards across the collection system.		
Priority:	Near-term	**Funding:**	WW
Location/Facility:	4th & Wake LS, Main LS, Gios LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	680,000
Site Civil & Mechanical			$	426,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**1,106,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	111,000
CM & ESDC	18 %	of capital costs	$	199,000
Administration	3 %	of capital costs	$	33,000
Soft Cost Subtotal:			**$**	**343,000**
Contingency:				
Contingency	40 %	of project cost	$	580,000
Total Project Cost:			**$**	**2,029,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2028
Project Duration (Years):	2
Comments:	

Project No:	**LSP.05**				
Project Name:	**Force Main Program - Phase 1**				
Description:	This program will replace downstream force main of Lift Station No. 3 to address existing operational challenges and capacity limitations. The work will include installation of new force mains designed to accommodate current and projected flows, along with all associated bypass pumping required to maintain service during construction. Implementation of this program will resolve hydraulic constraints, improve system reliability, and ensure the collection system can continue to operate effectively under future demand conditions.				
Priority:	Near-term	**Funding:**	WW		
Location/Facility:	Lift Station No. 3				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade	X		Condition Assessment		
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences		

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	173,000
Structural			$	-
Electrical, Instrumentation & Controls			$	668,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**841,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	84,000
CM & ESDC	18 %	of capital costs	$	151,000
Administration	3 %	of capital costs	$	25,000
Soft Cost Subtotal:			**$**	**260,000**
Contingency:				
Contingency	40 %	of project cost	$	442,000
Total Project Cost:			**$**	**1,543,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2029
Project Duration (Years):	2
Comments:	

Project No:	**LSP.06**
Project Name:	**Power and Generator Program**
Description:	This program will improve the reliability of lift station power systems through installation of permanent backup generators and portable generator connectors with transfer switches. Additional improvements include replacement of corroded generator piping, replacement of utility power poles, and replacement of main breakers. The specific scope will vary by facility based on condition assessments, but implementation of this program will enhance system resiliency, reduce the risk of service interruptions, and ensure compliance with electrical and safety standards.
Priority:	Near-term **Funding:** WW
Location/Facility:	Legacy LS, Main LS, 3rd & Ross LS, Alder Canal - Villa Ave LS, Gios LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	X
Facility/Equip Upgrade	X	Condition Assessment	X
Engineering Study		Operations Assessment	X
Expansion		Failure Modes & Consequences	X

Project Cost:				
Construction Costs:				
General			$	177,000
Site Civil & Mechanical			$	451,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**628,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	63,000
CM & ESDC	18 %	of capital costs	$	113,000
Administration	3 %	of capital costs	$	19,000
Soft Cost Subtotal:			**$**	**195,000**
Contingency:				
Contingency	40 %	of project cost	$	328,000
Total Project Cost:			**$**	**1,151,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2029
Project Duration (Years):	2
Comments:	

Project No:	**LSP.07**
Project Name:	**Structures, Hatches / Doors and Bypass Connection Program - Phase 2**
Description:	This program will address mid term rehabilitation and replacement of structural components at lift stations to improve safety, reliability, and long-term performance. Improvements include rehabilitation of wet wells, access hatches and doors, replacement of wet well piping and pipe supports, rehabilitation of wet well liners, replacement of access stairs, replacement of wet well access covers, and wall penetration patching and related structural improvements. The specific scope will vary by facility based on condition assessments, but implementation of this program will extend service life of key structures, improve maintainability, and ensure compliance with safety standards. Additionally, this program involves installing permanent bypass pumping connections at all lift stations that currently lack this critical feature. The bypass assemblies will provide quick and reliable access points for temporary pumps during planned maintenance or emergency events, minimizing the risk of sanitary sewer overflows and service disruptions.
Priority:	Mid-term **Funding:** WW
Location/Facility:	8th & Wake LS, 3rd & Ross LS, Heil & Dogwood LS, Lift Station No. 3, Alder Canal - Villa Ave LS
Project Origin:	El Centro Lift Stations Condition Assessment

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	594,000
Structural			$	-
Electrical, Instrumentation & Controls			$	119,000
Equipment			$	621,000
Construction Cost Subtotal:			**$**	**1,334,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	133,000
CM & ESDC	18 %	of capital costs	$	240,000
Administration	3 %	of capital costs	$	40,000
Soft Cost Subtotal:			**$**	**413,000**
Contingency:				
Contingency	40 %	of project cost	$	700,000
Total Project Cost:			**$**	**2,447,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2030
Project Duration (Years):	2
Comments:	

Project No:	**LSP.08**		
Project Name:	**Instrumentation and Control Program - Phase 2**		
Description:	This program will replace and upgrade critical electrical and control systems at lift stations, including programmable logic controllers (PLCs), motor control centers (MCCs), automatic transfer switches (ATSs), variable frequency drives (VFDs), electrical panels, conduits, site lighting, instrumentation, and control panels. The specific improvements will vary by facility based on existing conditions and operational needs, but will generally focus on standardizing equipment, improving reliability, and extending service life. Implementation of this program will enhance operational efficiency, expand remote monitoring and control capabilities, and ensure compliance with current electrical and safety standards across the collection system.		
Priority:	Mid-term	**Funding:**	WW
Location/Facility:	Lift Station No. 3, Alder Canal - Villa Ave LS, 3rd & Ross LS, Gios LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	318,000
Site Civil & Mechanical			$	625,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	-
Construction Cost Subtotal:			**$**	**943,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	94,000
CM & ESDC	18 %	of capital costs	$	170,000
Administration	3 %	of capital costs	$	28,000
Soft Cost Subtotal:			**$**	**292,000**
Contingency:				
Contingency	40 %	of project cost	$	494,000
Total Project Cost:			**$**	**1,729,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2031
Project Duration (Years):	2
Comments:	

Project No:	LSP.09				
Project Name:	Pumps, Piping, Supports, and HVAC Program				
Description:	This program will address mechanical and ventilation improvements at lift stations to enhance reliability, safety, and operability. Improvements include installation of emergency eye wash stations, replacement of force mains within wet wells, replacement of sump pumps and associated discharge piping, repair of forced air ventilation systems, replacement of pump bases, installation of chemical injection ports, replacement of suction piping in wet wells, and installation of discharge flow meters. The specific scope will vary by facility based on condition and operational needs, but implementation of this program will improve worker safety, extend equipment life, and ensure reliable system performance.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	Countryside LS, Lift Station No. 3, Alder Canal - Villa Ave, 3rd & Ross LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement	X	Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study		Operations Assessment			
Expansion		Failure Modes & Consequences	X		

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	514,000
Structural			$	-
Electrical, Instrumentation & Controls			$	81,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**595,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	60,000
CM & ESDC	18 %	of capital costs	$	107,000
Administration	3 %	of capital costs	$	18,000
Soft Cost Subtotal:			**$**	**185,000**
Contingency:				
Contingency	40 %	of project cost	$	311,000
Total Project Cost:			**$**	**1,091,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2031
Project Duration (Years):	2
Comments:	

Project No:	**LSP.10**		
Project Name:	**Main Lift Station Rehabilitation Project**		
Description:	This project will rehabilitate key electrical, structural, and mechanical systems at the lift station to improve safety, reliability, and long-term performance. Planned improvements include upgrades to site and emergency lighting, replacement of the generator and flow meter, structural repairs to the bar screen vault (including floor grating and access stairs), and enhancements to safety and ventilation systems. Collectively, these improvements will extend facility service life, improve maintainability, and ensure continued reliable operation.		
Priority:	Mid-term	**Funding:**	WW
Location/Facility:	Main LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	X

Project Cost:				
Construction Costs:				
General			$	716,000
Site Civil & Mechanical			$	189,000
Structural			$	-
Electrical, Instrumentation & Controls			$	173,000
Equipment			$	23,000
Construction Cost Subtotal:			**$**	**1,101,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	110,000
CM & ESDC	18 %	of capital costs	$	198,000
Administration	3 %	of capital costs	$	33,000
Soft Cost Subtotal:			**$**	**341,000**
Contingency:				
Contingency	40 %	of project cost	$	577,000
Total Project Cost:			**$**	**2,019,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.11**				
Project Name:	**East Side Lift Station Rehabilitation Project**				
Description:	This project will rehabilitate critical components within the wet well to improve reliability and maintainability. Planned improvements include installation of a backup level element, replacement of suction piping, and rehabilitation of the wet well liner, along with associated bypass pumping to support construction activities. Together, these upgrades will extend the service life of the wet well, reduce operational risk, and ensure continued reliable performance of the lift station.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	East Side LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment		
Expansion			Failure Modes & Consequences		

Project Cost:				
Construction Costs:				
General			$	10,000
Site Civil & Mechanical			$	139,000
Structural			$	-
Electrical, Instrumentation & Controls			$	5,000
Equipment			$	13,000
Construction Cost Subtotal:			**$**	**167,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	25,000
CM & ESDC	20 %	of capital costs	$	33,000
Administration	5 %	of capital costs	$	8,000
Soft Cost Subtotal:			**$**	**66,000**
Contingency:				
Contingency	40 %	of project cost	$	94,000
Total Project Cost:			**$**	**327,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.12**		
Project Name:	**Buena Vista Lift Station Rehabilitation Project**		
Description:	This project will address security, structural, and operational needs at the lift station. Planned improvements include installation of intrusion switches to enhance site security, replacement of wet well access covers to improve safety and maintainability, and spot repairs to the wet well liner to extend structural service life. The project will also include bypass pumping to support construction activities. Together, these improvements will reduce operational risks, improve safety, and ensure reliable facility performance.		
Priority:	Mid-term	**Funding:**	WW
Location/Facility:	Buena Vista LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	6,000
Site Civil & Mechanical			$	126,000
Structural			$	-
Electrical, Instrumentation & Controls			$	-
Equipment			$	23,000
Construction Cost Subtotal:			**$**	**155,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	23,000
CM & ESDC	20 %	of capital costs	$	31,000
Administration	5 %	of capital costs	$	8,000
Soft Cost Subtotal:			**$**	**62,000**
Contingency:				
Contingency	40 %	of project cost	$	86,000
Total Project Cost:			**$**	**303,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.13**				
Project Name:	**Legacy Lift Station Decommissioning Project**				
Description:	This project will decommission the existing lift station that will no longer required for system operation. Planned work will include permanent disconnection of electrical and mechanical equipment, abandonment or removal of wet well piping, and demolition or filling of below-grade structures as required. Additional work may include site restoration and minor utility rerouting to ensure continuity of service. Collectively, these improvements will safely retire the facility, eliminate ongoing maintenance costs, and reduce long-term operational risk.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	Legacy LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement			Predicted Useful Life Expiration	X	
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences	X	

Project Cost:					
Construction Costs:					
General				$	-
Site Civil & Mechanical				$	479,000
Structural				$	-
Electrical, Instrumentation & Controls				$	-
Equipment				$	-
Construction Cost Subtotal:				**$**	**479,000**
Soft Costs:					
Classification 'B'					
Engineering	10 %	of capital costs		$	48,000
CM & ESDC	18 %	of capital costs		$	86,000
Administration	3 %	of capital costs		$	14,000
Soft Cost Subtotal:				**$**	**148,000**
Contingency:					
Contingency	40 %	of project cost		$	252,000
Total Project Cost:				**$**	**879,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2032
Project Duration (Years):	2
Comments:	

Project No:	**LSP.14**				
Project Name:	**4th & Wake Lift Station Decommissioning Project**				
Description:	This project will decommission the existing lift station that will no longer required for system operation. Planned work will include permanent disconnection of electrical and mechanical equipment, abandonment or removal of wet well piping, and demolition or filling of below-grade structures as required. Additional work may include site restoration and minor utility rerouting to ensure continuity of service. Collectively, these improvements will safely retire the facility, eliminate ongoing maintenance costs, and reduce long-term operational risk.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	4th & Wake LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement			Predicted Useful Life Expiration	X	
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences	X	

Project Cost:					
Construction Costs:					
General				$	-
Site Civil & Mechanical				$	493,000
Structural				$	-
Electrical, Instrumentation & Controls				$	-
Equipment				$	-
Construction Cost Subtotal:				**$**	**493,000**
Soft Costs:					
Classification 'B'					
Engineering	10 %	of capital costs		$	49,000
CM & ESDC	18 %	of capital costs		$	89,000
Administration	3 %	of capital costs		$	15,000
Soft Cost Subtotal:				**$**	**153,000**
Contingency:					
Contingency	40 %	of project cost		$	259,000
Total Project Cost:				**$**	**905,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2033
Project Duration (Years):	2
Comments:	

Project No:	**LSP.15**				
Project Name:	**Force Main Program - Phase 2**				
Description:	This program will replace approximately 12,300 linear feet of downstream force main of Alder Canal - Villa Ave LS to address the existing oversized force main. The project will include installation of new piping designed to accommodate current and future flows, along with bypass pumping to maintain service during construction. Implementation of this program will resolve hydraulic constraints, improve reliability, and ensure the collection system continues to perform effectively under future demand conditions.				
Priority:	Mid-term	**Funding:**	WW		
Location/Facility:	Alder Canal - Villa Ave LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade			Condition Assessment		
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences		

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	130,000
Structural			$	-
Electrical, Instrumentation & Controls			$	5,752,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**5,882,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	588,000
CM & ESDC	18 %	of capital costs	$	1,059,000
Administration	3 %	of capital costs	$	176,000
Soft Cost Subtotal:			**$**	**1,823,000**
Contingency:				
Contingency	40 %	of project cost	$	3,083,000
Total Project Cost:			**$**	**10,788,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2033
Project Duration (Years):	2
Comments:	

Project No:	**LSP.16**		
Project Name:	**Gios Lift Station Rehabilitation Project**		
Description:	This project will implement targeted upgrades to improve safety, reliability, and maintainability at the lift station. Planned improvements include installation of an emergency eye wash to improve worker safety, replacement of water service piping to ensure dependable utility connections, and installation of pump lifting chains to facilitate safer and more efficient pump maintenance. Collectively, these improvements will enhance operational safety, reduce risks, and support reliable long-term performance of the facility.		
Priority:	Long-term	**Funding:**	WW
Location/Facility:	Gios LS		
Project Origin:	El Centro Lift Stations Condition Assessment		

Project Type:		**Project Driver(s):**	
Rehab/Replacement	X	Predicted Useful Life Expiration	
Facility/Equip Upgrade		Condition Assessment	X
Engineering Study		Operations Assessment	
Expansion		Failure Modes & Consequences	

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	-
Structural			$	-
Electrical, Instrumentation & Controls			$	20,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**20,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	3,000
CM & ESDC	20 %	of capital costs	$	4,000
Administration	5 %	of capital costs	$	1,000
Soft Cost Subtotal:			**$**	**8,000**
Contingency:				
Contingency	40 %	of project cost	$	12,000
Total Project Cost:			**$**	**40,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2035
Project Duration (Years):	2
Comments:	

Project No:	**LSP.17**				
Project Name:	**Lift Station No. 3 Rehabilitation Project**				
Description:	This project will rehabilitate key electrical, structural, and mechanical components of the lift station to improve safety, reliability, and performance. Planned improvements include replacement of wet well lighting, installation of a discharge flow meter with a new vault, site grading to improve drainage and access, and installation of a permanent fixed access ladder for the bar screen motor. Additional work will include replacement of existing 40-HP pumping units, replacement of wet well access hatches, and provision of bypass pumping to support construction activities. Collectively, these improvements will extend the service life of the facility, enhance worker safety, and ensure continued reliable operation.				
Priority:	Long-term	**Funding:**	WW		
Location/Facility:	Lift Station No. 3				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement	X	Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study		Operations Assessment			
Expansion		Failure Modes & Consequences			

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	207,000
Structural			$	-
Electrical, Instrumentation & Controls			$	569,000
Equipment			$	17,000
Construction Cost Subtotal:			**$**	**793,000**
Soft Costs:				
Classification 'B'				
Engineering	10 %	of capital costs	$	79,000
CM & ESDC	18 %	of capital costs	$	143,000
Administration	3 %	of capital costs	$	24,000
Soft Cost Subtotal:			**$**	**246,000**
Contingency:				
Contingency	40 %	of project cost	$	416,000
Total Project Cost:			**$**	**1,455,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2035
Project Duration (Years):	2
Comments:	

Project No:	**LSP.18**				
Project Name:	**8th & Wake Lift Station Rehabilitation Project**				
Description:	This project will replace the existing 5-HP pumps to improve reliability and maintainability of the lift station. The pump replacement will extend equipment service life, reduce the risk of unplanned failures, and ensure continued reliable operation of the facility.				
Priority:	Long-term		**Funding:**	WW	
Location/Facility:	8th & Wake LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment		
Expansion			Failure Modes & Consequences		

Project Cost:				
Construction Costs:				
General			$	-
Site Civil & Mechanical			$	142,000
Structural			$	-
Electrical, Instrumentation & Controls			$	34,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**176,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	26,000
CM & ESDC	20 %	of capital costs	$	35,000
Administration	5 %	of capital costs	$	9,000
Soft Cost Subtotal:			**$**	**70,000**
Contingency:				
Contingency	40 %	of project cost	$	98,000
Total Project Cost:			**$**	**344,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2036
Project Duration (Years):	2
Comments:	

Project No:	**LSP.19**				
Project Name:	**Alder Canal - Villa Ave Lift Station Rehabilitation Project**				
Description:	This project will rehabilitate key electrical, structural, and site components of the lift station to improve safety, reliability, and performance. Planned improvements include verification of the drywell flood alarm and integration with the RTU, redesign and installation of LED lighting in the drywell, and drainage and grading improvements to prevent water infiltration. Additional work will include installation of outdoor lighting at the chemical area, replacement of exterior and interior lighting at the electrical building, installation of a discharge flow meter with a new vault, and site grading improvements. Station bypass pumping will be provided to support construction activities. Collectively, these improvements will extend the service life of the facility, enhance worker safety, and ensure continued reliable operation.				
Priority:	Long-term	**Funding:**	WW		
Location/Facility:	Alder Canal - Villa Ave LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:			**Project Driver(s):**		
Rehab/Replacement	X		Predicted Useful Life Expiration		
Facility/Equip Upgrade			Condition Assessment	X	
Engineering Study			Operations Assessment	X	
Expansion			Failure Modes & Consequences	X	

Project Cost:					
Construction Costs:					
General				$	60,000
Site Civil & Mechanical				$	219,000
Structural				$	-
Electrical, Instrumentation & Controls				$	109,000
Equipment				$	-
Construction Cost Subtotal:				**$**	**388,000**
Soft Costs:					
Classification 'C'					
Engineering	15 %	of capital costs		$	58,000
CM & ESDC	20 %	of capital costs		$	78,000
Administration	5 %	of capital costs		$	19,000
Soft Cost Subtotal:				**$**	**155,000**
Contingency:					
Contingency	40 %	of project cost		$	218,000
Total Project Cost:				**$**	**761,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2037
Project Duration (Years):	2
Comments:	

Project No:	**LSP.20**				
Project Name:	**3rd & Ross Lift Station Rehabilitation Project**				
Description:	This project will implement targeted upgrades to improve safety, reliability, and maintainability of the lift station. Planned improvements include installation of new site task lighting and provision of an on-site water connection to support facility operations and maintenance. Collectively, these improvements will enhance worker safety, improve operational efficiency, and ensure continued reliable performance of the facility.				
Priority:	Long-term	**Funding:**	WW		
Location/Facility:	3rd & Ross LS				
Project Origin:	El Centro Lift Stations Condition Assessment				
Project Type:		**Project Driver(s):**			
Rehab/Replacement	X	Predicted Useful Life Expiration			
Facility/Equip Upgrade		Condition Assessment	X		
Engineering Study		Operations Assessment	X		
Expansion		Failure Modes & Consequences	X		

Project Cost:				
Construction Costs:				
General			$	7,000
Site Civil & Mechanical			$	-
Structural			$	-
Electrical, Instrumentation & Controls			$	28,000
Equipment			$	-
Construction Cost Subtotal:			**$**	**35,000**
Soft Costs:				
Classification 'C'				
Engineering	15 %	of capital costs	$	5,000
CM & ESDC	20 %	of capital costs	$	7,000
Administration	5 %	of capital costs	$	2,000
Soft Cost Subtotal:			**$**	**14,000**
Contingency:				
Contingency	40 %	of project cost	$	20,000
Total Project Cost:			**$**	**69,000**

Project Implementation (Schedule & Expenditure Timeline)	
Project Implementation:	One-Time Project
Project Delivery Method:	Design-Bid-Build
Project Start Year:	2037
Project Duration (Years):	2
Comments:	

City of El Centro

2025 Sewer Master Plan Update

Recommended Manhole Condition Improvement Projects Cost Summary

Project ID	Project Name	Description	Current (2025) Project Cost
MCON-1	Mortar Repair and CIPM Lining of Imperial Ave Manholes	Mortar repair and CIPM liner installation on 11 manholes on Imperial Ave between Danenburg Ave to McCabe Rd	$ 778,000
MCON-2	Ongoing Manhole Rehabilitation Program	$200K annual ongoing manhole rehabilitation program from Year 6 through Year 20 to ensure system reliability.	$ 3,000,000
		TOTAL:	**$ 3,778,000**

Note: Escalated project costs are based on a 4% annual construction inflation rate/

MH-1: Mortar Repair and CIPM Lining of Imperial Ave Manholes

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Mortar repair and CIPM liner installation on 11 manholes on Imperial Ave between Danenburg Ave to McCabe Rd	EA	11	$35,000	$ 385,000
				Subtotal	**$ 385,000**
				General Requirements (10%)	$ 39,000
				Contingency (30%)	$ 116,000
				Construction Total:	**$ 540,000**
				Soft Costs (Medium Project):	
				Engineering (23%)	$ 124,000
				Construction Management (15%)	$ 81,000
				Engineering Services During Construction (2%)	$ 11,000
				Environmental (2%)	$ 11,000
				Administration (2%)	$ 11,000
				Project Total	**$778,000**

APPENDIX H: RECOMMENDED CIP PROJECT COST ESTIMATE DETAILS

City of El Centro

2025 Sewer Master Plan Update

Recommended WWTP Improvement Projects Cost Summary

Project ID	Project Name	Capital Cost
WWTP-1	Headworks	$172,000
WWTP-2	Primary Clarifiers	$10,816,000
WWTP-3	Aeration Basins	$4,257,000
WWTP-4	Secondary Clarifiers	$749,000
WWTP-5	Digesters	$10,031,000
WWTP-6	Gravity Belt Thickeners*	$3,929,000
WWTP-7	Dewatering*	$3,289,000
WWTP-8	Operations Building	$7,356,000
WWTP-9	Operations Building ADA Improvements	$455,000
	Totals	**$40,599,000**

Notes:

Contingency factor used for each category above	30%
Escalation Factor assumed per year	4%

* Annualized cost for Gravity Belt Thickeners and Belt Filter Press (Dewatering) does not include equipment cost (City prepurchased)

WWTP-1: Headworks

Major Capital Cost Element	Unit	Qty	Unit Cost	Net Cost
Demo				**$0**
No demo items				$0
Sitework/Civil				**$10,000**
Replace floor drain	LS	1	$10,000	$10,000
Structural				**$60,000**
Replace Channel Grating Hardware	SF	200	$150	$30,000
Replace entrance door and frame A (3'x7')	EA	1	$30,000	$30,000
Mechanical				**$0**
No mechanical items				$0
Electrical				**$10,000**
Replace Door intrusion switch	LS	1	$10,000	$10,000
			Subtotal	**$ 80,000**
			General Requirements (10%)	$ 8,000
			Contingency (30%)	$ 24,000
			Construction Total:	**$ 112,000**
				Soft Costs:
			Engineering (30%)	$ 34,000
			Construction Management (15%)	$ 17,000
			Engineering Services During Construction (2%)	$ 3,000
			Environmental (2%)	$ 3,000
			Administration (2%)	$ 3,000
			Project Total	**$172,000**

WWTP-2: Primary Clarifiers

Major Capital Cost Element	Unit	Qty	Unit Cost	Net Cost
Demo				**$225,000**
Remove Primary Clarifiers	EA	2	$100,000	$200,000
Remove piping in Primary Clarifier Gallery	LS	1	$25,000	$25,000
Sitework/Civil				**$200,000**
Bypassing	LS	1	$100,000	$100,000
Dewatering	LS	1	$100,000	$100,000
Structural				**$3,600,000**
New Influent Structure	LS	1	$700,000	$700,000
New Concrete Basins (0.5 MG each)	EA	2	$1,450,000	$2,900,000
Mechanical				**$2,100,000**
Mechanism, Pumps, Valving and Piping	EA	2	$850,000	$1,700,000
Replace Piping System (gallery, scum and sludge)	LS	1	$250,000	$250,000
Replace sluice gates	EA	5	$30,000	$150,000
Electrical				**$4,500**
Light pole	LS	1	$4,500	$4,500
			Subtotal	**$ 6,129,500**
			General Requirements (10%)	$ 613,000
			Contingency (30%)	$ 1,839,000
			Construction Total:	**$ 8,582,000**
				Soft Costs:
			Engineering (10%)	$ 859,000
			Construction Management (10%)	$ 859,000
			Engineering Services During Construction (2%)	$ 172,000
			Environmental (2%)	$ 172,000
			Administration (2%)	$ 172,000
			Project Total	**$10,816,000**

WWTP-3: Aeration Basins

Major Capital Cost Element	Year	Qty	Unit Cost	Net Cost
Demo				**$ 30,600**
Remove (6) mechanical mixer concrete pads	CY	306.0	$100	$ 30,600
Sitework/Civil				**$ 150,000**
Bypassing	LS	1	$50,000	$ 50,000
Dewatering	LS	1	$100,000	$ 100,000
Structural				**$ 650,000**
Clean and inspect aeration basins	LS	1	$300,000	$ 300,000
Rehab aeration basin concrete	LS	1	$250,000	$ 250,000
Remove equipment and refurbish blower building	LS	1	$100,000	$ 100,000
Mechanical				**$ 1,580,000**
Replace RAS pipeline in Channel	LS	1	$150,000	$ 150,000
Aeration piping and diffusers	LS	1	$350,000	$ 350,000
Replace sluice gates	EA	36	$30,000	$ 1,080,000
*** Annualized cost for Gravity Belt Thickeners and Belt Filter Press (Dewatering) does not include**				**$ -**
No EI&C noted	LS	0	$0	$ -
			Subtotal	**$ 2,410,600**
			General Requirements (10%)	$ 242,000
			Contingency (30%)	$ 724,000
			Construction Total:	**$ 3,377,000**
				Soft Costs:
			Engineering (10%)	$ 338,000
			Construction Management (10%)	$ 338,000
			Engineering Services During Construction (2%)	$ 68,000
			Environmental (2%)	$ 68,000
			Administration (2%)	$ 68,000
			Project Total	**$4,257,000**

WWTP-4: Secondary Clarifiers

Major Capital Cost Element	Year	Qty	Unit Cost	Net Cost
Demo				**$25,000**
West splitter box	LS	1	$25,000	$25,000
Sitework/Civil				**$100,000**
Bypassing	LS	1	$50,000	$50,000
Dewatering	LS	1	$50,000	$50,000
Structural				**$177,037**
New west splitter box	LS	1	$60,000	$60,000
Inspect interior and exterior of PWPS	LS	1	$20,000	$20,000
Replace roof deck of PWPS	CY	15	$2,500	$37,037
Rehab concrete NW access hatch	LS	1	$10,000	$10,000
Rehab concrete curb around SW hatch	LS	1	$10,000	$10,000
Replace WAS Pump pads 1 &2	CY	4	$2,500	$10,000
Wet Well Cover (10' diameter)	LS	1	$30,000	$30,000
*** Annualized cost for Gravity Belt Thickeners and Belt Filter Press (Dewatering) does**				**$65,000**
Replace sluice gates at west box	LS	1	$30,000	$30,000
Replace sluice gates at center box	EA	1	$30,000	$30,000
Inspect plant water pumps and piping	LS	1	$5,000	$5,000
EI&C				**$0**
No EI&C noted	LS	0	$0	$0
			Subtotal	**$ 367,037**
			General Requirements (10%)	$ 37,000
			Contingency (30%)	$ 111,000
			Construction Total:	**$ 516,000**
				Soft Costs:
			Engineering (23%)	$ 122,000
			Construction Management (15%)	$ 78,000
			Engineering Services During Construction (2%)	$ 11,000
			Environmental (2%)	$ 11,000
			Administration (2%)	$ 11,000
			Project Total	**$749,000**

WWTP-5: Digesters

Year

Major Capital Cost Element		Unit	Qty	Unit Cost	Net Cost
Demo					**$65,000**
	Remove digested sludge pump	LS	1	$10,000	$10,000
	Remove gas mixing system	LS	1	$10,000	$10,000
	Remove unused, sludge and gas piping	LS	1	$25,000	$25,000
	Remove lower section stairway by 2&3	LS	1	$10,000	$10,000
	Remove storm drain between digesters and primary clarifier gallery	LS	1	$5,000	$5,000
	Remove concrete flatwork at digesters	LS	1	$5,000	$5,000
Sitework/Civil					**$100,000**
	Bypassing	LS	1	$50,000	$50,000
	Dewatering	LS	1	$50,000	$50,000
Structural					**$3,159,000**
	Clean and Inspect Digesters (1, 2, & 3)	EA	3	$250,000	$750,000
*** Annual**	Reline / Recoat Interior Digesters (1, 2, & 3)	EA	3	$300,000	$900,000
	Repair exterior coating - Digester 1	EA	1	$350,000	$350,000
	Recoat exterior coating - Digester 2&3	EA	2	$250,000	$500,000
	Floating cover - Digester 3	EA	1	$475,000	$475,000
	Relocate stairway b/t Digester 1&2	LS	1	$10,000	$10,000
	Recoat platforms / stairway between Digester 2&3	EA	2	$50,000	$100,000
	New storm drain between digesters and primary clarifier	LF	50	$180	$9,000
	Concrete flatwork at digesters	CY	20	$2,500	$50,000
	Equipment pad digested sludge pump	CY	6	$2,500	$15,000
Mechanical					**$2,360,000**
	New mech mixing pumps - Digester 1&2	EA	3	$125,000	$375,000
	New mixing piping, valves, actuators - Digester 1&2	LS	1	$500,000	$500,000
	Sludge Piping, Valves and Actuators	LS	1	$125,000	$125,000
	Digested Sludge Pumps	EA	3	$250,000	$750,000
	TWAS and Digested Sludge 6" Pipelines	LF	800	$150	$120,000
	New bypass from Digester 1 to 3	LF	300	$300	$90,000
	Waste gas burner and piping	LS	1	$400,000	$400,000
EI&C					**$0**
	No EI&C noted	LS	0	$0	$0
				Subtotal	**$ 5,684,000**
				General Requirements (10%)	$ 569,000
				Contingency (30%)	$ 1,706,000
				Construction Total:	**$ 7,959,000**
					Soft Costs:
				Engineering (10%)	$ 796,000
				Construction Management (10%)	$ 796,000
				Engineering Services During Construction (2%)	$ 160,000
				Environmental (2%)	$ 160,000
				Administration (2%)	$ 160,000
				Project Total	**$10,031,000**

WWTP-6: Gravity Belt Thickeners

Major Capital Cost Element	Unit	Qty	Unit Cost	Net Cost
Demo	**Year**			**$205,000**
GBT 1, GBT piping, air compressors, polymer piping & pump #2, TWAS temporary piping	LS	1	$80,000	$80,000
Internal supports, structures and steel frames	LS	1	$125,000	$125,000
Sitework/Civil				**$100,000**
Bypassing	LS	1	$50,000	$50,000
Dewatering	LS	1	$50,000	$50,000
Structural				**$614,375**
Rehab concrete slabs under GBTs 1&2	EA	2	$15,000	$30,000
Replacing the building roof decking	SF	1000	$100	$100,000
Rehab shade structure	SF	1875	$125	$234,375
New shade structure - Totes and BFPs	SF	2000	$125	$250,000
Mechanical				**$1,305,000**
New Gravity Belt Thickener 1	EA	1	$1,000,000	$1,000,000
Air Compressors	EA	2	$40,000	$80,000
* Annuali polymer feed pump #2	EA	1	$50,000	$50,000
Piping, Valves and Actuators (GBT, polymer, TWAS)	LS	1	$150,000	$150,000
Mount (2) TWAS pumps	CY	10	$2,500	$25,000
EI&C				**$0**
No EI&C noted	LS	0	$0	$0
			Subtotal	**$ 2,224,375**
			General Requirements (10%)	$ 223,000
			Contingency (30%)	$ 668,000
			Construction Total:	**$ 3,116,000**
				Soft Costs:
			Engineering (10%)	$ 312,000
			Construction Management (10%)	$ 312,000
			Engineering Services During Construction (2%)	$ 63,000
			Environmental (2%)	$ 63,000
			Administration (2%)	$ 63,000
			Project Total	**$3,929,000**

WWTP-7: Dewatering

Major Capital Cost Element	Unit	Qty	Unit Cost		Net Cost
Demo	**Year**				**$170,000**
Belt press #1	LS	1	$10,000		$10,000
Concrete pads under belt presses	SF	2	$5,000		$10,000
Internal Supports, structures and steel frames	LS	1	$150,000		$150,000
Sitework/Civil					**$100,000**
Bypassing	LS	1	$50,000		$50,000
Dewatering	LS	1	$50,000		$50,000
Structural					**$492,000**
Concrete pads under belt presses	CY	20	$2,500		$50,000
Replace belt press access ladders	EA	2	$15,000		$30,000
New shade structure - Totes and BFPs	SF	2000	$125		$250,000
Sludge drying bed 209'x209'x 0.5'	CY	810	$200		$162,000
Mechanical					**$1,100,000**
Belt press #1	EA	1	$1,100,000		$1,100,000
*** Annualized cost for Gravity Belt Thickeners and Belt Filter Press (Dewatering) does not include**					**$0**
No EI&C noted	LS	0	$0		$0
			Subtotal	**$**	**1,862,000**
			General Requirements (10%)	$	187,000
			Contingency (30%)	$	559,000
			Construction Total:	**$**	**2,608,000**
					Soft Costs:
			Engineering (10%)	$	261,000
			Construction Management (10%)	$	261,000
			Engineering Services During Construction (2%)	$	53,000
			Environmental (2%)	$	53,000
			Administration (2%)	$	53,000
			Project Total		**$3,289,000**

WWTP-8: Operations Building

Major Capital Cost Element	Unit	Qty	Unit Cost		Net Cost
Demo	Year			**$**	**200,000**
Existing Building	LS	1	$200,000	$	200,000
New Building (4,000 SF)				**$**	**3,968,333**
Structural and Arch	SF	4000	$833	$	3,333,333
Mechanical (Plumbing & HVAC)	SF	4000	$40	$	160,000
Electrical	SF	4000	$20	$	80,000
Furnishing	SF	4000	$20	$	80,000
Laboratory Facilities	SF	4000	$40	$	160,000
New Asphalt Parking lot	SF	3000	$10	$	30,000
New Shade Structure - Backhoe Dump Truck	SF	1000	$125	$	125,000
			Subtotal	**$**	**4,168,333**
			General Requirements (10%)	$	417,000
			Contingency (30%)	$	1,251,000
			Construction Total:	**$**	**5,837,000**
lude					*Soft Costs:*
			Engineering (10%)	$	584,000
			Construction Management (10%)	$	584,000
			Engineering Services During Construction (2%)	$	117,000
			Environmental (2%)	$	117,000
			Administration (2%)	$	117,000
			Project Total		**$7,356,000**

WWTP-9: Operations Building ADA Compliance

Major Capital Cost Element	Unit	Qty	Unit Cost	Net Cost
ADA Compliance				
Ramp installation (concrete, handrails)	LS	2	$15,000	$ 30,000
Door threshold adjustments	EA	6	$2,000	$ 12,000
Exterior signage and striping	LS	1	$5,000	$ 5,000
Widening doors (32" clear opening)	EA	6	$5,000	$ 30,000
Lever handle replacement	EA	6	$2,000	$ 12,000
Lowering switches, thermostats, controls	LS	1	$5,000	$ 5,000
Adjusting counter heights	LS	1	$10,000	$ 10,000
Accessible parking space with striping	EA	1	$5,000	$ 5,000
Van-accessible signage	EA	1	$2,000	$ 2,000
Interior signage	LS	1	$2,000	$ 2,000
Minor wall modifications for clearances	LS	1	$10,000	$ 10,000
Restroom ADA Upgrade				
Demo and disposal	LS	1	$10,000	$ 10,000
Framing and drywall	LS	1	$20,000	$ 20,000
Plumbing relocation and fixtures	LS	1	$25,000	$ 25,000
Electrical	LS	1	$10,000	$ 10,000
Finishes (tile, flooring, paint)	LS	1	$12,000	$ 12,000
ADA accessories (grab bars, dispensers, mirrors)	LS	1	$5,000	$ 5,000
			Subtotal	**$ 205,000**
			General Requirements (10%)	$ 21,000
			Contingency (30%)	$ 62,000
			Construction Total:	**$ 288,000**
lude				*Soft Costs:*
			Architechture and Engineering (31%)	$ 90,000
			Construction Management (15%)	$ 44,000
			Engineering Services During Construction (2%)	$ 6,000
			Permitting and Inspections (5%)	$ 15,000
			Environmental (2%)	$ 6,000
			Administration (2%)	$ 6,000
			Project Total	**$455,000**

City of El Centro
2025 Sewer Master Plan Update
Recommended Additional Improvement Projects Cost Summary

Project ID	Project Name	Description	Justification	Total Project Cost (2025 $)
AD-1	Brick Sewer Study	CCTV of all possible Brick sewers in the City's collection system.	Brick sewer pipeline segments are at risk of collapse due to material and old age.	$ 172,000
AD-2	Cybersecurity Vulnerability Assessment	This study should evaluate the vulnerability of the City's wastewater treatment facilities, SCADA systems, and data networks to unauthorized access,	Given the increasing frequency of cyberattacks targeting public infrastructure across the nation, it is recommended that the City include a Cybersecurity Study in its Capital	$ 198,000
AD-3	Sewer System Survey and GIS Update	Perform full sewer collection system survey over 5-years and update City sewer GIS.	Build a complete, accurate GIS of the sewer collection system, including manhole inverts, ground surface elevations, and confirmed pipeline diameters.	$ 984,000
			TOTAL:	**$ 1,354,000**

AD-1: Brick Sewer Study

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Sewer Study of of all possible Brick sewer lines (CCTV).	EA	1	$ 100,000	$ 100,000
				Subtotal	**$ 100,000**
				General Requirements (10%)	$ 10,000
				Contingency (30%)	$ 30,000
				Construction Total:	**$ 140,000**
				Soft Costs (Medium Project):	
				Engineering (30%)	$ 30,000
				Administration (2%)	$ 2,000
				Project Total	**$172,000**

AD-2: Cybersecurity Vulnerability Assessment

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Comprehensive Cybersecurity Vulnerability Assessmnet Assessment (multiple facilities, full SCADA + IT network)	EA	1	$ 150,000	$ 150,000
				Subtotal	**$ 150,000**
				Contingency (30%)	$ 45,000
				Construction Total:	**$ 195,000**
				Soft Costs (Small Project):	
				Administration (2%)	$ 3,000
				Project Total	**$198,000**

AD-3: Sewer System Survey and GIS Update

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Survey of Complete Sewer System Manholes over 5 Year Period	EA	1,982	$ 325	$ 644,150
2	Field Survey Plans + Update GIS	LS	1	$ 100,000	$ 100,000
				Subtotal	**$ 745,000**
				Contingency (30%)	$ 224,000
				Construction Total:	**$ 969,000**
				Soft Costs (Small Project):	
				Administration (2%)	$ 14,900
				Project Total	**$984,000**

Water Master Plan Update

City of El Centro

JANUARY 2026

Prepared for:

CITY OF EL CENTRO
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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
afy	acre-feet per year
ac	acre
ACP	asbestos cement pipe
ADD	average day demand
ADU	accessory dwelling unit
CCR	Consumer Confidence Report
CI	cast iron
CIP	Capital Improvement Program
City	City of El Centro
CMLC	concrete mortar lined and coated
COG	Council of Governments
DBP	disinfection byproducts
DI	ductile iron
du or DU	dwelling unit
EPA	U.S. Environmental Protection Agency
EPS	Extended Period Simulation
fps	feet per second
ft	feet
FTE	full-time employee
GIS	Geographic Information System
gpd	gallons per day
gpd/acre	gallons per day per acre
gpd/DU	gallons per day per dwelling unit
HCF	hundred cubic feet
IID	Imperial Irrigation District
LF	linear feet
LVSP	Lithium Valley Specific Plan
MCL	Maximum Contaminant Level
MDD	Maximum Day Demand
MinMD	Minimum Month Demand
MG	million gallons
MGD	million gallons per day
PFAS	per- and polyfluoroalkyl substances
PHD	Peak Hour Demand
PHG	Public Health Goal
PVC	polyvinyl chloride
PRV	pressure reducing valve
PS	pump station
RCP	reinforced concrete pipe
RHNA	Regional Housing Needs Allocation

Acronym/Abbreviation	Definition
RWPS	Raw Water Pump Station
SCADA	supervisory control and data acquisition
SCAG	Southern California Association of Governments
SWRCB	State Water Resources Control Board
UNK	unknown
UWMP	Urban Water Management Plan
VFD	variable frequency drive
WTP	Water Treatment Plant

Executive Summary

This Executive Summary provides highlights from the Water Master Plan report, summarizing the key findings and recommendations of each section. The Executive Summary (ES) consists of the following sections:

- ES-1 Key Project Objectives
- ES-2 Service Area and System Overview
- ES-3 Existing and Future Demand Projections
- ES-4 Water System Hydraulic Model Updates
- ES-5 Water System Capacity Analysis Summary
- ES-6 Water System Condition Assessment Summary
- ES-7 Water Quality Analysis Summary
- ES-8 Capital Improvement Program (CIP) Recommendations

ES-1 Key Project Objectives

A comprehensive study of the City's water system was last completed in February 2008 and published as the 2008 Water Master Plan. In September 2024, the City of El Centro (City) retained Dudek to prepare the City's water system master plan. The goal of this project was to develop a clear understanding of the water system needs, both existing and future, and establish a master plan that supports those needs.

This 2025 Water Master Plan seeks to address the following key objectives:

- Evaluate the City's existing water system to document current infrastructure, assess operational performance, and confirm system reliability under existing and projected demand conditions.
- Update and calibrate the City's hydraulic model to accurately represent current facilities and support evaluation of system capacity, pressure, and fire flow performance.
- Project future water demands through 2045 based on population growth, land use trends, and planned development, ensuring that the system can reliably meet future service requirements.
- Assess the condition of major facilities including the Water Treatment Plant (WTP), La Brucherie Pump Station, reservoirs, and key transmission mains to identify deficiencies, maintenance priorities, and replacement needs.
- Evaluate water quality trends and regulatory compliance to ensure continued delivery of safe and reliable potable water in accordance with state and federal standards.
- Develop a comprehensive Capital Improvement Program (CIP) that prioritizes projects to address capacity, redundancy, and condition deficiencies while supporting operational reliability and long-term sustainability.
- Identify staffing and funding needs to maintain efficient system operation and support implementation of the recommended capital improvement projects.

ES-2 Service Area and System Overview

The City of El Centro's water system serves over 10,000 connections through 174 miles of pipelines, two booster pump stations, and eight storage reservoirs. Water is sourced from the Imperial Irrigation District and treated at the City's Water Treatment Plant, which has a 21 million gallons per day (MGD) capacity and currently operates at 7 MGD.

The system operates within a single pressure zone due to the city's flat terrain. Most pipelines are 6–12 inches in diameter, with materials including PVC, asbestos cement, and cast iron. Storage includes four treated water tanks and four raw water ponds, primarily located at the WTP site.

Land use is predominantly residential, commercial, and industrial, supporting current and future water demand. Data was compiled from GIS, water models, reports, and City staff input. The extent of the City's water system is shown in **Figure ES.1.**

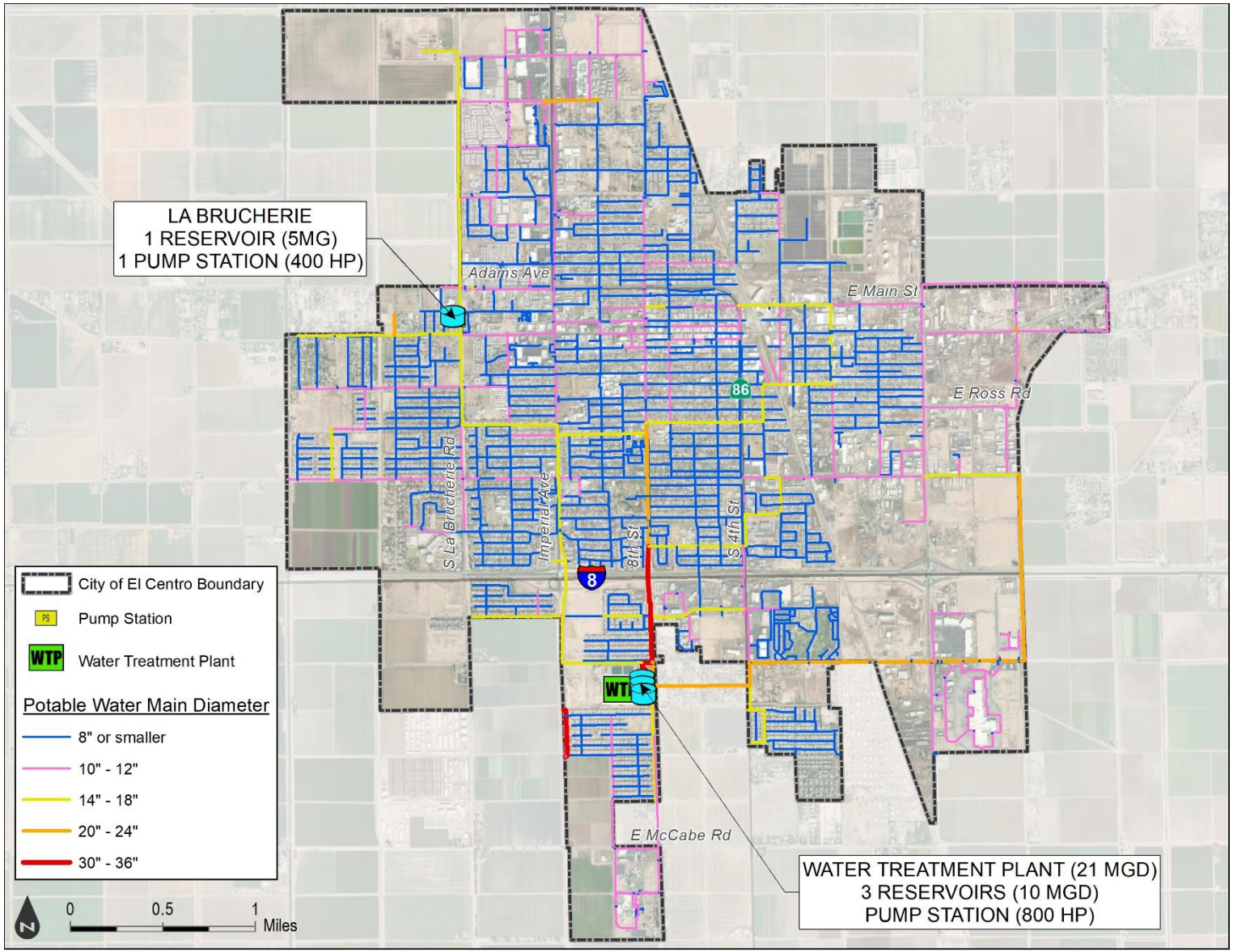

Figure ES-1 Existing Water System Overview

ES-3 Existing and Future Demand Projections

Section 3 presents an evaluation of the City of El Centro's existing and projected water demands through the 2045 planning horizon, based on population growth forecasts, historical and recent water use data, and anticipated development trends. Population projections were developed using data from the City's 2020 Urban Water Management Plan (UWMP) and updated to reflect the City's estimated 2025 population of 44,230. Based on adjusted growth rates consistent with the UWMP, the City's population is projected to increase to approximately 53,903 by 2045, representing a total growth of about 22% over the 20-year period.

An analysis of the City's historical production and billing data shows that average annual water production in 2024 was 7.18 MGD, with an estimated water loss of approximately 17%. This value was adopted as the baseline condition for modeling and planning purposes. Seasonal and diurnal demand patterns were analyzed using SCADA data, resulting in recommended design peaking factors of 1.5 for Maximum Day Demand (MDD) and 2.4 for Peak Hour Demand (PHD). These factors capture the City's typical variations in daily and hourly usage, which peak during the summer months.

Future demand projections were developed for two planning scenarios: **Near-Term (2035)** and **Ultimate (2045).** The Near-Term scenario incorporates 58 planned developments expected to be completed by approximately 2035, including new residential, commercial, industrial, and public facilities. These projects are anticipated to increase average day demand to 8.19 MGD. The Ultimate (2045) scenario assumes an additional 10% increase in demand, consistent with projected population growth and potential development tied to the Lithium Valley Specific Plan. Under this scenario, the average day demand is projected to reach 9.08 MGD.

Overall, the City's water demand is expected to increase moderately over the next two decades, from an existing 7.18 MGD in 2025 to approximately 9.08 MGD by 2045. These projections provide the foundation for subsequent hydraulic modeling and capacity analyses to ensure that the City's water system can continue to meet future service, reliability, and fire flow requirements under anticipated growth conditions.

ES-4 Water System Hydraulic Model Updates

Section 4 summarizes the updates, demand allocation, and calibration of the City's water model to ensure accurate representation of current system conditions for hydraulic and capacity analyses.

Model and Facilities Update: The City's existing hydraulic model was reviewed and updated by Dudek to reflect recent infrastructure improvements. Key updates include incorporation of the 20-inch transmission main along the Alder Canal, extending approximately 5,400 linear feet from East Ross Avenue to Danenberg Drive, and the pipelines constructed near Sperber Road by the County Jail in 2016. These updates align the model with the City's current GIS network, providing an accurate foundation for system performance evaluation.

Demand Update: Customer billing records from 2024, representing an annual average billed demand of 5.95 MGD, were spatially linked to water meter data and assigned to the nearest model junctions. Approximately 95% of records were successfully matched, and the remaining 5% were evenly distributed across all junctions. The difference between billed demand (5.95 MGD) and total water production (7.18 MGD) reflects an estimated 17% unaccounted-for water, encompassing potential physical losses and non-revenue water. 7.18 MGD was used as Existing Annual Average Demand for model calibration and analysis.

Model Calibration: Model calibration utilized multiple data sources, including SCADA flow and pressure data, distributed pressure gauges, and fire flow test results. Adjustments to the La Brucherie Pump Station's operating pressure improved agreement between modeled and observed data, achieving strong alignment in both flow and pressure trends. Comparison with six distributed pressure gauges confirmed modeled pressures were within ±10% of field measurements, demonstrating reliable system-wide representation.

Fire flow calibration initially yielded three of five tests within 12% of measured results. Two locations exhibited higher discrepancies, potentially due to localized field conditions such as closed valves or partial obstructions. These differences are considered isolated rather than indicative of model-wide issues. Continued field verification and additional flow testing are recommended to refine model accuracy and identify potential localized system constraints.

ES-5 Water System Capacity Analysis Summary

Section 5 establishes the design and evaluation criteria used to assess and plan improvements for the City's water system. Key criteria include maintaining a minimum pressure of 40 psi during maximum day demand (MDD) and 20 psi during MDD plus fire flow, with pipeline velocities limited to 5 feet per second (fps) at MDD and 10 fps during MDD plus fire flow. Fire flow requirements, based on California Fire Code and Imperial County Fire Department guidelines, range from 1,000 gallons per minute (gpm) for low-density residential areas to 4,000 gpm for industrial zones.

Chapter 6 presented capacity analysis results of the City's water system, indicating that it is generally well-equipped to meet existing and projected demands across near-term and ultimate planning scenarios. Hydraulic modeling confirms that system pressures remain above 40 psi and pipeline velocities stay below 5 fps under MDD conditions. Fire flow analyses show some deficiencies to be addressed by the CIP projects in Chapter 9.

Assessments of the City's pump stations and storage facilities indicate that existing capacity is sufficient, and no immediate CIP projects are required. To enhance system resilience, it is recommended that the City implement comprehensive emergency response planning, maintain critical spare parts, and evaluate potential temporary supplemental supply connections.

Overall, the City's water system demonstrates adequate hydraulic capacity, pumping capability, and storage to reliably meet both current and projected demands, with targeted operational and planning measures ensuring continued system reliability.

ES-6 Water System Condition Assessment Summary

A comprehensive condition assessment was conducted for the City's New and Old WTP facilities, the La Brucherie Pump Station, reservoirs, and distribution infrastructure.

Key recommendations for the New WTP focus on mechanical and electrical upgrades, including PLC and VFD replacements, power system studies with arc-flash labeling, flood float alarm installations, and replacement of leaking check valves. Overall, most New WTP structures and chemical facilities are in good condition, with no immediate major interventions required.

Significant upgrades are required at the Old WTP, including replacement of distribution pumps, electrical switchgear, standby generators, and structural repairs to slabs, pump supports, and wood platforms. Nearly all electrical equipment, except the generator, has exceeded its useful life. It is recommended that the City abandon the existing pump station and equipment in the Old WTP building and construct a new distribution pump station with new electrical service and standby power to feed the existing Raw Water Pump Station.

La Brucherie Pump Station improvements include new pumps, updated electrical equipment, generator replacement, and valve upgrades.

Reservoirs across the system require recoating, structural repairs, and ladder and hatch replacements, with prioritized projects scheduled over the next 5–10 years.

Pipeline condition assessments identify critical transmission mains on 8th St and Imperial Avenue that have passed useful life, requiring near-term replacement to maintain system reliability.

ES-7 Water Quality Analysis Summary

The City's water quality evaluation from 2018 to 2023 demonstrates consistent compliance with regulatory standards. Historical exceedances of aluminum and iron have trended downward, indicating effective operational adjustments. The State Water Resources Control Board has approved a reduced monitoring frequency for aluminum and iron, now conducted quarterly, confirming that previous water quality concerns have been largely resolved.

PFAS Monitoring and Emerging Contaminants: Emerging contaminants, particularly per- and polyfluoroalkyl substances (PFAS), are a key focus due to evolving federal and state regulations. Recent quarterly PFAS testing in the City's water supply detected no presence of these compounds. To maintain compliance with regulatory standards, the City should discontinue tracer studies and continue PFAS monitoring using EPA Method 533, which provides specific, approved procedures for sampling and analysis.

Regulatory Compliance and Future Considerations: The City remains in compliance with other federal and state requirements, including disinfection byproducts, total coliform, hexavalent chromium, and perchlorate. California's Public Health Goals and forthcoming regulations may require adjustments in monitoring protocols, particularly for PFAS and microplastics. The City's Municipal Code establishes robust protections for public water supply, including cross-connection control and water conservation enforcement, ensuring ongoing compliance with state legislation.

ES-8 CIP Recommendations

Capital Improvement Program (CIP) project recommendations and planning-level cost estimates developed for this study include recommended pipeline, water treatment plant, pump station, and reservoir improvement projects to address capacity, redundancy, and condition deficiencies in the City's water system. Pipeline projects include both redundancy and fire flow capacity improvements, as well as replacement of aging transmission mains. Water treatment plant projects address mechanical, electrical, and structural upgrades at both the new and old WTP facilities. Pump station and reservoir projects focus on maintaining reliable operation through equipment replacement, structural repairs, and system upgrades.

A detailed staffing plan was also developed to support effective operations, maintenance, and management of the City's water system, identifying additional personnel needed to ensure safe and efficient water service. Potential

funding sources for the CIP projects were identified, including State and Federal programs. All recommended projects and associated planning-level cost estimates are summarized in **Table ES-1.**

Table ES.1. Project Cost Summary Table

Improvement Type	Total Project Cost ($)	Project Cost ($)			
		FY 2026-30	FY 2031-35	FY 2036-40	FY 2041-46
Pipelines	$25,392,000	$8,114,000	$2,167,000	$17,018,000	$17,585,000
New WTP	$12,464,000	$—	$9,767,000	$559,000	$5,234,000
Old WTP	$3,780,000	$—	$—	$6,496,000	$—
Pump Stations	$16,172,000	$12,178,000	$4,371,000	$3,746,000	$—
Reservoirs	$16,500,000	$730,000	$9,732,000	$1,765,000	$14,870,000
Valves	$624,000	$442,000	$309,000	$—	$—
Totals:	**$76,932,000**	**$21,464,000**	**$26,346,000**	**$29,584,000**	**$37,689,000**

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1 Introduction

The following section summarizes the objectives of the 2025 Water Master Plan Update (2025 Update) for the City of El Centro (City). The section includes an overview of the City's previous master planning efforts and existing water service area to provide context for the evaluation and recommendations provided in the 2025 Update. The section also outlines the structure of the report with a brief description of each section as a guide for understanding the development and findings of the 2025 Update.

1.1 Background and Master Plan Objectives

The City of El Centro last completed a comprehensive evaluation of its water system in February 2008, resulting in the publication of the 2008 Water Master Plan. Since that time, the City has experienced changes in land use, development patterns, water demands, and regulatory requirements—necessitating an updated and forward-looking planning document.

The purpose of this update is to provide a current assessment of the municipal water system's performance, capacity, and future needs. This planning effort is intended to build on previous studies, integrate newly available data, and serve as a foundational tool to guide future investments in the City's water infrastructure.

The primary objectives of this Master Plan Update are to:

- Evaluate the City's existing water system to document current infrastructure, assess operational performance, and confirm system reliability under existing and projected demand conditions.
- Update and calibrate the City's hydraulic model to accurately represent current facilities and support evaluation of system capacity, pressure, and fire flow performance.
- Project future water demands through 2045 based on population growth, land use trends, and planned development, ensuring that the system can reliably meet future service requirements.
- Assess the condition of major facilities including the Water Treatment Plant (WTP), La Brucherie Pump Station, reservoirs, and key transmission mains to identify deficiencies, maintenance priorities, and replacement needs.
- Evaluate water quality trends and regulatory compliance to ensure continued delivery of safe and reliable potable water in accordance with state and federal standards.
- Develop a comprehensive Capital Improvement Program (CIP) that prioritizes projects to address capacity, redundancy, and condition deficiencies while supporting operational reliability and long-term sustainability.
- Identify staffing and funding needs to maintain efficient system operation and support implementation of the recommended capital improvement projects.

This Master Plan Update is intended to provide a data-driven, objective-based roadmap to help the City maintain a resilient, efficient, and reliable water system well into the future.

1.2 Previous Master Plans

The previous Water System Master Plan was completed in February 2008. It was based on planning assumptions and operational conditions that have since changed, requiring this update. The 2008 plan presented the current and projected future water demands, using the land use designations as of 2008: average day demand (ADD) of 8.7 MGD (2008) and 28 MGD (Build-out). The plan also addressed the 2008 raw water supply capacity (52.5 MG), WTP capacity (15 MGD) and reservoir tank storage capacity (10 MG). This information was then used to evaluate the City's water system capacity and improvement needs through a hydraulic modeling study.

The City's 2008 Water Master Plan involved the development of an H2OMAP Water hydraulic model of the City's water system under steady state conditions. Due to missing data, the model was not calibrated for Extended Period Simulation (EPS) conditions and was instead calibrated using fire flow tests only.

The calibrated 2008 model was utilized to conduct capacity analyses for both the existing and future (2015 and Build-out) systems. Recommended improvement projects were categorized in three phases, as listed in Table 8.6, Detailed Capital Improvement Program, of the 2008 Water Master Plan.

The 2008 Water Master Plan identified and prioritized forty-seven Capital Improvement Program (CIP) projects for implementation over a six-year horizon, with a total estimated cost of $65.06 million (in 2008 dollars). By 2025, the City had completed CIP Projects #27 and #28, as outlined in Table 8.6 of the 2008 Plan. These projects—the construction of a new 21-million-gallons-per-day (MGD) Water Treatment Plant and installation of a backup power generator at the new facility—were completed in 2010 and represent significant investments in the City's water infrastructure.

Since completion of the 2008 Master Plan, the City has also constructed a 20-inch, 5,400-foot water line along the Alder Canal from East Ross Avenue to Danenberg Drive. This improvement was recommended in transmission main breaks analysis of the 2008 Master Plan to enhance system redundancy and to eliminate areas being supplied by a single dead-end pipeline. Additionally, pipelines near Sperber Road adjacent to the County Jail were constructed to accommodate the increased demand in the area.

1.3 Service Area Overview

The City of El Centro is located in Imperial County, in the southeastern region of Southern California. Geographically, the City lies approximately 11 miles north of the U.S.–Mexico border, 245 miles west of Phoenix, Arizona, and 120 miles east of San Diego, making it a key urban center in the Imperial Valley. El Centro serves as the county seat and is the most populous city in Imperial County. Regional access to the City is provided by Interstate 8, State Route 86, and State Route 111, making it a transportation and commercial hub for the surrounding region. **Figure 1-1** provides a regional map showing the City's location within Imperial County and Southern California.

The City encompasses a total area of approximately 11 square miles and, as of 2025, has an estimated population of 44,000. It is surrounded by extensive agricultural land that supports year-round crop production across the Imperial Valley. While government services and commercial trade have emerged as the dominant employment sectors over the past four decades, agriculture continues to play a vital economic and cultural role in the region. According to the 2023 Imperial County Agricultural Crop & Livestock Report, agricultural operations in Imperial County generated over $2 billion in gross value in that year alone, underscoring the industry's continued significance.

The City's potable water system provides service to the entire incorporated area and is designed to meet both domestic and fire protection needs. As of 2025, the system serves an estimated 44,000 residents through 10,166 active metered connections. The water system infrastructure includes approximately 157 miles of distribution and transmission pipelines, two booster pump stations, and four reservoirs used for the storage of treated water. These facilities work together to deliver reliable service across the City's service area.

Figure 1-2 presents the existing potable water service area and major facilities, including treatment, storage, and pumping infrastructure, as well as key distribution pipelines.

1.4 Report Organization

This Water Master Plan Update report is organized into the following chapters:

- **Chapter 1 Introduction** describes the Master Plan Update background, objectives, scope of work, and report organization, key characteristics of the distribution system and service area.
- **Chapter 2 Existing System Description** summarizes the existing land use and current water system infrastructure components.
- **Chapter 3 Existing and Future Demand Projections** analyzes existing water demands and summarizes anticipated growth in the system, and additionally presents the demands used in the future capacity analysis scenarios.
- **Chapter 4 Hydraulic Model Updates** includes the facilities and demand update in the hydraulic model and a description of the calibration process.
- **Chapter 5 Design and Evaluation Criteria** presents the design criteria for pipelines, pump stations, and storage facilities that form the basis of the capacity analysis.
- **Chapter 6 Water System Capacity Analysis** provides the results of the existing and future system capacity analyses.
- **Chapter 7 Condition Assessment** details the findings of the condition assessments performed on the City's Water Treatment Plant, pump stations and four steel water storage reservoirs.
- **Chapter 8 Water Quality Analysis** evaluates the City's water quality data to identify contaminants of concern and anticipate future sampling and treatment needs.
- **Chapter 9 Capital Improvements Program** provides a summary of the recommended system improvements and presents the cost estimates.

The following documents are included as Appendices to the 2025 Water Master Plan Update report:

- **Appendix A** Near Term Development Projects
- **Appendix B** Detailed Project Costs
- **Appendix C** Structural Assessment Technical Memorandum (Kelsey)
- **Appendix D** Staffing Plan

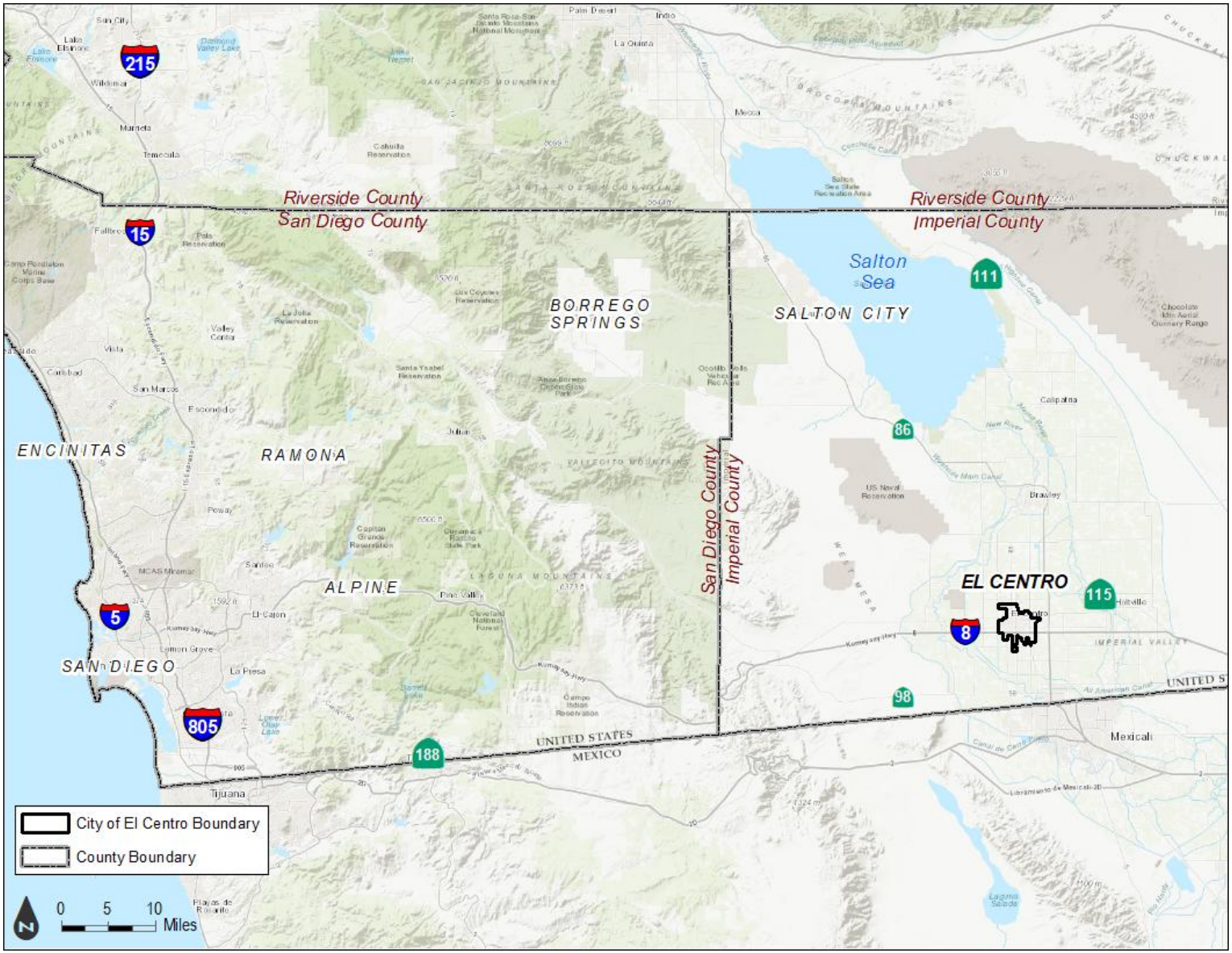

Figure 1-1 Regional Map

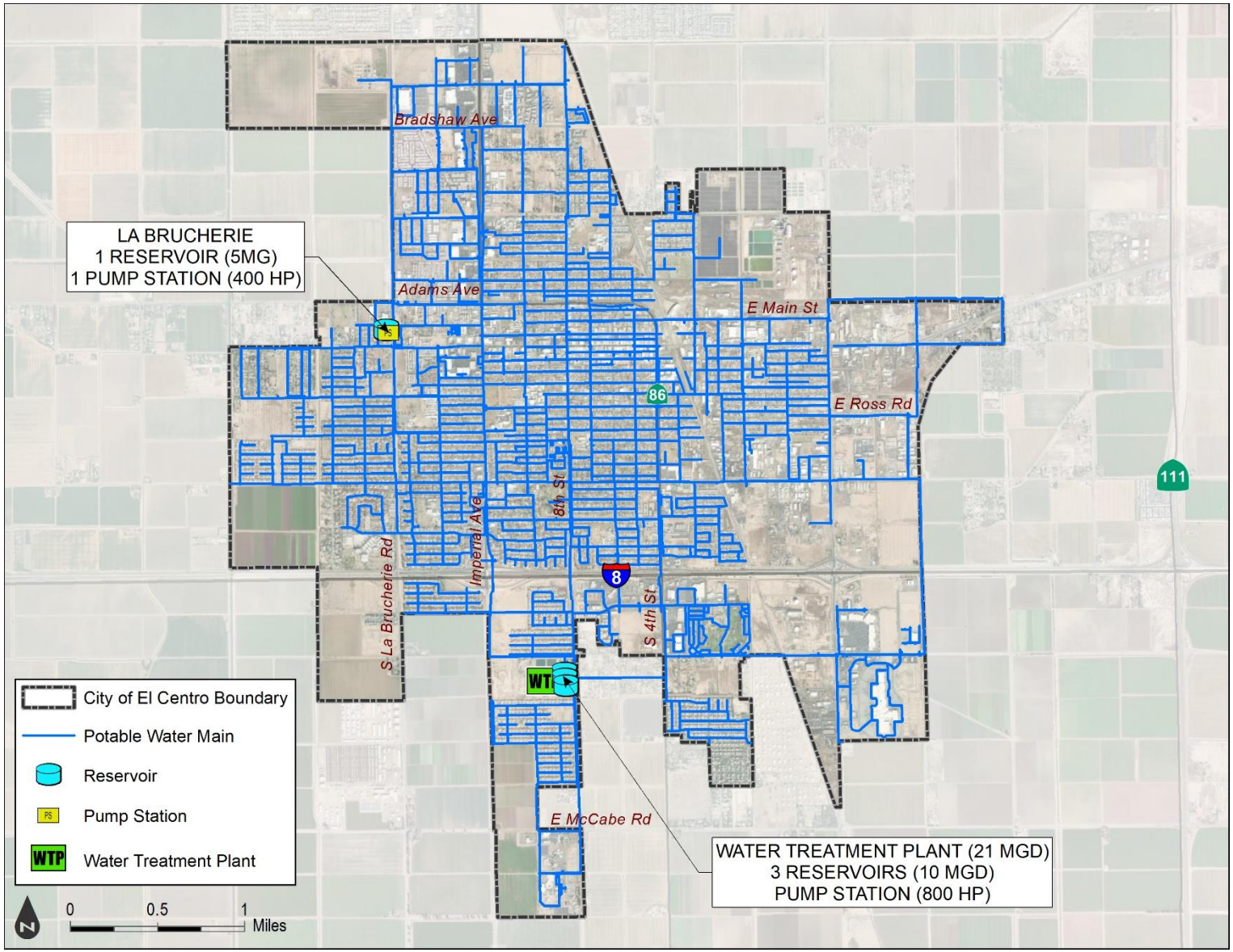

Figure 1-2 Water Service Area Boundary

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2 Existing System Description

The following Existing System Summary section summarizes existing features of the City's water distribution system. The section describes major components of the distribution system, including pipelines, booster pump stations, storage tanks, and the water treatment plant.

A comprehensive understanding of the City's existing water system is essential for capacity evaluation, condition assessment, water quality analysis, and CIP development. In characterizing key elements of the distribution system, the Existing System Description provides a basis for subsequent analyses and empowers the City to make well-informed decisions regarding system improvements or modifications.

2.1 Water System Summary

The City provides water service to 10,166 active connections within the City limits through approximately 174 miles of pipelines, 8 storage reservoirs (4 raw ponds and 4 treated tanks), and 2 booster pump stations. Due to the City's flat topography, ranging from 20 to 51 feet below mean sea level, there is only one pressure zone. Water is produced at the City-owned Water Treatment Plant (WTP), which is permitted to treat up to 21 MGD water from All American Canal This new WTP, built in 2010, is to replace the old WTP with 15 MGD capacity at the same site. This single pressure zone is supplied by two booster stations: one from the WTP and the other from the La Brucherie site. **Figure 2-1** shows a schematic of the existing water system operating under a single pressure zone. The following sections provide more detail on each element of the system.

2.2 Pipelines

The existing water system consists of approximately 157 miles of active pipelines, including 18.6 miles of transmission mains (18 inches or larger in diameter), and 138 miles of distribution mains. **Table 2-1** provides a breakdown of the pipelines by age, material, and length. Pipe diameters range from 4- to 36-inch, as summarized in **Table 2-2**. The majority of the pipes (62%) are 6 or 8 inches in diameter, with 12-inch pipes accounting for an additional 22% of the water system. **Figure 2-2** shows a map of the City's water pipelines, color coded by diameters.

Table 2-1. Pipeline Summary by Age, Material, and Length[1]

Age (years)	Length of Pipe (ft)1						% of Total
	ACP	PVC	CIP	STL	Other[2]	Total	
UNK	66,599	32,620	18,965	1,993	587	120,764	14.5%
<10	68	9,388	0	0	165	9,621	1.2%
11-20	0	39,565	1,305	0	0	40,870	4.9%
21-30	4,729	152,618	3,131	2,281	620	163,379	19.7%
31-40	36,378	74,153	1,262	0	529	112,321	13.5%
41-50	100,417	398	960	1,152	1,820	104,747	12.6%
51-60	121,004	996	4,435	7	0	126,443	15.2%
61-70	108,864	0	634	3,262	0	112,759	13.6%
71-80	33,237	0	2,858	0	81	36,175	4.4%
81-90	1,372	0	2,970	0	0	4,342	0.5%

Table 2-1. Pipeline Summary by Age, Material, and Length[1]

Age (years)	Length of Pipe (ft)1						% of Total
	ACP	PVC	CIP	STL	Other[2]	Total	
Totals	472,667	309,738	36,520	8,695	3,803	831,422	100.0%
% of Total	56.85%	37.25%	4.39%	1.05%	0.46%	100.00%	—

Notes:
1 Material type definitions include asbestos cement pipe (ACP), polyvinyl chloride (PVC), cast iron (CI), and steal (STL).
2 Other pipeline materials include ductile iron, concrete, reinforced concrete, galvanized steel, and concrete mortar lined and coated.

Table 2-2. Pipeline Summary by Diameter

Diameter (inches)	Length of Pipe (ft)	% of Total
Unknown	75	0.01%
less than 6	25,121	3.02%
6	201,292	24.21%
8	311,078	37.42%
10	10,084	1.21%
12	185,833	22.35%
18	67,291	8.09%
20	17,624	2.12%
24	6,014	0.72%
30	5,232	0.63%
36	1,779	0.21%
Total	831,422	100.00%

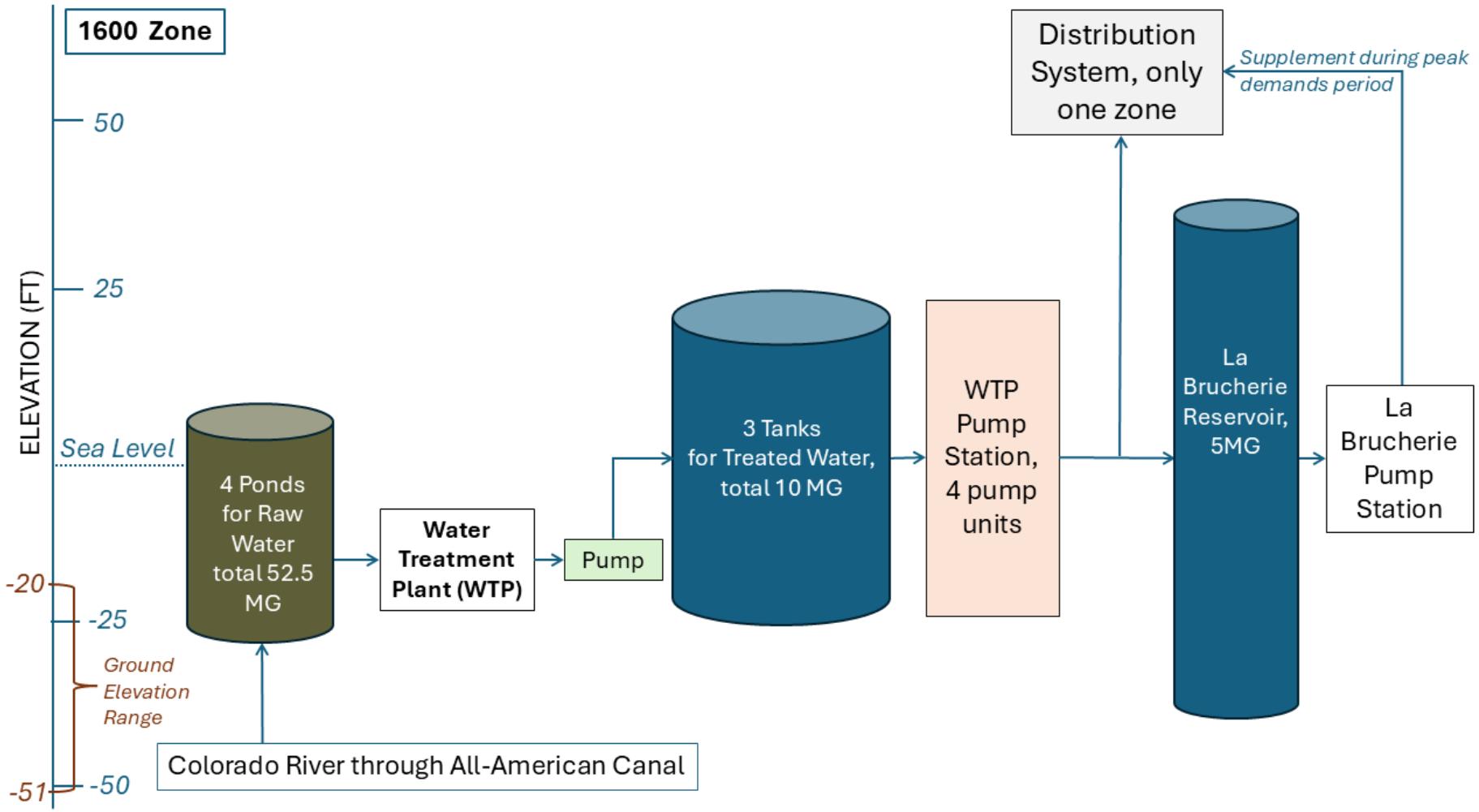


Figure 2-1 Water System Schematic

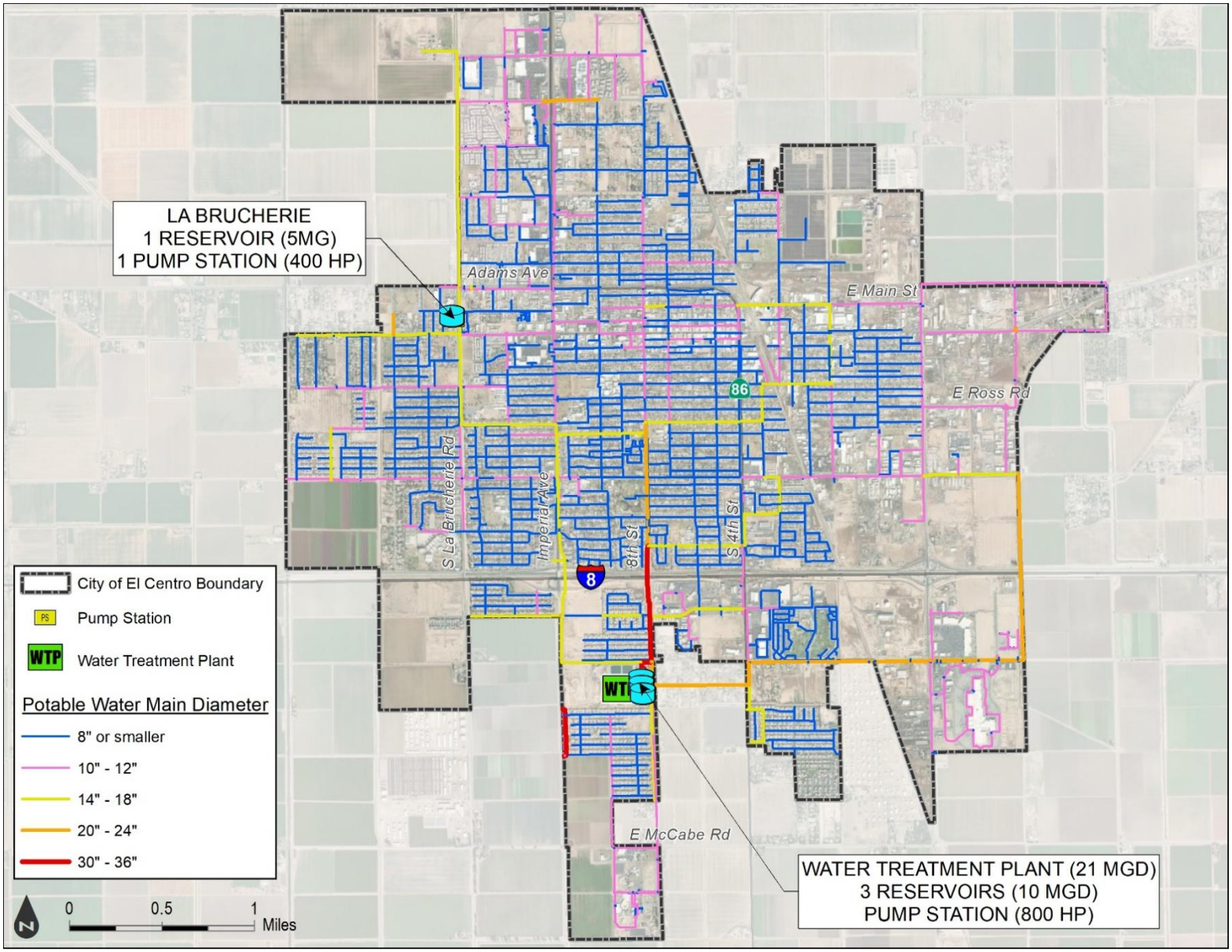


Figure 2-2 Existing Water System by Pipeline Diameter

2.3 Booster Pump Stations

The existing water system includes two (2) active booster pump stations, one at the WTP site and the other at the La Brucherie site. **Table 2-3** and **Figure 2-3** provides general booster station information.

Table 2-3. Booster Station Data

Name	Location	Supply	No. Pumps	Total Capacity (gpm)	Firm Capacity (gpm)
La Brucherie	La Brucherie Ave and Barbara Worth Dr	La Brucherie Tank	2	8,000	4,000
WTP Booster Station	S Clark and W Horne Roads	WTP	4	16,000	12,000



Figure 2-3 La Brucherie Pump Station

2.4 Storage Reservoirs

The City has four (4) potable water storage reservoirs in operation and four (4) raw water storage ponds. Based on discussions with City staff, the ponds were originally constructed as two (2) ponds, one North pond and one South pond, and were subsequently divided into four (4) ponds by means of the construction of a central, North-South embankment with new sloping embankment concrete. The ponds and three of the four reservoirs are located at the WTP. The following **Table 2-4** summarizes the City's storage water reservoirs. The locations of the four tanks are shown graphically in Figure 2-2. Street-view photographs of each tank are shown in **Figure 2-4** through **Figure 2-6.**

Table 2-4. Potable Water Storage Reservoirs

Reservoir Name	Reservoir Type	Volume (MG)	Base Elevation (ft MSL)	HWL (ft MSL)	Diameter (ft)	Install Date
Untreated Water Storage						
Pond 1	Concrete Lined Pond	13.125	n/a	n/a	315-feet wide by 520-feet long	2010[1]
Pond 2	Concrete Lined Pond	13.125	n/a	n/a	315-feet wide by 520-feet long	2010[1]
Pond 3	Concrete Lined Pond	13.125	n/a	n/a	315-feet wide by 520-feet long	2010[1]
Pond 4	Concrete Lined Pond	13.125	n/a	n/a	315-feet wide by 520-feet long	2010[1]
						Total Untreated Storage (MG): 52.5
Treated Water Storage						
Reservoir Tank No. 1	Welded Steel Tank	2.5	- 26	24	133	1955
Reservoir Tank No. 2	Welded Steel Tank	2.5	- 26	24	133	1955
Reservoir Tank No. 3	Welded Steel Tank	5.0	- 26	24	198	1978
La Brucherie	Welded Steel Tank	5.0	- 37	40	150	1993
						Total Treated Storage (MG): 15
						Sum of Untreated and Treated Storage (MG): 67.5

Note:
[1] Two original ponds were built in 1956 and divided into four ponds in 2010.



Figure 2-4 La Brucherie Tank

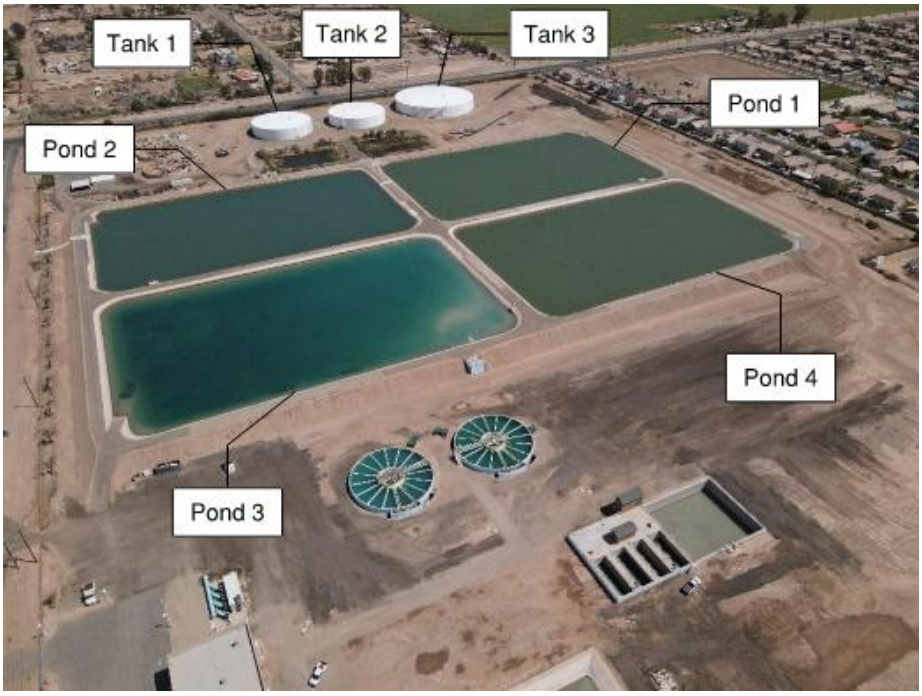


Figure 2-5 Untreated Ponds 1, 2, 3, and 4



Figure 2-6 Treated Reservoir Tanks 1, 2, and 3

2.5 Supply Sources and Interconnections

The Imperial Irrigation District (IID) supplies untreated Colorado River water through the All American Canal in bulk to the cities of El Centro, Imperial, Calexico, Brawley, Holtville, Calipatria, and Westmorland. Each city, including El Centro, processes and distributes its own treated water via separate municipal systems, with no direct interconnections between cities.

2.6 Water Treatment Plant

The City of El Centro owns and operates a WTP located at 1101 Danenberg Drive. The facility treats surface water supplied by the IID and serves as the sole source of potable water for the City.

The existing WTP was constructed in 2010, replacing the former 15-MGD plant at the same location. The upgraded facility has a permitted treatment capacity of approximately 21 MGD. Recent operational data indicate that the plant currently produces an average of 7 MGD, well within its available capacity. The WTP is sufficient to meet existing and projected demands under normal and peak conditions.

The facility employs conventional treatment processes including coagulation, flocculation, sedimentation, filtration, and disinfection to produce safe and reliable drinking water in compliance with state and federal regulations. The treated water is then distributed through a network of transmission and distribution mains that serve residential, commercial, and industrial customers.

2.7 Land Use

Figure 2-7 and **Table 2-5** summarize the existing distribution of land use types within the City, according to 2020 data obtained from the Southern California Association of Government's (SCAG) online database.

Table 2-5. Land Use Summary

Land Use Type	Area (Acres)	% of Total City Area
Rural Residential (RR)	111	1.8%
Low Density Residential (LDR)	2,228	35.1%
Medium Density Residential (MDR)	248	3.9%
High Density Residential (HDR)	433	6.8%
Civic[1]	60	0.9%
Commercial (includes Downtown, General, and Tourist Commercial)	1,246	19.6%
Industrial (includes General and Planned Industrial)	1,242	19.6%
Public Facility[2]	782	12.3%
Totals	**6,349**	**100%**

Notes:

1 Civic land use is defined as local governmental offices, state and federal facilities, professional offices, financial institutions, and other businesses located within the City's civic center area along Main St.

2 Public Facility land use is defined as all land owned by the City, Imperial Irrigation District, or El Centro Regional Medical Center. This land use category also includes public school districts, police and fire stations, parks and recreation facilities, and water and sewer facilities (e.g., treatment plants).

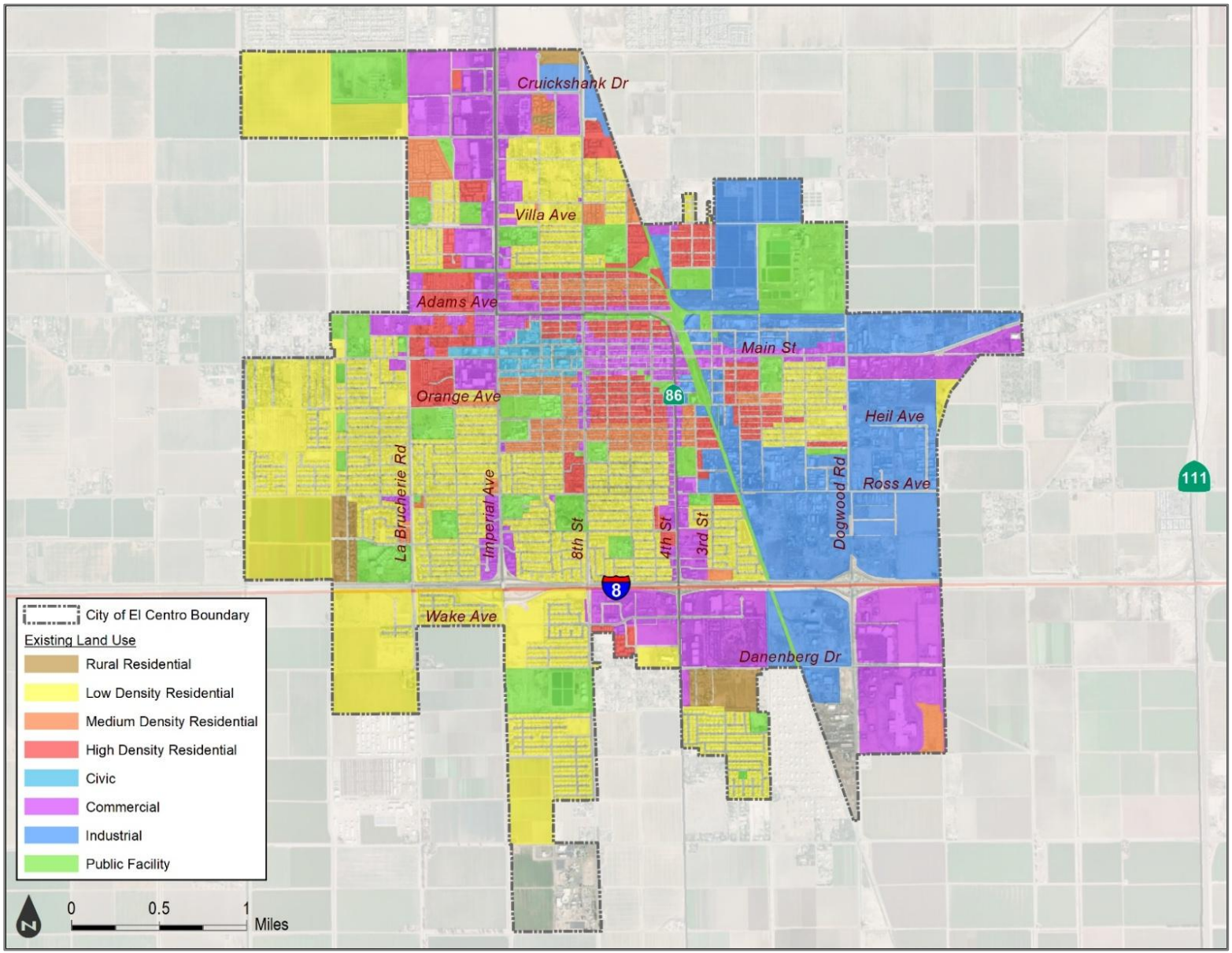


Figure 2-7 Existing Land Use Map

3 Existing and Future Demand Projections

The following section summarizes the current and projected water demands within the City's service area based on population, land use, and planned future developments. The section presents unit water demand generation factors for individual land use types, which serve as the basis for estimating future demands from planned developments.

The accurate representation of existing and future demands is critical for capacity evaluation of the water distribution system under various planning scenarios. By relating demand projections to forecasted population growth and development, the Existing and Future Demand Projections section will support the City in aligning future system improvements to anticipated service needs throughout the distribution system.

3.1 Population Growth Projections

This section describes the City's current population as well as projected populations throughout the planning horizon.

3.1.1 Existing Population

As of 2025, the City's population is estimated at 44,230 (U.S. Census Bureau, QuickFacts), lower than the 48,208 projected in the 2020 Urban Water Management Plan (UWMP).

3.1.2 Projected Population

Using the 2025 population of 44,230 as the baseline, population projections were calculated through 2045 using growth rates from the 2020 UWMP. **Table 3-1** summarizes the anticipated population at five-year intervals.

Table 3-1. Existing and Projected Population Estimates[1]

Year	2025	2030	2035	2040	2045
Population	44,230	46,570	48,642	51,273	53,903

Note:

[1] Five-year growth rates calculated using population estimates in Table 3-1 of the City of El Centro 2020 Urban Water Management Plan (UWMP) dated May 2021.

Under California law, local governments are required to plan for adequate development of housing units to accommodate projected population growth across the state. The California Department of Housing and Community Development (HCD) determines the regional housing need for each Council of Governments (COG). SCAG is a COG encompassing six counties and 191 cities in southern California, including the City of El Centro.

SCAG allocates housing planning goals to each city through the Regional Housing Needs Allocation (RHNA) process, as authorized by the California Government Code. According to SCAG's estimates, the City must identify adequate vacant and non-vacant sites to support the development of 3,442 new dwelling units by 2029.

If all 3,442 units are constructed and occupied by 2029, with an average household size of 3.4 persons per unit (Source: Section V of SCAG's Pre-Certified Local Housing Data for El Centro, April 2021), the City's population is anticipated to increase to approximately 57,360 in 2030 based on a population of 45,657 in 2020. The population increase represents a projected growth rate of approximately 26% between 2020 and 2030, more than double the rate estimated in the 2020 UWMP for the same period.

However, the RHNA process does not require all dwelling units to be constructed and fully occupied by 2029. Rather, each city must complete any necessary zoning changes to allow for residential development should the local housing demand increase. The City has already designated zoning to support development of its allocated units.

3.2 Existing and Historical Demands

The City provided Dudek with water production and billing data for calendar years 2023 and 2024, as summarized in **Table 3-2.** The difference between total production and total billed consumption represents unaccounted-for water, also referred to as water loss. For both 2023 and 2024, the water loss calculated from these records is approximately 17%. This percentage is higher than the industry average, which is typically below 10%, and higher than the City's historical losses prior to 2022.

In addition, Dudek reviewed the City's recent annual water loss audit reports. According to these audits, water loss was estimated at 12% in 2023 and 17% in 2024. While the 2024 audit aligns with the production/billing comparison, the 2023 audit result is noticeably lower. Both values, however, represent a higher loss percentage than in prior years, suggesting a recent upward trend in water loss.

To investigate potential causes, Dudek analyzed statistics from the City's billing records. The total number of active customer accounts and the number of meter readings remained consistent from 2018 through 2024. This consistency indicates that billing records are complete and that missing customer data are unlikely to be a significant factor.

After substantial investigation, Dudek identified several possible reasons contributing to the recent increase in water loss:

- **Leakage in the distribution system –** Aging infrastructure, unreported main breaks, and smaller undetected leaks were not tracked.
- **Meter inaccuracies –** Water meters, especially older ones, are likely under-registering usage. The large pump station meters are particularly prone to wear, and are expected to be under-registering.
- **Unauthorized consumption –** Illegal connections, bypassing of meters, or unpermitted hydrant use can contribute to apparent water loss.
- **Data discrepancies –** Timing mismatches between production reporting and billing cycles, or data entry errors, may inflate apparent losses.

Given the recent variability in reported water loss percentages, Dudek determined that the most appropriate and conservative approach is to base demand on the annual production data from 2024, which averaged 7.18 MGD. This year represents the most current and relatively stable set of operating conditions available for planning purposes.

Table 3-2. Annual Production/Billing Data Review

Year	2023	2024
Average Annual Production (MGD)	6.84	7.18
Average Annual Billing (MGD)	5.70	5.94
Water Loss Percentage (%)	17%	17%

3.2.1 Peaking Factors

The following **Figure 3-1** depicts the seasonal variation of the billing data and the production data. The figure demonstrates that water demand tends to peak in July and drops to a minimum in February.

The 2024 daily production data indicate an average annual production of 7.18 MGD, representing an average day demand (ADD). On July 18, 2024, the maximum daily production reached 10.621 MGD. Consequently, the Maximum Day Demand (MDD) peaking factor was calculated to be 1.5.

The MinMD peaking factor was utilized to determine the minimum month demand (MinMD), which is essential for conducting the water age analysis. This factor was calculated by taking the ratio of the four-year (2021-2024) average water billed usage during the minimum demand months (January through April) to the overall four-year average. The resulting ratio is approximately 0.8.

The SCADA dataset provided hourly flow and pressure values, which were used to perform a system-wide water balance and develop demand peaking factors. The Peak Hour Demand / Maximum Day Demand (PHD/MDD) factor derived from the SCADA dataset was calculated at 1.54, rounded up to 1.6 and applied in the model to reflect observed system peaking behavior. The peaking factors are summarized in **Table 3-3** and the diurnal pattern of the City's water usage is presented in **Figure 3-2.**

Table 3-3. Recommended Design Peaking Factors

Peaking Factor	Value x ADD
Minimum Month Demand (MinMD)	0.80
Maximum Day Demand (MDD)	1.50
Peak Hour Demand (PHD)	2.40

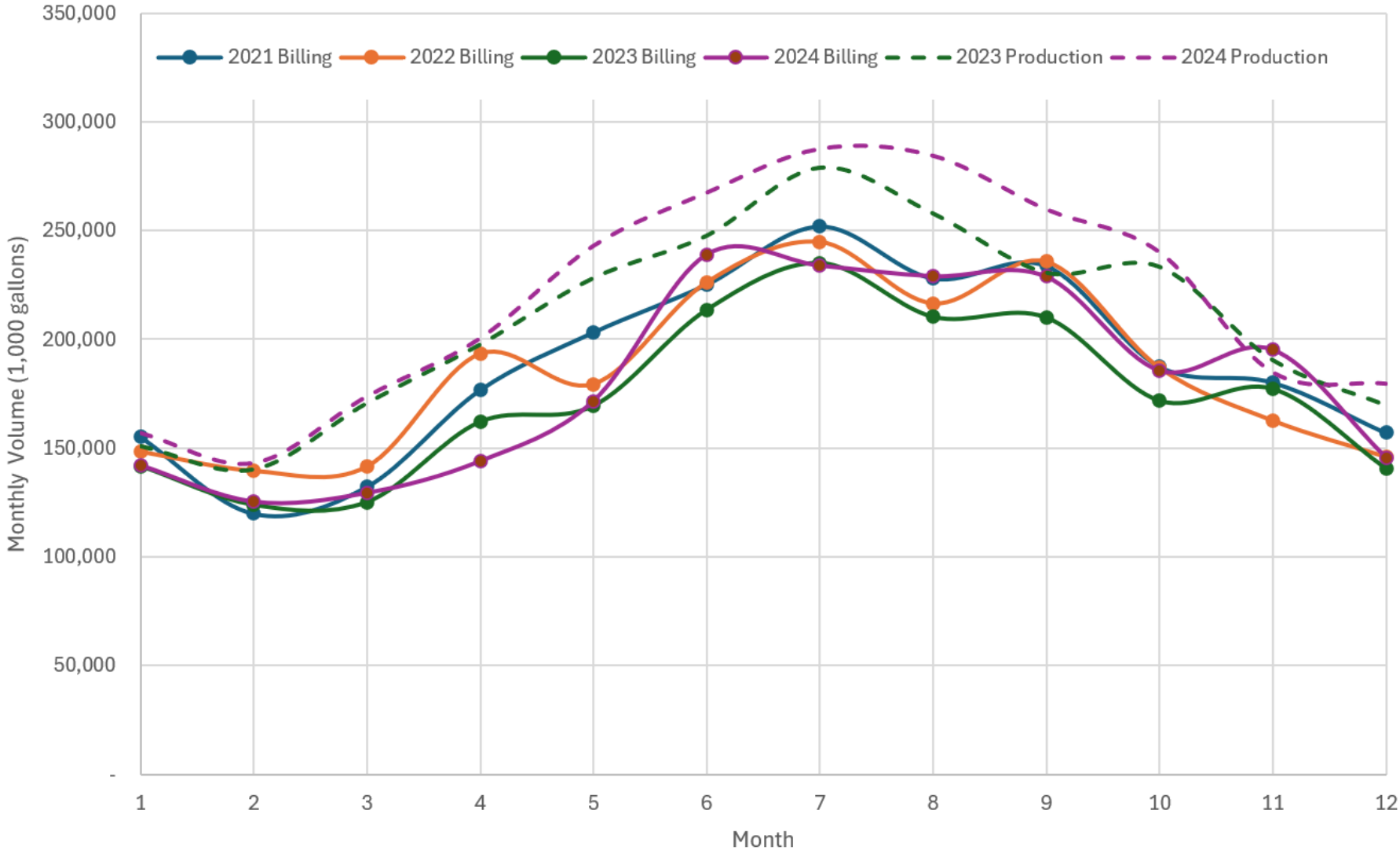


Figure 3-1 Potable Water System Seasonal Variation in Demands

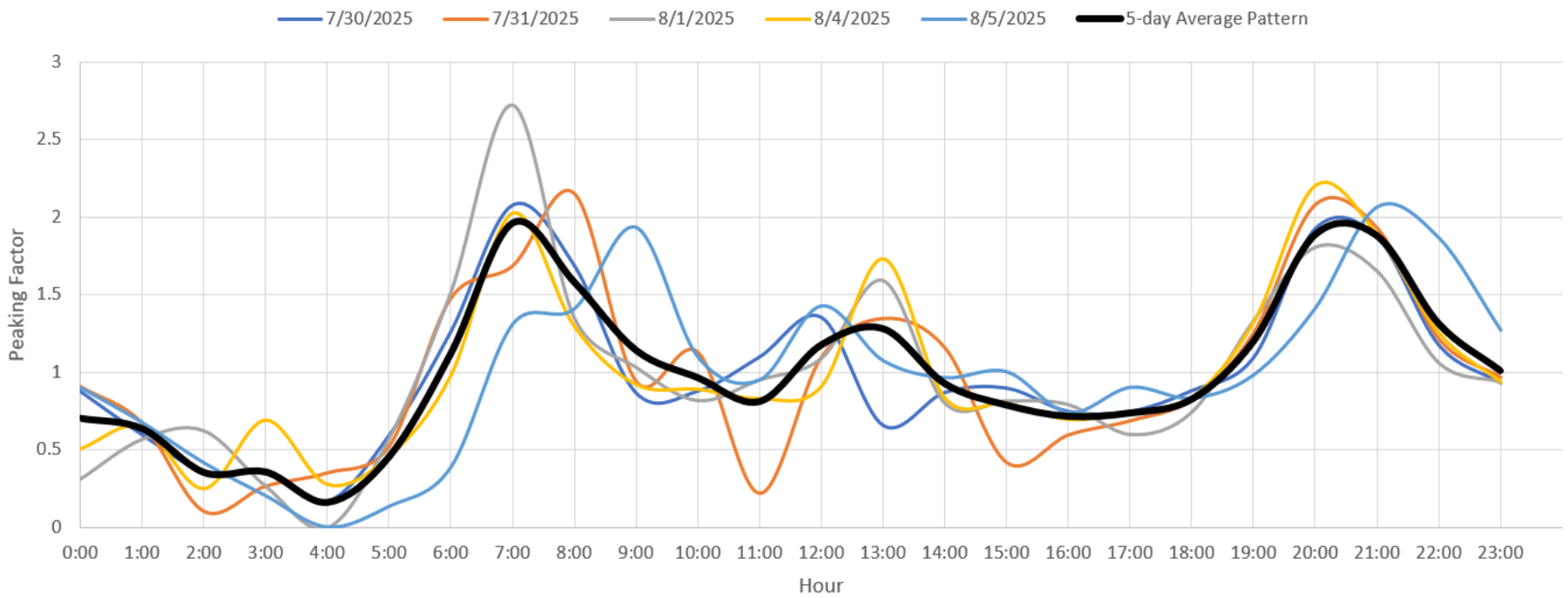


Figure 3-2 System Water Consumption Diurnal Pattern

3.3 Projected Demand Projections

3.3.1 Near-Term Demand

According to data from the City's Planning & Zoning Division, fifty-eight (58) developments are expected to be completed by approximately 2035, with 51 of these anticipated to contribute additional water demand to the City's distribution system. These near-term developments include:

- **Residential:** Seven (7) low- or medium-density subdivisions (tract developments), totaling 1,707 new single-family dwelling units, and high-medium or high-density residential developments (apartments) totaling 923 new dwelling units.
- **Commercial:** Twenty-eight (28) developments, including restaurants, self-storage facilities, medical offices, and four hotels totaling 320 rooms.
- **Industrial:** Eleven (11) developments, including the Dogwood and Villa projects, which are assumed to be split 50% in the near-term scenario and 50% in the ultimate scenario due to partial linkage with the Lithium Valley Project (see Section 3.3.2 for details).
- **Public/Institutional:** Two (2) facilities, including a new police station and highway patrol station.
- **Public Parks:** Three (3) new parks.

Additional near-term water demand for 2045 was estimated based on the land use type of planned developments. The City identified 58 planned developments, with their locations shown in **Figure 3-3** and a complete list provided in **Appendix A.** The 58 developments were categorized by land use type, and their associated water demands were calculated using the unit demand factors from **Table 3-4.**

Table 3-4. Unit Demand Factors

Land Use	GPD/Acre	DU/Acre	GPD/DU
High Density Residential	4000	20	200
Medium Density Residential	2100	10	210
Low Density Residential[1]	1000	4	250
Commercial	1,800	—	—
Industrial	500	—	—
Public Institutional	1,200	—	—
Public Park	700	—	—

Note:
[1] LDR includes Rural Residential Parcels.

Unit demand factors were established by spatially integrating the City of El Centro's 2024 water billing records with the 2020 Southern California Association of Governments (SCAG) land use designations. To enhance the accuracy of the analysis, a range of SCAG land use categories were utilized, including general planning, zoning, and allocation classifications. The SCAG dataset from 2020 represents the most recent available data.

Upon evaluation of the three residential land use types - high, medium, and low density - the observed differences in water demand were less pronounced than anticipated based on industry benchmarks. A detailed review

incorporating aerial imagery and land use overlays revealed that the residential classifications within the City of El Centro did not exhibit significant variation in water usage patterns.

To validate the representativeness of the unit demand factors, a targeted spot-check was conducted using aerial imagery for 212 low-density residential (LDR) meters and 282 high-density residential (HDR) meters. This verification process confirmed the appropriateness of the unit demand factors applied in this report.

The resulting additional demands are summarized in **Table 3-5.**

Table 3-5. Additional Demands from Development Projects

Development Type	Count	No. DUs	Estimated ADD (gpm)
High Density Residential (HDR; 5+ Units)	6	827	128.2
Medium Density Residential (MDR; 2-4 Units)	3	807	118.6
Low Density Residential (LDR; Single Unit)[1]	4	862	149.7
Commercial	28	—	69.1
Industrial	4	—	226.7
Public Institutional	2	—	1.7
Public Park	3	—	9.8
		Total:	**703.65**

Note:
[1] LDR includes Rural Residential Parcels.

3.3.2 Ultimate Demand

The only known developments anticipated to complete construction after 2035 are the Dogwood and Villa development that were assumed to be partially completed in the Ultimate scenario, as noted above. However, by 2045 the City may experience additional growth following implementation of the Lithium Valley Specific Plan (LVSP). In February 2025, Imperial County prepared a draft LVSP defining future land use and zoning changes that will empower the region to effectively marshal the vast lithium deposits identified within the Salton Sea Known Geothermal Resource Area (KGRA).

The timeline and extent of developments within the LVSP and their subsequent impact on the City of El Centro are not yet clearly defined and there is a chance the project will not move forward. Following discussions with City staff, it was decided to assume a 1% rate of growth per year between 2035 and 2045, for an assumed overall growth rate of 10% between the Near-Term and Ultimate scenarios. The 10% growth rate is consistent with the City's projected population increase of 5,261 people from 48,642 in 2035 to 53,903 in 2045, or a 10.8% increase, as shown in Table 3-1.

Therefore, the City's projected population growth between 2035 and 2045 was used to calculate a global multiplier intended to represent the increase in water demands in the Ultimate scenario. The change in water demand generated within the City's service area from the Near-Term (2035) to the Ultimate (2045) scenario can be represented as an increase of approximately 10.8%. A global multiplier was applied to Near-Term demand to create the Ultimate demand to simulate overall densification throughout the City.

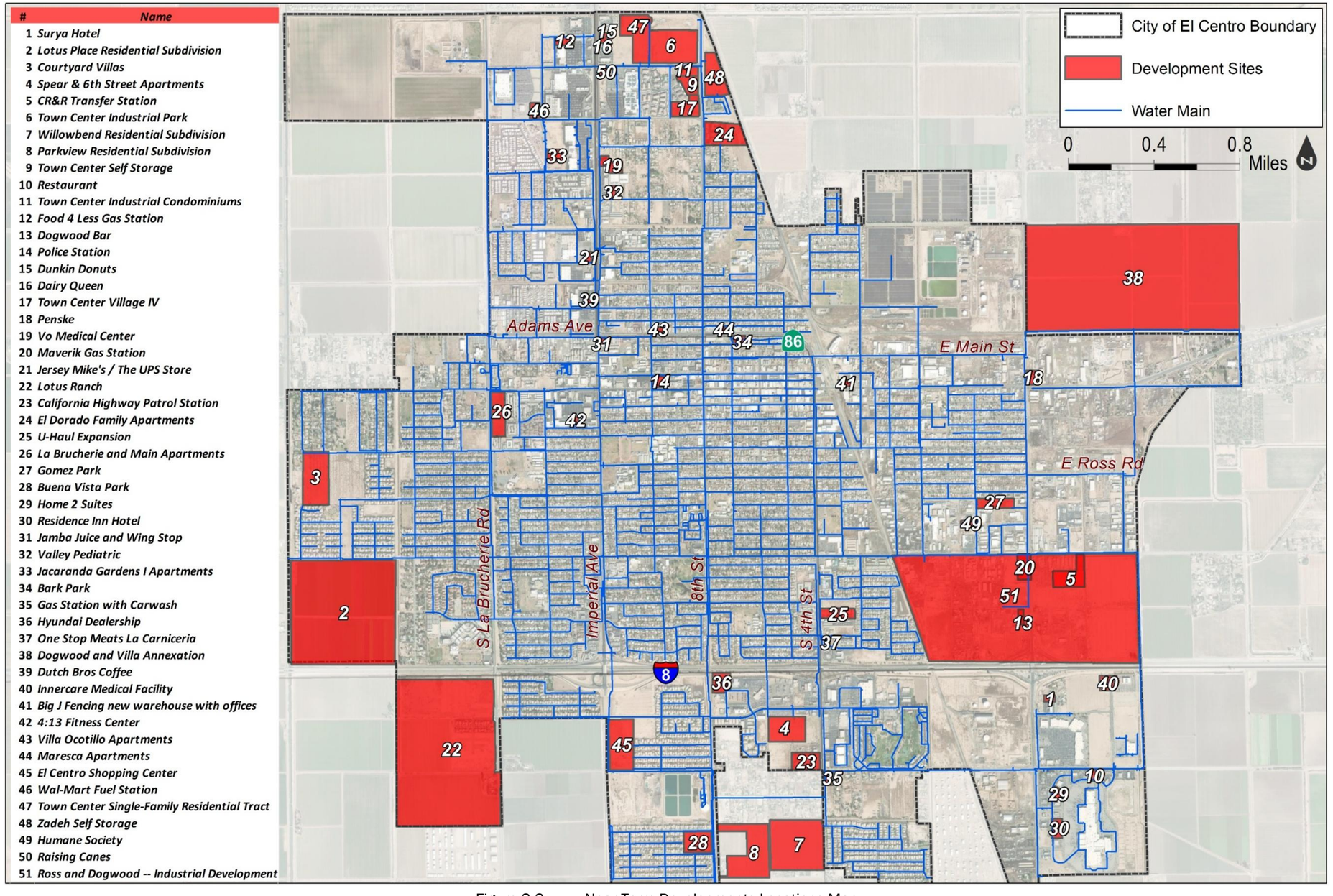
Should development within the LVSP accelerate, it is recommended that this Water Master Plan be updated to incorporate any significant planned developments within the City's service area. City staff anticipate that new developments related to the LVSP will likely occur in the northern portion of the service area, with residential development intended to support employment opportunities occurring first.

3.4 System Demand Summary

Table 3-6 summarizes the average day demand (ADD), maximum day demand (MDD), and minimum month demand (MinMD) for each model scenario in MGD.

Table 3-6. Water Demand Summary (MGD)

Demand (MGD)	Existing (2025)	Near-Term (2035)	Ultimate (2045)
ADD	7.18	8.19	9.08
MDD	10.77	12.29	13.62
MinMD	5.74	6.56	7.26



#	Name
1	Surya Hotel
2	Lotus Place Residential Subdivision
3	Courtyard Villas
4	Spear & 6th Street Apartments
5	CR&R Transfer Station
6	Town Center Industrial Park
7	Willowbend Residential Subdivision
8	Parkview Residential Subdivision
9	Town Center Self Storage
10	Restaurant
11	Town Center Industrial Condominiums
12	Food 4 Less Gas Station
13	Dogwood Bar
14	Police Station
15	Dunkin Donuts
16	Dairy Queen
17	Town Center Village IV
18	Penske
19	Vo Medical Center
20	Maverik Gas Station
21	Jersey Mike's / The UPS Store
22	Lotus Ranch
23	California Highway Patrol Station
24	El Dorado Family Apartments
25	U-Haul Expansion
26	La Brucherie and Main Apartments
27	Gomez Park
28	Buena Vista Park
29	Home 2 Suites
30	Residence Inn Hotel
31	Jamba Juice and Wing Stop
32	Valley Pediatric
33	Jacaranda Gardens I Apartments
34	Bark Park
35	Gas Station with Carwash
36	Hyundai Dealership
37	One Stop Meats La Carniceria
38	Dogwood and Villa Annexation
39	Dutch Bros Coffee
40	Innercare Medical Facility
41	Big J Fencing new warehouse with offices
42	4:13 Fitness Center
43	Villa Ocotillo Apartments
44	Maresca Apartments
45	El Centro Shopping Center
46	Wal-Mart Fuel Station
47	Town Center Single-Family Residential Tract
48	Zadeh Self Storage
49	Humane Society
50	Raising Canes
51	Ross and Dogwood -- Industrial Development

Figure 3-3 Near Term Developments Locations Map

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4 Hydraulic Model Updates

This section outlines the recent updates to the City's potable water hydraulic model, including enhancements to the network configuration, demand assumptions, and operational parameters. These improvements provide a current, consistent modeling framework that supports accurate system evaluations and informed planning decisions. By incorporating up-to-date system data and operational practices, the updated model enhances reliability and provides a defensible basis for regulatory compliance and future planning. This section establishes the foundation for applying the model to assess system performance under both existing and future conditions in the chapters that follow.

4.1 Facilities Update

The City's existing potable water model was originally developed using InfoWater™ by Innovyze®. Upon receipt of the most recent version of the model from the City, Dudek incorporated updates, including the addition of a 20-inch water line along the Alder Canal. This new segment extends approximately 5,400 linear feet, from East Ross Avenue to Danenberg Drive. Dudek also incorporated the pipelines constructed in 2016 near Sperber Road by the County Jail, as shown in the City's GIS. The newly constructed water mains since the 2008 master plan are shown in **Figure 4-1.**

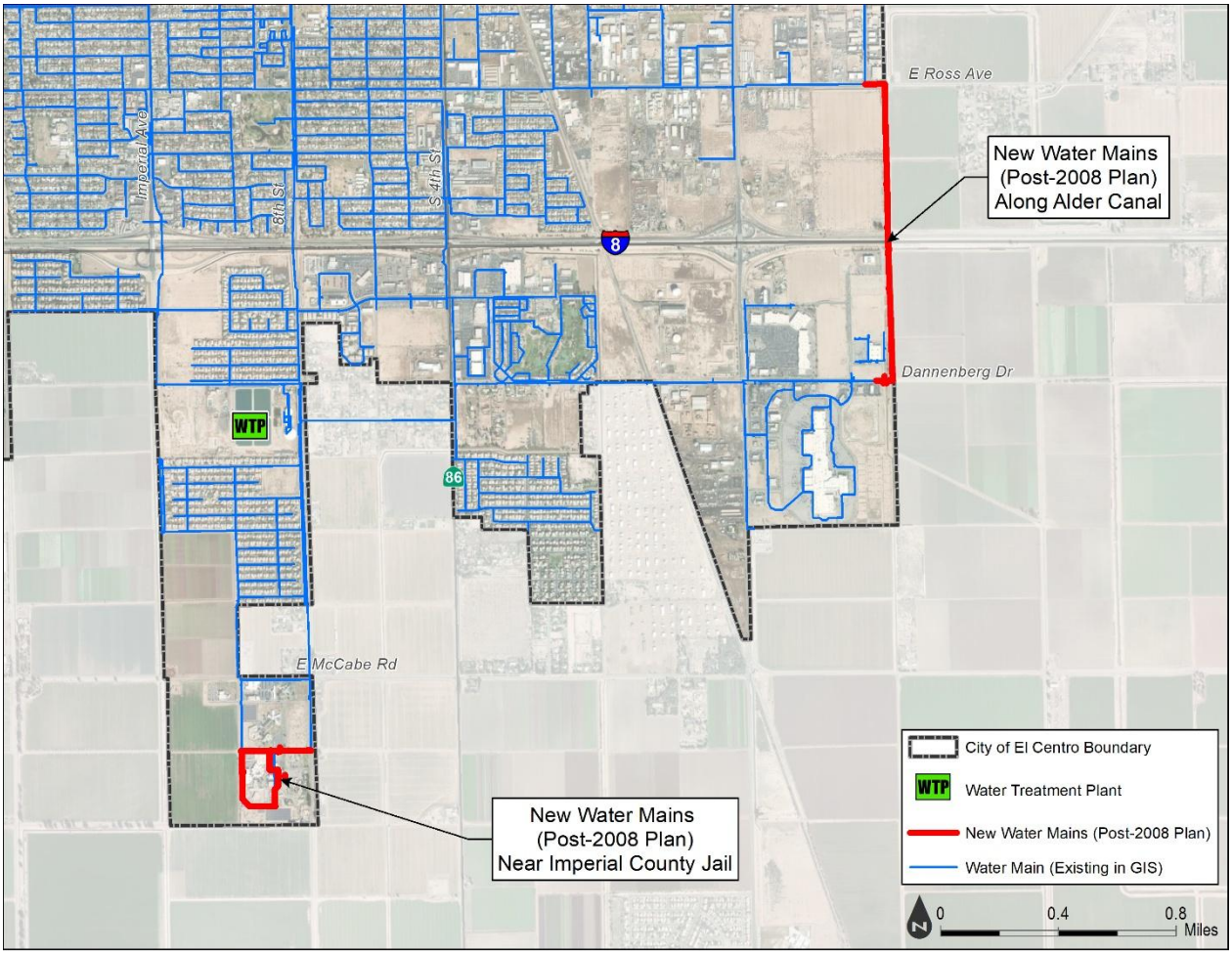

Figure 4-1 New Water Mains Post 2008 Master Plan

4.2 Demand Update

The 2024 billing records, with an annual average demand of 5.95 MGD, were linked to the water meter shapefile in GIS and then assigned to the nearest model junctions. Using the shared meter number field, 95% of the billing records were successfully matched; the remaining 5% of demand was evenly distributed among all junctions. The gap between the billed demand (5.95 MGD) and the 2024 production (7.18 MGD) represents unaccounted-for water, which may include both physical losses and revenue losses (e.g., theft or illegal connections). To reconcile this discrepancy and match the 2024 annual average production at the Water Treatment Plant (7.18 MGD), a uniform scaling factor of 1.207 was applied to the spatially allocated demands. The resulting 7.18 MGD is used as Existing ADD demand.

4.3 Model Calibration

Model calibration was conducted using multiple data sources provided by the City, including SCADA data, distributed pressure gauges, and field fire flow tests.

SCADA-Based Calibration: Calibration was initially performed using SCADA flow and pressure data from the City's Water Treatment Plant (WTP) effluent meter over a five-day period in late July and early August 2025. The La Brucherie Pump Station's modeled variable frequency drive (VFD) setting was adjusted to 58.5 psi, producing a modeled average flow of 252 gpm compared to the SCADA-measured average of 222 gpm. This adjustment resulted in close alignment of modeled and observed pressures while maintaining reasonable flow agreement.

Pressure Gauge Validation: To further validate the calibration, six pressure gauges distributed across the City were compared against model results under normal operating conditions. The measured and modeled pressures showed good agreement at all locations, with differences generally within just a few percent and no location exceeding ±10 percent (**Table 4-1; Figure 4-2**). This demonstrated that the model reliably represents system-wide operating pressures.

Fire Flow Testing: The City also provided results from five fire flow tests. Initially, only two of the five fire flow tests showed acceptable agreement with the model. Three locations were retested, which improved the calibration to three of five tests within 10% agreement (**Table 4-2**), confirming that the model accurately represents system response in most areas. The remaining two tests, however, showed greater differences with the measured pressure drops exceeding model predictions. Dudek reviewed potential causes, including roughness adjustments, supply flow balancing, and additional sensitivity testing, but model results remained relatively consistent. Possible causes of the discrepancy between the model and field measurements include unknown closed valves, partially obstructed pipelines, or unrecorded field conditions, particularly along W. Horne Road and within the Countryside Park neighborhood. Because pipe roughness factors were already set at the lower end of the reasonable range based on pipe material and age, no further adjustments were made during calibration. Field verification is recommended to confirm and address potential localized issues.

Conclusion

Although two of the fire flow tests showed larger variances, the model calibration process demonstrated strong agreement with SCADA flows and pressures and with distributed pressure gauges across the system. The discrepancies appear to be localized and attributable to site-specific conditions rather than systemic modeling deficiencies. Overall, the model reproduces observed system behavior within acceptable engineering tolerances

and is considered calibrated for use in capacity analysis. The City is encouraged to conduct additional flow tests at a wider range of locations to help identify potential localized blockages or unrecorded system constraints.

Table 4-1. Pressure Gauges Calibration

Pressure Gauge #	Cross Streets	Measured Pressure (psi)			Modeled Pressure (psi)			Difference (psi)			Difference (%)		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	18th and Lincoln	63	56	61	64	60	62	1	4	1	2%	7%	2%
2	3rd and San Diego	65	58	63	65	61	63	0	3	0	0%	4%	0%
3	8th and Vine	68	58	62	62	60	61	-6	2	-1	-9%	3%	-1%
4	Barbara Worth and Imperial	67	56	60	62	59	61	-5	3	0	-8%	5%	0%
5	Dogwood and Hamilton	68	62	65	64	61	63	-4	-1	-2	-6%	-1%	-3%
6	23rd and Ocotillo	58	51	56	58	54	56	-1	3	0	-1%	5%	0%

Table 4-2. Fire Flow Calibration

Fire Flow Test #	Cross Streets	Flow (gpm)	Measured Static Pressure (psi)	Measured Residual Pressure (psi)	Modeled Static Pressure (psi)	Modeled Residual Pressure (psi)	Static Pressure % diff	Residual Pressure % diff
1	Rose Ave and N 12th St	1,163	60	48	62	53	3%	10%
2	W State St and S 5th St	872	59	52	59	58	0%	12%
3	Blossom Way and Countryside Dr	822	50	40	56	52	12%	30%
4	W Holt Ave and S Wilson St	822	60	56	58	57	-3%	1%
5	Lotus Ave and W Brighton Ave	919	57	56	56	54	-2%	-4%

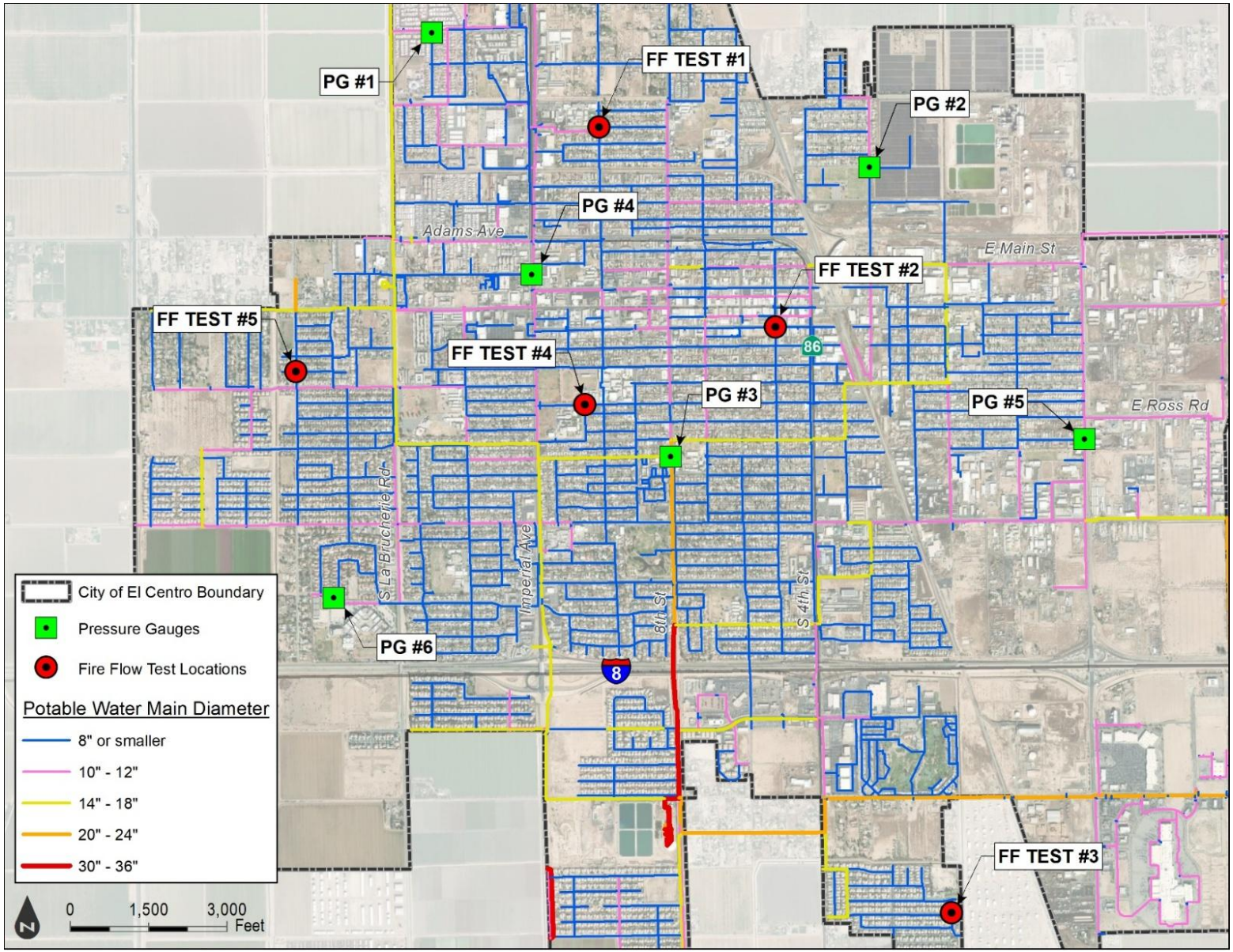

Figure 4-2 Fire Flow Test and Pressure Gauge Locations

5 Design and Evaluation Criteria

This section establishes the design and evaluation criteria that guide the planning and assessment of the City's water system. It introduces the standards for pipelines, pump stations, fire flow, and storage facilities, which serve as benchmarks for determining system adequacy under existing and future demand conditions. These criteria form the basis for evaluating infrastructure performance and planning improvements to meet operational and emergency requirements.

Defining clear design and evaluation criteria is essential for ensuring consistency and reliability in water system planning. By outlining these standards, this chapter provides a framework for assessing current facilities and guiding future upgrades to maintain service quality, meet regulatory expectations, and support community growth. Establishing these criteria also promotes system resiliency and preparedness for emergency scenarios.

5.1 Pipelines and Pump Criteria

The design and evaluation criteria provide the standards against which the existing system is evaluated. These criteria are also the basis for planning new facilities to improve existing service or to handle future water demands, including maximum day demand (MDD) and MDD plus fire flow. The design and evaluation criteria recommended for use in this Master Plan Update are based on the City's previous master plan and Dudek's understanding of the City's water system, as summarized **Table 5-1.**

Table 5-1. Design and Evaluation Criteria Summary

Pressure Criteria	Minimum service pressure at MDD	40 psi
	Minimum service pressure at MDD plus Fire Flow	20 psi
	Maximum service pressure	80 psi
Pipeline Criteria	Existing Pipelines:	—
	Maximum allowable velocity at MDD	5 ft per sec
	Maximum allowable velocity at MDD + FF	10 ft per sec
	Maximum friction loss at MDD	10 feet/1,000 linear feet
	New Pipelines:	—
	Maximum allowable velocity at MDD, <= 12-in diameter	5 ft per sec
	Maximum allowable velocity at MDD, >= 16-in diameter	4 ft per sec
	Maximum friction loss at MDD	5 feet/1,000 linear feet
Pump Station Criteria	Minimum Number of Pumps	2
	Minimum Pump Capacity	Firm capacity (with largest pump off) capable of handling MDD+FF or PHD
	Emergency Backup Power	Required
Storage/Supply Criteria	Storage with Supply Unavailable	MDD x 5 days
	Earthquake Storage	MinMD x 10 days
	Emergency Backup Power	Required

5.2 Fire Flow Criteria

The Imperial County Fire Department & Office of Emergency Services is concerned with the availability of adequate water supply for firefighting purposes and establishes minimum water flows and residual system pressures required during a firefighting event. These criteria are provided to the City of El Centro for use in master planning efforts.

The Imperial County Fire Department & Office of Emergency Services uses the California Fire Code (CFC), which establishes minimum fire flows and durations for individual structures. This Water Master Plan Update evaluates available fire flows to assess distribution system adequacy under existing and future demand conditions, using general land use categories that represent different types of development. Therefore, the fire flow requirements set forth in this Master Plan are intended for general planning purposes only and may not be reflective of the actual fire flow requirements sought for specific development approvals.

Table 5-2 presents the recommended fire flow requirements for new developments for the WMP fire flow evaluation based on general land use designations, discussions with City of El Centro staff, and guidelines from Imperial County Fire Department & Office of Emergency Services.

Table 5-2. Fire Flow Criteria

Structure	Flow (gpm)[1]	Duration (hours)
Low Density Residential (LDR)[2]	1,000	2
Medium Density Residential (MDR)	2,000	2
High Density Residential (HDR)	3,000	3
Commercial, Mixed Use	3,000	3
Public/Civic[3]	3,000	3
Industrial/Manufacturing	4,000	4

Notes:
1 Fire Flows to be supplied at a minimum residual pressure of 20 psi during MDD.
2 Includes mobile home parks, single family residential and rural residential area.
3 Included schools, parks, and other open spaces.

5.3 Pump Station Criteria

Due to the flat topography within the City's service area, the water system operates within a single pressure zone, supplied by two booster stations that pump directly into the distribution system. These booster stations are located at the Water Treatment Plant (WTP) and at the La Brucherie Tank. The La Brucherie Pump Station primarily operates during peak water demands to support pressure and supply needs.

Pump stations are required to meet the following evaluation criteria:

- **Minimum Number of Pumps:** Each pump station shall be equipped with at least two pumps to provide redundancy and ensure continuous operation in the event of a pump outage.
- **Minimum Pump Capacity:** The pump configuration shall provide firm capacity, defined as the capacity of the station with the largest pump out of service, sufficient to meet Maximum Day Demand plus fire flow (MDD+FF) or Peak Hour Demand (PHD) conditions. This ensures the system can meet peak operational and emergency demands without service interruptions.

- **Emergency Backup Power:** All pump stations shall be equipped with emergency backup power to maintain operation during utility power outages, ensuring uninterrupted water service to the community.

These criteria ensure that the City's booster stations maintain reliable water service under both routine and emergency conditions.

5.4 Storage/Supply Criteria

The City's existing storage has a total capacity of 67.0 MG, as listed in Table 2-4. This includes two untreated ponds and four treated water reservoirs. Since the City is single source supplied, these storage assets provide critical supply reliability during emergencies when normal supply source is unavailable. To determine the adequacy of the water supply facilities, the available water supplies are evaluated for various types of extreme conditions, such as the largest source going out of service, a power outage, or a significant earthquake. These criteria are summarized at the bottom of Table 5-1.

Supply with Largest Source Out of Service

To satisfy supply criteria, the City should have sufficient water capacity to meet the MDD with the largest source out of service for 5 days. The largest and only source of supply in El Centro is the City's Water Treatment Plant. Thus, storage is the only source of treated water that can be used when the WTP is out of service.

Supply with Power Outage

In the event of a power outage, the City must ensure sufficient water supply and pressure to serve its customers at MDD for a duration of six hours. Additionally, the system pressure should not fall below 40 psi at any location within the distribution system.

The City is equipped with full back-up power at the WTP pump station (PS), the La Brucherie PS, and the raw water PS that is used to pump water from the Imperial Irrigation District canal.

Supply with Earthquake

To satisfy supply criteria in the case of an earthquake, the City should have sufficient water to maintain a minimum level of water service for 10 days. Additionally, the system pressure should not fall below 40 psi at any location within the distribution system.

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6 Water System Capacity Analysis

This section introduces the evaluation of the City's water system capacity under existing and projected demand conditions. It explains the framework for assessing the system's ability to meet established design and performance standards, including considerations for fire protection, pumping, and storage. The chapter also addresses key aspects of system reliability, such as redundancy and resiliency, which are essential for maintaining service during emergencies or operational disruptions.

Understanding water system capacity and reliability is critical for ensuring consistent service delivery and planning for future growth. By defining the criteria and approach for evaluating performance, this chapter provides the foundation for informed decision-making and long-term infrastructure planning. Establishing this context helps the City prioritize improvements that support operational efficiency and resilience against potential challenges.

6.1 Pressure/Pipeline Analysis

The water distribution system was analyzed under existing, near-term, and ultimate maximum day demand (MDD) conditions to identify potential pressure or velocity deficiencies. Specifically, the evaluation focused on locations where pressures fall below 40 psi or exceed 80 psi, and where pipeline velocities surpass 5 feet per second (fps).

The results indicate that, under normal operating conditions, no pressure or velocity violations occur within the system across any of the three planning scenarios. Maximum pipeline velocities remain below 5 fps throughout the system. **Figure 6-1** presents the minimum pressure distribution under existing MDD conditions.

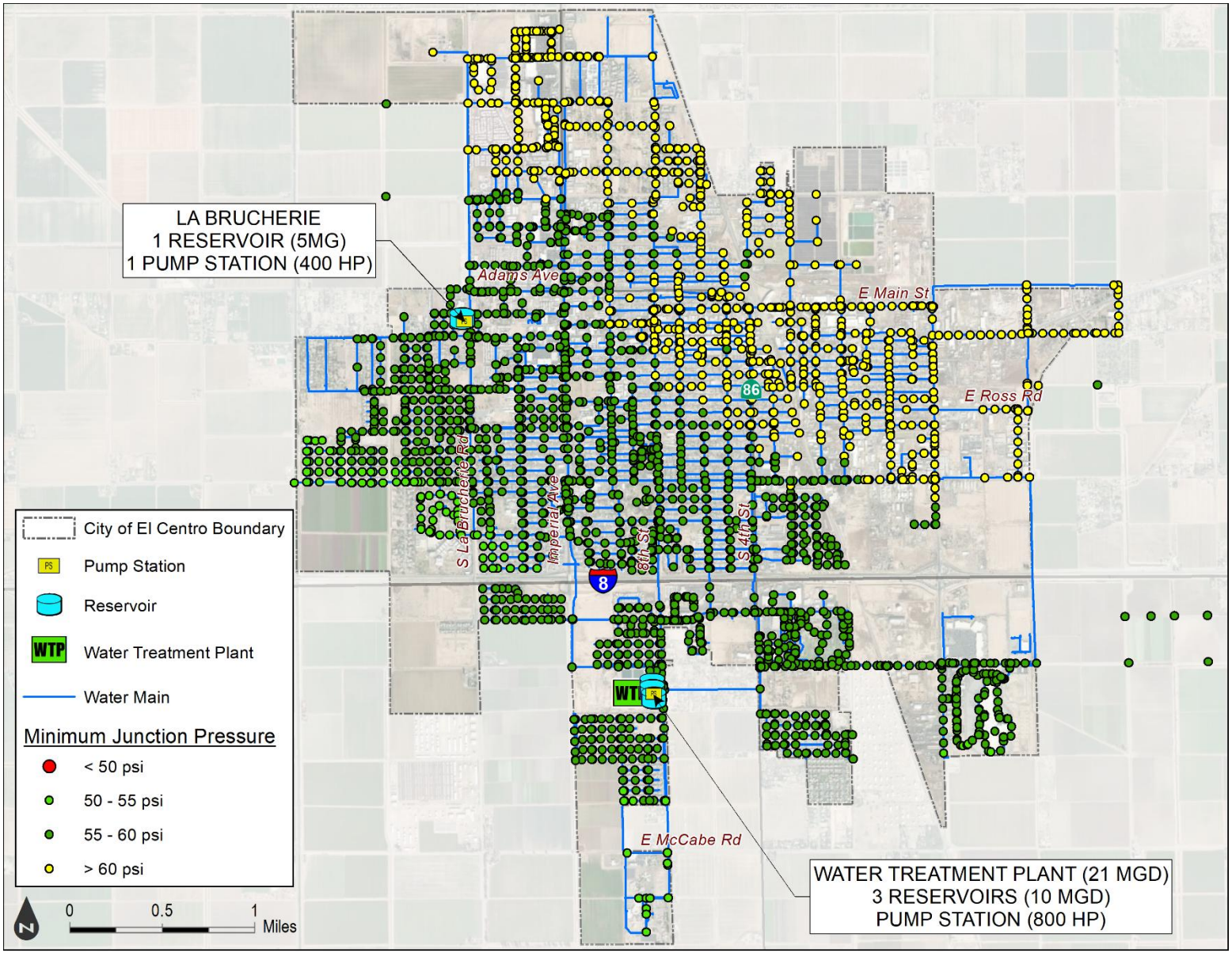

Figure 6-1 Existing MDD, Minimum Pressure, and Maximum Velocities

6.2 Fire Flow Analysis

The evaluation of system pressures under Existing MDD plus fire flow conditions was conducted using a steady-state simulation of the calibrated hydraulic model. Fire flow demands were applied at each model node based on the fire flow requirements corresponding to the land use designations of adjacent parcels (refer to Table 5-2). It is assumed that both the PS at the WTP and the La Brucherie PS are operational during a fire event.

Following the initial model run, areas showing fire flow deficiencies were reviewed closely to verify the accuracy of assigned fire flow demands and land use designations. In addition, the GIS data for water laterals and fire hydrants were reviewed to confirm that fire flow demands were properly assigned to the correct model junctions. The resulting deficiencies are illustrated in **Figure 6-2.** Seventeen (17) CIP projects were identified to address only the hydrants where available fire flow was less than 2,000 gpm, as summarized in **Table 6-1.** The total length of upsizing pipelines is 22,400 LF.

Table 6-1. Fire Flow Projects

Project ID	Project Name	Length (ft)	Proposed Diameter (in)	Justification
FF-1	S 2nd St Upsizing	2,600	12	Improve Existing Capacity Issues
FF-2	Euclid Ave Upsizing	1,300	12	Improve Existing Capacity Issues
FF-3	El Centro Ave Upsizing	1,300	8	Improve Existing Capacity Issues
FF-4	Adams Ave Upsizing	1,400	8	Improve Existing Capacity Issues
FF-5	E Main St Upsizing	1,900	8	Improve Existing Capacity Issues
FF-6	S 4th St Upsizing	2,000	8	Improve Existing Capacity Issues
FF-7	Yucca Dr Connection	100	8	Improve Existing Capacity Issues
FF-8	Brighton Ave Connection	400	8	Improve Existing Capacity Issues
FF-9	Heil Ave Upsizing	600	12	Improve Existing Capacity Issues
FF-10	Hamilton Ave Upsizing	700	12	Improve Existing Capacity Issues
FF-11	Maple Ave Upsizing	800	12	Improve Existing Capacity Issues
FF-12	Cedar Ave Upsizing	700	12	Improve Existing Capacity Issues
FF-13	New St Upsizing	600	10	Improve Existing Capacity Issues
FF-14	W Brighton Ave Upsizing	2,000	12	Improve Existing Capacity Issues, end of useful life
FF-15	W Holt Ave Upsizing	2,700	12	Improve Existing Capacity Issues, end of useful life
FF-16	W Heil Ave Upsizing	2,000	12	Improve Existing Capacity Issues, end of useful life
FF-17	W Main St Connection	1,300	12	Improve Existing Capacity Issues
Total	—	**22,400**	—	—

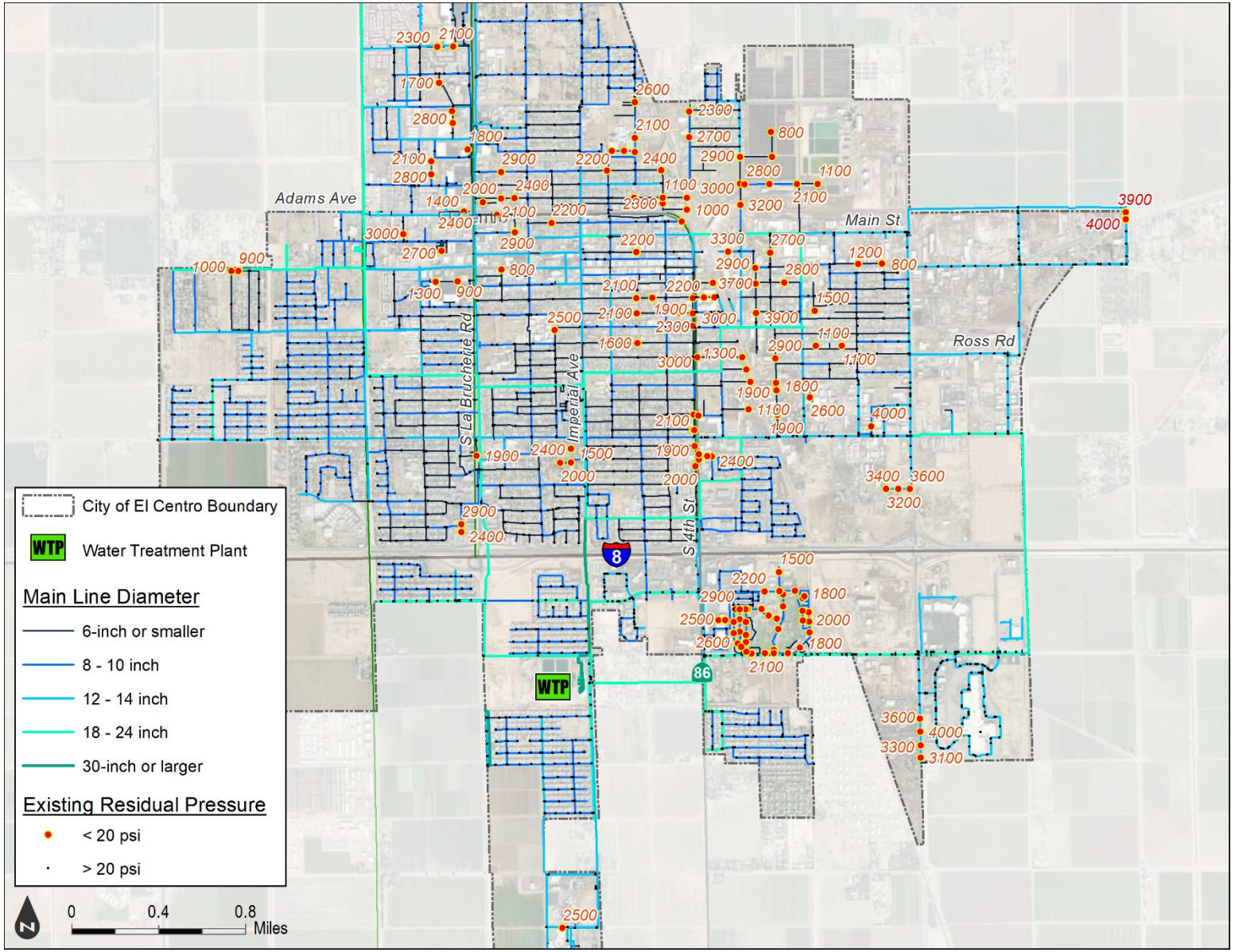

Figure 6-2 Available Fire Flow to Hydrants under Existing MDD Conditions

The existing 6-inch water main along South 2nd Street, between West Orange Avenue and Ross Avenue as shown in **Figure 6-3**, exhibits multiple fire flow deficiencies, with available flow rates falling below 2,000 gpm. To resolve these deficiencies and meet required fire protection standards, it is recommended that this segment be upsized to a 12-inch diameter main. Given the extent of the deficiencies and the critical nature of fire protection, this project is designated as high priority.

Dead-end segments along New Street south of W. Orange Avenue, and four additional dead ends east of S. 3rd Street, as shown in Figure 6-3, exhibit fire flow deficiencies. Because these are dead-end mains, the recommended upsizing improvements are designated as low-priority projects. The existing 6-inch pipelines are proposed to be upsized to 12-inch diameter, which represents a significant increase justified by the industrial land use in this area and its higher fire flow demand.

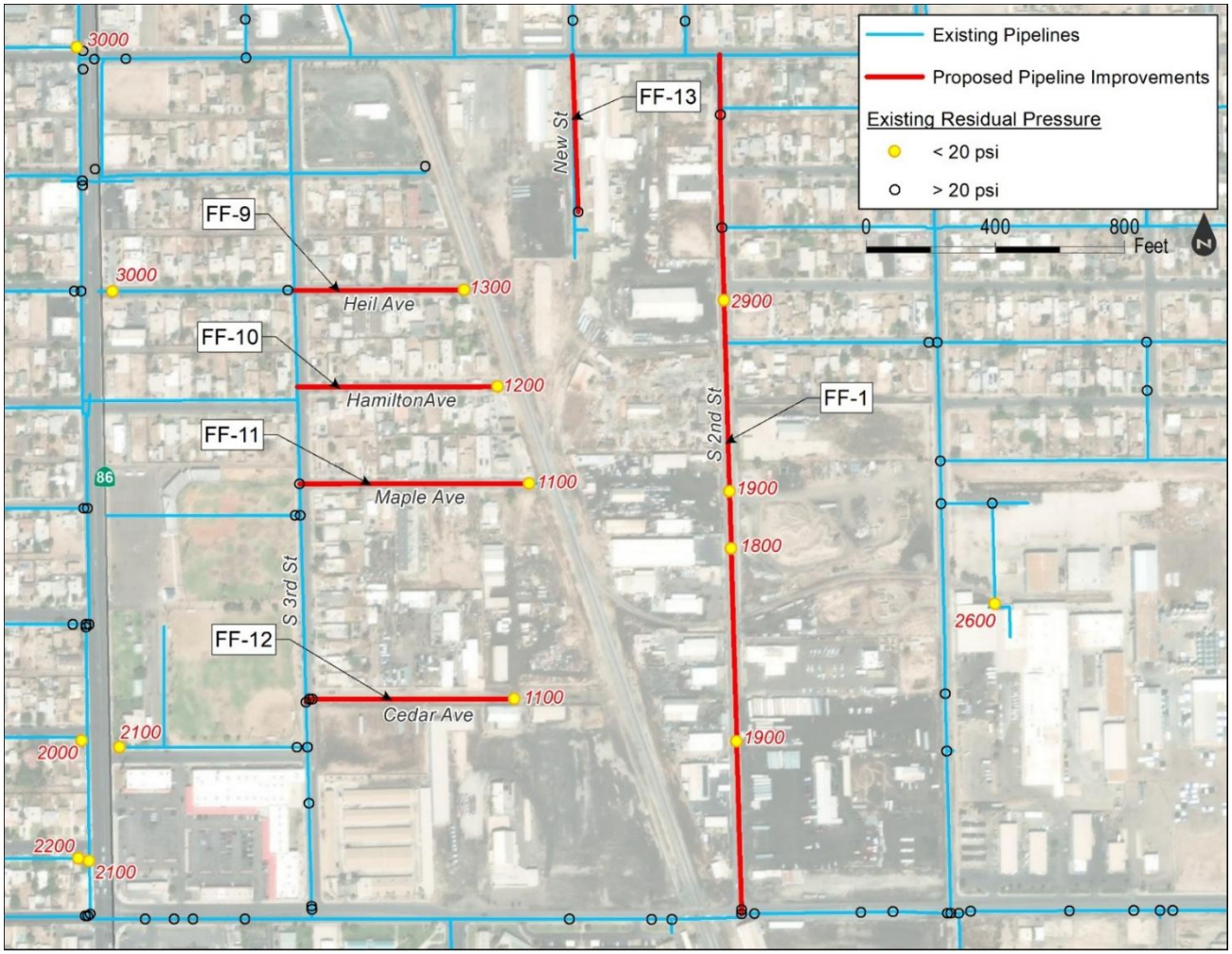

Figure 6-3 Fire Flow Projects – S 3rd Street Dead Ends, S 2nd Street, and New Street

Fire flow deficiencies have been identified along Euclid Avenue, east of North 3rd Street, as shown in **Figure 6-4.** Upsizing the existing 8-inch water main between North 4th Street and North 3rd Street would address multiple deficiencies within this segment and enhance fire protection capabilities. This improvement would also increase safety for the public facility located east of North 3rd Street. This project is also considered high priority.

Also shown on Figure 6-4, two dead-end segments located on El Centro Avenue and Adams Avenue, north of N. 6th Street, serve a medium- to high-density residential neighborhood. This area exhibits low available fire flow, with values as low as 1,000 gpm. It is recommended to upsize the existing 6-inch pipelines to a minimum of 8-inch diameter to improve fire flow capacity.

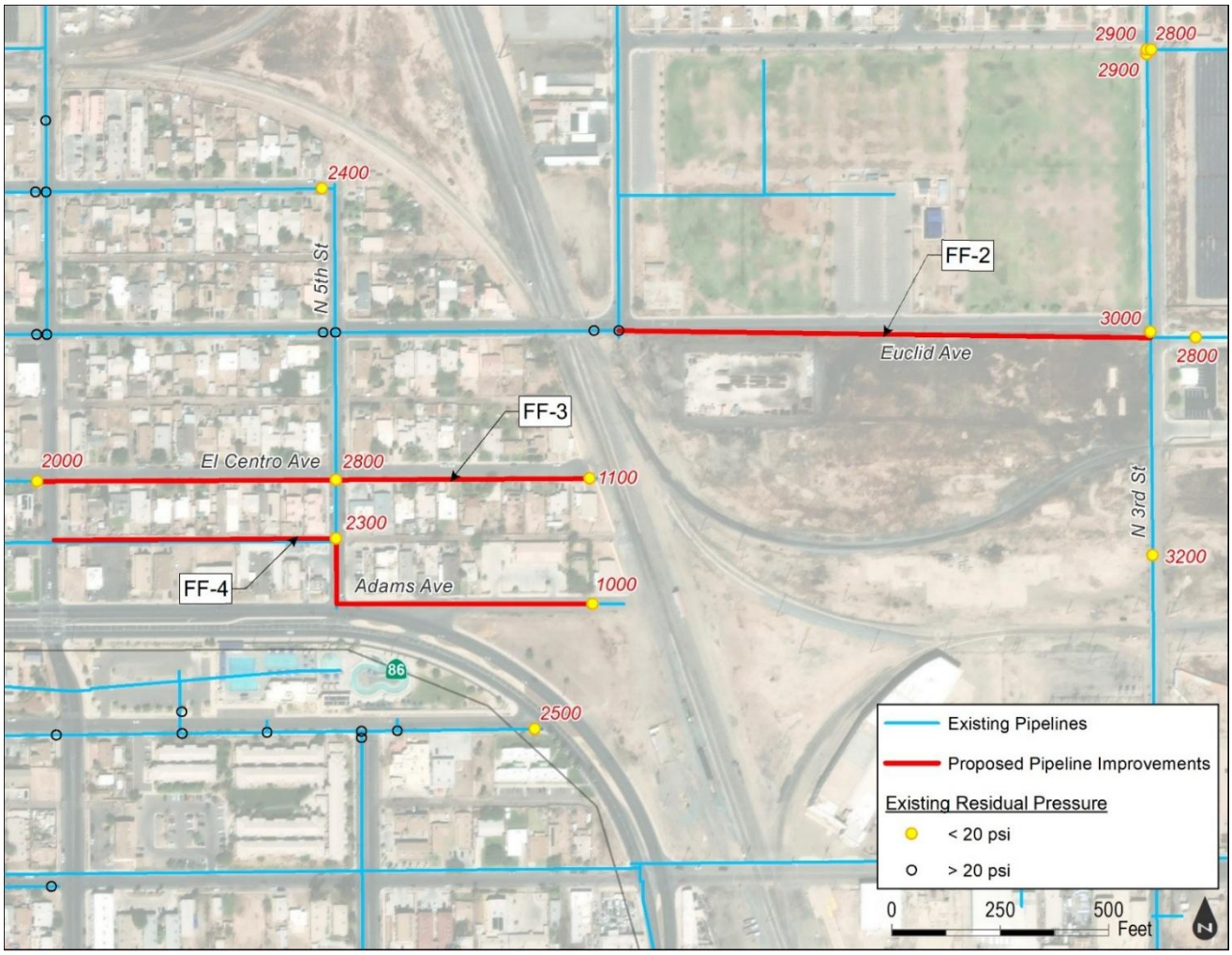

Figure 6-4 Fire Flow Projects – Euclid Avenue, El Centro Avenue, and Adams Avenue

On E. Main Street, just west of S. Dogwood Street, there is an existing 6-inch dead-end main. Fire flow deficiencies were identified in this area, with available fire flow ranging from approximately 800 to 1,200 gpm, as shown in **Figure 6-5.** It is recommended to upsize the existing 6-inch main to 8-inch and extend it east to S. Dogwood Street to create a looped connection and improve fire flow reliability in the surrounding area.

Also shown in Figure 6-5, the hydrant serving McGee Park is currently connected to a 4-inch/6-inch pipeline that branches from an 8-inch line farther north on Olive St. The available fire flow at this hydrant is approximately 1,500 gpm, which is below the required 3,000 gpm for a public park. It is recommended to reconnect this hydrant to the 18-inch main located approximately 400 feet west along S 1st Street to achieve adequate fire flow capacity.

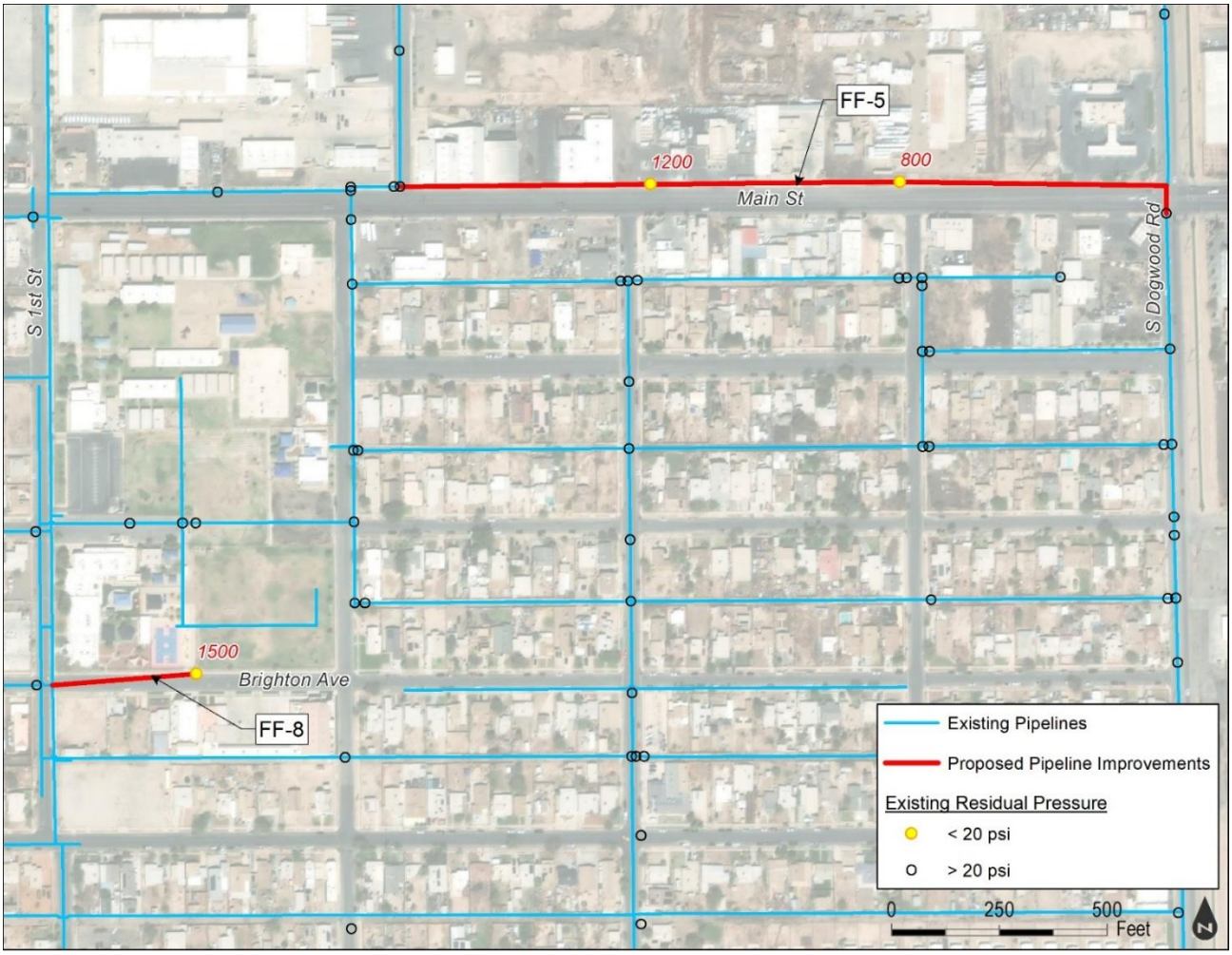

Figure 6-5 Fire Flow Projects – E Main Street and Brighton Avenue

As shown in **Figure 6-6,** along S 4th Street, the existing water main configuration consists of a 4-inch main between Wensley Avenue and Ross Avenue, no main between Ross Avenue and Desert Gardens Drive, and a 6-inch main from Desert Gardens Drive to Aurora Drive. It is recommended to upsize the existing mains and construct new 8-inch mains where missing, extending from Wensley Avenue to Aurora Drive, to address the fire flow deficiencies identified in this area.

In the same vicinity, also shown in Figure 6-6, the City's GIS data indicate that the 8-inch main on Yucca Drive is not directly connected to the main on S 4th Street (currently 6-inch, to be upsized as noted above). It is recommended to extend the Yucca Drive main approximately 100 linear feet to connect with S. 4th Street, thereby closing the loop and improving fire flow performance in the area.

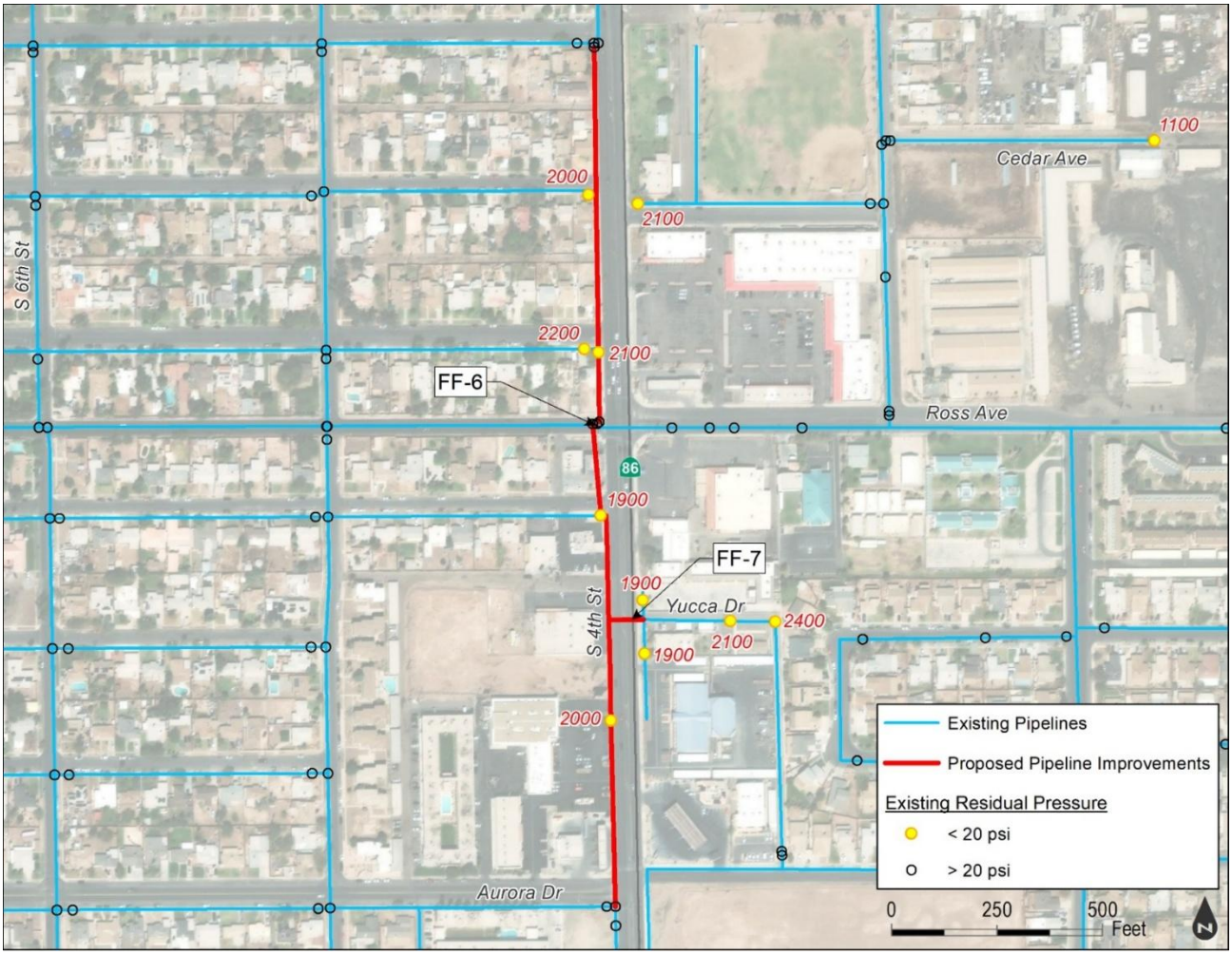

Figure 6-6 Fire Flow Projects – St 4th Street and Yucca Drive

The block bounded by Brighton Avenue, Heil Avenue, 8th Street, and the railroad, as shown in **Figure 6-7,** exhibits concentrated fire flow deficiencies. Considering the age of the existing pipelines, three aging 6-inch segments on Brighton Avenue, Holt Avenue, and Heil Avenue are recommended to be upsized to 12-inch diameter to improve fire flow capacity in this area.

Also shown in Figure 6-7, a missing segment on Main Street between Imperial Avenue and S. 12th Street results in a dead-end condition with reduced fire flow. It is recommended to construct the missing segment to close the loop and enhance fire flow reliability.

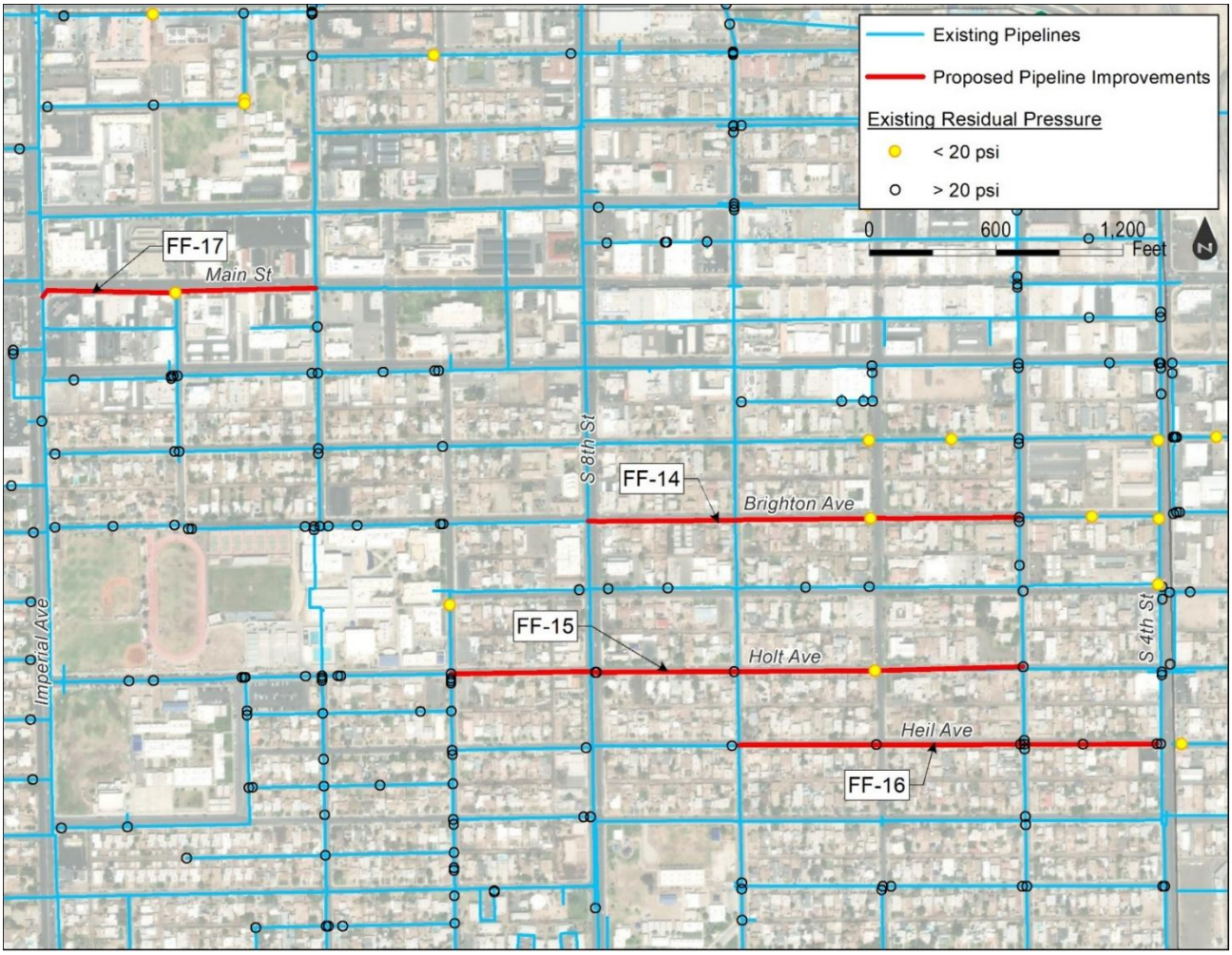

Figure 6-7 Fire Flow Projects – Main Stt/Imperial Ave, Brighton Ave/8th St, and Holt Ave/Heil Ave

The CIP projects and available fire flow after improvements are presented in **Figure 6-8.**

In the near-term and ultimate scenarios, the increase in domestic demand is minimal compared to the fire flow demands; therefore, no additional fire flow deficiencies were identified in the future conditions.

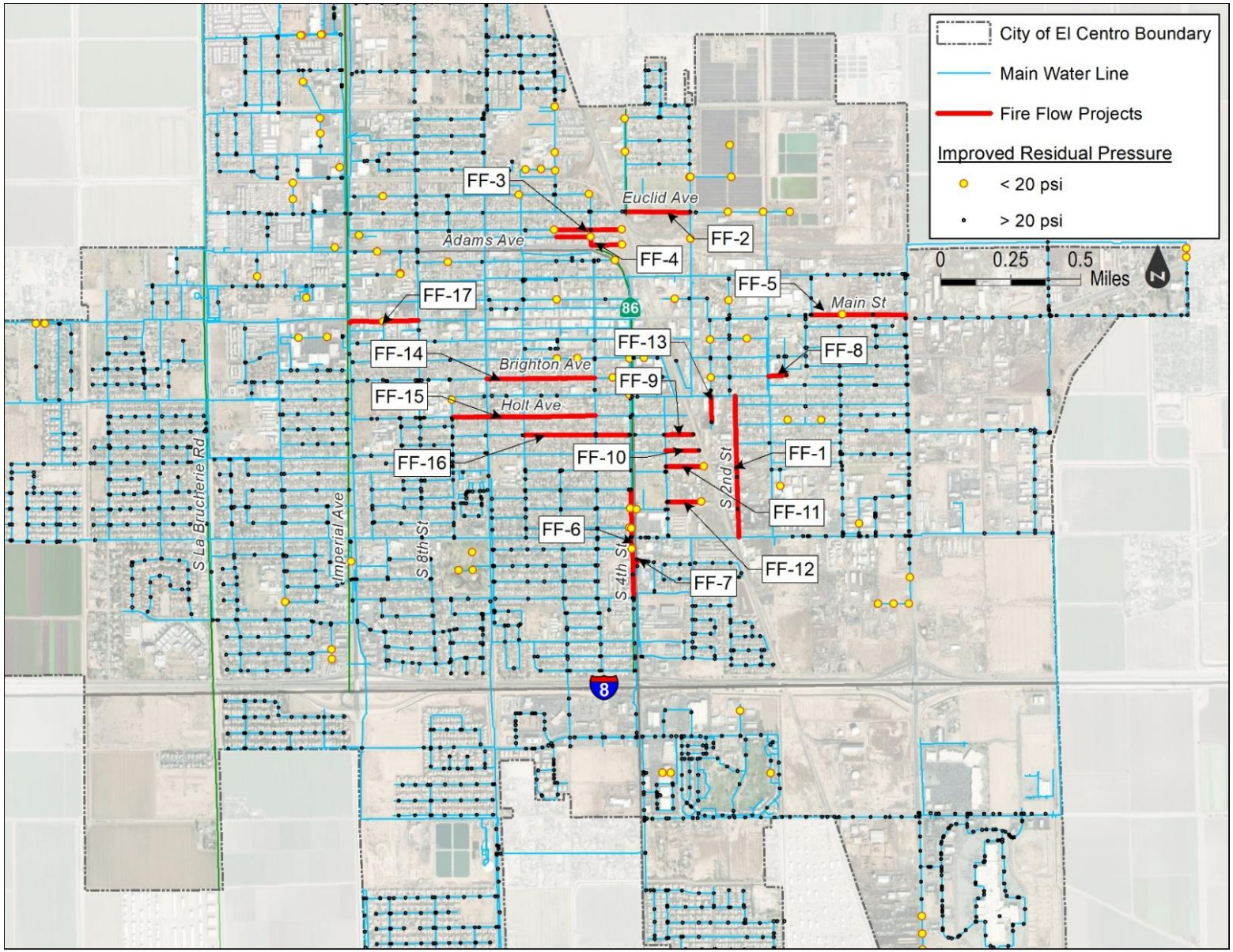

Figure 6-8 Available Fire Flow to Hydrants under Existing MDD Conditions, with Improvements

6.3 Pump Station Analysis

Design criteria require that the firm capacity of each pump station - defined as the total pumping capacity with the largest pump out of service—be sufficient to meet Maximum Day Demand (MDD) plus fire flow, or Peak Hour Demand (PHD), whichever is greater.

6.3.1 Existing

The WTP Booster Station and La Brucherie Pump Station, which together serve El Centro's single pressure zone have a combined firm capacity of 16,000 gpm. The City has indicated that all four existing pumps at the WTP, with a total capacity of 16,000 gpm, have recently been operating simultaneously to meet system peak hour demand at 13,500 gpm. To add redundancy supporting peak hour supply, an additional distribution pump with specifications matching the existing units was already installed during the 2024–2025 period.

The simultaneous operation of all four WTP pumps during peak hours suggests that the La Brucherie Pump Station and associated storage tank may not be fully utilized. The La Brucherie Pump Station is configured to maintain a downstream pressure of approximately 60 psi and is intended to supplement system flow during peak periods. However, a review of five days of hourly SCADA data from summer 2025 (**Figure 6-9**) shows that the station does not contribute additional flow during the evening peak around 9 p.m. and operates at a flow rate well below its 8,000 gpm capacity. It is recommended that the City optimize the use of La Brucherie facilities to enhance overall system efficiency.

Calculations based on the two design criteria, as presented in **Table 6-2** and **Table 6-3**, indicate that the current system provides adequate overall capacity, even without the recently installed WTP pump.

Table 6-2. Pump Station Analysis – Existing (2024) Scenario, MDD+FF Criteria

Existing Total Firm Capacity[1]	Existing MDD	Maximum FF	Required (MDD + FF)	Surplus
(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
16,000	7,500	4,000	11,500	4,500

Note:
1 Firm capacity assumes the largest pump at both the WTP Booster Station and La Brucherie Pump Station is out of service.

Table 6-3. Pump Station Analysis – Existing (2024) Scenario, PHD Criteria

Existing Total Firm Capacity 1	Required (PHD)	Surplus
(gpm)	(gpm)	(gpm)
16,000	13,500	2,500

Note:
1 Firm capacity assumes the largest pump at both the WTP Booster Station and La Brucherie Pump Station is out of service.

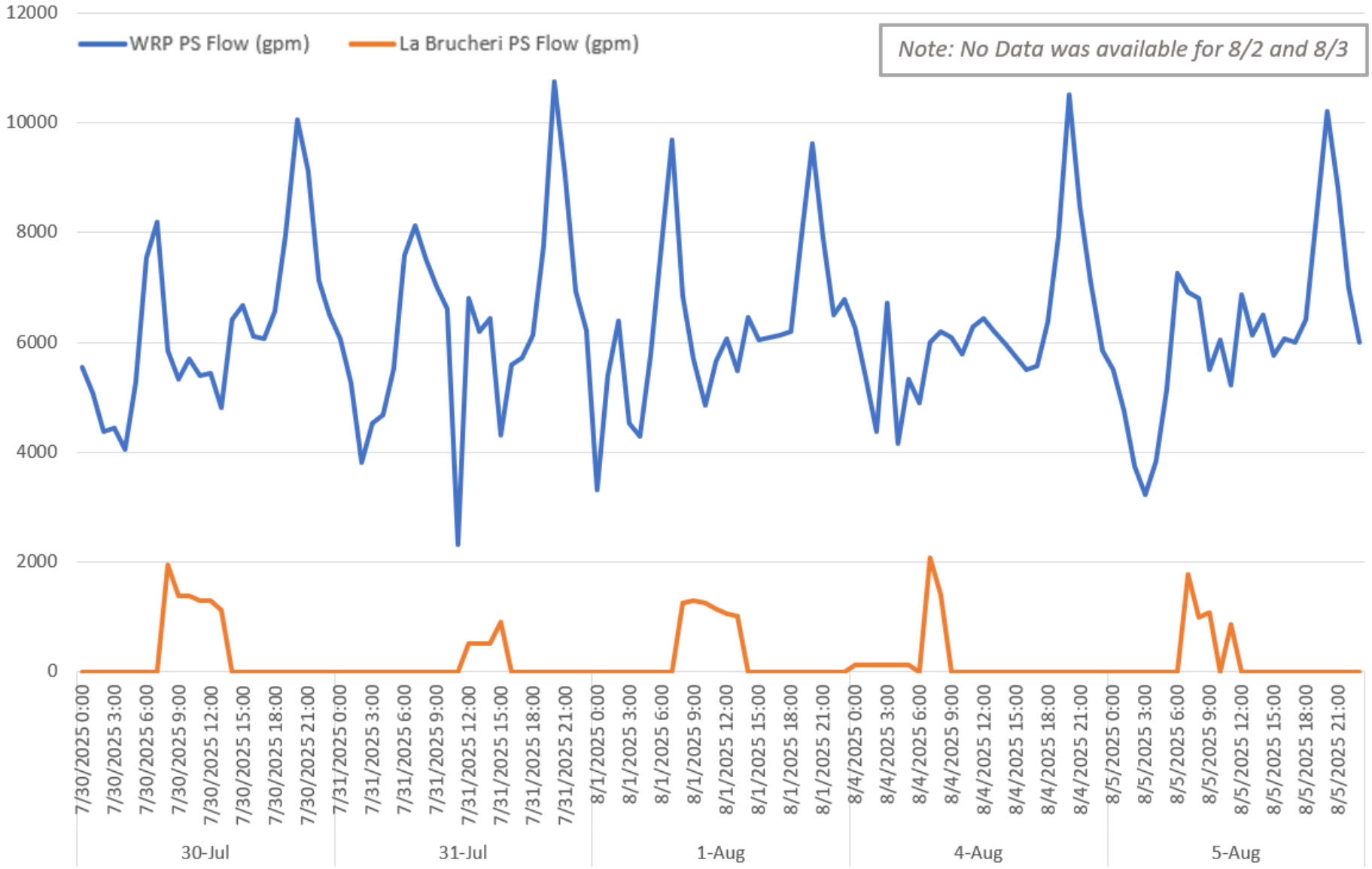

Figure 6-9 PS Hourly SCADA Flow

6.3.2 Near-Term

The near-term Maximum Day Demand (MDD) is projected to increase by 821 gpm—from 7,500 gpm to 8,321 gpm as a result of new planned developments. The City will continue to provide pumping capacity surplus of approximately 1,000 gpm, as summarized in **Table 6-4.**

Table 6-4. Pump Station Analysis Results – Near-Term Scenario

Existing Total Firm Capacity	Near-Term MDD	Maximum Fire Flow (FF)	Near-Term MDD + FF	Near-Term PHD	Total Required	Surplus
(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
16,000	8,321	4,000	12,321	14,978	14,978	1,022

6.3.3 Ultimate

The City's population is projected to increase from 48,642 in 2035 to 53,903 by 2045, representing a 10.8% growth, as shown in Table 3-1. As a result, the ultimate Maximum Day Demand (MDD) is estimated to rise from 8,321 gpm to 9,221 gpm. Based on this projection, the City is anticipated to experience a pumping capacity shortfall of approximately 600 gpm by 2045, as summarized in **Table 6-5.**

Given the relatively small magnitude of this deficit relative to the available capacity (2.5%) and that it's based on long term population projections, it is not considered sufficient to justify a standalone CIP project at this time. It is recommended to monitor system performance and adjust pump operations scheduling while planning for future reassessment during the next master plan update with new population projection data.

Table 6-5. Pump Station Analysis Results – Ultimate (2045) Scenario

Existing Total Firm Capacity	Ultimate MDD	Maximum Fire Flow (FF)	Ultimate MDD + FF	Ultimate PHD	Total Required	Surplus
(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)
16,000	9,221	4,000	13,221	16,598	16,598	-598

6.4 Storage/Supply Analysis

As outlined in Section 5.4, the supply criteria require the City to maintain sufficient capacity to meet maximum day demand (MDD) with the largest supply source out of service for five days. The earthquake criteria specify maintaining enough storage to provide a minimum level of service for 10 days following a major seismic event. **Tables 6-6** and **6-7** summarize the required storage for these two requirements and compare it to the City's existing storage.

As shown in **Figure 6-10**, the City is only projected to experience minor storage deficiencies in the ultimate timeframe with the earthquake supply requirement. As shown in Figure 6-10, the analysis indicates that the City is projected to experience only a minor storage deficiency in the ultimate planning horizon, and only under the earthquake supply scenario. This deficiency is limited in magnitude and does not affect compliance with the MDD supply reliability criteria. Given the long-term nature of the projected shortfall, the uncertainty associated with future demand projections, and the City's anticipated growth that may be partially offset by the implementation of recycled water supplies, immediate expansion of storage facilities is not warranted at this time.

Accordingly, a capital improvement project to expand water storage is not recommended as part of this Master Plan. The City is encouraged to periodically reevaluate its storage requirements as development approaches buildout, demand patterns become better defined, and future supply strategies - such as recycled water - are implemented. Storage expansion may be reconsidered in a future planning update if the projected deficiency becomes more pronounced or if system conditions materially change.

Table 6-6. Storage Analysis Results – Supply without Largest Source Criteria

Scenario	Existing Storage (MG)	MDD (MGD)	Storage Required: MDD x 5 days (MG)	Surplus/Deficit (MG)
Existing	67.5	10.8	54.0	13.5
Near-Term		12.0	60.0	7.5
Ultimate		13.3	66.5	1.0

Table 6-7. Storage Analysis Results – Earthquake Supply Criteria

Scenario	Existing Storage (MG)	MinMD (MGD)	Storage Required: MinMD x 10 days (MG)	Surplus/Deficit (MG)
Existing	67.5	5.7	57.0	10.5
Near-Term		6.4	64.0	3.5
Ultimate		7.1	71.0	-3.5

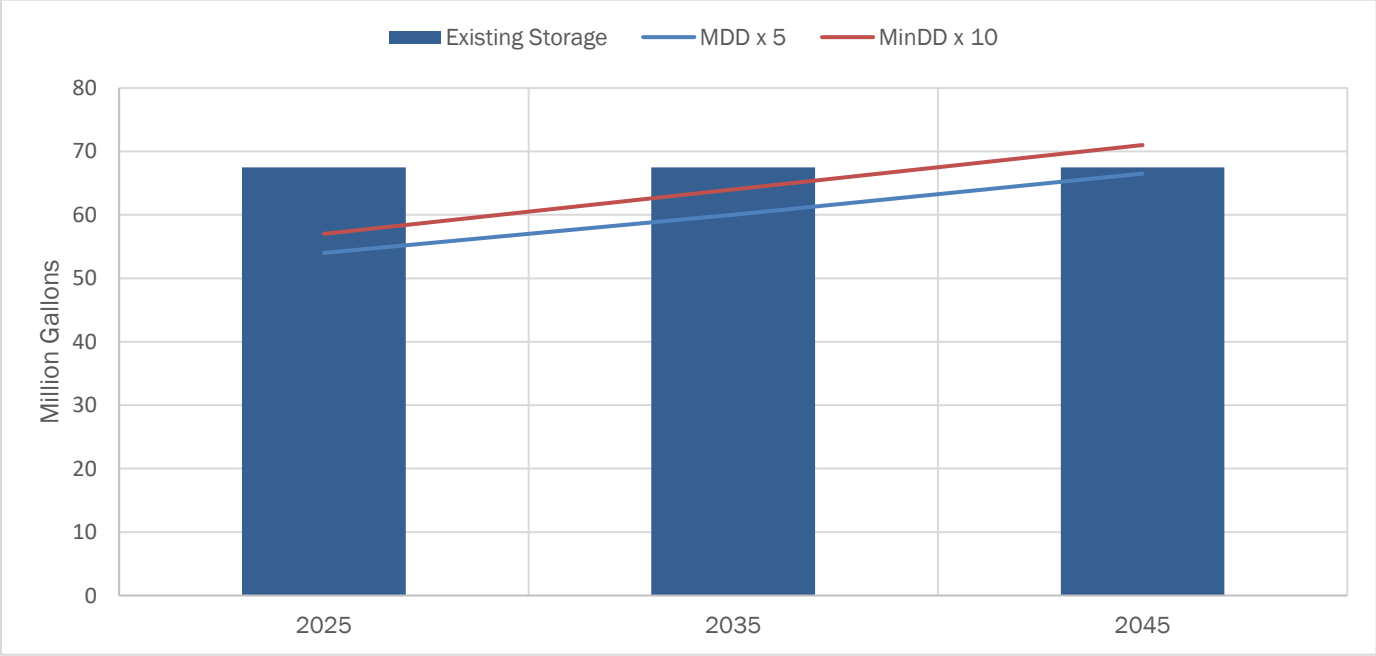

Figure 6-10 Storage Analysis Results

6.5 Redundancy and Reliability

Although no capacity deficiencies were identified as presented Section 6.1, two projects are proposed to improve system reliability and eliminate areas served by a single transmission main. The Buena Vista Park neighborhood, located immediately south of the Water Treatment Plant, is currently supplied through a single 18-inch transmission line. To provide redundancy, an additional 18-inch main along Imperial Avenue between Danenberg Avenue and Manuel Ortiz Avenue is proposed and included in the CIP as Project Redun-1.

Similarly, the Countryside Park neighborhood is presently served by a single transmission main. A new 12-inch water line along Farnsworth Lane between Danenberg Drive and Quail Run Drive, currently under design, will complete the looped connection and enhance system reliability. This project is identified as Redun-2 in the CIP.

The locations of the two projects are shown in Figure 9-2.

6.6 Capacity Analysis Summary

The comprehensive evaluation of the City's water system indicates that, under existing, near-term, and ultimate planning scenarios, the system is generally well-equipped to meet current and projected demands. Hydraulic model simulations confirm that minimum pressures remain above 40 psi and maximum velocities stay below 5 fps under Maximum Day Demand (MDD) conditions. Fire flow analyses indicate that 17 pipeline improvements, totaling 22,400 linear feet, are required to achieve compliance with the fire flow requirements.

Pump station assessments demonstrate that the combined firm capacity of the Water Treatment Plant (WTP) Booster Station and La Brucherie Pump Station is sufficient to meet MDD, MDD plus fire flow, and Peak Hour Demand (PHD) under existing and near-term conditions, with a modest surplus available. While the ultimate scenario projects a shortfall of approximately 600 gpm, this deficit represents 2.5% of the total firm capacity and is based on long term population forecasting. Therefore, no capital project is recommended at this time. Pump capacity needs should be reevaluated at the next water master plan update, assumed within 10-years.

Storage analysis indicates that the City maintains substantial water storage; however, deficits relative to earthquake supply criteria exist due to the system being supplied from a single source. These deficits increase under near-term and ultimate demand scenarios but do not necessitate immediate large-scale improvements. The existing storage is sufficient to meet 6.3 days of MDD and 11.7 days of minimum day demand (MinDD) under current conditions. Recommended strategies to maintain resilience include emergency response planning, procurement of critical spare parts, and potential temporary supplemental supply connections during emergencies. Implementing tertiary treatment at the City's wastewater treatment plant to use recycled water for irrigation could reduce overall water demands, effectively bringing existing storage into compliance.

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7 Condition Assessment

This section introduces the condition assessment conducted at the City of El Centro's major water facilities. It explains the scope of evaluations performed at the City's New Water Treatment Plant, Old Water Treatment Plant, the La Brucherie pump station, the City's reservoirs, operator-identified malfunctioning valves, and aging pipelines. Inspections were performed on mechanical and electrical equipment, treatment structures, storage tanks, and other critical components. These assessments provide a structured approach to understanding the physical state of the City's water infrastructure.

Evaluating the condition of existing facilities is essential for ensuring reliable water service and planning future improvements. By documenting the current state of key assets, this chapter establishes a foundation for identifying maintenance needs and prioritizing investments that enhance system performance and resiliency. This context supports informed decision-making and long-term sustainability of the City's water supply infrastructure.

7.1 New Water Treatment Plant

Condition assessment was performed for the City's New WTP facilities including operations and chemical buildings, Clearwell pumps, clarifiers, filters, ponds, and basins. See **Table 7-1** for the assessment that has been developed for each New WTP facility.

Table 7-1. New Water Treatment Plant Site Visit

Operations Building	
Electrical: The Operations Building includes an electrical room in addition to general administration rooms. The building was constructed in 2010 as part of the New WTP expansion. The major electrical equipment within the Operations Building electrical room includes: ▪ Main Switchboard "MSB" (with IID utility meter) ▪ ATS ▪ Standby Diesel Generator (outside ops bldg.) ▪ Main Distribution Board MDB ▪ Panelboard P1 and Transformer T-1 (ops bldg.) ▪ Panel HA (ops bldg.) ▪ MCC-1 (powers backwash and waste pumps) The electrical equipment in the electrical room appeared to be in good condition, with an estimated 15 years of useful life remaining based on its age. Staff did not report any issues with the electrical equipment in the operations building or the standby generator located outside. Staff reported that the generator capacity is sufficient for the plant, and that an annual maintenance	 

Table 7-1. New Water Treatment Plant Site Visit

service and load bank test was just performed on the generator. The generator appeared to be in good condition.

No arc flash stickers were observed on the electrical equipment in the electrical room, nor on the standby generator. A power system study is recommended to be performed and arc flash stickers installed, and a study update and new stickers performed every 5 years after, or electrical systems are done if earlier, per NFPA 70E (Rec 1).

No third-party maintenance/testing stickers were observed on the electrical equipment, nor on the standby generator, other than a ground fault test done on MSB's main breaker in 2009. Testing and maintenance is recommended every 3 years per the NETA ATS standard by a NETA-certified company. Testing ensures equipment works properly, protects properly, and identifies equipment issues. The third-party testing is not included as a CIP recommendation, as it is considered an operations and preventative maintenance activity.

Staff reported that the underground hand holes have flooded in the past. Staff asked for recommendations to address this issue, including possibly replacing the hand holes with new hand holes with sumps and pea gravel under for drainage. According to the record drawings, there are 10 such hand holes around the site. Replacing the hand holes in their entirely is not recommended because it would be costly, affect plant operation and take equipment out of service. Modifications are recommended to address this concern (Rec 2).

The Operations Building interior lighting appears to be in good condition, with no issues noted by staff.

Staff noted that all the new water treatment plant's exterior lighting is the old High Pressure Sodium type. City plans to upgrade the lighting internally; therefore, this improvement is not included in CIP.

The major control panels within the Operations Building electrical room includes:

- LCP-100



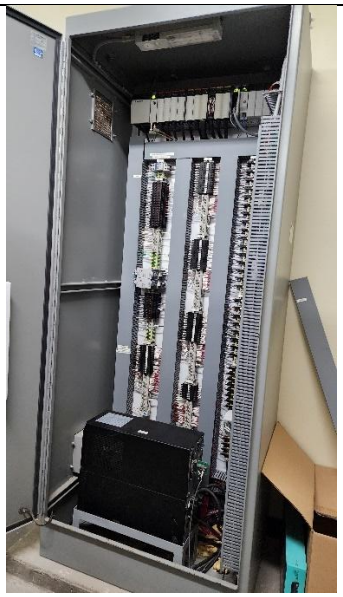




Table 7-1. New Water Treatment Plant Site Visit

A server/network rack with:

- A Dell PowerEdge R410 server appears to be at or past the end of its lifecycle per Dell's website, which means Dell no longer provides direct support for it.
- The Dell PowerEdge R430 server appears to be at or past the end of its lifecycle per Dell's website, which means Dell no longer provides direct support for it.
- The Dell PowerEdge R230 server appears to be at or past the end of its lifecycle per Dell's website, which means Dell no longer provides direct support for it.
- Networking equipment, which appears to be in good condition.
- A cloud managed video surveillance provider device.





Dudek assumes that the City has a program in place with its IT department to update its computer systems, so such updates and replacements won't be recommended in this report.

Staff reported that they have no issues with the plant control system, PLCs, and LCPs. The PLCs have been in service since 2009, and the control panels appear to be in good condition. According to the manufacturer's website, the model number for the ControlLogix 5561 CPU used in LCP-300 appears to have been discontinued in 2017, which means that no new product can be purchased—only repair or exchange services may be available. Should PLC modules fail, it may be difficult to find used or refurbished modules when needed. We recommend replacing all PLCs throughout the New WTP (Rec 3).

New WTP Operations Building Mechanical and Electrical Recommendations

1 – Perform a Power System Study and Install Arc-Flash Stickers for the entire WTP, assuming a study has not been done before.

2 – Electrical hand hole cover water intrusion recommendation options: a. Remove the concrete top and hatch of each hand hole and replace with a taller cover with a new sealable H20 rated hand hole cover. Re-grade around the 10 hand holes on site with a 2% slope away and install asphalt on re-graded area. b. Remove each existing hand hole hatch and replace with a sealed roof hatch and install bollards around hand holes so they are not driven on (roof hatches are not traffic rated). Re-grade around the 10 hand holes on site with a 2% slope away and install asphalt on re-graded area.

3 – Replace PLCs throughout the plant. Could spread the cost out by doing PLCs in one control panel at a time and keeping old PLCs for spare parts.

Table 7-1. New Water Treatment Plant Site Visit

Chemical Building – Ferric Chloride Receiving, Storage, and Feed Room

Mechanical:

The Chemical Building includes various rooms housing chemical storage tanks, dosing pumps, analyzers, and associated equipment. This particular room was initially designated for Ferric Chloride operations; however, record drawings indicate its current use for Aluminum and Polymer.

Constructed in 2010, this room contains the following:

- Two 7,000 gallon Aluminum Chlorohydrate tanks
- One 2,000 gallon polymer tank
- Five temporary polymer totes at the time of the site visit.

All tanks, mechanical components, and feed pumps within the room appear to be in good condition and are functioning as intended.

Electrical:

The major electrical equipment within the chemical building includes:

- Panelboard P2 (in chem bldg., fed from Panelboard P1)
- Panel HB (on chemical building exterior—not in use)

This electrical equipment appeared to be in good condition, with an estimated 15 years of useful life remaining for the panelboards based on age. Staff did not report any issues with the electrical equipment in the chemical building.

No arc flash stickers were observed on the electrical equipment.

No third-party maintenance/testing stickers were observed on the electrical equipment. Testing and maintenance is recommended every 3 years per the NETA ATS standard by a NETA-certified company. Testing ensures equipment works properly, protects properly, and identifies equipment issues. The third-party testing is not included as a CIP recommendation, as it is considered an operations and preventative maintenance activity.

The interior lighting appears to be in good condition, with no issues noted by staff.









Table 7-1. New Water Treatment Plant Site Visit

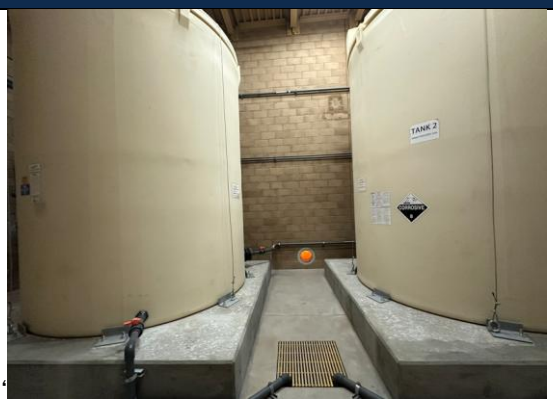
Chemical Building - Chlorine Receiving, Storage and Feed Rooms	
Mechanical: The Chlorine Receiving and Storage Room contains two 6,500-gallon 12.5% Sodium Hypochlorite tanks along with associated piping and electrical infrastructure, as identified in the New WTP record drawings. The Chlorine Feed Room includes two Clearwell chlorinators and five Sodium Hypochlorite dosing pumps—two of which supply the Clearwell Pump Station and three that dose the below-grade vaults upstream of the clarifiers. These storage and mechanical facilities were constructed in 2024 as part of the Chlorine Conversion Project. All tanks, mechanical equipment, and dosing systems within both Chlorine rooms were observed to be in good working order. **Electrical:** The interior lighting appears to be in good condition, with no issues noted by staff. The major control panel within the chemical building is LCP-101. This LCP was installed when the sodium hypochlorite system was installed recently.	  
New WTP Chemical Building Mechanical and Electrical Recommendations	
No recommendations necessary	

Table 7-1. New Water Treatment Plant Site Visit

Clearwell Pumps

Mechanical:

Constructed in 2010, the Clearwell Pump Station consists of four vertical turbine pumps located outdoors at-grade. These replaced the Old WTP's Clearwell pumps. All pumps, associated valves, and piping are in good condition. Minor rust was noted around flange bolts, but coatings were intact, pipe supports were stable, and the concrete pad was structurally sound.

A pool of water was observed on the east side of the pad, likely due to leakage at a fitting or coupling between the above-grade header and below-grade piping. Fittings or couplings near the pooling should be replaced to mitigate the maintenance issue.

Based on operational discussions, the New WTP is currently operating at an average production rate of approximately 7 MGD. The facility is equipped with clearwell pumps rated for 14 MGD and is permitted for flows up to 21 MGD (Rec 1).

Electrical:

The major electrical equipment within the Clearwell Electrical Building includes:

- Distribution Board DB-I
- Panelboard P4 and Transformer TP-4
- Four ABB ACS550 VFDs with line reactors for the 75 HP Clearwell pumps. Per the manufacturer's web site, these VFDs are obsolete and the manufacturer recommends replacement with new VFDs (Rec 2).

The electrical building is climate controlled and has two air conditioning units. Staff advised that the roof air conditioning unit was recently replaced. Staff did not advise of any HVAC concerns.

The electrical switchboard, panelboard, and transformer appeared to be in good condition, with an estimated 15 years of useful life remaining based on age. Staff did not report any issues with the electrical equipment in the Clearwell Electrical Building.

No arc flash stickers were observed on the electrical equipment in the electrical room.

No third-party maintenance/testing stickers were observed on the electrical equipment. Testing and

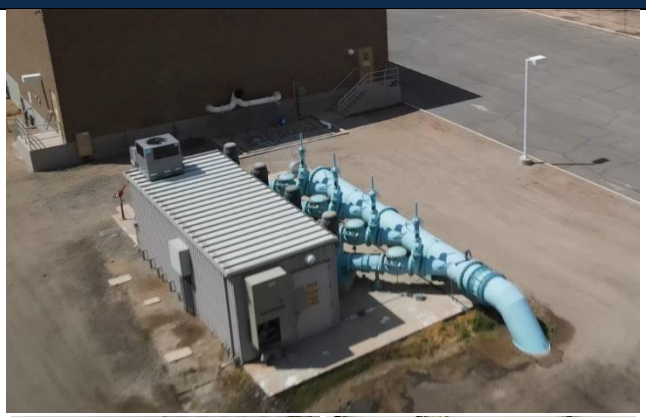










Table 7-1. New Water Treatment Plant Site Visit

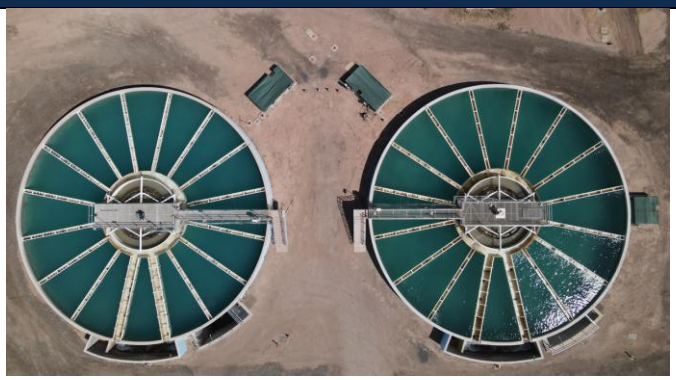
maintenance is recommended every 3 years per the NETA ATS standard by a NETA-certified company. Testing ensures equipment works properly, protects properly, and identifies equipment issues. The third-party testing is not included as a CIP recommendation, as it is considered an operations and preventative maintenance activity. The Clearwell Electrical Building interior lighting appears to be in good condition, with no issues noted by staff. The following items were observed at the Clearwell pumps: ▪ All outdoor flex conduits appeared brittle, cracked, discolored, and damaged by the sun and elements. They did not appear to have broken fully through. These should be replaced as a maintenance item. ▪ Strut used to anchor the exposed conduit to the concrete deck is severely corroded in this area and should be replaced as a maintenance item.	
New WTP Clearwell Pumps Mechanical and Electrical Recommendations	
1 – Install 4 new pumps at the Clearwell Pump Station to increase pumping capacity. 2 – Replace 4 VFDs at Clearwell Pump Station with active front end VFDs. Alternately, the City could replace two at a time and keep the old VFDs as spares in the interim to spread out the cost.	
Clarifiers and Vaults	
Mechanical: Two clarifiers, constructed in 2010, treat raw water diverted through two magnetic flow meter and dosing vaults. Each clarifier includes primary and secondary treatment zones. Valves, piping, and structural elements are in overall good condition. Clarifier No. 1 (north) shows signs of rust and corrosion, while Clarifier No. 2, which was recently resurfaced, remains in excellent condition. The City plans to take Clarifier No. 1 offline this year for sandblasting and resurfacing. It is recommended that the City implement a routine maintenance schedule—including sandblasting and resurfacing—to maintain long-term structural integrity and prolong the service life of the clarifiers. This routine maintenance schedule is not included as a CIP	

Table 7-1. New Water Treatment Plant Site Visit

recommendation, as it is considered an operations and preventive maintenance activity.

Electrical:

The following items were observed at the clarifiers:

- All outdoor flex conduits appeared brittle, cracked, discolored, and damaged by the sun and elements. They did not appear to have broken fully through. These should be replaced as a maintenance item.
- Two ultrasonic level transmitters were observed mounted to the side of Clarifier #1 without a sunshade over them. Adding a sunshade would reduce the internal temperature in each transmitter installed outdoors on site during the day and protect the display from sunlight and heat damage. Sunshades should be added as part of maintenance activities.
- City staff advised that the flow meter and valve vault downstream of the clarifiers flooded once in the past. Staff would like to have a float switch or some other type of flood alarm installed in the vault that reports back to the Plant PLC and SCADA system (Rec 1).







New WTP Clarifiers and Vaults Mechanical and Electrical Recommendations

1 – Add a flood float switch alarm to each flow meter and valve vault downstream of the clarifiers per Staff request. Alarm to report to Plant PLC and SCADA. Cost estimate assumes we can run signals back to filter building PLC through existing conduits but need to re-pull all cables in conduit.

Filters

Mechanical:

The filter structure includes three gravity sand filter bays, with the middle bay approximately twice the width of the others. Overhead walkways span all three bays. The filter piping room beneath contains large-diameter process piping, HVAC piping, and chlorine analyzer equipment.

All components, including filters, piping, and ancillary systems, are in good condition. No deficiencies were noted.

Operational feedback suggests adding two more filters for redundancy and emergency situations. A bypass to facilitate drainage of filters for O&M is also recommended (Rec 1).



Table 7-1. New Water Treatment Plant Site Visit

It was also discussed that the staff is experiencing valve actuators leak grease and not reach torque. Dudek recommends replacing these actuators with new ones (Rec 2).

Electrical:

The filters area includes an electrical building that houses electrical equipment and control panels, and an underground filter gallery.

The major electrical equipment within the filter electrical room includes:

- MCC-2
- Panel HC
- Panel P3 and its 15 kVA transformer in MCC-2
- The major electrical equipment within the filter gallery includes:
- Panel HF5
- Panel HF6

The electrical equipment appeared to be in good condition, with an estimated 15 years of useful life remaining based on its age. Staff did not report any issues with the electrical equipment in the filters area.

No arc flash stickers were observed on the electrical equipment in the electrical room, nor on the standby generator.

No third-party maintenance/testing stickers were observed on the electrical equipment. Testing and maintenance is recommended every 3 years per the NETA ATS standard by a NETA-certified company. Testing ensures equipment works properly, protects properly, and identifies equipment issues. The third-party testing is not included as a CIP recommendation, as it is considered an operations and preventative maintenance activity.

The filter electrical building and filter gallery interior lighting appears to be in good condition, with no issues noted by staff.

The major control panels within the filters electrical room includes:

- LCP-200
- LCP-300

Staff reported that they have no issues with the plant control system, PLCs, and LCPs. The PLCs have been in service since 2009, and the control panels appear to be in good condition. According







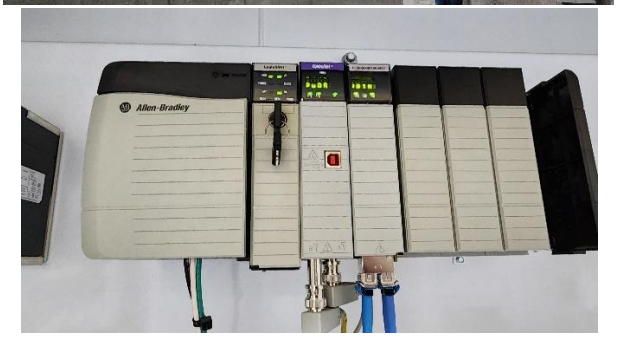


Table 7-1. New Water Treatment Plant Site Visit

to the manufacturer's website, the model number for the ControlLogix 5561 CPU used appears to have been discontinued in 2017, which means that no new product can be purchased—only repair or exchange services may be available. Should PLC modules fail, it may be difficult to find used or refurbished modules when needed. We recommend replacing all PLCs throughout the New WTP (Rec 3).	
New WTP Filters Mechanical and Electrical Recommendations	
1 – Construct two new filter bays and filter bypass for drainage. 2 – Replace deficient actuators. 3 – Replace PLCs throughout plant. Could spread the cost out by doing PLCs in one control panel at a time and keeping old PLCs for spare parts.	
Waste Washwater Recovery Basin	
Mechanical: This 70-foot by 85-foot by 16-foot-deep basin is located adjacent to the filter bays and includes two submersible pumps, two duck-bill style check valves, and associated piping. The pumps appear to be functioning properly. However, the 36-inch duck-bill check valve exhibits leakage when not submerged. It is recommended to replace this 36-inch valve (Rec 1). Dudek further recommends either replacing both check valves or removing and reshaping them to restore performance. Bypass valve is needed between the duck-bill style check valves to drain filter bays to perform maintenance. **Electrical:** The electrical equipment at the basin appear to be in good condition. No concerns were observed, and staff did not advise of any concerns.	 
New WTP Waste Washwater Recovery Basin Mechanical and Electrical Recommendations	
1 – Replace Waste Washwater Basin check valve to eliminate ongoing leakage and potentially replace both check valves to mitigate this issue in the future.	

Table 7-1. New Water Treatment Plant Site Visit

Sludge Basins and Sludge Drying Beds

Mechanical:

Constructed in 2010 at the southern end of the WTP site, the facility includes two adjacent concrete sludge basins with a shared skimming structure. To the south, two earthen sludge drying beds, originally planned as a concrete unit, are hydraulically connected by a PVC pipe to increase capacity. During the site visit a temporary pump setup was placed at the south end of the sludge basins to transfer the water to the sludge drying beds.

The basins and drying beds are in good condition. No mechanical improvements are recommended at this time.

An additional, larger sludge drying pond is recommended, as the insufficient capacity and the flat slope of the existing two ponds make it difficult for staff to fully clean and maintain

The City noted concerns about the proximity of the accumulated sludge mound to planned residential developments west of the WTP. It is recommended that alternative disposal options be explored.



New WTP Sludge Basins and Sludge Drying Beds Mechanical and Electrical Recommendations

1 – Construct new 150-foot by 170-foot concrete drying bed.

Backwash Pond and Pumps

Mechanical:

Located at the northwest section of the New WTP and constructed in 2010, the backwash pond receives waste washwater from the basin adjacent to the filters. Once processed, vertical turbine pumps return clean water to the Old WTP's raw water reservoirs and transport residual sludge to the sludge drying beds.

City staff suggests that the pond can only accommodate one filter backwash at a time.

Staff discussed the location of the backwash return outlet being close to the raw water intake causing turbidity issues downstream at the clarifiers. Also, the valve between the northwest and southwest ponds is not sealing properly and is recommended to be replaced (Rec 1).

Electrical:

The electrical equipment at the backwash pump station, including motors, disconnect switches,



Table 7-1. New Water Treatment Plant Site Visit

conduits, and ultrasonic level transmitter all appear to be in good condition. No electrical recommendations are necessary.	
New WTP Backwash Pond and Pumps Mechanical and Electrical Recommendations	
1 – Construct new 18-inch diameter pipeline to the raw water ponds.	

7.2 Old Water Treatment Plant

Condition assessment was performed for the City's Outdated WTP facilities including pump rooms, electrical rooms, and the raw water pump station. See **Table 7-2** for the assessment that has been developed for each Old WTP facility site visit.

Table 7-2. Old Water Treatment Plant Site Visit

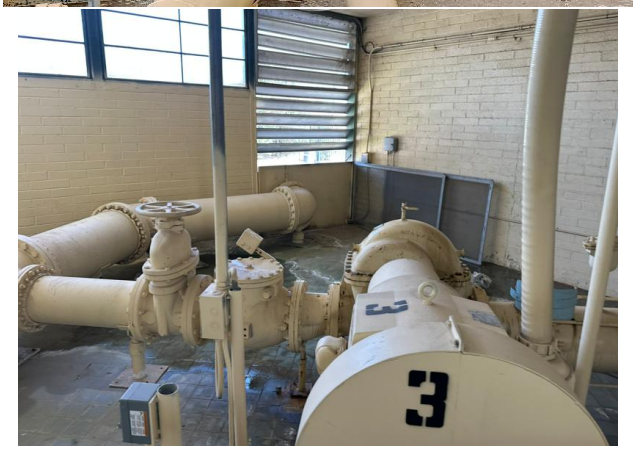
Distribution Pump Room	
Mechanical: The Distribution Pump Room currently contains four split-case pumps that convey treated water from the New WTP into the City's pump station. Pump trains 1, 2, and 4 were upgraded in 1994 with 200-horsepower pumps and new piping. In 2022, pump train 3 was added, replacing a former pressure relief valve at the north end of the room. This addition included the installation of a new above-grade 20-inch ductile iron pipe (DIP), which allows Pumps 1 and 3 to deliver flow to a separate section of the pump station. Pumps 2 and 4 continue to operate using the original 30-inch below-grade discharge piping, which was originally shared by all four pump trains. Each pump train is composed of the following: ▪ 4,000 GPM Aurora pump ▪ 12-inch lever-and-weight check valve ▪ 12-inch gate valve and 12-inch butterfly valve on trains 1 and 3 ▪ Two 12-inch butterfly valves on trains 2 and 4 ▪ Associated components including couplings, reducers, air release valves, and pressure gauges Two new butterfly valves, installed in 2024, were observed on Pump Train 2. It is recommended to replace all four pumps and related mechanical equipment due to reduced equipment size at pump train 3, potentially leaking equipment, and surpassing the industry standard	 

Table 7-2. Old Water Treatment Plant Site Visit

useful life of 30 years for pumping equipment. It has been determined the best option is to construct an entirely new pump station related components and new building at the Old WTP site (Rec 1).

Electrical:

No major electrical equipment or control panels were observed in the Distribution Pump Room. Electrical, instrumentation, and controls within the room include:

- Lighting
- Pump pushbutton stations
- Pump-related instrumentation
- Junction boxes
- Conduit and wire
- Pump motors

The existing distribution pump room is open to the outdoor environment, in that louvers with a slat missing were observed in the open position.

The following items were observed in the Distribution Pump Room:

- Could not determine the age of the existing motors, however the motor manufacturer does not appear to be in business.
- We could not determine the age of the existing power conductors to each distribution pump. Assuming they are the same age as the existing SWBD-B, then the conductors are beyond their useful life.
- The existing room lighting appears to be a mix of original light fixtures and modified original fixtures utilizing LED screw-in bulbs and the original building conduit and wire. Due to the amount of daylight entering the room, the lighting levels could not be fully observed. The lighting appears to be well beyond its useful life and likely provides insufficient light levels for staff to work on the equipment. No emergency lighting was observed in this room.
- Water was present on the floor in the room near Pump 3. It appears that water was present on the floor in the past in the room due to white deposits that remain on the floor.









Table 7-2. Old Water Treatment Plant Site Visit

- Most conduits appear to be exposed and routed overhead within the room. There are a few conduits routed along the floor, other conduits near the floor, and conduits under the pumps that appear to be corroded. One conduit was observed to be supported/hung from coat-hanger type metal from a valve handwheel.
- The pressure gauge on one pump was dark and hard to read.
- A flexible conduit for controls at Pump 3 that may have been the check valve open status signal appears to not be in use.
- The conduit for Pump 3 limit switch is being supported by a coat-hanger type metal from a valve handwheel. The limit switch is still there but not in use, as it appears to not be near the pump's check valve.

It is recommended to replace the entire distribution pump system, electrical distribution, and controls in a new location because the existing motors and electrical distribution equipment far exceeds the industry standard useful life of 30 years. This would include construction of an entirely new distribution pump station on a new Utility electrical service with a new standby generator, ATS, switchboard, and VFDs in a new electrical building. (Rec 1).

Clearwell Pump Room

Mechanical:

The Clearwell Pump Room houses two split-case Peerless pumps and three vertical turbine pumps, all of which are currently inactive. During the site visit, one of the split-case pumps was undergoing testing and is expected to be re-piped as a fifth pump in the Distribution Pump Room to increase system capacity.



As part of replacing the entire pump station at the Old WTP in a new pump station building, mechanical equipment in the Clearwell Pump Room would no longer be part of the new system.

Electrical:

The following items were observed in the Clearwell Pump Room:

- Could not determine the age of the two existing motors for the pumps the City plans on re-purposing, however they appear to be beyond their useful life.

Table 7-2. Old Water Treatment Plant Site Visit

- We could not determine the age of the existing power conductors to each horizontal split case pump observed in this room. Assuming they are at least the same age as the existing SWBD-B, then the conductors are beyond their useful life.
- The existing room lighting appears to be a mix of original light fixtures and modified original fixtures utilizing LED screw-in bulbs and the original building conduit and wire. Due to the amount of daylight entering the room, the lighting levels could not be fully observed. The lighting appears to be well beyond its useful life and likely provides insufficient light levels for staff to work on the equipment. Minimal emergency lighting was observed in this room, and based on its physical condition observed, may not be operable.
- Existing exposed conduits near and along the floor appear to be for pump instrumentation and controls. These conduits should be removed and relocated.
- Three existing abandoned Clearwell pumps and associated electrical and instrumentation equipment, conduit and wire were observed to be in place and should be removed.

Staff reports they are re-piping an existing pump in this room to be Distribution Pump 5. Staff advised they are installing conduit and wire, replacing the spare VFD with a new VFD, and modifying the electrical distribution to provide power to this pump 5. In the future, staff plans to re-pipe another existing pump in this room to be Distribution Pump 6.



Table 7-2. Old Water Treatment Plant Site Visit

Electrical Room, Original MCC, Main Switchboard, ATS, and Standby Generator	

1st Floor Electrical Room:

This electrical room was observed to include the following existing electrical equipment:

- SWBD-B.
- Part of a yellow-colored Square D MCC that is not labeled with a name.
- Five (5) VFDs for the Distribution Pumps, listed in order what we observed is newest to oldest:
  - VFD #1
  - VFD #2
  - VFD #4
  - VFD #3
  - Spare VFD
- This electrical room appears to be air-conditioned by a mini split system and by a roof-top HVAC unit.
- Staff advised that VFD #1 is the newest VFD.
- Staff advised that VFD #2 was replaced inside the old VFD's enclosure, but did not confirm when it was replaced.
- Based on the model number on the nameplate on the front of VFDs 3 and 4, and the manufacturer's web site, the manufacturer no longer sells this model, but they plan to support it until the end of 2029.
- Staff is replacing the obsolete Spare VFD with a new VFD for use on the new future Distribution Pump #5.

It appears that staff has been keeping up with replacing VFDs for the distribution pumps as needed.

SWBD-B appears to be beyond its useful life. Staff advised they are working on adding a fifth distribution pump in the future and will have bypass this switchboard and run conductors directly from the 5 VFDs to the 5 distribution pumps.

A yellow-colored Square D MCC was observed-part of it is in the electrical room, and part of it is in the hallway. It is not labeled with a name but appears to have originally had the utility meter in it and it fed the entire old plant site. The MCC appears original to the plant and still powers some equipment and the building panelboards. This MCC is extremely beyond its useful life and should be removed or replaced (Rec 2).





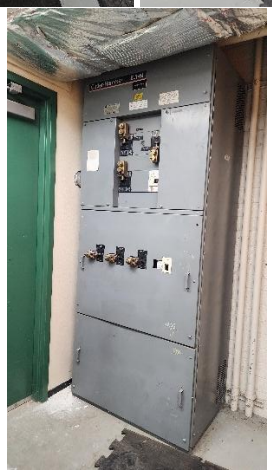
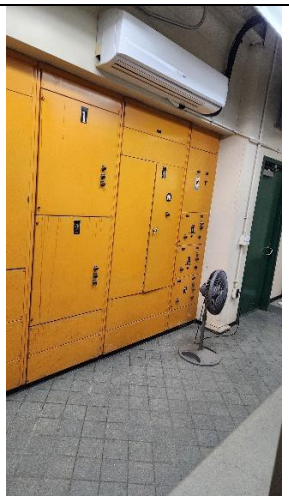


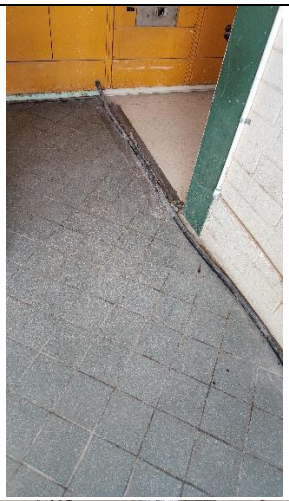
Table 7-2. Old Water Treatment Plant Site Visit

Staff advised that some of the conductors related to the yellow MCC, including the conductors feeding it from the switchboard in the warehouse are aluminum conductors that they would like replaced.

In the lobby, SO cord was observed routed across the hallway floor from the yellow MCC to the transformer under the stairs for panelboard LP1. Staff advised that the permanent underground conductors had failed and could not be removed from the conduit to put new conductors in. Staff would like new conduit and wire installed to feed the panelboard and transformer.

Staff also advised that they would like the lighting controller equipment located within the wall directly above Panel LP-1 replaced.







2nd Floor Electrical Mezzanine:

The mezzanine, located directly above the 1st floor electrical room, was observed to include the following existing electrical equipment:

- Switchboard 2A (not labeled in the field)
- VFD Isolation Transformer T100
- VFD Isolation Transformer T101
- VFD Isolation Transformer T102
- VFD Isolation Transformer T104
- VFD Isolation Transformer T103 (assumed based on record drawings, not labeled in field)
- Transformer TA
- Panelboard PA (fed from Switchboard 2A via Transformer TA)



Switchboard 2A's nameplate indicates it was built in 2015, so it has approximately 20 years of remaining useful life. Switchboard 2A was observed to have a 1200A main breaker. The existing loads on this switchboard appear to utilize all of the switchboard's capacity, should all 4 distribution pumps be running.

Four of the five VFD isolation transformers appear to be 35 years old and are nearing the end of their useful life.

Transformer TA and Panelboard PA appear to be operating beyond the end of their useful lives.

Table 7-2. Old Water Treatment Plant Site Visit

Warehouse Electrical Equipment (Main Switchboard):

This electrical room was observed to include the following existing electrical equipment:

- Old WTP Main Breaker Section
- Old WTP ATS Section
- Old WTP Main Switchboard
- MCC-1

The main breaker section is provided power from the utility company. The existing utility electrical service is via overhead conductors from Danenberg Drive and three utility transformers on site. Plant staff advised that the Old WTP electrical service and electrical system experiences surges from the utility regularly (Rec 4). Staff reports that the New WTP does not experience surges from the utility like the Old WTP does. Soot on the nearby wall and ceiling above the main breaker in the warehouse indicate the possibility of a previous electrical system incident. The main breaker section appears to be beyond the end of its useful life (Rec 3).

The ATS Section appears to be beyond the end of its useful life. Six holes in the door of the ATS section were observed, which is a safety hazard and should be rectified. Staff advised that they replaced the ATS with a new ATS installed within this existing section, but did not indicate how recent the replacement was. The ATS did not appear to be the bypass isolation type that allows connection to a source safely while the transfer switch is racked out and removed for maintenance, repairs, or testing (Rec 3).

The main switchboard appears to be beyond the end of its useful life and should be replaced. Many breakers appear to be original to the switchboard, which means they are beyond the end of their useful lives and provide an increased risk of operational failure and/or not protecting equipment and staff properly (Rec 3).

MCC-1 appears to be in fair condition but appears to be at the end of its useful life (Rec 3).

Standby Generator:

The Old WTP 1000 kW standby generator appears to have been installed in 2009 and its control panel has a label stating that the control panel was replaced after 296 hours of operation, based on observations. Generator is observed to be in good condition, with no engine leaks or other issues

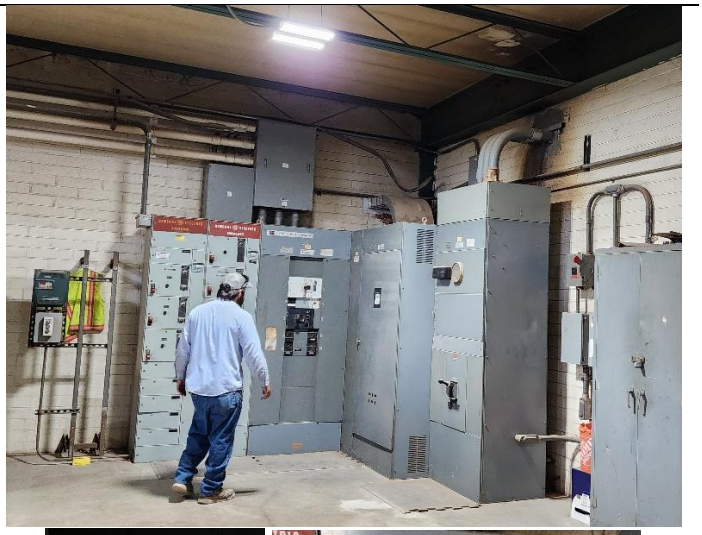






Table 7-2. Old Water Treatment Plant Site Visit

observed. Staff advised they have no issues with the standby generator performance nor its capacity to power the current plant electrical load. The ability to power more than four distribution pumps and the Old WTP loads should be evaluated.

General Old WTP Building Observations:

Most, if not all of the existing Old WTP building panelboards, transformers, conduit and conductors, and lighting throughout the old WTP appear to be far beyond the end of useful life.

No arc flash stickers were observed on any electrical equipment.

Only one third-party maintenance/testing sticker was observed on the electrical equipment at the Old WTP—on the new breaker installed in the existing yellow MCC to power the Raw Water Pump Station MCC. Testing and maintenance is recommended every 3 years per the NETA ATS standard by a NETA-certified company. Testing ensures equipment works properly, protects properly, and identifies equipment issues. The third-party testing is not included as a CIP recommendation, as it is considered an operations and preventative maintenance activity.

The PLC in MCP-10 appears to be in good condition and is still supported by the manufacturer, including available replacements.







Old WTP Building Mechanical and Electrical Recommendations

1 – Replace existing Old WTP distribution pumps and associated electrical equipment with a new distribution pump station on-site in a new location with an electrical utility service, ATS, standby generator, electrical distribution, VFDs, and controls in a new electrical building. Assume 8-200hp pumps. Also power the existing Raw Water Pump Station from this electrical system. Estimated construction cost: $5.8 million.

2 – Old WTP Lobby and 1st Floor Electrical Room—Remove yellow MCC in its entirety and all associated conductors. Install one switchboard at 480-volts to power all remaining existing Old WTP building electrical loads still in use that are currently powered by the MCC. Also replace Transformer TA and Panelboard PA on mezzanine. This project is only required if new pump station is not constructed.

3 – Replace existing electrical equipment in the warehouse, including all main switchboard sections, main breaker section, ATS section, and MCC-1. The new main switchboard would have breakers to power Switchboard 2A (if needed), the new recommended switchboard, and new MCC-1. Also, replace all remaining panelboards, transformers, conduit and conductors to those transformers and panelboards. Assuming 5 panelboards for building loads. This project is only required if new pump station is not constructed.

4 – Perform a Power System Study and install arc flash stickers for the entire old WTP. Assuming a study has not been done before. This project is only required if new pump station is not constructed.

Table 7-2. Old Water Treatment Plant Site Visit

Raw Water Pump Station

Mechanical:

The Raw Water Pump Station (RWPS) facility contains four 50 horsepower vertical turbine pumps with exposed motors that sit at grade at the top of the structure. The date of original construction has not been determined and no record drawings for the facility are available.

All mechanical components and pumps within the pump station appear to be in good condition and are functioning as intended. It was discussed that Staff would like the raw water pump station pumps to be replaced with more up to date equipment (Rec 1).

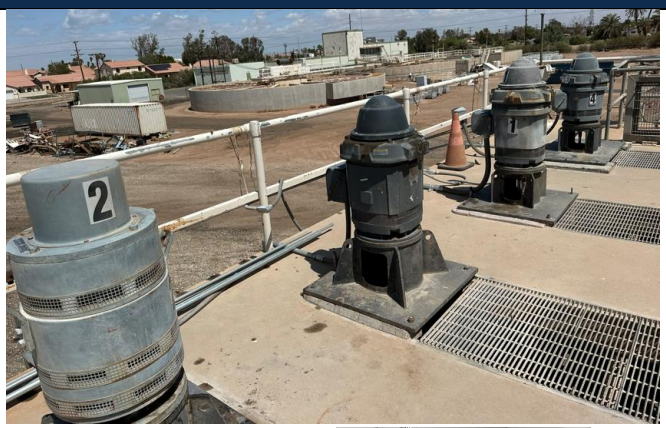
Electrical:

The RWPS includes four pumps to pump raw water from the canal to the raw water ponds. All motors appear to be older WP-1 type motors. Pump 1 appears to be 50 hp, and the other three pumps appear to be 30 hp. Only one of the four motors' nameplates indicated the motor is inverter-duty rated, suitable for use with a VFD. We could not determine the age of the existing motors to advise if they are at the end of their useful lives. Staff did not indicate any concerns with the raw water pump motors. The conduits to the pumps appear to be in excellent condition.

The RWPS Electrical Building was observed to include the following existing electrical equipment:

- MCC-1—staff advised that this is a brand new MCC that was just installed and is in excellent condition.
- Four stand-alone ABB VFDs—staff advised that these are newly installed and appear to be in excellent condition.
- Two ultrasonic level transmitters, which appear to be in excellent condition.
- LCP-80—staff advised that this control panel is new and was recently installed. It includes and Allen-Bradley PLC and OIT, as well as radio communication to MCP-10 at the Old WTP control room.
- The existing building lighting appears to be fluorescent fixtures, however the lighting level appears adequate.

The only electrical recommendation is to revise how the raw water pump station is powered. Dudek recommends powering the raw water pump station





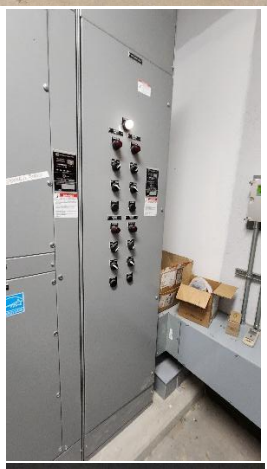






Table 7-2. Old Water Treatment Plant Site Visit

directly from the recommended new distribution pump station electrical switchboard (Rec 2). **Structural:** The RWPS consists of a multi-level concrete structure measuring approximately 36-feet wide by 40-feet long with elevated pumps and a small, wood-framed control building located on the top slab and a wood-framed deck overhang located at the southwest. The structure is partially buried, with sloping backfill varying approximately 6-feet from the northwest corner to the southeast corner of the structure. The overall condition of the Raw Water Ponds is considered "fair" with varying levels of minor to severe deterioration observed and a condition rating of 5.4. Refer to **Appendix C** for detailed findings of the facility (Rec 3).	
Old WTP Raw Water Pump Station Mechanical, Electrical and Structural Recommendations	
1 – Replace existing Old WTP distribution pumps and associated electrical equipment with a new distribution pump station on-site with a new utility electrical service and standby generator. 2 – Power the existing Raw Water Pump Station from the new Distribution Pump Station electrical system. 3 – Repair top slab cracking and localized spalling. Repair pump support beams and strengthen with fiber-reinforced polymer as soon as possible. Replace pump anchor bolts and pump base plates. Replace wood platform planking.	

7.3 La Brucherie Pump Station

Condition assessment was performed for the City's Outdated WTP facilities including pump rooms, ponds, and clarifiers. See **Table 7-3** for the assessment that has been developed for each La Brucherie facility site visit.

Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

Distribution Pump Room

Mechanical:

The Distribution Pump Room contains two split-case pumps, installed in 1994, that convey potable water from the on-site La Brucherie Reservoir into the City's distribution system. The two pump trains discharge into a grated below-grade header located within the pump room.

Each pump train consists of the following:

- 4,000 GPM Aurora pump
- 14-inch lever-and-weight check valve
- 14-inch and 16-inch butterfly valves
- Associated components including couplings, reducers, air release valves, and pressure gauges

It is recommended to remove and replace the two pumps and related mechanical equipment due to surpassing the industry standard useful life of 30 years for pumping equipment. The City requested that the project include installation of a third pump in the space reserved for future equipment under the original design. (Rec 1).

Electrical:

No major electrical equipment was observed in the Distribution Pump Room. Electrical, instrumentation, and controls within the room include:

- PAX Mixer Control Panel
- Exhaust Fan EF-1 Combination Motor Starter
- Exhaust Fan EF-2 Combination Motor Starter
- Lighting
- Pump pushbutton stations
- Instrumentation
- Junction boxes
- Conduit and wire
- Pump motors
- Sump Pump Control Panel

The following items were observed in the Distribution Pump Room:

- Could not determine the age of the existing motors, however the motor manufacturer does not appear to be in business.





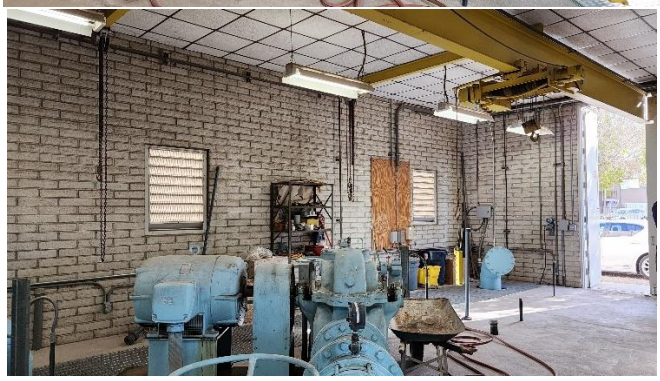


Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

- We could not determine the age of the existing power conductors to each distribution pump. Assuming they are the same age as the existing Distribution Switchboard A and the motors, then the conductors are beyond their useful life and should be replaced.
- The existing room lighting appears to be original fluorescent light fixtures with LED tubes.
- No emergency lighting nor exit signs were observed in this room or in any room on site. Addition of emergency lighting and exit signs are not recommended as a CIP item, but are considered part of operation and maintenance activities.
- Exhaust fans EF-1 and EF-2 combination motor starters have had their control transformers replaced and are running.
- The pressure gauges on both pumps were dark and hard to read.
- All conduits inside the pump distribution room appears to be in good condition.
- The sump pump control panel and floats appear to be in good condition.
- The crane and crane motor appear to be in good condition. Although they may be at the end of their useful life based on age, there is no recommendation to replace the crane if staff has no concerns about it.
- The PAX Mixer Control Panel appears to be in good condition.





Electrical Room

The Electrical Room was observed to include the following existing electrical equipment:

- Main Switchboard (with Utility meter)
- Bypass Isolation Type ATS
- Distribution Switchboard A
- Harmonic Filter Assembly Switchboard B
- Transformer T-1
- Panelboard P
- VFD Isolation Transformer T111
- VFD Isolation Transformer T112
- VFD for P-111
- VFD for P-112
- Control Panel UCP 21
- Control Panel MCP-11A

The Main Switchboard, ATS, Distribution Switchboard A, Transformer T-1, Panelboard P, and Control Panel UCP 21 all appear to be in fair to





Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

good condition but also appear to be at the end of their useful life, based on age and should be replaced (Rec 3).

Both VFD isolation transformers appear to be 33 years old and are nearing the end of their useful life. Dudek recommends replacing each transformer in the next 5 years, or when its corresponding VFD is replaced, whichever is sooner (Rec 3).

Staff advised that the VFD for P-111 is the newest VFD. Based on the model number on the nameplate on the front of the VFD for P-112, and the manufacturer's web site, the manufacturer no longer sells this model, but they plan to support it until the end of 2029. It appears that staff has been keeping up with replacing VFDs for the distribution pumps as needed.

Staff advised that the Harmonic Filter Assembly Switchboard B is no longer in use and has been abandoned in place. Staff also advised that they don't experience electrical surges at this site, like they do at the old WTP site. Dudek recommends removing equipment that is no longer in use.

No arc flash stickers were observed on any electrical equipment (Rec 2).

No third-party maintenance/testing stickers were observed on any electrical equipment. Testing and maintenance is recommended every 3 years per the NETA ATS standard by a NETA-certified company. Testing ensures equipment works properly, protects properly, and identifies equipment issues. The third-party testing is not included as a CIP recommendation, as it is considered an operations and preventative maintenance activity.

Control Panel MCP 11A appears to be in good condition. Based on the shop drawings found inside the control panel, it was re-built in 2015. The PLC in MCP-11A appears to be in good condition and is still supported by the manufacturer, including available replacements. A UPS was not observed within the MCP-11A enclosure. Dudek recommends installing a UPS as part of operations and maintenance activities so that the PLC remains powered during the transition from utility power to standby generator power.

The electrical room was observed to be clean, but very hot. Staff advised that the electrical room has











Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

a working, dedicated HVAC unit. In addition, there were many ceiling tiles observed around the electrical room with water stains on them, indicating either a roof leak or a condensation leak from the HVAC unit on the roof (Rec 6).

The lighting in the electrical room appeared to be sufficient for working conditions. The light fixtures appear to be a mixture of T8 and T5 fluorescent type, suspended from the ceiling. The T8 fixtures appear to have LED-type light tubes installed. The T8 light fixtures appear to have water stains from the roof or HVAC water leaks. Addition of emergency lighting and exit signs are not recommended as a CIP item, but are considered part of operation and maintenance activities.

Overall, Staff advised that they do not have issues with the electrical and controls equipment at this site.



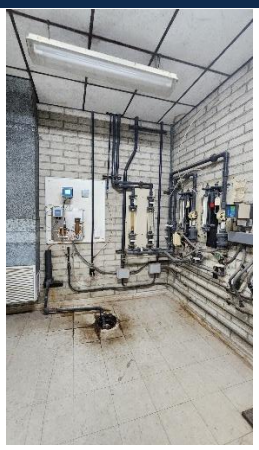
Chlorine Room

Mechanical:

The Chlorine Room is equipped for a gas chlorine system that is no longer in use. There is a chemical tank and metering pump in the distribution pump room that Staff uses to treat the distribution water. There are no recommendations in this room.

Electrical:

An analyzer is in use in this room to measure free chlorine in the system on site. There are no electrical recommendations for this room.





Standby Generator Room

The existing standby generator is located indoors in the generator room, with a 350-gallon fuel tank adjacent to it. The generator and fuel tank appear to be original to the pump station. Staff indicated that they have no issues with the standby generator and tank.

The fuel tank control panel was observed to have an opening in it as if there is a missing component. No fuel leaks were observed around the fuel tank.

The output breaker on the generator appears to be original. Based on a useful life of 30 years, this breaker is at the end of its useful life and should be replaced. Note that no third-party testing sticker was found on the generator's main breaker, so the



Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

City does not have a good idea of this breaker's ability to continue to perform its function properly.

Dudek reached out to Quinn Power Systems, a Caterpillar Generator representative and distributor regarding the existing diesel generator. The representative responded that the model 3408 generator set is no longer in production, so parts availability may become an issue. The representative said he foresees parts availability from Caterpillar for the diesel engine for another 10 years on this generator set model (Rec 5). QPS also advised that many of the electrical controls have been superseded by newer components, which can be replaced with current production. For example, the generator control panel is obsolete and no longer supported. QPS can retrofit the generator with a new Caterpillar generator control panel (Rec 4).

There are small concrete stains under the generator that could indicate a past leak, however, they do not appear to be fresh.

Dudek recommends performing annual maintenance recommended by Caterpillar on generator, including a load bank test, if not performed within the past year.

The lighting in the standby generator room appeared to be sufficient for working conditions. The light fixtures appear to be T8 fluorescent type, suspended from the ceiling. The fixtures appear to have LED-type light tubes installed.

Many ceiling tiles were observed around the standby generator room with water stains on them, potentially indicating a roof leak or some other type of water leak above the drop ceiling.







La Brucherie Pump Station Building Mechanical and Electrical Recommendations

1 – Remove and replace the existing La Brucherie distribution pumps and associated mechanical equipment with new units to be installed at the same location within the existing building structure. Additionally, install a 3rd pump to increase capacity.

2 – Perform a Power System Study and install arc flash stickers for the electrical equipment on site. Assuming a study has not been done before.

3 - Replace the following electrical equipment and all conductors associated with them: Main Switchboard (with Utility meter), Bypass Isolation Type ATS, Distribution Switchboard A, Transformer T-1, Panelboard P, VFD Isolation Transformer T111, and VFD Isolation Transformer T112.

4 - Replace generator control panel and replace generator output breaker immediately in the short-term future. Replacing them proactively avoids an unplanned outage when they fail and replacements may have long lead times. Have the fuel tank control panel opening repaired.

Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

5 - Replace standby generator and diesel fuel tank within the next 10 years.

6 – Repair cause of leaks from above the drop ceiling and replace tiles in the electrical room and standby generator room.

Reservoir Inlet Piping

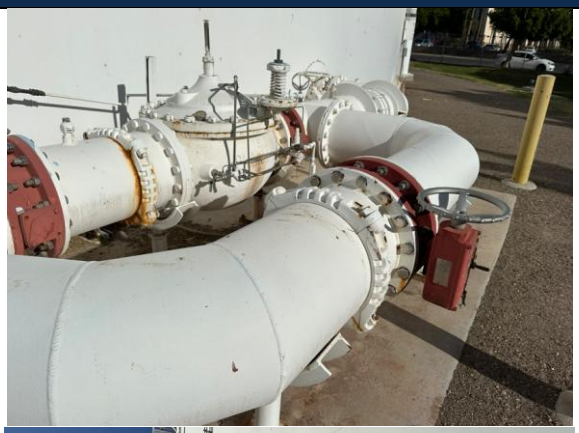
Mechanical:

The on-site reservoir features an above-grade inlet piping system located along the east side of the tank.

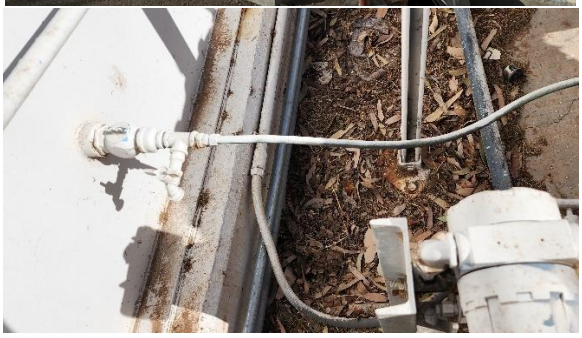
- The inlet system includes the following:
- 18-inch steel tank penetration
- 18-inch butterfly valve at the point of tank entry
- 16-inch altitude valve
- 16-inch steel bypass line
- Two 18-inch couplings with restrained harnesses
- Three butterfly valves for bypass control.

The altitude valve is currently non-functional, requiring manual operation for filling the tank. Overflow is managed through a 16-inch steel overflow line on the northeast tank wall, which connects to an 18-inch vertical steel downpipe that transitions into underground reinforced concrete pipe (RCP). This pipe discharges into a detention basin in the northeast corner of the property. A secondary detention basin is located in the southwest corner and is hydraulically connected to the first via an 18-inch underground RCP. The overflow system is also tied into the City's storm drain infrastructure through a 12-inch RCP and a concrete vault located in La Brucherie Road.

It is recommended that the existing, non-functional altitude valve be replaced with a new unit to allow automated control of tank filling operations (Rec 1). This improvement would significantly reduce the potential for operational error and labor-intensive manual operation.







Electrical:

Instrumentation and controls related to the altitude valve should be replaced when the valve is replaced.

The flexible conduits in this area appeared to be very weathered and should be replaced within the next 5 years as part of operations and maintenance activities.

There is a conduit that comes up out of the ground to a junction box that is weathered, and appears to

Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

be PVC. Dudek recommends that all conduits as from the ninety degree bend below grade all the way up to its end point should be PVC-Coated rigid conduit. Instead of digging up the conduit to install PVC-Coated rigid, Dudek recommends painting the PVC conduit at a minimum to protect it from degradation from the sun's UV rays. Staff did not advise of any electrical or instrumentation issues on the reservoir, and no concerns were observed.	
La Brucherie Reservoir Inlet Piping Mechanical and Electrical Recommendations	
1 – Remove and replace altitude valve.	
Flow Meter Vault	
Mechanical: Located just east of the pump station building, the flow meter vault measures approximately 6-feet wide by 8-feet long and houses the site's primary flow metering equipment. The outlet piping from the pump station reduces from an 18-inch to a 12-inch line as it passes through the vault, then expands back to 18 inches before leaving the site. A 12-inch magnetic flow meter is currently installed within this narrowed section. Operations staff reported that this bottleneck has contributed to operational inefficiencies including overheating. It is recommended to replace the reduced 12-inch piping section with a larger-diameter pipe, either 16-inch or maintaining 18-inch diameter throughout, to improve flow capacity, reduce velocity, and enhance flow measurement accuracy (Rec 1). **Electrical:** Dudek could not enter the flow meter vault. When the reduced 12-inch piping section is replaced with a larger diameter pipe, we recommend installing a new flow tube element and new flow indicating transmitter, as well as the power and controls cables and conductors back to the panelboard and to the PLC. We also recommend grounding the new flow meter with grounding rings in accordance with manufacturer's recommendations. If ground rods are not present in the vault, they should be installed at that time.	

Table 7-3. La Brucherie Pump Station and Reservoir Site Visit

La Brucherie Flow Meter Vault Mechanical and Electrical Recommendations
1 – Remove and replace flow meter an upsize pump station effluent piping.

7.4 Reservoirs

Condition assessment was performed for the City's Structural facilities including Old WTP reservoirs, La Brucherie reservoir, and WTP raw water ponds. See **Table 7-4** for a brief summary of the assessment that has been developed for each reservoir site visit. See **Appendix C** for a detailed technical memorandum of the structural water facilities El Centro owns and operates.

Table 7-4. Reservoirs Site Visit

Old WTP Reservoir No. 1	
Structural: The WTP Reservoir No. 1 is a 2.5 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1955 and is the northernmost reservoir at the WTP site. The reservoir measures 133'-6" in diameter with an overflow height of approximately 24'-0" The overall condition of the reservoir is considered "fair" with varying levels of minor to moderate deterioration observed and a condition rating of 5.9. Refer to **Appendix C** for detailed findings of the facility (Rec 1).	
Old WTP Reservoir No. 2	
Structural: The WTP Reservoir No. 2 is a 2.5 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1955 and is located between Reservoir No. 1 and Reservoir No. 3 at the WTP site. The reservoir measures 133'-6" in diameter with an overflow height of approximately 24'-0". The overall condition of the reservoir is considered "fair" with varying levels of minor to moderate deterioration observed and a condition rating of 4.8. Refer to **Appendix C** for detailed findings of the facility (Rec 2).	

Table 7-4. Reservoirs Site Visit

Old WTP Reservoir No. 3

Structural:

The WTP Reservoir No. 3 is a 5.0 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1978 and is the southernmost reservoir at the WTP site. The reservoir measures 197'-6" in diameter with an overflow height of approximately 24'-6".

The overall condition of the reservoir is considered "good" with varying levels of minor to moderate deterioration observed and a condition rating of 7.3. Refer to **Appendix C** for detailed findings of the facility (Rec 3).



La Brucherie Reservoir

Structural:

The La Brucherie Reservoir is a 5.0 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1994 and is located at the La Brucherie Pump Station site. The reservoir measures 150'-0" in diameter with an overflow height of 40'-0". The reservoir is known to have been repaired due to seismic damage occurring approximately in the early to mid-2010s

The overall condition of the reservoir is considered "good" with varying levels of minor to moderate deterioration observed and a condition rating of 7.2. Refer to **Appendix C** for detailed findings of the facility (Rec 4).



WTP Raw Water Ponds

Structural:

The WTP Raw Water Ponds consist of four (4) concrete-slope and lined ponds, each measuring approximately 315-feet wide by 520-feet long from the outer edges of the sloping concrete embankments. The ponds are divided by earthen berms with asphalt pavement along the top of the berm. the ponds were originally constructed as two (2) ponds, one North pond and one South pond, and were subsequently divided into four (4) ponds by means of the construction of a central, North-South embankment with new sloping embankment concrete.

Based on input from City operations staff, raw water currently flows from the raw water ponds to the clarifiers by gravity; however, gravity flow can utilize only approximately three days of storage



Table 7-4. Reservoirs Site Visit

rather than the full pond capacity. To enable full use of the raw water pond storage, it is recommended that a pump station be installed between the raw water ponds and the clarifiers. The overall structural condition of the Raw Water Ponds is considered "fair" with varying levels of minor to severe deterioration observed and a condition rating of 5.8. Refer to **Appendix C** for detailed findings of the facility (Rec 5).	
Reservoirs Recommendations	
1 – Old WTP Reservoir No. 1: Recoat interior and exterior of reservoir within 5 years. Replace appx. 10% of roof framing and hardware. Perform minor metallic surface repairs and patching. Replace interior ladder, roof hatches, and center vent. Replace roof handrailing system. 2 – Old WTP Reservoir No. 2: Recoat exterior of reservoir within 5 years. Recoat interior of reservoir as soon as possible. Replace all roof framing including columns, rafters, girders, connections, and hardware. Perform minor metallic surface repairs and patching. Replace interior ladder, roof hatches, and center vent. Replace roof handrailing system. 3 – Old WTP Reservoir No. 3: Recoat interior and exterior of reservoir within 10 years. Repair base plate bearing pad. Replace interior ladder. Repair roof hatch lifting mechanisms as soon as possible. Replace roof handrailing system. Continue to monitor structure. 4 – La Brucherie Reservoir: Recoat exterior of reservoir within 5-10 years. Recoat interior of reservoir as soon as possible. Perform minor metallic surface repairs and patching. Repair base plate bearing pad. Replace interior ladder. 5 – WTP Raw Water Ponds: Add pump between raw water ponds and clarifiers. Repair cracking by means of epoxy injection Replace original sloping embankment concrete at Pond No. 3 and Pond. No 4. Continue to monitor Pond No. 1 and Pond No. 2.	

7.5 Malfunctioning Valves for Replacement

As part of the CIP recommendations in this report, El Centro Operations and Maintenance personnel identified malfunctioning valves to be replaced. **Table 7-5** provides a list of the malfunctioning valves to be replaced.

Table 7-5. Malfunctioning Valves

Cross Streets		Valve Number
1	Ocotillo / La Brucherie	3 Watervalves not shown in GIS
2	Imperial Ave / Pepper	19-12GV083
3	Ross / Imperial Ave	19-12GV127
4	Ross / Imperial Ave	19-12GV018
5	3rd St / Aurora	19-15GV061
6	Broadway / 12th St	21-13GV057
7	4th St / Hamilton	20-14GV021
8	3rd St / Hamilton	20-14GV027
9	Orange Ave / 1st St	20-15GV058

Table 7-5. Malfunctioning Valves

Cross Streets		Valve Number
10	E. Brighton / 1st St	21-15GV030
11	E. Orange / Dogwood	20-16GV036
12	S. Hope / Heil Ave	20-15GV014
13	12th St / Vine	20-13GV020
14	7th St / Brighton	21-13GV104
15	Woodward / Imperial Ave	22-12GV031
16	Pico / 8th St	24-13GV034 /24-13GV035
17	7th St / Buena Vista	24-13GV008 / 24-13GV009
18	6th St / Buena Vista	24-14GV010
19	12th St / Pico	24-13GV012 /24-13GV011
20	Sandy / 7th St	23-14GV060
21	Imperial Ave / Lenrey Ave	19-12GV006
22	Ross / Imperial Ave	19-12GV103
23	Park / 12th St	22-13GV088
24	Ocotillo / Imperial Ave	18-12GV005 /18-12GV008
23	Park / 12th St	22-13GV088
24	Ocotillo / Imperial Ave	18-12GV005 / 18-12GV008

7.6 Aging Pipelines

Figure 7-1 presents the age and condition assessment of the City's water distribution system pipelines, based on the City's GIS data. The water mains were color-coded by installation year and material type, since the useful life expectancy varies by material (e.g., asbestos cement pipe typically lasts longer than steel pipe). Segments shown in red represent pipelines that have exceeded their useful life, while orange and yellow indicate mains that are approaching the end of their useful life within 20 years and 10 years, respectively.

Based on this evaluation, two transmission mains, 24-in on 8th St between Driftwood Dr and Wensley Ave, and 18-in on Imperial Ave between Smoketree Dr and Ross Ave, are recommended for near-term replacement due to their large diameter and critical importance to system reliability (Projects Age-1 and Age-2 in CIP list).

The other red lines shown in Figure 7-1 are 12-inches in diameter or smaller are located within areas of the distribution system that feature a looped network, providing directional redundancy through parallel pipelines. As a result, these segments were not identified as candidates for CIP projects

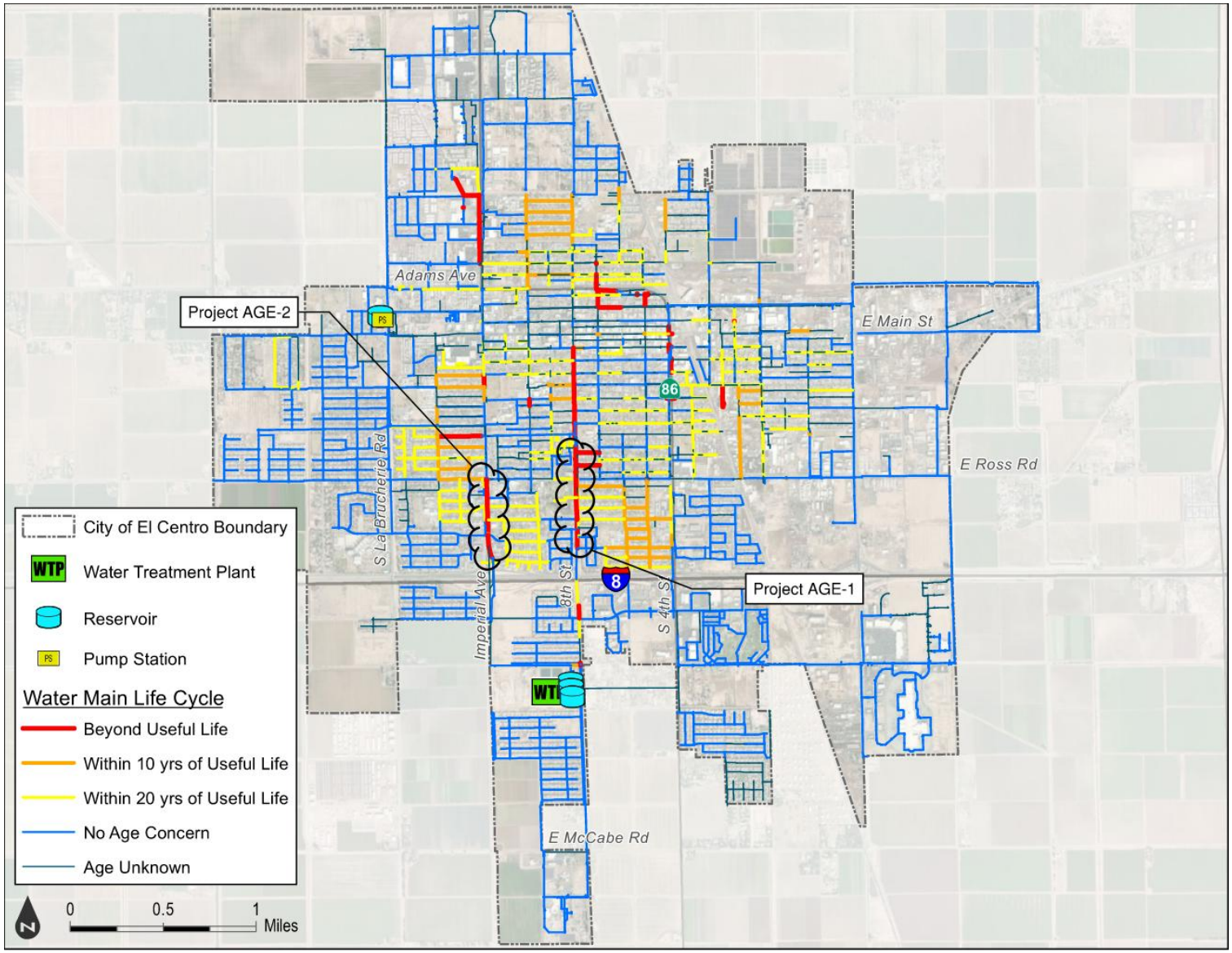


Figure 7-1 Pipelines Useful Life

7.7 Findings and Recommendations

Recommended improvements, priorities and types of issues/risks for all the above-mentioned facilities that were assessed during the site visits are summarized in Table 7-6.

Table 7-6. Water Facilities Condition Assessment Summary

Facility Component	Asset Discipline	Recommended Improvement Description	Priority	Type of Issue/ Risk
New WTP				
Waste Wash water Basin	Mechanical	Replace check valve(s) to eliminate leaking.	Medium	Potential Operational Failure
Operations Building	E&IC	Perform a Power System Study and Install Arc-Flash Stickers for the entire WTP. Assuming a study has not been done before.	Medium	Safety
Operations Building	E&IC/Civil	Electrical hand hole cover water intrusion recommendations: 1. Remove the concrete top and hatch of each hand hole and replace with a taller cover with a new sealable H20 rated hand hole cover. Re-grade around the 10 hand holes on site with a 2% slope away and install asphalt on re-graded area. 2. Remove each existing hand hole hatch and replace with a sealed roof hatch and install bollards around hand holes so they are not driven on (roof hatches are not traffic rated). Re-grade around the 10 hand holes on site with a 2% slope away and install asphalt on re-graded area.	Low	Potential Operational Failure
Clearwell Pumps	Mechanical	Install 4 new pumps on a concrete pad.	Low	Insufficient Capacity
Clearwell Pumps	E&IC	Replace 4 VFDs at Clearwell Pump Station with active front end VFDs. Alternately, the City could replace two at a time and keep the old VFDs as spares in the interim to spread out the cost.	Medium	End of useful life, new parts not available
Clarifiers and Vaults	E&IC	Add a flood float switch alarm to each flow meter and valve vault downstream of the clarifiers per Staff request. Alarm to report to Plant PLC and SCADA. Cost estimate assumes we can run signals back to filter building PLC through existing conduits but need to re-pull all cables in conduit.	Low	Staff request.

Table 7-6. Water Facilities Condition Assessment Summary

Facility Component	Asset Discipline	Recommended Improvement Description	Priority	Type of Issue/ Risk
Operations Building and Filters	E&IC	Replace PLCs throughout plant. Could spread the cost out by doing PLCs in one control panel at a time and keeping old PLCs for spare parts.	Medium	End of useful life, new parts not available
Filters	Mechanical / Structural / E&IC	Construct and install new filter building with two bays. Install a bypass line for filter drainage and replace faulty actuators in the existing filter building.	Low	Operational Concern
Drying Beds	Structural / Mechanical	Construct new 150-foot by 170-foot concrete drying bed.	Low	Insufficient Capacity
Backwash Pond	Mechanical	Construct new 18-inch diameter pipeline to the raw water ponds.	Low	Operational Concern
Old WTP				
Old WTP Building - Distribution Pump Room	Mechanical/ E&IC	Construct an entirely new building to house the new distribution pumping system and electrical and controls system, including pumps, piping, electrical distribution, and controls as a new distribution pump station in a new location with its own new electrical utility service, ATS, standby generator, electrical distribution, 8 VFDs, and controls in a new electrical building. Electrical assumptions for 8-200HP pumps. (Includes 1500kW generator for 7-200HP distribution pumps). Demolition of Old WTP Building.	High	End of useful life
Old WTP Building	E&IC	Old WTP Lobby and 1st Floor Electrical Room—Remove yellow MCC in its entirety and all associated conductors. Install one switchboard at 480-volts to power all remaining existing Old WTP building electrical loads still in use that are currently powered by the MCC, such as sump pumps, lighting, office, and warehouse loads. The new switchboard could be located in the 1st floor electrical room where the MCC is currently located. Also replace Transformer TA and Panelboard PA on mezzanine. This project is only required if new pump station is not constructed.	Low	Beyond end of useful life.
Old WTP Building	E&IC	Warehouse Electrical Equipment—Replace existing electrical equipment in the warehouse, including all main switchboard sections, main breaker section, ATS section, and MCC-1. The new main switchboard would have breakers to power Switchboard	Low	Beyond end of useful life.

Table 7-6. Water Facilities Condition Assessment Summary

Facility Component	Asset Discipline	Recommended Improvement Description	Priority	Type of Issue/ Risk
		2A (if needed), the new recommended switchboard, and new MCC-1. The new ATS should be a bypass isolation ATS type. Also, replace all remaining panelboards, transformers, conduit and conductors to those transformers and panelboards. Assuming 5 panelboards for building loads. This project is only required if new pump station is not constructed.		
Old WTP Building	E&IC	General Old WTP Building— Perform a Power System Study and install arc flash stickers for the entire old WTP. Assuming a study has not been done before. This project is only required if new pump station is not constructed.	Medium	Safety
Raw Water Pump Station	Structural	Repair top slab cracking and localized spalling. Repair pump support beams and strengthen with fiber-reinforced polymer as soon as possible. Replace pump anchor bolts and pump base plates. Replace wood platform planking.	Medium	Material degradation
Raw Water Pump Station	Mechanical / E&IC	Replace distribution pumps and associated electrical equipment with a new utility electrical service and standby generator.	Low	Equipment upgrade
Raw Water Pump Station	E&IC	Power the existing Raw Water Pump Station from the new Distribution Pump Station electrical system.	Low	Equipment upgrade
La Brucherie Pump Station and Reservoir Site				
Distribution Pump Room	Mechanical	Remove and replace two distribution pumps and related equipment in existing building. Install 3rd pump to increase capacity.	High	End of useful life
Reservoir Inlet Piping	Mechanical	Replace altitude valve and related components.	High	Non-functional
Flow Meter Vault and Piping	Mechanical	Upsize and upgrade pump station effluent piping, flow tube and flow indicating transmitter.	Medium	Inefficiency
Entire site	E&IC	Perform a Power System Study and install arc flash stickers for the electrical equipment on site.	High	Safety
Electrical Room	E&IC	Replace the following electrical equipment and all conductors associated with them: ▪ Main Switchboard (with Utility meter) ▪ Bypass Isolation Type ATS ▪ Distribution Switchboard A	Medium	End of useful life

Table 7-6. Water Facilities Condition Assessment Summary

Facility Component	Asset Discipline	Recommended Improvement Description	Priority	Type of Issue/ Risk
		▪ Transformer T-1 ▪ Panelboard P ▪ VFD Isolation Transformer T111 ▪ VFD Isolation Transformer T112		
Pump Station Building	Structural	Repair cause of leaks from above the drop ceiling and replace tiles in the electrical room and standby generator room.	High	Safety issue, operational issue
Standby Generator Room	E&IC	Replace generator control panel and replace generator output breaker immediately in the short-term future. Replacing them proactively avoids an unplanned outage when they fail and replacements may have long lead times. Have the fuel tank control panel opening repaired.	High	Avoids operational failure and unplanned site outage
Standby Generator Room	E&IC	Replace standby generator and diesel fuel tank within the next 10 years.	Medium	Approaching the end of useful life
Structural Facilities				
Old WTP Reservoir No. 1	Structural	Recoat interior and exterior of reservoir within 5 years. Replace appx. 10% of roof framing and hardware. Perform minor metallic surface repairs and patching. Replace interior ladder, roof hatches, and center vent. Replace roof handrailing system.	High	Material degradation
Old WTP Reservoir No. 2	Structural	Recoat exterior of reservoir within 5 years. Recoat interior of reservoir as soon as possible. Replace all roof framing including columns, rafters, girders, connections, and hardware. Perform minor metallic surface repairs and patching. Replace interior ladder, roof hatches, and center vent. Replace roof handrailing system.	High	Material degradation
Old WTP Reservoir No. 3	Structural	Recoat interior and exterior of reservoir within 10 years. Repair base plate bearing pad. Replace interior ladder. Repair roof hatch lifting mechanisms as soon as possible. Replace roof handrailing system. Continue to monitor structure.	Low	Material degradation
La Brucherie Reservoir	Structural	Recoat exterior of reservoir within 5-10 years. Recoat interior of reservoir as soon as possible. Perform minor metallic surface repairs and patching. Repair base plate bearing pad. Replace interior ladder.	Low	Material degradation

Table 7-6. Water Facilities Condition Assessment Summary

Facility Component	Asset Discipline	Recommended Improvement Description	Priority	Type of Issue/ Risk
WTP Raw Water Ponds	Structural	Repair cracking by means of epoxy injection Replace original sloping embankment concrete at Pond No. 3 and Pond. No 4. Continue to monitor Pond No. 1 and Pond No. 2.	Medium	Material degradation

8 Water Quality Analysis

This section introduces the evaluation of water quality data for the City as part of the 2025 Water Master Plan Update. It focuses on identifying contaminants of concern and understanding regulatory trends that influence monitoring and treatment requirements. A key area of emphasis is emerging contaminants such as PFAS, which are subject to evolving federal and state standards. The chapter also outlines the framework for reviewing water quality performance against established criteria.

Assessing water quality is essential for protecting public health and ensuring compliance with current and future regulations. By defining the approach for evaluating contaminants and anticipating treatment needs, this chapter provides the foundation for proactive planning and resource allocation. Establishing this context helps the City maintain safe drinking water and prepare for regulatory changes that could impact system operations.

8.1 Water Quality Testing

Between 2018 and 2023, the City's water quality testing revealed consistent exceedances of MCLs for aluminum and iron, which are set by the U.S. Environmental Protection Agency (EPA) under the Safe Drinking Water Act (EPA, National Primary Drinking Water Regulations). Additionally, a single test in 2023 detected elevated levels of chromium. The contaminants were likely associated with chemicals used in the treatment process, which the City addressed at that time. The following sections present the test results for contaminants that exceeded MCLs over the past six years, demonstrate that subsequent sampling has shown no further exceedances, and summarize results from PFAS testing.

8.1.1 Aluminum

Per EPA regulations, the maximum contaminant level (MCL) for aluminum in drinking water is 200 µg/L, which was exceeded at multiple sampling locations between 2018 and 2023. **Figure 8-1** presents the total annual number of aluminum MCL exceedances in El Centro's drinking water during this period. Exceedances were relatively low in 2018 and 2019, increased sharply to a peak of 10 in 2020, and declined to 1 in 2021. No exceedances were observed in 2022, and a single exceedance was recorded in 2023. Overall, the data show a downward trend in aluminum concentrations following the 2020 peak, indicating that the City's measures to control aluminum levels have been largely effective.

8.1.2 Iron

Per EPA regulations, the maximum contaminant level (MCL) for iron in drinking water is 300 µg/L. Several sampling locations exceeded this threshold between 2018 and 2020, as shown in **Figure 8-2**, which presents the annual frequency of iron MCL exceedances in El Centro's drinking water. Exceedances were relatively low in 2018 and 2019, peaked in 2020 with seven occurrences, and have been minimal or nonexistent from 2021 through 2024. This overall decline indicates that the City's measures to control iron concentrations in the water system have been largely effective.

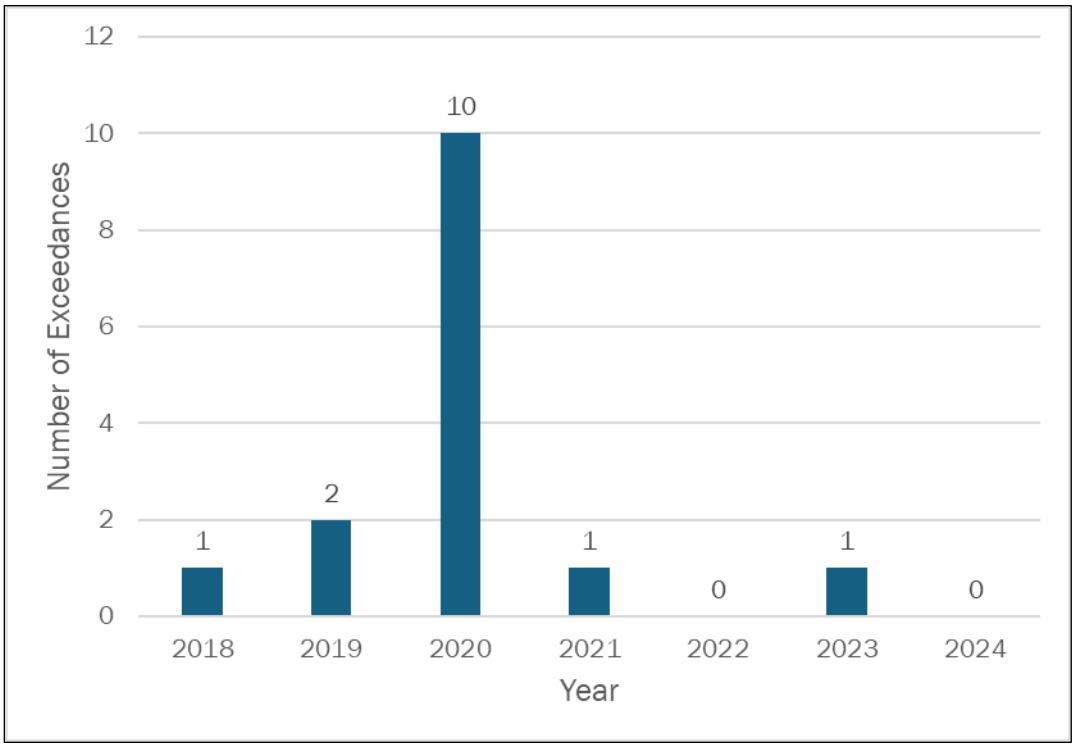


Figure 8-1 Annual Frequency of Aluminum MCL Exceedances

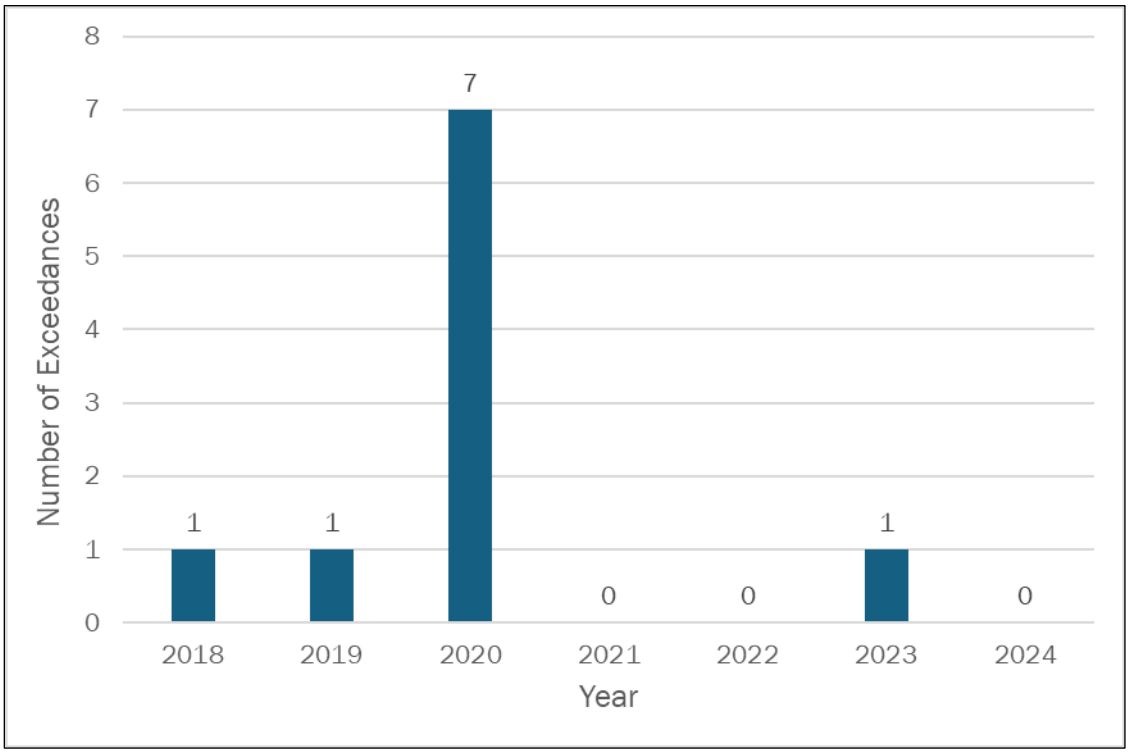


Figure 8-2 Annual Frequency of Iron MCL Exceedances

8.1.3 Total Chromium

In California, the State Water Resources Control Board has set the MCL for total chromium in drinking water at 50 µg/L, which is more stringent than the federal EPA standard of 100 µg/L. From 2018 to 2024, this limit was exceeded only once in 2023, with a recorded level of 140 µg/L. All other monitoring results during this period remained below the MCL. Given the isolated nature of this exceedance and the absence of a recurring trend, no additional treatment measures or increased sampling frequency are currently recommended for chromium in the City's water system.

8.1.4 Conclusions

Since the aluminum, iron, and total chromium found in the water quality sampling are trending down since 2020, recommendations for containing these contaminants are not necessary.

The City of El Centro requested and received approval from the State Water Resources Control Board (SWRCB), to reduce the frequency of aluminum and iron effluent testing. As documented in the SWRCB's letter dated February 5, 2025, titled *Reduced Secondary Standards Effluent Monitoring for Iron and Aluminum – El Centro, City of System No. 1310004,* testing is now required on a quarterly basis. It is anticipated that this issue has been resolved and testing requirements will continue to be reduced.

8.2 PFAS

Per- and polyfluoroalkyl substances (PFAS) are a class of synthetic chemicals that have been produced by the fluorochemical industry for over 85 years. These compounds are of growing concern due to their persistence in the environment and potential to contaminate drinking water sources. According to the State Water Resources Control Board (SWRCB), the primary sources of PFAS contamination in drinking water include fire training sites, industrial facilities, landfills, and wastewater treatment plants. PFAS have the potential to migrate into groundwater, surface waters, and reservoirs, resulting in widespread environmental exposure. Consequently, it is critical for the City to monitor and regularly test PFAS concentrations in its water supply.

8.2.1 Federal Regulations

In April 2024, the EPA finalized the National Primary Drinking Water Regulations (NPDWR), establishing enforceable MCLs for six PFAS compounds in drinking water, as summarized in **Table 8-1.**

Table 8-1. MCLs for Six PFAS Compounds

Compound	Final MCL (Enforceable levels)
PFOA	4.0 ppt
PFOS	4.0 ppt
PFHxS	10 ppt
PFNA	10 ppt
HFPO-DA (aka GenX chemicals)	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index

In May 2025, the EPA rescinded the adopted MCLs for PFHxS, PFNA, HFPO-DA, and the Hazard Index for mixtures; the MCLs for PFOA and PFOS remain enforceable.

For public water systems serving more than 10,000 people, four consecutive samples per entry point must be collected within a 12-month period, with sampling intervals of two to four months. All analyses must be performed using EPA-approved laboratory methods. A trigger level of 2.0 ppt applies for both PFOA and PFOS.

Public water systems are required to complete initial monitoring by 2027 and continue ongoing monitoring thereafter. Although the original EPA deadline for systems to reduce PFAS levels exceeding MCLs was 2029, this compliance deadline has recently been extended to 2031.

8.2.2 State Regulations

In March 2024, the State Water Resources Control Board (SWRCB) issued Order DW 2024-0002-DDW, requiring all public water systems to monitor PFAS compounds at their water sources. Under this Order, if monitoring results confirm the presence of PFAS, the community water system must report the detection in its annual Consumer Confidence Report (CCR). Section 116378, subdivision (c)(1) further specifies that, unless the affected water source is taken out of service or new data indicate that the applicable response level is no longer exceeded, the system must continue to provide notice of the exceedance in its CCR.

In April 2024, the Office of Environmental Health Hazard Assessment (OEHHA) adopted Public Health Goals (PHGs) for two PFAS compounds in California:

- **PFOA:** 0.007 ppt
- **PFOS:** 1 ppt

These PHGs are more stringent than the federally established Maximum Contaminant Levels (MCLs) for the same compounds. California is expected to implement additional PFAS regulations in the near future, with updates posted on the California Water Boards website[1].

8.2.3 Testing and Recommendations

The City of El Centro conducts quarterly PFAS testing through tracer studies. According to the test results provided by the City, PFAS was not detected in any of the samples collected on the following dates: October 16, 2023; January 9, 2024; April 16, 2024; and August 28, 2024.

These results suggest that PFAS is not currently a concern for the City's water supply. However, the City should continue regular testing to stay in compliance with expected state and federal regulations. If future tests show higher levels of PFAS, the City will review the results and take appropriate action.

When PFAS is detected in a water source, regulatory requirements distinguish between notification levels and action levels. If concentrations exceed the notification level, the City is required to inform the public of the detection. Exceedances above the action level trigger more stringent measures, including taking the affected well or source out of service. Additionally, wastewater treatment plants with an influent flow greater than 1 MGD are required to monitor PFAS in both biosolids and effluent.

1 https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/swrcb-ddw-24-001.html

It is recommended for El Centro to discontinue the practice of employing tracer studies to measure for PFAS. Tracer studies are not acceptable for measuring PFAS under the State Water Board regulations. The approved methodology is EPA Method 533, which quantifies specific PFAS compounds via mass spectrometry. To maintain sample integrity, glass and polytetrafluoroethylene containers should be avoided. Acceptable sampling containers are listed in **Table 8-2.** This table also outlines the sampling procedures required by EPA Method 533 to ensure compliance with current PFAS sampling standards.

Table 8-2. EPA Method 533 for PFAS Sampling

Analysis Method	Sampling Requirements for U.S. EPA 533 Method
Sample Type	Grab Sample
Sample Volume	100-250 mL, samples do not need to be headspace free
Sample Container	Polypropylene or polyethylene bottle with polypropylene or polyethylene screw caps
Preservation	Ammonium acetate (1 g/L concentration)
Shipping	Ship at <10°C
Laboratory Storage and Holding Time	Must be received by lab within 48 hours of sampling and stored at or below 6°C. Samples must not be frozen.
Duplicate Samples and Matrix Spike Requirements	Within each extraction batch, analyze a minimum of one field duplicate or laboratory fortified sample matrix duplicate.

8.3 Other Regulations

8.3.1 Disinfection Byproducts

The EPA is currently in the process of reviewing the Microbial and Disinfection Byproducts (DBP) Rules and anticipates changes to these rules in 2025. These rules aim to reduce drinking water exposure to DBPs, which are used to kill pathogens found in source water locations (such as lakes, rivers, reservoirs, and groundwater aquifers). Disinfectants can react with natural materials in the water to form byproducts and these byproducts are harmful to public health.

The EPA requires public water systems to conduct quarterly monitoring of DBPs and to take samples at locations representing the maximum residence time in the distribution system.

8.3.2 State Regulations Effective in 2021

Revision of Monitoring of Total Coliform

The monitoring frequency for total coliform has been revised under updated regulatory requirements. For water systems serving a population between 41,001 and 50,000—which includes the City of El Centro—the minimum number of required samples has increased from 12 to 50 samples per month. The City is currently in compliance with this new sampling frequency, as 2023 monitoring data confirm that at least 50 samples were collected each month.

The agency must submit a monthly summary of bacteriological monitoring results to the State Board. These requirements are outlined in § 64423.1 of SBDDW-20-002[2]

8.3.3 State Regulations Effective in 2024

Adoption of Hexavalent Chromium MCL

Agencies that have a water system with 10,000 service connections or greater must comply with the hexavalent chromium MCL of 10 ppb by October 1, 2026. The Detection Limit for purposes of reporting (DLR) is 0.1 ppb. Water systems are required to take the initial sample for hexavalent chromium by April 1, 2025.

Revision of Detection Limit for Perchlorate

The new detection limit for perchlorate is 0.002 mg/L (previously 0.004 mg/L).

8.3.4 Future State Regulatory Requirements

In 2018, California Senate Bill (SB) 1422 directed the State Water Resources Control Board (SWRCB) to develop a standardized methodology for testing microplastics in drinking water, establish requirements for a four-year monitoring and reporting program, and publicly disclose the results. Under this mandate, the SWRCB designated certain large public water systems to participate in the statewide monitoring plan. Although the City of El Centro was not selected as a participant, the City should anticipate more stringent monitoring and reporting requirements in the future as results from the four-year study become available and regulatory agencies advance the development of microplastics standards.

8.4 Review of Chapter 28 of City's Municipal Code

8.4.1 Review of City Water Quality Protections

Article II of Chapter 28 of the City's Municipal Code protects the public water supply against potential cross-connections that may cause contamination. This article outlines requirements for backflow prevention devices and grants the City authority to terminate water service if a threat to the public water supply is encountered.

8.4.2 Review of City Water Conservation Enforcement

The following state bills are relevant to the City's enforcement of conservation measures:

- **AB 1572 (effective 2024):** Prohibits the use of potable water for irrigation of nonfunctional turf at commercial, industrial, municipal, and institutional properties.
- **SB 606 and AB 1668 (effective in 2018 and expanded in 2025):** Require urban water suppliers to implement best management practices for the largest water consumers.

[2] https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/rtcr/t2/proposed_regulations_woal.pdf

Article III, Chapter 28 of the City's Municipal Code grants the City the legal authority to enforce water conservation through the following ordinances to comply with the state bills mentioned above:

- **Section 28-50:** Prohibits wasteful use of water and defines "waste" in relation to potable water use, including the use of potable water to irrigate turf, as required by AB 1572.
- **Sections 28-51 and 28-52:** Allow the City to implement a water conservation plan and evaluate the projected supply and demand for water by its customers. Section 28-52 outlines the 5-stage conservation plan that includes best management practices, as required by SB 606 and AB 1668.
- **Sections 28-54 and 28-55:** Allow for administrative enforcement (citations and penalties) of conservation measures mentioned in all other sections to ensure compliance by water users.

The City's Municipal Code currently meets state conservation requirements.

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9 Capital Improvements Program

The following section summarizes the recommended capacity and condition improvement projects developed to address water distribution system deficiencies identified in the previous Sections. Additional recommendations include a staffing plan to enhance the operational efficiency and resiliency of the City's water system. Lastly, the section presents planning-level engineer's cost opinions for each recommended project as well as potential funding sources for City staff to pursue.

The recommended projects and associated cost opinions are compiled into a multi-year water CIP for implementation by the City. The water CIP is a culmination of the results and recommendations developed in the 2025 Update. Completion of the projects defined in the CIP will improve the existing level of service, ensure regulatory compliance, and address future growth throughout the City's water system.

9.1 Pipeline Redundancy Improvement Projects

Table 9-1 lists the recommended project to improve the redundancy of the City's water system by building pipelines that eliminate areas currently served by a single transmission main. The justification for these projects is provided in Section 6.1 of this report. Both projects are of high priority and should be completed within the next five years. The locations of these projects are shown in **Table 9-2.**

Table 9-1. Recommended Pipeline Redundancy Improvements

Project ID	Project Name	Description	Justification
Redun-1	S Imperial Ave Connection	Build 1,350 LF of new 18-in pipeline to close the loop between Danenberg Dr and Manuel A Ortiz Ave.	Improve Redundancy and Water Quality in Existing System
Redun-2	Farnsworth Ln Connection	Build 2,000 LF of new 20-in pipeline to close the loop between Dannenberg Dr and Quail Run Dr.	Improve Redundancy and Water Quality in Existing System

9.2 Pipeline Capacity Improvement Projects

Based on the results of the capacity analysis, seventeen (17) pipeline improvement projects are recommended to address anticipated fire flow capacity deficiencies under Existing (2025) conditions, as listed in Table 9-2. The justification for these projects is provided in Section 6.2 of this report. Projects FF-1 and FF-2 are considered high priority, as they involve relatively short pipe segments that can resolve multiple fire flow deficiencies. These projects are recommended for completion within the next five years. Projects FF-3 and FF-4 are classified as medium priority and could be implemented within Year 6 through 10. The remaining projects are of lower priority and may be scheduled beyond Year 10.

Table 9-2. Recommended Pipeline Capacity Improvements

Project ID	Project Name	Description	Justification
FF-1	S 2nd St Upsizing	Upsize approximately 2,600 LF of existing 6-inch to 12-inch pipeline on S 2nd St from W Orange Ave to Ross Ave.	Improve Existing Capacity Issues
FF-2	Euclid Ave Upsizing	Upsize approximately 1,300 LF of existing 8-inch to 12-inch pipeline on Euclid Ave from 4yh St to 3rd St.	Improve Existing Capacity Issues
FF-3	El Centro Ave Upsizing	Upsize approximately 1,300 LF of existing 6-inch to 8-inch pipeline on El Centro Ave from 6th St to Railroad.	Improve Existing Capacity Issues
FF-4	Adams Ave Upsizing	Upsize approximately 1,400 LF of existing 6-inch to 8-inch pipeline on Adams Ave from N 6th St / the alley between El Centro Ave and Adams Ave to Railroad.	Improve Existing Capacity Issues
FF-5	E Main St Upsizing	Upsize and add approximately 1,900 LF of existing 6-inch to 8-inch pipeline on Main St from Dogwood Rd to Fairfield Dr.	Improve Existing Capacity Issues
FF-6	S 4th St Upsizing	Upsize existing 4" from Wensley to Ross Ave to 8"; build new 8" between Ross and Desert Gardens Dr; upsize existing 6" from Desert Gardens to Aurora Dr to 8".	Improve Existing Capacity Issues
FF-7	Yucca Dr Connection	Build 100 LF of new 8-in pipeline to close the loop across 4th St.	Improve Existing Capacity Issues
FF-8	Brighton Ave Connection	Build 400 LF of new 8-in pipeline to connect the McGee Park hydrant to nearby 18" line.	Improve Existing Capacity Issues
FF-9	Heil Ave Upsizing	Upsize approximately 600 LF of existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues
FF-10	Hamilton Ave Upsizing	Upsize approximately 700 LF existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues
FF-11	Maple Ave Upsizing	Upsize approximately 800 LF existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues
FF-12	Cedar Ave Upsizing	Upsize approximately 700 LF existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues
FF-13	New St Upsizing	Upsize approximately 600 LF of existing 6" to 10" pipeline from Orange Ave to New St.	Improve Existing Capacity Issues
FF-14	W Brighton Ave Upsizing	Upsize approximately 2,000 LF of existing 6" to 12" pipeline from 8th St to 5th St.	Improve Existing Capacity Issues

Table 9-2. Recommended Pipeline Capacity Improvements

Project ID	Project Name	Description	Justification
FF-15	W Holt Ave Upsizing	Upsize approximately 2,700 LF of existing 6" to 12" pipeline from 10th St to 5th St.	Improve Existing Capacity Issues
FF-16	W Heil Ave Upsizing	Upsize approximately 2,000 LF of existing 6" to 12" pipeline from 7th St to 4th St.	Improve Existing Capacity Issues
FF-17	W Main St Connection	Build 1,300 LF of new 12-in pipeline to close the loop on Main St.	Improve Existing Capacity Issues

9.3 Pipeline Condition Improvement Projects

This section summarizes the recommended projects to improve conditions in pipelines, as listed in **Table 9-3**. The phasing of these projects are presented in the project cost summary **Table 9-10**. The justification for these projects is provided in Section 7.6 of this report. The locations of these projects are shown in **Figure 9-2.**

Table 9-3. Recommended Pipeline Condition Improvements

Project ID	Project Name	Description	Justification
Age-1	8th St Replacement	Replace 24" Steel transmission main built in the 1970s to PVC pipes of the same size.	Improve Existing Condition Issues
Age-2	Imperial Ave Replacement	Replace 18" Steel transmission main built in the 1950s to PVC pipes of the same size.	Improve Existing Condition Issues

The locations of all recommended pipeline projects, including redundancy, condition, and capacity, are shown in **Figure 9-1**

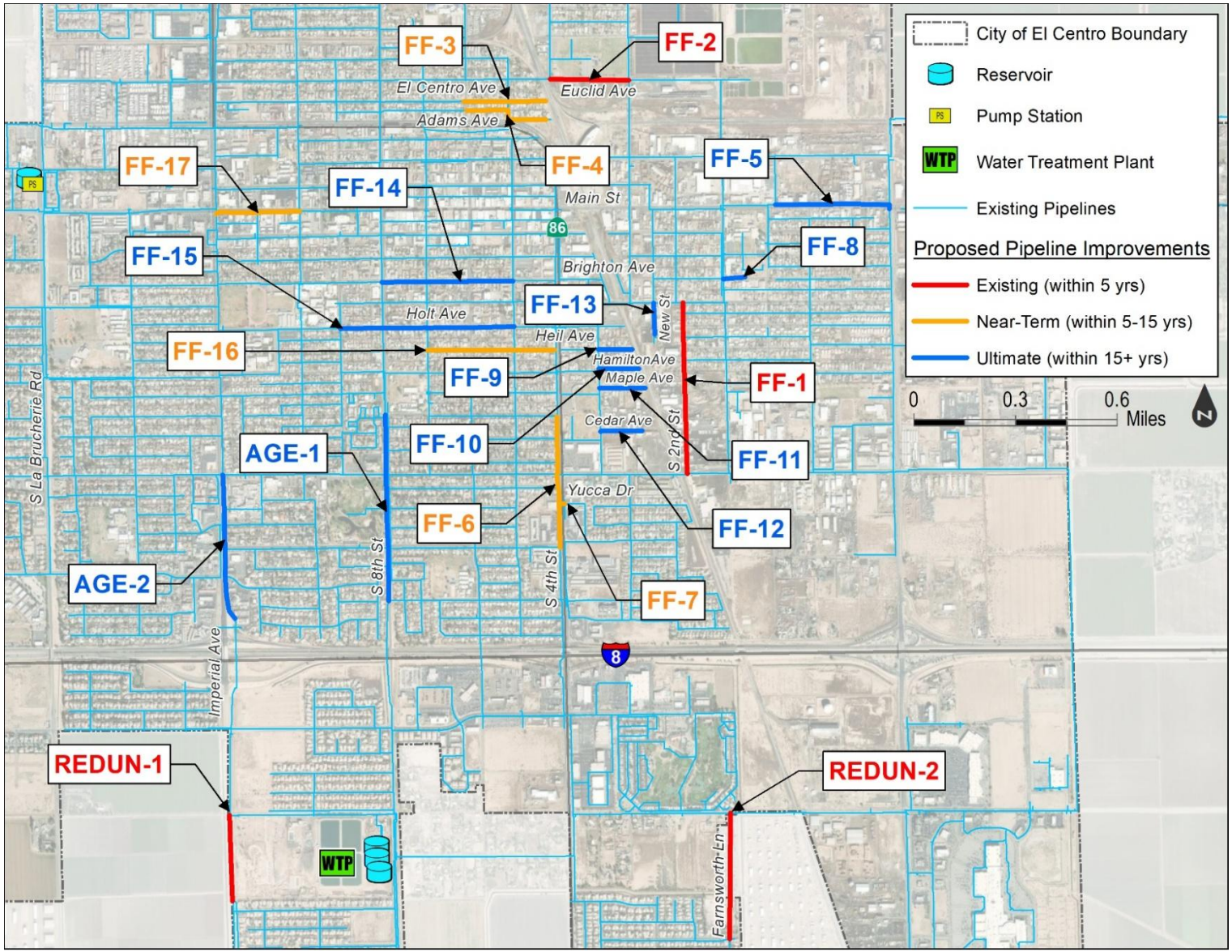

Figure 9-1 Pipeline Improvement Projects

9.4 WTP Improvement Projects

This section summarizes the recommended projects to improve conditions in the old and the new water treatment plant, as listed **Table 9-4** and **Table 9-5**, respectively. The justification for these projects is provided in Section 7.1 and Section 7.2, respectively, of this report. The phasing of these projects are presented in the project cost summary Table 9-10.

Table 9-4. Recommended New WTP Condition Improvements

Project ID	Project Name	Description	Justification
NWTP-1	Operations Building	Replace PLCs throughout plant. Electrical hand hole cover water intrusion recommendations. Power System Study. Includes Electrical Equipment Removal costs.	Safety
NWTP-2	Clearwell Pumps	Replace 4 VFDs at Clearwell Pump Station with active front end VFDs. Install an additional 4 new Pumps and concrete pad north of the existing pumps.	End of useful life, new parts not available. Insufficient Capacity
NWTP-3	Primary Clarifiers and Vaults	Add a flood float switch alarm to each flow meter and valve vault downstream of the clarifiers per Staff request. Alarm to report to Plant PLC and SCADA. Cost estimate assumes we can run signals back to filter building PLC through existing conduits but need to re-pull all cables in conduit.	Staff request.
NWTP-4	Waste Washwater Basin	Replace check valve(s) to eliminate leaking. Add bypass valves between check valves and drain filter bays.	Potential Operational Failure
NWTP-5	Filters	Add two more filters for redundancy and emergency situations	Operational Concern
NWTP-6	Drying Ponds	Install new concreate drying ponds.	Insufficient Capacity
NWTP-7	Pond Discharge Piping	Install new discharge pipeline to raw water ponds.	Operational Concern
NWTP-8	Clarifier Pump Station	Install a pump between raw water storage and clarifiers	Allows for transfer of additional water in case reduced canal supply
NWTP-9	Raw Water Pump Station Expansion	Replace 4 existing pumps and add one standby pump at raw water pump station to pump raw water from canal to raw water ponds. Repair top slab cracking and localized spalling. Repair pump support beams and strengthen with fiber-reinforced polymer as soon as possible. Replace pump anchor bolts and pump base plates. Replace wood platform planking. Replace old pumps. Power via new pump station service.	Provides backup pump in case pump failure in high demand periods

Table 9-5. Recommended Old WTP Condition Improvements

Project ID	Project Name	Description	Justification
OWTP-1	Old WTP Building	Demolition of Old WTP Building Replacing electrical equipment in Old WTP building. Power System Study	End of useful life. Not required with new Pump Station build.

9.5 Pump Station Improvement Projects

This section summarizes the recommended projects to improve conditions in the pump stations, as listed in **Table 9-6.** The justification for these projects is provided in Section 7.3 of this report. Project PS-1 is the highest priority project identified due to the age of the existing pump station and the critical function it performs in maintaining water pressure in the distribution system. The phasing of these projects are presented in the project cost summary Table 9-10.

Table 9-6. Recommended Pump Station Condition Improvements

Project ID	Project Name	Description	Justification
PS-1	New Pump Station	New PS Building. New pumps, piping, and valves. HVAC and Electrical.	Avoid operational failure and unplanned site outage.
PS-2	La Brucherie Pump Station	Demo existing pumps and electrical equipment. Roof leak repair. New pumps, piping, valving. Power system study. Replace electrical equipment. Replace generator control panel and output breaker. Replace standby generator and diesel fuel tank.	End of useful life
PS-3	La Brucherie Reservoir - Mechanical and Electrical	Replace altitude valve and related components. Replace flow meter and upsize piping.	Non-functional

9.6 Reservoir Improvement Projects

This section summarizes the recommended projects to improve conditions in the reservoirs, as listed in **Table 9-7**. The justification for these projects is provided in Section 7.4 of this report and in **Appendix C.** The phasing of these projects are presented in the project cost summary Table 9-10.

Table 9-7. Recommended Reservoir Condition Improvements

Project ID	Project Name	Description	Justification
RES-1	Old WTP Reservoir No. 1	Recoat interior and exterior of reservoir within 5 years. Replace appx. 10% of roof framing and hardware. Perform minor metallic surface repairs	Material degradation

Table 9-7. Recommended Reservoir Condition Improvements

Project ID	Project Name	Description	Justification
		and patching. Replace interior ladder, roof hatches, and center vent. Replace roof handrailing system.	
RES-2	Old WTP Reservoir No. 2	Recoat exterior of reservoir within 5 years. Recoat interior of reservoir as soon as possible. Replace all roof framing including columns, rafters, girders, connections, and hardware. Perform minor metallic surface repairs and patching. Replace interior ladder, roof hatches, and center vent. Replace roof handrailing system.	Material degradation
RES-3	WTP Raw Water Ponds	Repair cracking by means of epoxy injection Replace original sloping embankment concrete at Pond No. 3 and Pond. No 4. Continue to monitor Pond No. 1 and Pond No. 2.	Material degradation
RES-4	Old WTP Reservoir No. 3	Recoat interior and exterior of reservoir within 10 years. Repair base plate bearing pad. Replace interior ladder. Repair roof hatch lifting mechanisms as soon as possible. Replace roof handrailing system. Continue to monitor structure.	Material degradation
RES-5	La Brucherie Reservoir	Recoat exterior of reservoir within 5-10 years. Recoat interior of reservoir as soon as possible. Perform minor metallic surface repairs and patching. Repair base plate bearing pad. Replace interior ladder.	Material degradation

9.7 Valve Replacement Projects

A total of 24 malfunctioning valves in the water distribution system, identified by City's operator and listed in Table 7-5, have been included as a CIP item. The justification for this project is to address existing condition issue. The phasing of this project is presented in the project cost summary **Table 9-13.**

9.8 Project Cost Summary

Pipeline Capital Improvement Project (CIP) costs were estimated using a unit cost curve derived from pipe diameter and total project length, as illustrated in **Figure 9-2**. These base costs were then adjusted to include allowances for General Requirements and Contingency, resulting in the total estimated Construction Cost for each project. Further adjustments were applied to account for Engineering Design, Construction Management, Environmental Compliance, and Administrative Services, culminating in the Total Project Cost.

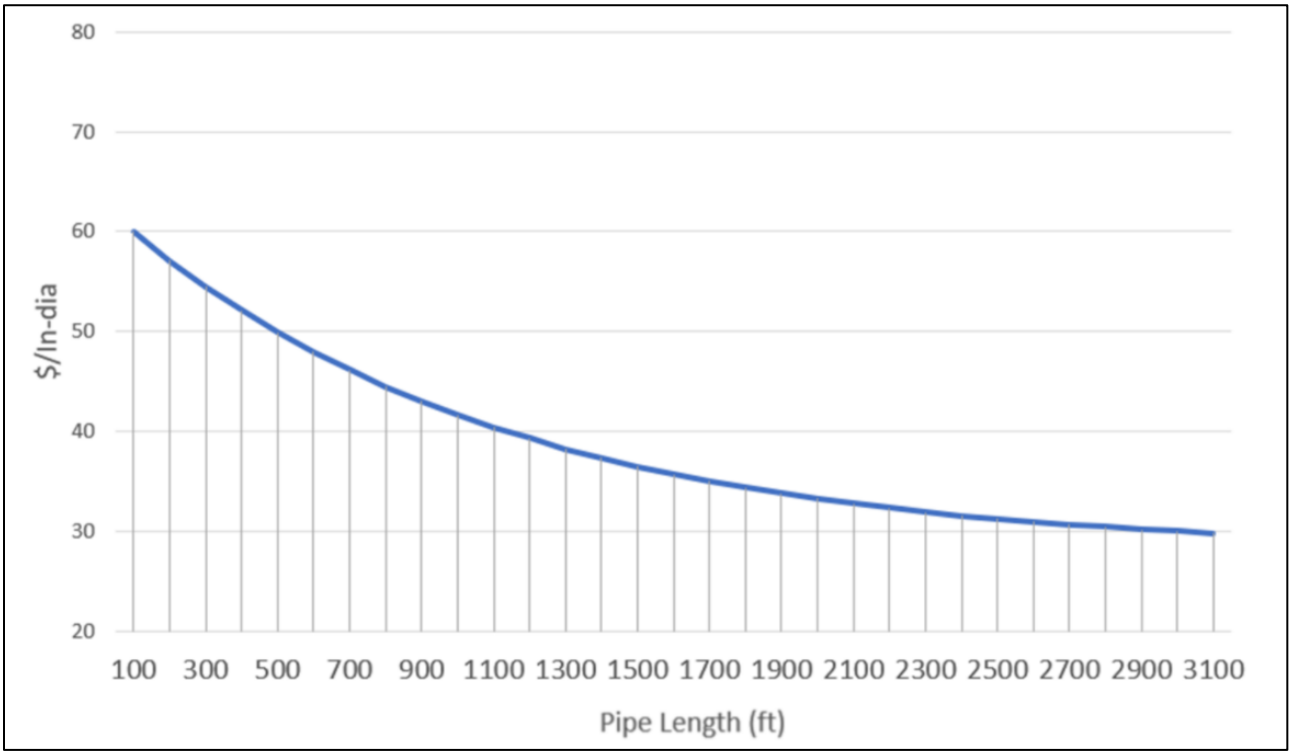

Figure 9-2 Unit Cost Curve

Capital Improvement Project (CIP) costs for facilities, including treatment plants, pump stations, and reservoirs, were developed based on recent bid results and engineer's estimates for comparable projects. The cost estimates incorporate Dudek's and Kelsey Structural's experience in the design of similar facilities, as well as their extensive database of equipment costs and contractor pricing. Recommended improvements were strategically grouped into projects based on their location and the required shutdowns to minimize operational disruptions. Adjustments were applied to each grouped project to account for engineering design, contractor profit, and other relevant allowances.

The estimated costs for all CIP are summarized in **Tables 9-8** through **9-13**. All cost estimates are based on an Engineering News Record (ENR) Construction Cost Index (CCI) of 15,993.96 for September 2025, with a 4% annual escalation factor applied to reflect fiscal year cost projections.

9.9 Project Prioritization

Project prioritization was conducted based on condition assessment results, hydraulic modeling outputs, consultations with City staff, and a review of historical planning documents. The highest-priority improvement identified is the construction of a new distribution pump station, which is essential for maintaining adequate system pressure and has surpassed its anticipated service life. Subsequent priorities include several pipeline replacement and capacity enhancement projects, selected due to their age, operational criticality, and hydraulic limitations. Additional improvements were identified at the recently commissioned water treatment facility, notably upgrades to clearwell pumping systems and filter basin infrastructure to ensure reliability and compliance with performance standards. Reservoir rehabilitation projects were also recognized as necessary within the next decade; however, these were assigned a lower priority relative to other system needs, and fiscal constraints deferred them beyond the recommended implementation horizon. It is advised that the City maintain a reservoir inspection program and adjust prioritization should structural or operational conditions deteriorate at an accelerated rate.

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Table 9-8. Pipeline Improvement Projects

PIPELINE IMPROVEMENT PROJECTS																									
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																					
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Redundancy	Redun-1	S Imperial Ave Connection	$ 1,763	$ -	$ -	$ -	$ 207	$ 1,931	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Redun-2	Farnsworth Ln Connection	$ 2,434	$ 254	$ 2,370	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capacity	FF-1	S 2nd St Upsizing	$ 1,844	$ 384	$ 1,596	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	FF-2	Euclid Ave Upsizing	$ 1,136	$ -	$ -	$ -	$ 266	$ 1,106	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	FF-3	El Centro Ave Upsizing	$ 778	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,024	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	FF-4	Adams Ave Upsizing	$ 835	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,143	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	FF-5	E Main St Upsizing	$ 998	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 389	$ 1,618	$ -	$ -
	FF-6	S 4th St Upsizing	$ 1,042	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 321	$ 1,335	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	FF-7	Yucca Dr Connection	$ 106	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 170	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	FF-8	Brighton Ave Connection	$ 356	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 781
	FF-9	Heil Ave Upsizing	$ 706	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,547
	FF-10	Hamilton Ave Upsizing	$ 782	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,714
	FF-11	Maple Ave Upsizing	$ 849	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,861
	FF-12	Cedar Ave Upsizing	$ 782	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,714
	FF-13	New St Upsizing	$ 599	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,313
	FF-14	W Brighton Ave Upsizing	$ 1,526	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 595	$ 2,474	$ -	$ -
	FF-15	W Holt Ave Upsizing	$ 1,851	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 694	$ 2,885	$ -	$ -	$ -
	FF-16	W Heil Ave Upsizing	$ 1,526	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 529	$ 2,199	$ -	$ -	$ -	$ -	$ -	$ -
	FF-17	W Main St Connection	$ 1,162	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 373	$ 1,548	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Condition	Age-1	8th St Replacement	$ 3,833	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,277	$ 5,311	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Age-2	Imperial Ave Replacement	$ 2,484	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 574	$ 3,381	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 27,392	$ 638	$ 3,966	$ -	$ 473	$ 3,037	$ -	$ 1,024	$ 1,143	$ -	$ -	$ 895	$ 5,259	$ 2,825	$ 5,840	$ 2,199	$ 694	$ 3,869	$ 4,092	$ -	$ 8,930		

Table 9-9. New WTP Improvement Projects

NEW WTP IMPROVEMENT PROJECTS																									
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																					
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	NWTP-1	Operations Building	$ 1,013	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 395	$ 1,642	$ -	$ -	$ -
	NWTP-2	Clearwell Pumps	$ 1,960	$ -	$ -	$ -	$ -	$ -	$ 2,481	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	NWTP-3	Primary Clarifiers and	$ 116	$ -	$ -	$ -	$ -	$ -	$ 147	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	NWTP-4	Waste Washwater Basin	$ 93	$ -	$ -	$ -	$ -	$ -	$ 118	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	NWTP-5	Filters	$ 3,441	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,898	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	NWTP-6	Drying Ponds	$ 1,641	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,197	$ -	$ -	$ -	$ -
	NWTP-7	Pond Discharge Piping	$ 2,417	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	NWTP-8	Clarifier Pump Station	$ 349	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 559	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	NWTP-9	Raw Water Pump Station Expansion	$ 1,434	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,123	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 12,464	$ -	$ -	$ -	$ -	$ -	$ 2,746	$ -	$ -	$ 4,898	$ 2,123	$ -	$ 559	$ -	$ -	$ -	$ -	$ 3,592	$ 1,642	$ -	$ -		

Table 9-10. Old WTP Improvement Projects

OLD WTP IMPROVEMENT PROJECTS																						
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																		
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	OWTP-1	Old WTP Building	$ 3,780	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,259	$ 5,237	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 3,780	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,259	$ 5,237	$ -	$ -	$ -	$ -	$ -	$ -

Table 9-11. Pump Station Improvement Projects

PS IMPROVEMENT PROJECTS																						
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																		
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	PS-1	New Pump Station	$ 10,143	$ 1,055	$ -	$ 5,135	$ 5,340	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PS-2	La Brucherie Pump Station	$ 5,406	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 770	$ 3,601	$ 3,746	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PS-3	La Brucherie Reservoir - Mechanical and Electrical	$ 623	$ 648	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 16,172	$ 1,703	$ -	$ 5,135	$ 5,340	$ -	$ -	$ -	$ -	$ 770	$ 3,601	$ 3,746	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Table 9-12. Reservoir Improvement Projects

RESERVOIR IMPROVEMENT PROJECTS																						
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																		
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	RES-1	Old WTP Reservoir No. 1	$ 2,600	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,422	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	RES-2	Old WTP Reservoir No. 2	$ 3,000	$ -	$ -	$ -	$ -	$ 730	$ 3,037	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	RES-3	WTP Raw Water Ponds	$ 2,400	$ -	$ -	$ -	$ -	$ -	$ -	$ 316	$ 2,957	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	RES-4	Old WTP Reservoir No. 3	$ 4,900	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,765	$ 7,343	$ -	$ -	$ -	$ -
	RES-5	La Brucherie Reservoir	$ 3,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,459	$ 6,068	$ -
		TOTAL:	$ 16,500	$ -	$ -	$ -	$ -	$ 730	$ 3,037	$ 3,738	$ 2,957	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,765	$ 7,343	$ -	$ 1,459	$ 6,068	$ -

Table 9-13. Valve Improvement Projects

VALVE IMPROVEMENT PROJECTS																						
Improvement Type	Project ID	Project Name	Total Project Cost ($1,000)	Project Cost ($1,000)																		
				Year 1 (FY26-27)	Year 2 (FY27-28)	Year 3 (FY28-29)	Year 4 (FY29-30)	Year 5 (FY30-31)	Year 6 (FY31-32)	Year 7 (FY32-33)	Year 8 (FY33-34)	Year 9 (FY34-35)	Year 10 (FY35-36)	Year 11 (FY36-37)	Year 12 (FY37-38)	Year 13 (FY38-39)	Year 14 (FY39-40)	Year 15 (FY40-41)	Year 16 (FY41-42)	Year 17 (FY42-43)	Year 18 (FY43-44)	Year 19 (FY44-45)	Year 20 (FY45-46)
Condition	VLV-1	Valve Replacement	$ 624	$ 82	$ 85	$ 88	$ 92	$ 95	$ 99	$ 103	$ 107	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		TOTAL:	$ 624	$ 82	$ 85	$ 88	$ 92	$ 95	$ 99	$ 103	$ 107	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

9.10 Staffing Plan

To support the effective operation, maintenance, and management of the City of El Centro's water system, a detailed staffing study was conducted (see *Technical Memorandum – Staffing Study, September 30, 2025, Dudek*) as included in **Appendix D**. The study evaluated current staffing levels across the Water Treatment Plant, water distribution system, meter shop, backflow prevention program, Engineering, and Administration, and compared them to similar-sized agencies to identify gaps and future needs. The analysis considered routine operations, inspections, valve maintenance, regulatory compliance, and anticipated operational requirements, including potential increases in treatment plant shift hours.

For the purposes of this study, two different staffing options were reviewed for the WTP staffing: an 8-hour and a 16-to-24-hour shift schedule. The WTP is currently operating with one 8-hour shift, though the City anticipates the State of California to require staffing 16 hours per day in the next five years. Most WTPs in California operate with 24-hour staffing. To accommodate the anticipated regulatory-required shift from a single 8-hour schedule to 16- to 24-hour operations, recommendations for both shifts were included as part of the study.

Table 9-14 summarizes the total number of full-time employees (FTE) needed to maintain the WTP, the water distribution, the meter shop and the backflow prevention program, as detailed in **Appendix D**. Based on the findings, it is recommended that the City staff an additional 3 to 14 employees for the WTP, three permanent FTEs positions for the meter shop (eliminating the two temporary positions), two backflow prevention staff, and one dedicated WWTP Instrumentation Electrical Technician. Alongside that, it is recommended that the City hire 1 to 5 additional engineering staff, as well as 1 to 2 additional administrative staff to be shared between the Sewer and Water maintenance efforts.

Table 9-14. Summary of Total Recommended Full Time Employee (FTEs)

Department	Current Number of FTEs	Recommended Additional FTEs	Recommended Total FTEs
WTP Staff[1]	11.5	8 / 19	19.5 to 30.5
▪ WTP Only (8-hr/16+hr shifts)	8	3 / 14[1]	11 / 22[1]
▪ Meter Shop	3[2]	3	6
▪ Backflow Prevention Program	0.5	2	2.5
Underground Utilities Staff (including Water Operators)	8	2	10
Dedicated Instrumentation Control Electrician	0.5	0.5	1
Engineering[3]	**5**	**1 to 5**	**6 to 10**
Administration[3] (excluding Fleet staff)	**6**	**1 to 2**	**7 to 8**

Notes:
1 WTP staffing recommendations offered for both 8-hour and 16+hr staffing options.
2 Currently the City has 5 total meter staff, including 3 permanent staff and 2 temporary staff. The City would like all meter staff to be permanent.
3 Recommendations for Engineering and Administration staff are shared between the Sewer and Water Systems.

9.11 Potential Funding Sources

Table 9-15 presents descriptions of potential State and Federal funding sources the City may want to consider for the water CIP.

Table 9-15. Potential Funding Sources

Funding Source	Program	Description	Type	Typical Range of Funding	Estimated Time to Acquire Funds
U.S. Environmental Protection Agency (EPA)/ California State Water Board	Drinking Water State Revolving Fund (DWSRF)	Funds water treatment plant upgrades, storage tank rehab, and distribution system improvements.	State/ Federal	Varies by project; up to 100% for eligible communities	6–12 months
California Infrastructure and Economic Development Bank (IBank)	Infrastructure State Revolving Fund (ISRF) Program	Offers low-cost financing to public agencies for various infrastructure projects, including water treatment and distribution.	State	$1 million to $65 million	6-12 months
Department of Housing and Urban Development (HUD)	Community Development Block Grant (CDBG)	Grants for public facilities including water systems in low- and moderate-income communities.	Federal	$500,000 to $5 million+	6–18 months
U.S. EPA	Water Infrastructure Finance and Innovation Act (WIFIA)	Long-term, low-cost loans for large-scale water infrastructure projects including drinking water systems.	Federal	$20 million+ (or $5 million for small communities)	12–24 months
Federal Emergency Management Agency (FEMA)	Building Resilient Infrastructure and Communities (BRIC)	Funds infrastructure resilience projects, including water/wastewater systems.	Federal	$500,000 to $50 million	12–24 months
California Department of Water Resources (DWR)	Integrated Regional Water Management (IRWM) Grants	Funds regional water management projects, including wastewater and stormwater.	State	$1 million to $10 million	6–18 months

Appendix A

Near Term Development Projects

Appendix A
Near Term Developments

Project Name	Street Address / General Location	Proposed Land Use	Project Description	Site Area (Ac)	Site Area (SqFt)	Proposed Dwelling Units (DU)	Building Area (SF)	Res. Density (DU/Ac)	Status	Projected Water Demands (gpd)	Point Load Model Junction ID
4:13 Fitness Center	1531 W. Main St.	Commercial	An 18,522 sq. ft. fitness center with trainin	0.43	18,731			N/A	Under construction	774.00	4497
Bark Park	Northeast Corner of Park Avenue and 7th St.	Park	Dog park	1.65	71,827			N/A	Completed	1,154.24	5180
Big J Fencing new warehouse with offices	336 Main St	Commercial	An 8,400 sq. ft. warehouse with office spa	0.19	8,276			N/A	Planning Review Complete	342.00	4833
Buena Vista Park	SWC of 8th St and Manuel A Ortize Ave	Park	Construction of new park	11.33	493,588			N/A	Under construction	7,931.85	0193
California Highway Patrol Station	2802 S. 4th St.	Institution	44,473 SF California Highway Patrol Stati	1.02	44,431			N/A	Under construction	1,224.00	0047
Courtyard Villas	Glenwood Rd; W. Orange Ave.	Low Density Residential	53 lot single-family subdivision	19.43	846,371	53	N/A	2.73	Pre-Application	13,250.00	0888
CR&R Transfer Station	S. Ross Rd.; 140 ft. E. Montenegro Way/ E. Dogv	Industrial	Solid waste transfer station	8.75	381,150			N/A	Planning Review	4,375.00	0855
Dairy Queen	3065 N. Imperial Ave.	Commercial	restaurant with drive-thru	1.05	45,661			N/A	Completed	1,886.82	5897
Dogwood and Villa Annexation	SEC Dogwood Ave and Villa Ave	Industrial	Annexation and Pre-Zone of 320 Acres	320	13,939,200			N/A	Planning Review	80,000.00	5311
Dogwood Bar	411 E. Aurora Dr.	Commercial	4,500 SF building	0.103	4,487			N/A	Planning Review Complete	185.40	0623
Dunkin Donuts	3063 N. Imperial Ave.	Commercial	restaurant with drive-thru	0.70	30,575			N/A	Under construction	1,263.43	5897
Dutch Bros Coffee	740 N. Imperial Ave.	Commercial	2,405 square foot Dutch Bros Coffee with	0.055	2,396			N/A	Planning Review	99.00	4987
El Centro Shopping Center	SE corner of S. Imperial Ave and Wake Ave.	Commercial	A new retail and fast-food shopping center	3.56	155,074			N/A	Planning Review	6,408.00	2417
El Dorado Family Apartments	1805 N. 8th St.	High-Medium Density	136 unit apartment complex	5.99	260,924	136	N/A	22.70	Under construction	27,200.00	1728
Food 4 Less Gas Station	2420 Cottonwood Dr.	Commercial	14 pump gas station	1.92	83,635			N/A	Planning Review Complete	3,456.00	1821
Gas Station with Carwash	3003 SW. 4th St.	Commercial	16 pump gas station with a 3,800 square f	0.138	6,011			N/A	Planning Review	248.40	2206
Gomez Park	Hope St between E. Hamilton Ave and Ross Ave	Park	Renovation of existing park	7.15	311,331			N/A	In design	5,003.02	4228
Home 2 Suites	3105 S. Dogwood Ave.	Commercial	79 room hotel	2.90	126,361			N/A	Under construction	5,221.53	0270
Humane Society	664ft. north from corner of E. Ross Ave. and S. Hop	Commercial	new 7,724 sq. ft. building equipped with do	0.18	7,841			N/A	Planning Review	324.00	0829
Hyundai Dealership	2202 Merrill Center Dr.	Commercial	18,500 square foot dealership building	0.42	18,295			N/A	Building/Grading Review	756.00	0395
Innercare Medical Facility	850 E. Danenberg Drive	Commercial	New 21,493 sq. ft. medical office.	0.493	21,475			N/A	Planning Review Complete	887.40	0879
Jacaranda Gardens I Apartments	1625 N. Waterman Ave	High Density Residential	96 unit apartment complex	4.36	190,016	96		22.01	Completed	19,200.00	1673
Jamba Juice and Wing Stop	1497 Adams Ave.	Commercial	a tentative improvements for fast-food restaurants Jamba Juice and Wing Stop	0.69	30,170			N/A	Completed	1,246.69	5024
Jersey Mike's/ UPS Store	1002 N. Imperial	Commercial	restaurant/ package and mail site	1.17	50,862			N/A	Completed	2,101.74	5403
La Brucherie and Main Apartments	303 S. La Brucherie Ave	High-Medium Density Residential	177 unit apartment complex	11.90	518,258	177	N/A	14.88	Planning Review Complete	35,400.00	1201
Lotus Place Residential Subdivision	SEC Austin Rd. and Ross Ave.	Low Density Residential	561-lot Single Family residential subdivision Development map states 574 lots - which is the latest?	160	6,969,600	561	N/A	3.51	Pre-Application	140,250.00	0628
Lotus Ranch	West of La Brucherie Ave.; South of I-8	Medium Density Residential	609 Lot single-family subdivision	100.76	4,389,106	609	N/A	6.04	Under construction	127,890.00	0332
Maresca Apartments	718 Adams Ave.	High-Medium Density Residential	A new six-unit apartment complex with two	0.42	18,215	8	N/A	19.13	Planning Review	1,600.00	5178
Maverik Gas Station	1402 N. Dogwood Ave.	Commercial	21 pump gas station and 5,951 SF convenience store	6.74	293,780		5,951	N/A	Completed	12,139.67	0861
One Stop Meats La Carniceria	2033 S. 4th St.	Commercial	1,400 square foot Food Market	0.032	1,394			N/A	Planning Review Complete	57.60	0573
Parkview Residential Subdivision	E. of 8th St.; 625 ft south of Horne Rd.	Low Density Residential	114 lot single-family subdivision	26.05	1,134,738	114	N/A	4.38	Planning Review	28,500.00	0185
Penske	502 E. Main St.	Commercial	Truck rental business	3.41	148,607			N/A	Completed	6,140.79	4894
Police Station	150 N. 11 St.	Institution	46,500 SF station	1.067	46,479			N/A	Under construction	1,280.40	1280
Raising Canes	2299 N. Imperial Ave.	Commercial	Fast food restaurant with drive-thru	1.31	57,042			N/A	Planning Review	2,357.11	1769
Residence Inn Hotel	3409 S. Dogwood Ave.	Commercial	104 room hotel	3.99	173,881			N/A	Building/Grading Permit Review	7,185.17	0305
Restaurant	751 E. Danenberg Dr.	Commercial	4,575 SF restaurant building	0.105	4,574			N/A	Planning Review Complete	189.00	0256
Ross and Dogwood -- Industrial Development	Ross Ave and Dogwood	Industrial	Industrial Development	483.65	21,067,681			N/A	Planning Review	225,123.63	0624
Spear & 6th Street Apartments	NEC 6th St. and Spear Ave.	High-Medium Density Residential	288 unit apartment complex	14.11	614,632	288	N/A	20.41	Planning Review	57,600.00	10012
Surya Hotel	NWC Wake Ave. and Weakley Ave.	Commercial	99 room hotel	1.3	56,628			N/A	Planning Review Complete	2,340.00	0622
Town Center Industrial Condominiums	SWC Cruickshank Dr. and 8th St.	Industrial	34,200 SF of Industrial Warehouse	0.785	34,195			N/A	Planning Review Complete	392.50	5893
Town Center Industrial Park - Residential	NWC N. 8th St. and Cruickshank Dr.	Medium Density Residential	102 lot single-family subdivision	11.71	510,000	102		8.71	Planning Review	21,420.00	5893
Town Center Industrial Park - Industrial	NWC N. 8th St. and Cruickshank Dr.	Industrial	11 industrial lots	33	1,437,480			N/A	Planning Review	16,500.00	5893
Town Center Self Storage	SW Cruickshank Dr. and 8th St.	Commercial	2 self-storage buildings in 4.31 acres	7.74	337,154			N/A	Building/Grading Permit Review	13,932.00	5893
Town Center single-family	NWC N. 8th St. and Cruickshank Dr.	Medium Density Residential	102 lot single-family subdivision	13.1	570,636	102	N/A	7.79	Planning Review	21,420.00	5882
Town Center Village IV	NWC N. 8th and Bradshaw Ave.	High-Medium Density Residential	180 unit apartment complex	11.59	504,860	180	N/A	15.53	Under construction	36,000.00	5880
U-Haul expansion	1745 4th St.	Commercial	85,224 SF three-story storage warehouse	6.94	302,307		85,224	N/A	Completed	12,492.02	3486
Valley Pediatric	1446 W. Pico Ave.	Commercial	medical offices	1.77	77,122			N/A	Completed	3,186.86	1670
Villa Ocotillo Apartments	1080 Adams Ave.	High Density Residential	a hotel conversion into 38 studios	0.749	32,626	38	N/A	50.73	Planning Review Completed	7,600.00	VLV_10514
Vo Medical Center	1699 N. Imperial Ave.	Commercial	medical offices	4.87	212,037			N/A	Completed	8,761.86	5614
Wal-Mart Fuel Station	2150 N. Waterman Ave.	Commercial	Walmart fuel station with 12 fuel dispense	2.99	130,121			N/A	Planning Review	5,376.90	1809
Willowbend Residential Subdivision	W. of 4th St.; 630 ft S. of Horne Road	Low Density Residential	134 lots single-family subdivision	37.04	1,613,462	134	N/A	3.62	Planning Review	33,500.00	2221
Zadeh Self Storage	NEC of Dorian Ct. and N. 8th St.	Commercial	2 buidlings; 104 and 375 square ft, 1500 s	0.046	2,004			N/A	Planning Review	82.80	5893
									Total (GPD)	**1,013,256.84**	
									Total (GPM)	**703.65**	
									Total (MGD)	**1.01**	

Appendix B
Detailed Project Costs

City of El Centro
2025 Water Master Plan Update
Recommended Pipeline Improvement Projects Cost Summary

Project ID	Project Name	Description	Justification	Total Project Cost ($)
Redun-1	S Imperial Ave Connection	Build 1,350 LF of new 18-in pipeline to close the loop between Danenber Dr and Manuel A Ortiz Ave.	Improve Redundancy in Existing System	$ 1,763,000
Redun-2	Farnsworth Ln Connection	Build 2,000 LF of new 20-in pipeline to close the loop between Dannenberg Dr and Quail Run Dr.	Improve Redundancy in Existing System	$ 2,434,000
FF-1	S 2nd St Upsizing	Upsize approximately 2,600 LF of existing 6-inch to 12-inch pipeline on S 2nd St from W Orange Ave to Ross Ave.	Improve Existing Capacity Issues	$ 1,844,000
FF-2	Euclid Ave Upsizing	Upsize approximately 1,300 LF of existing 8-inch to 12-inch pipeline on Euclid Ave from 4yh St to 3rd St.	Improve Existing Capacity Issues	$ 1,136,000
FF-3	El Centro Ave Upsizing	Upsize approximately 1,300 LF of existing 6-inch to 8-inch pipeline on El Centro Ave from 6st St to Railroad.	Improve Existing Capacity Issues	$ 778,000
FF-4	Adams Ave Upsizing	Upsize approximately 1,400 LF of existing 6-inch to 8-inch pipeline on Adams Ave from N 6th St / the alley between El Centro Ave and Adams Ave/ to Railroad.	Improve Existing Capacity Issues	$ 835,000
FF-5	E Main St Upsizing	Upsize and add approximately 1,900 LF of existing 6-inch to 8-inch pipeline on Main St from Dogwood Rd to Fairfield Dr.	Improve Existing Capacity Issues	$ 998,000
FF-6	S 4th St Upsizing	Upsize existing 4" from Wensley to Ross Ave to 8"; build new 8" between Ross and Desert Gardens Dr; upsize existing 6" from Desert Gardens to Autora Dr to 8".	Improve Existing Capacity Issues	$ 1,042,000
FF-7	Yucca Dr Connection	Build 100 LF of new 8-in pipeline to close the loop across 4th St.	Improve Existing Capacity Issues	$ 106,000
FF-8	Brighton Ave Connection	Build 400 LF of new 8-in pipeline to connect the McGee Park hydrant to nearby 18" line.	Improve Existing Capacity Issues	$ 356,000
FF-9	Heil Ave Upsizing	Upsize approximately 600 LF of existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues	$ 706,000
FF-10	Hamilton Ave Upsizing	Upsize approximately 700 LF existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues	$ 782,000
FF-11	Maple Ave Upsizing	Upsize approximately 800 LF existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues	$ 849,000
FF-12	Cedar Ave Upsizing	Upsize approximately 700 LF existing 6" to 12" pipeline from 3rd St to the Railroad.	Improve Existing Capacity Issues	$ 782,000
FF-13	New St Upsizing	Upsize approximately 600 LF of existing 6" to 10" pipeline from Orange Ave to New St.	Improve Existing Capacity Issues	$ 599,000
FF-14	W Brighton Ave Upsizing	Upsize approximately 2,000 LF of existing 6" to 12" pipeline from 8th St to 5th St.	Improve Existing Capacity Issues	$ 1,526,000
FF-15	W Holt Ave Upsizing	Upsize approximately 2,700 LF of existing 6" to 12" pipeline from 10th St to 5th St.	Improve Existing Capacity Issues	$ 1,851,000
FF-16	W Heil Ave Upsizing	Upsize approximately 2,000 LF of existing 6" to 12" pipeline from 7th St to 4th St.	Improve Existing Capacity Issues	$ 1,526,000
FF-17	W Main St Connection	Build 1,300 LF of new 12-in pipeline to close the loop on Main St.	Improve Existing Capacity Issues	$ 1,162,000
Age-1	8th St Replacement	Replace 24" Steel transmission main built in the 1970's to PVC pipes of the same size.	Improve Existing Condition Issues	$ 3,833,000
Age-2	Imperial Ave Replacement	Replace 18" Steel transmission main built in the 1950's to PVC pipes of the same size.	Improve Existing Condition Issues	$ 2,484,000
			TOTAL:	**$ 27,392,000**

Redun-1: S Imperial Ave Connection

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Build new 18-in line	LF	1,350	$684	$ 923,400
				Subtotal	**$ 923,400**
				General Requirements (10%)	**$ 93,000**
				Contingency (30%)	**$ 278,000**
				Construction Total:	**$ 1,295,000**
					Soft Costs:
				Engineering (15%)	$ 195,000
				Construction Management (15%)	$ 195,000
				Engineering Services During Construction (2%)	$ 26,000
				Environmental (2%)	$ 26,000
				Administration (2%)	$ 26,000
				Project Total	**$ 1,763,000**

Redun-2: Farnsworth Ln Connection

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Build new 20-in line	LF	2,000	$660	$ 1,320,000
				Subtotal	**$ 1,320,000**
				General Requirements (10%)	**$ 132,000**
				Contingency (30%)	**$ 396,000**
				Construction Total:	**$ 1,848,000**
					Soft Costs:
				Engineering (13%)	$ 234,000
				Construction Management (13%)	$ 241,000
				Engineering Services During Construction (2%)	$ 37,000
				Environmental (2%)	$ 37,000
				Administration (2%)	$ 37,000
				Project Total	**$ 2,434,000**

FF-1: S 2nd St Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	2,600	$372	$ 967,200
				Subtotal	**$ 967,200**
				General Requirements (10%)	**$ 97,000**
				Contingency (30%)	**$ 291,000**
				Construction Total:	**$ 1,356,000**
					Soft Costs:
				Engineering (15%)	$ 200,000
				Construction Management (15%)	$ 204,000
				Engineering Services During Construction (2%)	$ 28,000
				Environmental (2%)	$ 28,000
				Administration (2%)	$ 28,000
				Project Total	**$ 1,844,000**

FF-2: Euclid Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 8" to 12"	LF	1,300	$444	$ 577,200
				Subtotal	**$ 577,200**
				General Requirements (10%)	**$ 58,000**
				Contingency (30%)	**$ 174,000**
				Construction Total:	**$ 810,000**
					Soft Costs:
				Engineering (19%)	$ 153,000
				Construction Management (15%)	$ 122,000
				Engineering Services During Construction (2%)	$ 17,000
				Environmental (2%)	$ 17,000
				Administration (2%)	$ 17,000
				Project Total	**$ 1,136,000**

FF-3: El Centro Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 8"	LF	1,300	$296	$ 384,800
				Subtotal	**$ 384,800**
				General Requirements (10%)	**$ 39,000**
				Contingency (30%)	**$ 116,000**
				Construction Total:	**$ 540,000**
					Soft Costs:
				Engineering (23%)	$ 124,000
				Construction Management (15%)	$ 81,000
				Engineering Services During Construction (2%)	$ 11,000
				Environmental (2%)	$ 11,000
				Administration (2%)	$ 11,000
				Project Total	**$ 778,000**

FF-4: Adams Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 8"	LF	1,400	$296	$ 414,400
				Subtotal	**$ 414,400**
				General Requirements (10%)	**$ 42,000**
				Contingency (30%)	**$ 125,000**
				Construction Total:	**$ 582,000**
					Soft Costs:
				Engineering (22%)	$ 129,000
				Construction Management (15%)	$ 88,000
				Engineering Services During Construction (2%)	$ 12,000
				Environmental (2%)	$ 12,000
				Administration (2%)	$ 12,000
				Project Total	**$ 835,000**

FF-5: E Main St Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 8", and close loop by extending 8" to Dogwood Rd	LF	1,900	$264	$ 501,600
				Subtotal	**$ 501,600**
				General Requirements (10%)	**$ 51,000**
				Contingency (30%)	**$ 151,000**
				Construction Total:	**$ 704,000**
					Soft Costs:
				Engineering (20%)	$ 143,000
				Construction Management (15%)	$ 106,000
				Engineering Services During Construction (2%)	$ 15,000
				Environmental (2%)	$ 15,000
				Administration (2%)	$ 15,000
				Project Total	**$ 998,000**

FF-6: S 4th St Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 4" from Wensley to Ross Ave to 8"; build new 8" between Ross and Desert Gardens Dr; upsize existing 6" from Desert Gardens to Autora Dr to 8".	LF	2,000	$264	$ 528,000
				Subtotal	**$ 528,000**
				General Requirements (10%)	**$ 53,000**
				Contingency (30%)	**$ 159,000**
				Construction Total:	**$ 740,000**
					Soft Costs:
				Engineering (20%)	$ 146,000
				Construction Management (15%)	$ 111,000
				Engineering Services During Construction (2%)	$ 15,000
				Environmental (2%)	$ 15,000
				Administration (2%)	$ 15,000
				Project Total	**$ 1,042,000**

FF-7: Yucca Dr Connection

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Build new 8-in pipeline	LF	100	$480	$ 48,000
				Subtotal	**$ 48,000**
				General Requirements (10%)	**$ 5,000**
				Contingency (30%)	**$ 15,000**
				Construction Total:	**$ 68,000**
					Soft Costs:
				Engineering (30%)	$ 21,000
				Construction Management (15%)	$ 11,000
				Engineering Services During Construction (2%)	$ 2,000
				Environmental (2%)	$ 2,000
				Administration (2%)	$ 2,000
				Project Total	**$ 106,000**

FF-8: Brighton Ave Connection

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Build new 8-in pipeline	LF	400	$416	$ 166,400
				Subtotal	**$ 166,400**
				General Requirements (10%)	**$ 17,000**
				Contingency (30%)	**$ 50,000**
				Construction Total:	**$ 234,000**
					Soft Costs:
				Engineering (30%)	$ 71,000
				Construction Management (15%)	$ 36,000
				Engineering Services During Construction (2%)	$ 5,000
				Environmental (2%)	$ 5,000
				Administration (2%)	$ 5,000
				Project Total	**$ 356,000**

FF-9: Heil Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	600	$576	$ 345,600
				Subtotal	**$ 345,600**
				General Requirements (10%)	**$ 35,000**
				Contingency (30%)	**$ 104,000**
				Construction Total:	**$ 485,000**
					Soft Costs:
				Engineering (24%)	$ 118,000
				Construction Management (15%)	$ 73,000
				Engineering Services During Construction (2%)	$ 10,000
				Environmental (2%)	$ 10,000
				Administration (2%)	$ 10,000
				Project Total	**$ 706,000**

FF-10: Hamilton Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	700	$552	$ 386,400
				Subtotal	**$ 386,400**
				General Requirements (10%)	**$ 39,000**
				Contingency (30%)	**$ 116,000**
				Construction Total:	**$ 542,000**
					Soft Costs:
				Engineering (23%)	$ 125,000
				Construction Management (15%)	$ 82,000
				Engineering Services During Construction (2%)	$ 11,000
				Environmental (2%)	$ 11,000
				Administration (2%)	$ 11,000
				Project Total	**$ 782,000**

FF-11: Maple Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	800	$528	$ 422,400
				Subtotal	**$ 422,400**
				General Requirements (10%)	**$ 43,000**
				Contingency (30%)	**$ 127,000**
				Construction Total:	**$ 593,000**
					Soft Costs:
				Engineering (22%)	$ 131,000
				Construction Management (15%)	$ 89,000
				Engineering Services During Construction (2%)	$ 12,000
				Environmental (2%)	$ 12,000
				Administration (2%)	$ 12,000
				Project Total	**$ 849,000**

FF-12: Cedar Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	700	$552	$ 386,400
				Subtotal	**$ 386,400**
				General Requirements (10%)	**$ 39,000**
				Contingency (30%)	**$ 116,000**
				Construction Total:	**$ 542,000**
					Soft Costs:
				Engineering (23%)	$ 125,000
				Construction Management (15%)	$ 82,000
				Engineering Services During Construction (2%)	$ 11,000
				Environmental (2%)	$ 11,000
				Administration (2%)	$ 11,000
				Project Total	**$ 782,000**

FF-13: New St Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 10"	LF	600	$480	$ 288,000
				Subtotal	**$ 288,000**
				General Requirements (10%)	**$ 29,000**
				Contingency (30%)	**$ 87,000**
				Construction Total:	**$ 404,000**
					Soft Costs:
				Engineering (26%)	$ 107,000
				Construction Management (15%)	$ 61,000
				Engineering Services During Construction (2%)	$ 9,000
				Environmental (2%)	$ 9,000
				Administration (2%)	$ 9,000
				Project Total	**$ 599,000**

FF-14: W Brighton Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	2,000	$396	$ 792,000
				Subtotal	**$ 792,000**
				General Requirements (10%)	**$ 80,000**
				Contingency (30%)	**$ 238,000**
				Construction Total:	**$ 1,110,000**
					Soft Costs:
				Engineering (16%)	$ 180,000
				Construction Management (15%)	$ 167,000
				Engineering Services During Construction (2%)	$ 23,000
				Environmental (2%)	$ 23,000
				Administration (2%)	$ 23,000
				Project Total	**$ 1,526,000**

FF-15: W Holt Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	2,700	$360	$ 972,000
				Subtotal	**$ 972,000**
				General Requirements (10%)	**$ 98,000**
				Contingency (30%)	**$ 292,000**
				Construction Total:	**$ 1,362,000**
					Soft Costs:
				Engineering (15%)	$ 200,000
				Construction Management (15%)	$ 205,000
				Engineering Services During Construction (2%)	$ 28,000
				Environmental (2%)	$ 28,000
				Administration (2%)	$ 28,000
				Project Total	**$ 1,851,000**

FF-16: W Heil Ave Upsizing

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Upsize existing 6" to 12"	LF	2,000	$396	$ 792,000
				Subtotal	**$ 792,000**
				General Requirements (10%)	**$ 80,000**
				Contingency (30%)	**$ 238,000**
				Construction Total:	**$ 1,110,000**
					Soft Costs:
				Engineering (16%)	$ 180,000
				Construction Management (15%)	$ 167,000
				Engineering Services During Construction (2%)	$ 23,000
				Environmental (2%)	$ 23,000
				Administration (2%)	$ 23,000
				Project Total	**$ 1,526,000**

FF-17: W Main St Connection

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Build new 12-in line	LF	1,300	$456	$ 592,800
				Subtotal	**$ 592,800**
				General Requirements (10%)	**$ 60,000**
				Contingency (30%)	**$ 178,000**
				Construction Total:	**$ 831,000**
					Soft Costs:
				Engineering (19%)	$ 155,000
				Construction Management (15%)	$ 125,000
				Engineering Services During Construction (2%)	$ 17,000
				Environmental (2%)	$ 17,000
				Administration (2%)	$ 17,000
				Project Total	**$ 1,162,000**

Age-1: 8th St Replacement

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Replace 24" Steel transmission main built in the 1970's to PVC pipes of the same size	LF	2,900	$720	$ 2,088,000
				Subtotal	**$ 2,088,000**
				General Requirements (10%)	**$ 209,000**
				Contingency (30%)	**$ 627,000**
				Construction Total:	**$ 2,924,000**
					Soft Costs:
				Engineering (10%)	$ 293,000
				Construction Management (15%)	$ 439,000
				Engineering Services During Construction (2%)	$ 59,000
				Environmental (2%)	$ 59,000
				Administration (2%)	$ 59,000
				Project Total	**$ 3,833,000**

Age-2: Imperial Ave Replacement

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Replace 18" Steel transmission main built in the 1955 to PVC pipes of the same size	LF	2,300	$576	$ 1,324,800
				Subtotal	**$ 1,324,800**
				General Requirements (10%)	**$ 133,000**
				Contingency (30%)	**$ 398,000**
				Construction Total:	**$ 1,856,000**
					Soft Costs:
				Engineering (13%)	$ 235,000
				Construction Management (15%)	$ 279,000
				Engineering Services During Construction (2%)	$ 38,000
				Environmental (2%)	$ 38,000
				Administration (2%)	$ 38,000
				Project Total	**$ 2,484,000**

City of El Centro
2025 Water Master Plan Update
Recommended Valve Improvement Projects Cost Summary

Project ID	Project Name	Description	Justification	Total Project Cost ($)
VLV-1	Valve Replacement	Replacing 24 malfunctioning valves identified by City's operator	End of useful life.	$ 624,000
			TOTAL:	**$ 624,000**

VLV 1: Valve Replacement

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Item Total
1	Installment of New Valves	EA	24	$ 20,000	$ 480,000
				Subtotal	**$ 480,000**
				Contingency (30%)	$ 144,000
				Construction Total:	**$ 624,000**
				Project Total	**$624,000**

NEW WTP IMPROVEMENT PROJECTS

Improvement Type	Project ID	Project Name	Description	Total Project Cost (2025$)
Condition	NWTP-1	Operations Building	Replace PLCs throughout plant. Electrical hand hole cover water intrusion recommendations. Power System Study. Includes Electrucal Equipment Removal costs.	$1,013,000
	NWTP-2	Clearwell Pumps	Replace 4 VFDs at Clearwell Pump Station with active front end VFDs. Install an additional 4 new Pumps and concrete pad north of the existing pumps.	$1,960,000
	NWTP-3	Primary Clarifiers and Vaults	Add a flood float switch alarm to each flow meter and valve vault downstream of the clarifiers per Staff request. Alarm to report to Plant PLC and SCADA. Cost estimate assumes we can run signals back to filter building PLC through existing conduits but need to re-pull all cables in conduit.	$116,000
	NWTP-4	Waste Washwater Basin	Replace check valve(s) to eliminate leaking.	$93,000
	NWTP-5	Filters	Transition single filter bay into two bays. Reroute existing mechanical piping. Filter drainage bypassing. Filter bay actuator replacements	$3,441,000
	NWTP-6	Drying Ponds	Install new concreate drying ponds.	$1,641,000
	NWTP-7	Pond Discharge Piping	Install new discharge pipeline to raw water ponds.	$2,417,000
	NWTP-8	Clarifier Pump Station	Install a pump between raw water storage and clarifiers	$349,000
	NWTP-9	Raw Water Pump Station Expansion	Replace 4 existing pumps and add one standby pump at raw water pump station to pump raw water from canal to raw water ponds	$1,434,000
			TOTAL:	**$ 12,464,000**

OLD WTP IMPROVEMENT PROJECTS

Improvement Type	Project ID	Project Name	Description	Total Project Cost (2025$)
Condition	OWTP-1	Old WTP Building	Replacing electrical equipment in Old WTP building. Power System Study	$3,780,000
			TOTAL:	**$3,780,000**

PS IMPROVEMENT PROJECTS

Improvement Type	Project ID	Project Name	Description	Total Project Cost (2025$)
Condition	PS-1	New Pump Station	New PS Building. New pumps, piping, and valves. HVAC and Electical.	$10,143,000
	PS-2	La Brucherie Pump Station	Demo existing pumps. Demo existing electrical equipment. Roof leak repair. New pumps, piping, valving. Power system study. Replace electrical equipment. Replace generator control panel and output breaker. Replace standby generator and diesel fuel tank.	$5,406,000
	PS-3	La Brucherie Reservoir - Mechanical and Electrical	Replace altitude valve and related components. Replace flow meter and upsize piping.	$623,000
			TOTAL:	**$16,172,000**

RESERVOIR IMPROVEMENT PROJECTS

Improvement Type	Project ID	Project Name	Description	Total Project Cost (2025$)
Condition	RES-1	Old WTP Reservoir No. 1	Recoat interior and exterior of reservoir within 5 years. Replace appx. 10% of roof framing and hardware. Perform minor metallic surface repairs and patching. Replace interior ladder, roof hatches and center vent. Replace roof handrailing system.	$2,600,000
	RES-2	Old WTP Reservoir No. 2	Recoat exterior of reservoir within 5 years. Recoat interior of reservoir as soon as possible. Replace all roof framing including columns, rafters, girders, connections and hardware. Perform minor metallic surface repairs and patching. Replace interior ladder, roof hatches and center vent. Replace roof handrailing system.	$3,000,000
	RES-3	WTP Raw Water Ponds	Repair cracking by means of epoxy injection Replace original sloping embankment concrete at Pond No. 3 and Pond. No 4. Continue to monitor Pond No. 1 and Pond No. 2.	$2,400,000
	RES-4	Old WTP Reservoir No. 3	Recoat interior and exterior of reservoir within 10 years. Repair base plate bearing pad. Replace interior ladder. Repair roof hatch lifting mechanisms as soon as possible. Replace roof handrailing system. Continue to monitor structure.	$4,900,000
	RES-5	La Brucherie Reservoir	Recoat exterior of reservoir within 5-10 years. Recoat interior of reservoir as soon as possible. Perform minor metallic surface repairs and patching. Repair base plate bearing pad. Replace interior ladder.	$3,600,000
			TOTAL:	**$16,500,000**

NWTP-1: Operations Building

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Demo				**$50,000**
Electrical Equipment Removal	LS	1	$50,000	$50,000
Electrical				**$425,000**
Power System Study	LS	1	$125,000	$125,000
Hand hole	EA	10	$15,000	$150,000
Replace PLCs throughout plant (including filter PLC/s)	LS	1	$150,000	$150,000
			Subtotal	**$ 475,000**
			General Requirements (10%)	$ 48,000
			Contingency (40%)	$ 190,000
			Construction Total:	**$ 713,000**
				Soft Costs:
			Engineering (21%)	$ 148,000
			Construction Management (15%)	$ 107,000
			Engineering Services During Construction (2%)	$ 15,000
			Environmental (2%)	$ 15,000
			Administration (2%)	$ 15,000
			Project Total	**$1,013,000**

NWTP-2: Clearwell Pumps

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Demo				**$25,000**
VFD removal	LS	1	$25,000	$25,000
Sitework/Civil				**$55,500**
Concrete Pad	SF	37	$1,500	$55,500
Mechanical				**$280,000**
New Clearwell Pumps	EA	4	$70,000	$280,000
Electrical				**$600,000**
Replace VFDs	EA	4	$150,000	$600,000
			Subtotal	**$ 960,500**
			General Requirements (10%)	$ 97,000
			Contingency (40%)	$ 385,000
			Construction Total:	**$ 1,443,000**
				Soft Costs:
			Engineering (15%)	$ 213,000
			Construction Management (15%)	$ 217,000
			Engineering Services During Construction (2%)	$ 29,000
			Environmental (2%)	$ 29,000
			Administration (2%)	$ 29,000
			Project Total	**$1,960,000**

NWTP-3: Primary Clarifiers and Vaults

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Electrical				**$50,000**
Float Switch alarms	LS	1	$50,000	$50,000
			Subtotal	**$ 50,000**
			General Requirements (10%)	$ 5,000
			Contingency (40%)	$ 20,000
			Construction Total:	**$ 75,000**
				Soft Costs:
			Engineering (30%)	$ 23,000
			Construction Management (15%)	$ 12,000
			Engineering Services During Construction (2%)	$ 2,000
			Environmental (2%)	$ 2,000
			Administration (2%)	$ 2,000
			Project Total	**$116,000**

NWTP-4: Waste Washwater Basin

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Mechanical				**$40,000**
36" Duckbill Check Valve	LS	1	$40,000	$40,000
			Subtotal	**$ 40,000**
			General Requirements (10%)	$ 4,000
			Contingency (40%)	$ 16,000
			Construction Total:	**$ 60,000**
				Soft Costs:
			Engineering (30%)	$ 18,000
			Construction Management (15%)	$ 9,000
			Engineering Services During Construction (2%)	$ 2,000
			Environmental (2%)	$ 2,000
			Administration (2%)	$ 2,000
			Project Total	**$93,000**

NWTP-5: Filters

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Mechanical				**$1,750,000**
Construction of two new filter bays	LS	1	$1,500,000	$1,500,000
Filter drainage bypassing	LS	1	$100,000	$100,000
Filter bay actuator replacements	LS	1	$150,000	$150,000
			Subtotal	**$ 1,750,000**
			General Requirements (10%)	$ 175,000
			Contingency (40%)	$ 700,000
			Construction Total:	**$ 2,625,000**
				Soft Costs:
			Engineering (10%)	$ 263,000
			Construction Management (15%)	$ 394,000
			Engineering Services During Construction (2%)	$ 53,000
			Environmental (2%)	$ 53,000
			Administration (2%)	$ 53,000
			Project Total	**$3,441,000**

NWTP-6: Drying Ponds

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Sitework/Civil				**$796,875**
Concrete Drying Ponds	LS	1	$796,875	$796,875
			Subtotal	**$ 796,875**
			General Requirements (10%)	$ 80,000
			Contingency (40%)	$ 319,000
			Construction Total:	**$ 1,196,000**
				Soft Costs:
			Engineering (16%)	$ 193,000
			Construction Management (10%)	$ 180,000
			Engineering Services During Construction (2%)	$ 24,000
			Environmental (2%)	$ 24,000
			Administration (2%)	$ 24,000
			Project Total	**$1,641,000**

NWTP-7: Pond Discharge Piping

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Sitework/Civil				**$1,200,000**
New discharge pipeline to raw water ponds	LS	1	$1,200,000	$1,200,000
			Subtotal	**$ 1,200,000**
			General Requirements (10%)	$ 120,000
			Contingency (40%)	$ 480,000
			Construction Total:	**$ 1,800,000**
				Soft Costs:
			Engineering (13%)	$ 239,000
			Construction Management (10%)	$ 270,000
			Engineering Services During Construction (2%)	$ 36,000
			Environmental (2%)	$ 36,000
			Administration (2%)	$ 36,000
			Project Total	**$2,417,000**

NWTP-8: Clarifier Pump Station

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Structural				**$50,000**
Shade structure	LS	1	$50,000	$50,000
Mechanical				**$120,000**
New pumps, piping, valving	EA	2	$60,000	$120,000
			Subtotal	**$ 170,000**
			General Requirements (10%)	$ 17,000
			Contingency (30%)	$ 51,000
			Construction Total:	**$ 238,000**
				Soft Costs:
			Engineering (30%)	$ 72,000
			Construction Management (10%)	$ 24,000
			Engineering Services During Construction (2%)	$ 5,000
			Environmental (2%)	$ 5,000
			Administration (2%)	$ 5,000
			Project Total	**$349,000**

NWTP-9: Raw Water Pump Station Expansion

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Mechanical				**$240,000**
Replace 4 existing pumps with additional capacity	EA	4	$60,000	$240,000
Structural				**$400,000**
Concrete repair, metal planking and framing repair	LS	1	$400,000	$400,000
EI&C				**$50,000**
Power via new pump station service	LS	1	$50,000	$50,000
			Subtotal	**$ 690,000**
			General Requirements (10%)	$ 69,000
			Contingency (40%)	$ 276,000
			Construction Total:	**$ 1,035,000**
				Soft Costs:
			Engineering (17%)	$ 180,000
			Construction Management (15%)	$ 156,000
			Engineering Services During Construction (2%)	$ 21,000
			Environmental (2%)	$ 21,000
			Administration (2%)	$ 21,000
			Project Total	**$1,434,000**

OWTP-1: Old WTP Building

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
EI&C				**$2,000,000**
Demolition of Old WTP Building	LS	1	$2,000,000	$2,000,000
			Subtotal	**$ 2,000,000**
			General Requirements (10%)	$ 200,000
			Contingency (40%)	$ 800,000
			Construction Total:	**$ 3,000,000**
				Soft Costs:
			Engineering (10%)	$ 300,000
			Construction Management (10%)	$ 300,000
			Engineering Services During Construction (2%)	$ 60,000
			Environmental (2%)	$ 60,000
			Administration (2%)	$ 60,000
			Project Total	**$3,780,000**

PS-1: New Pump Station

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Structural				**$1,500,000**
New pump station building	LS	1	$1,500,000	$1,500,000
Mechanical				**$2,250,000**
New pumps, piping, valving	LS	1	$2,250,000	$2,250,000
EI&C				**$2,000,000**
New pump station building HAVC and electrical	LS	1	$2,000,000	$2,000,000
			Subtotal	**$ 5,750,000**
			General Requirements (10%)	$ 575,000
			Contingency (30%)	$ 1,725,000
			Construction Total:	**$ 8,050,000**
				Soft Costs:
			Engineering (10%)	$ 805,000
			Construction Management (10%)	$ 805,000
			Engineering Services During Construction (2%)	$ 161,000
			Environmental (2%)	$ 161,000
			Administration (2%)	$ 161,000
			Project Total	**$10,143,000**

PS-2: La Brucherie Pump Station

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Demo				**$35,000**
Demo existing pumps	LS	1	$25,000	$25,000
Demo existing electrical equipment	LS	1	$10,000	$10,000
Structural				**$150,000**
Roof leak repair	LS	1	$150,000	$150,000
Mechanical				**$1,350,000**
New pumps, piping, valving	LS	1	$1,350,000	$1,350,000
EI&C				**$1,215,000**
Power system study	LS	1	$60,000	$60,000
Replace electrical equipment	LS	1	$650,000	$650,000
Replace generator control panel and output breaker	LS	1	$55,000	$55,000
Replace standby generator and diesel fuel tank	LS	1	$450,000	$450,000
			Subtotal	**$ 2,750,000**
			General Requirements (10%)	$ 275,000
			Contingency (40%)	$ 1,100,000
			Construction Total:	**$ 4,125,000**
				Soft Costs:
			Engineering (10%)	$ 413,000
			Construction Management (10%)	$ 619,000
			Engineering Services During Construction (2%)	$ 83,000
			Environmental (2%)	$ 83,000
			Administration (2%)	$ 83,000
			Project Total	**$5,406,000**

PS-3: La Brucherie Reservoir - Mechanical and Electrical

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
Mechanical				**$280,000**
Replace altitude valve	LS	1	$90,000	$90,000
Replace flow meter	LS	1	$90,000	$90,000
Upsize pump station effluent pipe	LS	1	$100,000	$100,000
			Subtotal	**$ 280,000**
			General Requirements (10%)	$ 28,000
			Contingency (40%)	$ 112,000
			Construction Total:	**$ 420,000**
				Soft Costs:
			Engineering (27%)	$ 113,000
			Construction Management (15%)	$ 63,000
			Engineering Services During Construction (2%)	$ 9,000
			Environmental (2%)	$ 9,000
			Administration (2%)	$ 9,000
			Project Total	**$623,000**

OWTP-1: Old WTP Building

Major Capital Cost Element	Unit	Qty	Unit Cost	Total Cost
				$1,125,000
Replacing electrical equipment in Old WTP building	LS	1	$1,000,000	$1,000,000
Power system study	LS	1	$125,000	$125,000
			Subtotal	**$ 1,125,000**
			General Requirements (10%)	$ 113,000
			Contingency (40%)	$ 450,000
			Construction Total:	**$ 1,688,000**
				Soft Costs:
			Engineering (14%)	$ 231,000
			Construction Management (10%)	$ 169,000
			Engineering Services During Construction (2%)	$ 34,000
			Environmental (2%)	$ 34,000
			Administration (2%)	$ 34,000
			Project Total	**$2,190,000**

Appendix C

Structural Assessment Technical Memorandum (Kelsey)

City of El Centro Water and Sewer Master Plan

Structural Assessment Technical Memorandum

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1 Summary

1.1 Project Background

The City of El Centro (City) has retained the professional engineering services of Dudek to prepare updates to the City's Water and Sewer Master Plans. This project will update the existing 2008 Water and Sewer Master Plans and develop a prioritized Capital Improvement Program (CIP) for the City. As part of the Water and Sewer Master Plan updates, a Water Storage Condition Assessment was defined in the project scope of work and includes the condition assessment of the following structures located at the City's Water Treatment Plant (WTP) and La Brucherie Pump Station (PS) sites.

1. WTP Steel Raw Water Reservoir No. 1
2. WTP Steel Raw Water Reservoir No. 2
3. WTP Steel Raw Water Reservoir No. 3
4. La Brucherie Steel Raw Water Reservoir
5. WTP Raw Water Ponds

Additionally, the condition assessment of the WTP Raw Water Pump Station (RWPS) was requested by the City during the assessment kickoff meeting held at the WTP on April 2nd, 2025. Kelsey Structural has been contracted as an engineering subconsultant to Dudek to perform the requested structural engineering services for this project, which included the following scope of work:

- Project Management and Coordination
- Data Collection and Review
- Perform Site Investigations
- Prepare Technical Memorandum

Kelsey Structural has performed the structural condition assessment of the structures identified above and has prepared this Structural Assessment Technical Memorandum (TM) to document the findings of our condition assessment and provide improvement recommendations to address observed damage and deterioration of the structures. Structural assessment findings and recommendations are provided in Sections 4 through 9 of this report for the respective structures. A planning-level engineer's opinion of probable construction cost (EOPCC) has also been developed for each structure and is provided in Section 10 of this TM. Accompanying photographs referenced throughout the TM are provided in Appendix A.

1.2 Structural Assessment Summary

Table 1.2 below provides a summary of the overall condition ratings of each structure assessed as part of this project, with corresponding main improvement recommendations and associated EOPCC provided. Discussions of the condition rating methodology as well as detailed condition assessment findings, improvement recommendations and EOPCC for each structure are provided in the subsequent sections of this TM. The dollar amounts provided in the summary EOPCC are the estimated present value totals before contingencies or escalation are applied. Refer to Section 10 of this TM for a detailed breakdown and discussion of the included costs and estimate assumptions.

Table 1.2 Structural Assessment Summary

Structure Name	Overall Condition	Condition Rating	Main Recommendations (1)	Engineer's Opinion of Probable Construction Cost
WTP Reservoir No. 1	Fair	5.9	• Recoat interior and exterior of reservoir within 5 years. • Replace appx. 10% of roof framing and hardware. • Perform minor metallic surface repairs and patching. • Replace interior ladder, roof hatches and center vent. • Replace roof handrailing system.	$2,581,790
WTP Reservoir No. 2	Fair	4.8	• Recoat exterior of reservoir within 5 years. • Recoat interior of reservoir as soon as possible. • Replace all roof framing including columns, rafters, girders, connections and hardware. • Perform minor metallic surface repairs and patching. • Replace interior ladder, roof hatches and center vent. • Replace roof handrailing system.	$2,965,490
WTP Reservoir No. 3	Good	7.3	• Recoat interior and exterior of reservoir within 10 years. • Repair base plate bearing pad. • Replace interior ladder. • Repair roof hatch lifting mechanisms as soon as possible. • Replace roof handrailing system. • Continue to monitor structure.	$4,830,460
La Brucherie Reservoir	Good	7.2	• Recoat exterior of reservoir within 5-10 years. • Recoat interior of reservoir as soon as possible. • Perform minor metallic surface repairs and patching. • Repair base plate bearing pad. • Replace interior ladder.	$3,554,820 (2)
Raw Water Ponds	Fair	5.8	• Repair cracking by means of epoxy injection • Replace original sloping embankment concrete at Pond No. 3 and Pond. No 4. • Continue to monitor Pond No. 1 and Pond No. 2.	$2,386,820
Raw Water Pump Station	Fair	5.4	• Repair top slab cracking and localized spalling. • Repair pump support beams and strengthen with fiber-reinforced polymer as soon as possible. • Replace pump anchor bolts. • Repair pump base plates. • Replace wood platform planking.	$305,095

1) Unless otherwise noted, recommended reservoir improvements are to be completed during the next coating cycle.

2) EOPCC for La Brucherie Reservoir does not include exterior recoating costs.

2 Data Collection and Review

2.1 Data Collection and Review

In development of this TM, Kelsey Structural has reviewed the following relevant record documents provided by Dudek and the City of El Centro:

1. "City of El Centro, Calif. Water Treatment Plant Treated Water Reservoirs" record drawings prepared by Golden & Bryant Consulting Engineers, dated April 26, 1955.
2. "City of El Centro, Imperial County, California, 5 Million Gallon Potable Water Storage Tank" as-built drawings prepared by Engineering-Science, Inc., dated September 1977.
3. "Cathodic Protection System for 5,000,000 Gallon Reservoir, City of El Centro, California" as-built drawings prepared by Wallace & Tiernan, dated March 3, 1983.
4. "City of El Centro, Water System Improvements" as-built drawings prepared by Engineering-Science, dated October 1994.
5. "S Brucherie Rd Welded Tank Inspection Report" prepared by MIT Diving and Coating, dated November 18, 2024.
6. "5MG Welded Tank Inspection Report" prepared by MIT Diving and Coating, dated November 20, 2024.
7. "North 2.5MG Welded Tank Inspection Report" prepared by MIT Diving and Coating, dated November 20, 2024.
8. "South 2.5MG Welded Tank Inspection Report" prepared by MIT Diving and Coating, dated November 21, 2024.

A desktop review of these documents was performed to obtain a general understanding of the structures assessed and to determine age, construction methodology, structural member sizing, material properties and seismic design parameters of the structures prior to field investigations. Where information was not provided or available, reasonable assumptions were made based on industry standard values.

2.2 Kickoff Meeting

Kelsey Structural participated in a Water System Condition Assessment kickoff meeting held at the City's WTP on April 2, 2025. Attendees include City, Dudek and Kelsey Structural staff. The meeting lasted approximately two (2) hours and included various discussions about WTP and La Brucherie PS facilities, processes, maintenance and operational issues. Brief discussions of the six (6) aforementioned structures were conducted, with Kelsey Structural staff inquiring into the age, maintenance history and known structural issues of the structures. During the meeting, the City requested the condition assessment of the Raw Water Pump Station located next to the existing Raw Water Ponds due to concerns of concrete damage and deterioration observed by City staff.

3 Assessment Approach

Kelsey Structural has developed the following assessment approach to help summarize the general approach, terminology, definitions and methods used to perform the structural assessments. Kelsey Structural follows a similar approach for all assessment projects to provide consistent condition ratings and improvement recommendations, facilitating system-wide comparisons, asset ranking and similar life cycle approaches towards structure maintenance and rehabilitation.

3.1 Site Investigation Approach

The following site investigations were performed by Matt Stone, SE of Kelsey Structural in completion of the structure condition assessments.

1. WTP site investigation and assessment of Reservoir No. 1, Reservoir No. 2, Reservoir No. 3, Raw Water Ponds and the Raw Water Pump Station occurring at 9:00am on Wednesday April 2nd, 2025, lasting approximately six (6) hours.
2. La Brucherie PS site investigation and assessment of La Brucherie Reservoir occurring at 8:00am on Thursday April 3rd, 2025, lasting approximately two (2) hours.

All investigations were performed following the requirements and procedures of the building code and standards documents listed in Table 3.1 below.

Table 3.1. Assessment Code and Standard Documents

Code or Design Standard	Name
CBC 2022	California Building Code
ACI 201.1R-08	Guide for Conducting a Visual Inspection of Concrete in Service
ACI 228.4-23	Visual Condition Survey of Concrete - Guide
ACI 364.1R-19	Guide for Assessment of Concrete Structures Before Rehabilitation
ACI 562-21	Assessment, Repair, and Rehabilitation of Existing Concrete Structures
AWWA D100-21	Welded Carbon Steel Tanks for Water Storage
AWWA D101-24	Evaluation of Steel Water Tanks and Related Facilities
AWWA M42	M42 Steel Water Storage Tanks

The site investigations allowed for visual observation and assessment of the aforementioned structures and process areas while the structures were in operation. The structures were primarily assessed from grade level and accessible top slabs, roof structures or similar accessible areas, with roof hatches opened as needed by City staff to assess the interior of the reservoir structures. No tanks, vaults, channels or similar process areas retaining fluids or requiring confined space entry were entered as part of the assessments.

All assessment methods used during the site investigations were nondestructive in nature and primarily consisted of visual observations and the use of tools such as a ball peen hammer, pit depth gauge, calipers, tape measure and similar hand tools. Field notes, photographs and videos were taken to document the condition of each structure that was observed. A pole mounted camera was used to capture photographs and videos in the confined areas of covered structures. Site investigation photographs are provided in Appendix A of this TM and are referenced throughout the document.

3.2 Structural Condition Rating System

In performing the structural condition assessments, a condition rating from 10 to 1 was assigned to each structural element that was observed, with corresponding conditions of "excellent", "good", "fair" and "poor" as defined in Table 2.2 below. Use of this rating system allows for multiple structures to be compared to each other and helps facilitate system-wide comparisons and ranking for the use in future capital improvement projects and operation and maintenance programs.

The ratings reflect the observed conditions at the time the assessment was performed and are assigned in line with the aforementioned Code and Standards documents, industry standards and engineering judgement based on the information that can be obtained from a visual observation. Damage and deterioration may progress further after the findings of this assessment are provided and additional recommendations and improvements may be warranted at the time of rehabilitation.

Table 3.2. Structural Condition Rating System

Condition	Condition Rating	Description	
Excellent	10	Overall:	Elements with no damage or deterioration observed. Typically, new construction only.
		Action:	None.
Good	7 – 9	Overall:	Elements with minimal damage or deterioration observed. Structural integrity is not compromised.
		Metallic Elements:	Minor surface corrosion and minimal metal loss (0 – 10%).
		Concrete Elements:	Hairline cracking (< 1/32"), isolated surficial spalling (< 1/4" deep), surface discoloration.
		Action:	No immediate action is required. Continue to monitor.
Fair	4 - 6	Overall:	Elements with minor to moderate damage or deterioration observed. Structural integrity may be compromised.
		Metallic Elements:	Moderate surface corrosion, blistering, flaking with measurable metal loss (10 - 25%).
		Concrete Elements:	Concrete cracking (< 1/8"). Spalling (<1" deep, mostly isolated), Efflorescence. Exposed aggregate. Rebar bleed through and minor surface corrosion. Signs of carbonation.
		Action:	Continue to monitor, perform isolated repairs, prepare for future capital improvement projects.
Poor	1 - 3	Overall:	Elements with severe damage or deterioration observed. Structural integrity is compromised. Failures may occur.
		Metallic Elements:	Severe metallic corrosion and metal loss (>25%) which may compromise element strength.
		Concrete Elements:	Moderate to severe concrete cracking (>1/8"), large spalling (>1" deep, widespread), exposed and/or corroding reinforcement. Widespread exposed aggregate. Severe surface carbonation.
		Action:	Repairs and/or replacement should be performed as soon as possible. Access restrictions may be required to areas where strength is compromised.

3.3 Structure Terminology

In presenting the condition assessment findings of reservoir structures, it is typically beneficial to differentiate between the condition of elements on the exterior versus the interior of the structure as the coating systems and typical deterioration differ between the two locations. In general, the following structural elements of the reservoirs were observed as part of this condition assessment:

Exterior Assessment

- Coatings
- Shell Plate
- Baseplate and Bearing Pad
- Concrete Foundation
- Anchorage
- Roof Plate
- Appurtenances (Manways, Ladders, Stairs, Piping)

Interior Assessment

- Coatings
- Shell Plate
- Baseplate
- Roof Plate
- Roof Framing (Rafters, Girders, Columns)
- Connections and Hardware
- Appurtenances (Landings, Handrailing, Hatches, Vents)

Figure 3.2 below illustrates the typical structural elements and terminology used throughout this assessment. The figure is provided for illustrative purposes only and does not necessarily represent the exact conditions of the reservoirs assessed.

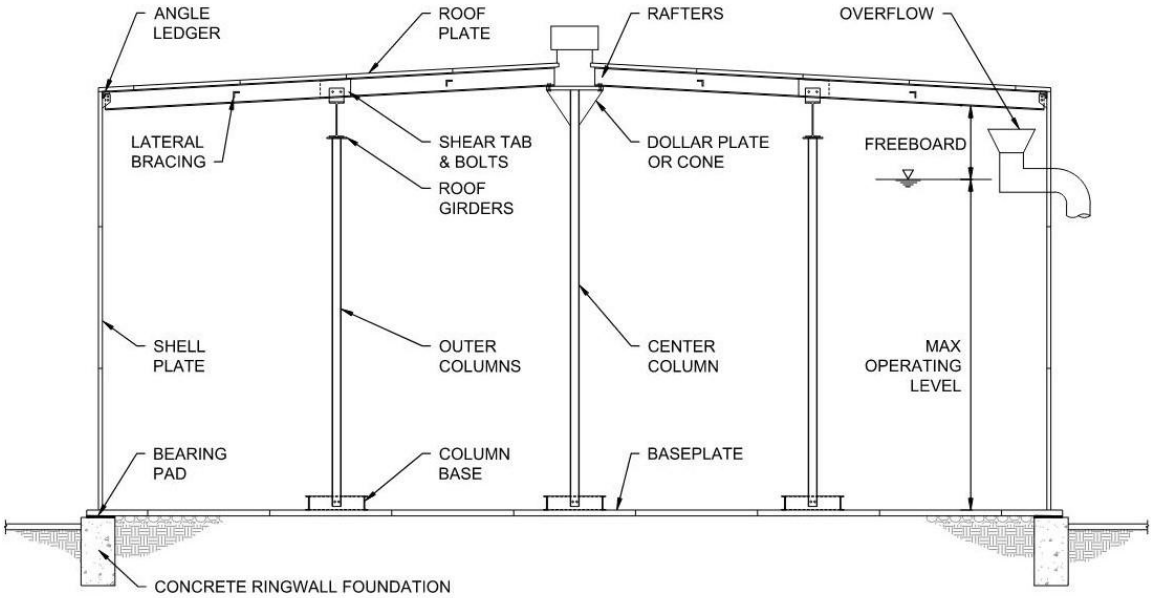

Figure 3.2: Typical Welded Steel Reservoir Structural Terminology (NTS)

Discussions on typical terminology of the Raw Water Ponds and Raw Water Pump Station are provided in their respective sections presented in the subsequent portions of this TM.

4 WTP Reservoir No. 1

4.1 Structure Summary

The WTP Reservoir No. 1 is a 2.5 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1955 and is the northernmost reservoir at the WTP site (Photo 4.1). The reservoir measures 133'-6" in diameter with an overflow height of approximately 24'-0". The reservoir shell consists of four (4) courses and transitions to a steel cone roof with a flat angle edge (no knuckle). The roof framing system consists of three (3) bays of steel rafters supported by a center column and dollar plate, two (2) rows of intermediate girders and steel columns, and the shell plate. The base plate is supported at-grade directly on the soil/subgrade below with no ringwall foundation or anchorage.

The overall condition of the reservoir is considered **FAIR** with varying levels of minor to moderate deterioration observed. Table 4.1 below summarizes the condition ratings and improvement recommendations for each structural element of the reservoir, with detailed assessment findings and recommendations provided for each element following the table.

Table 4.1 WTP Reservoir No. 1 Findings and Recommendation Summary

Structural Element		Condition	Condition Rating	Recommendations
EXTERIOR	Coatings	Fair	5	Recoat within 5 years.
	Shell Plate	Good	8	Perform minor touchups during next coating cycle.
	Baseplate and Bearing Pad	Good	7	Perform minor touchups during next coating cycle.
	Concrete Foundation	-	-	-
	Anchorage	-	-	-
	Roof Plate	Fair	6	Perform minor touchups during next coating cycle.
	Appurtenances	Good	7	Perform minor touchups during next coating cycle. Replace ladder, roof hatches, center vent and roof handrailing.
INTERIOR	Coatings	Fair	4	Recoat within 5 years.
	Shell Plate	Good	7	Perform minor repairs during next coating cycle.
	Baseplate	Good	7	Perform minor repairs during next coating cycle.
	Roof Plate	Fair	5	Remove surface corrosion during next coating cycle.
	Roof Framing	Fair	5	Perform minor repairs during next coating cycle. Expect replacement of 10% roof framing. Replace all columns.
	Connections and Hardware	Fair	5	Replace appx. 10% of bolts and all rafter connections to shell plate.
	Appurtenances	Fair	5	Perform surface repairs during next coating cycle. Replace ladder.
OVERALL		**Fair**	**5.9**	

4.2 Assessment Findings

4.2.1 Exterior Findings

The following exterior assessment findings are based solely on the observations performed by Kelsey Structural.

Coatings

The exterior coatings varied from fair condition at the shell, baseplate and appurtenances to poor condition at the roof plate. The exterior shell coating was mostly well adhered and moderately chalking, with isolated areas of localized delamination, but well adhered beyond these areas (Photo 4.2). The exterior roof coating has reached the end of its useful life, with large areas of coating delamination, flaking and general thinness observed, while the coating was easily scraped away even at areas where delamination was not yet observable (Photo 4.3). Multiple layers of coatings (2-3) were identified, with overcoats appearing to be the previous method of recoating application.

Shell Plate

The exterior surface of the shell plate appeared to be in good condition. Minor surface corrosion was observed in isolated locations, concentrated near appurtenances and welds. (Photos 4.4 and 4.5). The upper two courses are shorter in height than the lower two courses, possibly from a previous repair or retrofit to the upper portion of the reservoir.

Baseplate and Bearing Pad

The exterior surface of the baseplate appeared to be in good condition. Minor surface corrosion was observed in isolated locations, concentrated near appurtenances and welds. (Photo 4.6).

The reservoir does not have a bearing pad and bears directly on the subgrade (Photo 4.6).

Concrete Foundation

The reservoir does not have a concrete foundation and bears directly on the subgrade (Photo 4.6). No signs of differential settlement, scouring or other foundation issues were observed.

Anchorage

The reservoir is unanchored (Photo 4.6).

Roof Plate

The exterior surface of the roof plate appeared to be in fair condition. Minor surface corrosion was observed at areas of coating flaking and delamination, but no appreciable metal loss was observed (Photo 4.7). Isolated areas of previously repaired steel pitting were also observed, with material loss of approximately 1/32-inch. Approximately 100 patch plates of varying size were also observed (Photo 4.8). The roof slope appeared adequate to provide proper drainage; however, some areas appeared to be subject to warping and localized ponding, concentrated near roof plate seams (Photo 4.9).

Appurtenances

The exterior appurtenances varied from good to fair condition, with several accessibility components observed to be noncompliant with current Cal-OSHA standards. The reservoir manways, piping, overflow and pipe supports were observed to be in good condition, with minor localized corrosion concentrated at welds and at bolt hardware (Photo 4.10 – 4.12). Flexible (seismic) couplings were not observed at any of the exterior piping. The concrete encasement around the overflow pipe was observed with large cracks approximately 1/4-inch wide, however the concrete is mostly a nonstructural component, and the cracking is not a concern. The roof access ladder appeared to be in good condition; however, is not Cal-OSHA compliant with its safety cage configuration (Photo 4.13). The roof access hatches (two square and one circular) appeared to be in fair

condition with moderate corrosion of the interior lifting mechanism and hardware and are also not Cal-OSHA compliant, with no integral fall protection system (netting, railing or similar) provided (Photo 4.14). The center vent appeared to be in fair condition with minor to moderate surface corrosion and appeared to have been repaired with a retrofit screen, which is not covering the openings in the vent completely (Photo 4.15) The roof handrail system appeared to be in good condition; however, is not Cal-OSHA compliant in both extents and railing height, and is a potential fall hazard (4.16).

4.2.2 Interior Findings

The following interior assessment findings are based on the limited observations of the reservoir interior that could be performed by Kelsey Structural from the exterior of the reservoir roof plate through the roof hatches as well as from a review of the previous dive inspection report provided by the City and listed in the previous Data Review summary of Section 2.1. The reservoir was not entered by Kelsey Structural.

Coatings

The interior coatings appeared to be in overall fair condition, with the roof and roof framing coating systems being in poor condition and nearing the end of their useful life. The interior shell coating appeared mostly adhered, with isolated areas of blistering observed and uniform discoloration below the waterline (Photo 4.17). The baseplate coating was uniformly discolored and showed signs of warping and bubbling, indicating early signs of delamination and coating failure (per dive inspection report review). The roof framing columns showed similar signs of warping and bubbling (per dive inspection report). The roof framing coating on the rafter and girders appeared to be mostly adhered, with the exception of the top flange of the rafters at the interface between the roof plate, where moderate surface corrosion was observed (Photo 4.18). Similarly, the roof plate coating appeared mostly adhered, with the exception of the interface between the roof rafters.

Shell Plate

The interior surface of the shell plate appeared to be in good condition. Minor rust tubercles and pinhole rust bleeding through the coating were observed (per dive inspection report review). Previous pitting of the shell surface was observed through the coating, with metal loss estimated at a maximum of 1/8" (Photo 4.19).

Baseplate

The interior surface of the base plate appeared to be in good condition. Minor rust tubercles and pinhole rust bleeding through the coating were observed (per dive inspection report review). Previous pitting of the plate surface was observed through the coating, with metal loss estimated at a maximum of 1/16".

Roof Plate

The interior surface of the roof plate appeared to be in fair condition. The majority of the roof plate surface exhibited minor pitting beneath the coating system in isolated locations, estimated to be a maximum depth of 1/16". Rust bleed was observed at the majority of roof plate seams and plate corrosion was observed concentrated over the roof rafters, with moderate metal loss assumed (Photo 4.20).

Roof Framing

The roof framing appeared to be in fair condition, with roof rafters, columns and connections observed with more advanced deterioration. Previously repaired pitting along the roof rafters and moderate metal loss on the rafter flanges were observed, concentrated at the rafter ends near the shell (Photo 4.21). The top flanges of the majority of the rafters showed signs of moderate surface corrosion at the interface between the roof plate (Photo 4.22). Rust bleed, signs of corrosion tubercle development and signs of pitting were observed at the roof framing columns and their base (per dive inspection report review). The roof girders appeared to be in better condition than the roof rafters, with minor rust bleeding observed at the connection points to the rafters (Photo 4.23).

Connections and Hardware

The connections and hardware at the interior of the reservoir appeared to be in fair condition. Rust bleeding and minor corrosion were observed at framing and appurtenance bolts, with minor metal loss at the bolt holes assumed. Minor to moderate corrosion was observed at the welded shear tab connections at the exterior bay of roof rafters to the upper shell course (Photo 4.24).

Appurtenances

The interior appurtenances appeared to be in fair condition. Minor rust bleed, concentrated around welds, was observed at pipe penetrations through the shell (per dive inspection report review). The interior access ladder rungs were observed with moderate corrosion and metal loss (Photo 4.25 and per dive inspection report review).

4.3 Recommendations

4.3.1 Exterior Recommendations

Coatings

Recoat the exterior of the reservoir including roof plate, shell, baseplate and appurtenances within five (5) years. Basis of recoating cost estimates assume an overcoat will be applied over the existing coatings after surface hydro/abrasive blasting and cleaning.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle.

Baseplate and Bearing Pad

Perform minor corrosion touchup repairs during the next coating cycle.

Concrete Foundation

Not applicable.

Anchorage

Not applicable.

Roof Plate

Perform minor corrosion touchup repairs during the next coating cycle. Approximately 100 square feet (sqft.) of patch plate repairs are anticipated for areas of more advanced corrosion.

Appurtenances

Replace the reservoir exterior ladder, handrailing system, roof hatches and center vent. New access appurtenances are recommended to be Cal-OSHA compliant to improve personnel safety. Optionally, provide a new exterior stair system for improved access. Perform minor corrosion touchup repairs to piping and supports during the next coating cycle.

4.3.2 Interior Recommendations

Coatings

Recoat the interior of the reservoir including shell plate, base plate, roof framing, roof plate and appurtenances within five (5) years. It is recommended that the new coating be applied to clean metal, with the previous layers of coating removed by means of abrasive blasting.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle. Provide patch/reinforcing plates to areas where steel pitting has exceeded 1/16" (assumed 500 sqft of plates).

Baseplate

Perform minor corrosion touchup repairs during the next coating cycle. Provide patch/reinforcing plates to areas where steel pitting has exceeded 1/16" (assumed 250 sqft of plates).

Roof Plate

Remove surface corrosion over roof rafters and provide top surface strengthening where needed (assume approximately 500 sqft. of strengthening plates).

Roof Framing

Repair roof rafters where metal loss is less than 10% (approximately 50% of roof rafters, 75 total). Replace roof rafters where metal loss has exceeded 10% (approximately 10% of roof rafters, 15 total). Replace all columns with tube steel/pipe columns and new baseplates (16 total).

Connections and Hardware

Replace the shear tab connections at the outer rafter bay to the upper shell course (80 total).

Appurtenances

Perform minor corrosion touchup repairs at all piping connections during the next coating cycle. Replace the interior ladder, preferably with new fiber-reinforced polymer (FRP) or stainless-steel ladder.

4.3.3 Additional Recommendations

Due to the high seismicity of the site, it is recommended that a structural and seismic analysis of the reservoir be performed to determine code deficiencies and risks associated with seismic events. Historical earthquakes in the area have resulted in failures of similar reservoirs such as shell yielding, buckling or partial roof collapse due to sloshing waves. Kelsey Structural practices in analysis of water storage reservoirs and can provide this service, if requested.

5 WTP Reservoir No. 2

5.1 Structure Summary

The WTP Reservoir No. 2 is a 2.5 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1955 and is located between Reservoir No. 1 and Reservoir No. 3 at the WTP site (Photo 5.1). The reservoir measures 133'-6" in diameter with an overflow height of approximately 24'-0". The reservoir shell consists of four (4) courses and transitions to a steel cone roof with a flat angle edge (no knuckle). The roof framing system consists of three (3) bays of steel rafters supported by a center column and dollar plate, two (2) rows of intermediate girders and steel columns, and the shell plate. The base plate is supported at-grade directly on the soil/subgrade below with no ringwall foundation or anchorage.

The overall condition of the reservoir is considered **FAIR** with varying levels of minor to moderate deterioration observed. Table 5.1 below summarizes the condition ratings and improvement recommendations for each structural element of the reservoir, with detailed assessment findings and recommendations provided for each element following the table.

Table 5.1 WTP Reservoir No. 2 Findings and Recommendation Summary

Structural Element		Condition	Condition Rating	Recommendations
EXTERIOR	Coatings	Fair	4	Recoat within 5 years.
	Shell Plate	Good	8	Perform minor touchups during next coating cycle.
	Baseplate and Bearing Pad	Good	7	Perform minor touchups during next coating cycle.
	Concrete Foundation	-	-	-
	Anchorage	-	-	-
	Roof Plate	Fair	6	Perform minor touchups during next coating cycle.
	Appurtenances	Fair	5	Perform minor touchups during next coating cycle. Replace ladder, roof hatches, center vent and roof handrailing.
INTERIOR	Coatings	Poor	3	Recoat as soon as possible.
	Shell Plate	Fair	6	Perform minor repairs during next coating cycle.
	Baseplate	Good	7	Perform minor repairs during next coating cycle.
	Roof Plate	Fair	4	Remove surface corrosion during next coating cycle. Provide patch plates where corrosion is > 1/16".
	Roof Framing	Poor	2	Replace all roof framing including rafters, girders and columns.
	Connections and Hardware	Poor	2	Replace all roof framing connections and hardware
	Appurtenances	Fair	4	Perform surface repairs during next coating cycle. Replace ladder.
OVERALL		**Fair**	**4.8**	

5.2 Assessment Findings

5.2.1 Exterior Findings

The following exterior assessment findings are based solely on the observations performed by Kelsey Structural.

Coatings

The exterior coatings varied from fair condition at the shell, baseplate and appurtenances to poor condition at the roof plate. The exterior shell coating was partially adhered to most of the shell with isolated areas of localized delamination and moderately chalking throughout with poor adhesion (Photo 5.2). The coating at the baseplate was mostly flaked off or not adhered to the plate surface, with multiple coating layers observed (Photo 5.3). The shell coating is nearing the end of its useful life. The exterior roof coating has reached the end of its useful life, with large areas of coating delamination, flaking and general thinness observed, while the coating was easily scraped away even at areas where delamination was not yet observable (Photo 5.4). Multiple layers of coatings (2-3) were identified at all surfaces, with overcoats appearing to be the previous method of recoating application.

Shell Plate

The exterior surface of the shell plate appeared to be in good condition. Minor surface corrosion was observed in isolated locations, with minimal metal loss observed. (Photos 5.5 and 5.6). The upper two courses are shorter in height than the lower two courses, possibly from a previous repair or retrofit to the upper portion of the reservoir.

Baseplate and Bearing Pad

The exterior surface of the baseplate appeared to be in good condition, though the coatings and surrounding soil/asphalt paving obscured the view of much of the base plate extension (Photo 5.7). Minor surface corrosion was observed in isolated locations, concentrated near appurtenances and welds.

The reservoir does not have a bearing pad and bears directly on the subgrade (Photo 5.7).

Concrete Foundation

The reservoir does not have a concrete foundation and bears directly on the subgrade (Photo 5.7). No signs of differential settlement, scouring or other foundation issues were observed.

Anchorage

The reservoir is unanchored (Photo 5.7).

Roof Plate

The exterior surface of the roof plate appeared to be in fair condition. Minor surface corrosion was observed at areas of coating flaking and delamination, but no appreciable metal loss was observed (Photo 5.8). Isolated areas of previously repaired steel pitting were also observed, with material loss estimated at approximately 1/32-inch. The roof slope appeared adequate to provide proper drainage; however, some areas appeared to be subject to warping and localized ponding, concentrated near roof plate seams (Photo 5.9).

Appurtenances

The exterior appurtenances appeared to be in fair condition, with several accessibility components observed to be noncompliant with current Cal-OSHA standards. The reservoir manways, piping, overflow and pipe supports were observed to be in fair condition, with minor localized corrosion concentrated at welds and more moderate corrosion and rust bleeding at bolt hardware (Photo 5.10 – 5.12). The concrete encasement around the overflow pipe was observed with large cracks

approximately 1/4-inch wide, however the concrete is mostly a nonstructural component, and the cracking is not a concern (Photo 5.13). The roof access ladder appeared to be in fair condition; however, is not Cal-OSHA compliant with its safety cage configuration (Photo 5.14). The roof access hatches (one square and one circular) appeared to be in poor condition with moderate to severe corrosion of the hatch plates and hardware and are also not Cal-OSHA compliant, with no integral fall protection system (netting, railing or similar) provided (Photo 5.15). The center vent appeared to be in fair condition with minor to moderate surface corrosion and appeared to have been repaired recently, including modifications to the roof plate (Photo 5.16). Based on a review of the dive inspection report, this roof plate repair has experienced moderate surface corrosion on the interior of the reservoir. The roof handrail system consists of minimal "V-bar" railing at the ladder and appeared to be in fair condition; however, is not Cal-OSHA compliant in both extents and railing height and is a potential fall hazard (5.17).

5.2.2 Interior Findings

The following interior assessment findings are based on the limited observations of the reservoir interior that could be performed by Kelsey Structural from the exterior of the reservoir roof plate through the roof hatches as well as from a review of the previous dive inspection report provided by the City and listed in the previous Data Review summary of Section 2.1. The reservoir was not entered by Kelsey Structural.

Coatings

The interior coatings appeared to be in overall poor condition, with the roof and roof framing coating systems having reached the end of their useful life. The interior shell coating appeared moderately adhered to the shell in most areas, with isolated areas of blistering observed and uniform discoloration below the waterline (Photo 5.18). The baseplate coating was uniformly discolored and showed signs of blistering throughout the reservoir (per dive inspection report review). The roof framing column coatings exhibited moderate coating blistering, rust nodules and early signs of coating failure, with the center column coating being in poorer condition, exhibiting large blisters and delamination (per dive inspection report). The roof framing coating on the rafter and girders appeared to be delaminating at most members, starting at the top flanges where coating failure was more severe. (Photo 5.19). Similarly, the roof plate coating was observed delaminating at the interface between the roof rafter top flanges and plate seams (Photo 5.20).

Shell Plate

The interior surface of the shell plate appeared to be in fair condition. Minor rust tubercles and pinhole rust bleeding through the coating were observed (per dive inspection report review). Widespread pitting of the shell surface was observed through the coating below the waterline, with metal loss estimated at a maximum of 1/8" (from review of dive inspection report). Based on the smoother surface observed at the upper (4th) shell course, it can be inferred that this course was likely replaced or retrofitted after original construction and is concurrent with the exterior observation provided above that the upper two shell courses are shorter in height than the lower two courses, similarly indicating a repair or retrofit.

Baseplate

The interior surface of the base plate appeared to be in good condition. Minor rust tubercles and pinhole rust bleeding through the coating were observed (per dive inspection report review).

Roof Plate

The interior surface of the roof plate appeared to be in fair condition. The majority of the roof plate surface exhibited minor pitting beneath the coating system in isolated locations, estimated to be a maximum depth of 1/16". Rust bleed was observed at the majority of roof plate seams and plate corrosion was observed concentrated over the roof rafters, with moderate metal loss assumed (Photo 5.21).

Roof Framing

The roof framing appeared to be in poor condition, with roof rafters, columns and connections observed with more advanced deterioration. Previously repaired pitting along the roof rafters and moderate metal loss on the rafter flanges was observed, concentrated at the rafter ends near the shell and other connection points. The top flanges of the majority of the rafters showed signs of moderate to severe surface corrosion at the interface between the roof plate (Photo 5.22). The roof girders were also observed with moderate corrosion, though it was difficult to determine the amount from the observations performed at the roof hatch (Photo 5.23). Rust bleed, signs of corrosion tubercle development and signs of pitting were observed at the roof framing columns and their base (per dive inspection report review), with the center column exhibiting more moderate to severe surface corrosion and metal loss. The tie-rods between roof rafters were observed with severe deterioration and corrosion, with significant metal loss observed (Photo 5.23)

Connections and Hardware

The connections and hardware at the interior of the reservoir appeared to be in poor condition. Rust bleeding and moderate to severe corrosion was observed at framing and appurtenance bolts, with moderate metal loss at the bolt holes assumed. Moderate to severe corrosion was observed at the welded shear tab connections at the exterior bay of roof rafters to the upper shell course (Photo 5.24). Similarly, moderate corrosion at the rafter bearing seats, girder bearing plates and center dollar plate were also observed (per dive inspection report review).

Appurtenances

The interior appurtenances appeared to be in overall fair condition, with the interior ladder observed to be in poor condition. Minor rust bleed, concentrated around welds, was observed at pipe penetrations through the shell (per dive inspection report review). The interior access ladder rungs were observed with severe corrosion, metal loss and rung failure (Photo 5.25 and per dive inspection report review). The ladder is considered unsafe for use.

5.3 Recommendations

5.3.1 Exterior Recommendations

Coatings

Recoat the exterior of the reservoir including roof plate, shell, baseplate and appurtenances within five (5) years (or sooner with interior recoating and rehabilitation). Basis of recoating cost estimates assume an overcoat will be applied over the existing coatings after surface hydro/abrasive blasting and cleaning.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle.

Baseplate and Bearing Pad

Perform minor corrosion touchup repairs during the next coating cycle.

Concrete Foundation

Not applicable.

Anchorage

Not applicable.

Roof Plate

Perform minor corrosion touchup repairs during the next coating cycle. Approximately 100 square feet (sqft.) of patch plate repairs are anticipated for areas of more advanced corrosion. Repair the center patch plate at the roof vent for surface corrosion.

Appurtenances

Replace the reservoir exterior ladder, handrailing system, roof hatches and center vent. New access appurtenances are recommended to be Cal-OSHA compliant to improve personnel safety. Optionally, provide a new exterior stair system for improved access. Perform minor corrosion touchup repairs to piping and supports and replace all piping bolts during the next coating cycle.

5.3.2 Interior Recommendations

Coatings

Recoat the interior of the reservoir including shell plate, base plate, roof framing, roof plate and appurtenances as soon as possible. It is recommended that the new coating be applied to clean metal, with the previous layers of coating removed by means of abrasive blasting.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle. Provide patch/reinforcing plates to areas where steel pitting has exceeded 1/16" (assumed 500 sqft of plates). Retain the services of a licensed California Professional or Structural engineer to perform engineering analysis for the shell plates to determine if the observed metal loss requires additional repair and/or strengthening. Kelsey Structural specializes in the analysis of welded steel reservoirs and can provide this service, if requested.

Baseplate

Perform minor corrosion touchup repairs during the next coating cycle. Provide patch/reinforcing plates to areas where steel pitting has exceeded 1/16" (assumed 250 sqft of plates).

Roof Plate

Remove surface corrosion over roof rafters and plate seams and provide top surface strengthening where needed (assume approximately 500 sqft. of strengthening plates).

Roof Framing

Based on the extent and severity of the observed corrosion of the roof framing system, it is recommended that the entire framing system be replaced, including the roof rafters, girders, columns and center dollar plate. It is possible the roof girders may be salvaged if deterioration is surficial only, but detailed assessment of these members is required to determine the feasibility of reuse.

Connections and Hardware

Replace all framing connections and hardware as part of the roof framing replacement recommended above. Perform surface repairs of appurtenance (nonstructural) bolts during the next coating cycle.

Appurtenances

Perform minor corrosion touchup repairs at all piping connections during the next coating cycle. Replace the interior ladder, preferably with new fiber-reinforced polymer (FRP) or stainless-steel ladder.

5.3.3 Additional Recommendations

Due to the high seismicity of the site, it is recommended that a structural and seismic analysis of the reservoir be performed to determine code deficiencies and risks associated with seismic events. Historical earthquakes in the area have resulted in failures of similar reservoirs such as shell yielding, buckling or partial roof collapse due to sloshing waves. Kelsey Structural specializes in the analysis of welded steel reservoirs and can provide this service, if requested.

6 WTP Reservoir No. 3

6.1 Structure Summary

The WTP Reservoir No. 3 is a 5.0 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1978 and is the southernmost reservoir at the WTP site (Photo 6.1). The reservoir measures 197'-6" in diameter with an overflow height of approximately 24'-6". The reservoir shell consists of three (3) courses and transitions to a steel cone roof with a flat angle edge (no knuckle). The roof framing system consists of three (3) bays of steel rafters supported by a center column and dollar plate, two (2) rows of intermediate girders and steel columns, and the shell plate. The base plate is supported on a minimum 2'-0" wide concrete ringwall foundation and is unanchored.

The overall condition of the reservoir is considered **GOOD** with varying levels of minor to moderate deterioration observed. Table 6.1 below summarizes the condition ratings and improvement recommendations for each structural element of the reservoir, with detailed assessment findings and recommendations provided for each element following the table.

Table 6.1 WTP Reservoir No. 3 Findings and Recommendation Summary

Structural Element		Condition	Condition Rating	Recommendations
EXTERIOR	Coatings	Good	7	Continue to monitor. Recoat within 10 years.
	Shell Plate	Good	9	Perform minor touchups during next coating cycle.
	Baseplate and Bearing Pad	Fair	6	Perform minor touchups during next coating cycle. Replace bearing pad with epoxy grout.
	Concrete Foundation	Good	9	Continue to monitor.
	Anchorage	-		-
	Roof Plate	Good	8	Perform minor touchups during next coating cycle.
	Appurtenances	Good	8	Perform minor touchups during next coating cycle. Repair roof hatch corrosion and replace lifting mechanisms.
INTERIOR	Coatings	Fair	6	Continue to monitor. Perform localized touchups during next cleaning. Recoat within 10 years.
	Shell Plate	Good	7	Perform minor repairs during next coating cycle.
	Baseplate	Good	8	Perform minor repairs during next coating cycle.
	Roof Plate	Good	8	Perform minor repairs during next coating cycle.
	Roof Framing	Fair	6	Perform minor repairs during next coating cycle. Expect replacement of 5% of framing members.
	Connections and Hardware	Good	7	Perform minor repairs during next coating cycle. Expect replacement of 5% of bolt hardware.
	Appurtenances	Fair	6	Perform surface repairs during next coating cycle. Replace ladder.
OVERALL		**Good**	**7.3**	

6.2 Assessment Findings

6.2.1 Exterior Findings

The following exterior assessment findings are based solely on the observations performed by Kelsey Structural.

Coatings

The exterior coatings appeared to be in good condition. The exterior shell coating was mostly well adhered with mild chalking, and isolated areas of localized coating flaking (Photo 6.2). Similarly, the exterior roof plate coating was mostly well adhered with mild chalking, and isolated areas of localized coating flaking (Photo 6.3). Multiple layers of coatings (2) were identified, with overcoats appearing to be the previous method of recoating application.

Shell Plate

The exterior surface of the shell plate appeared to be in good condition. Little to no corrosion was observed, with only minor pinhole rust spots in isolated locations (Photos 6.4 and 6.5).

Baseplate and Bearing Pad

The exterior surface of the baseplate appeared to be in fair condition. The coating has delaminated in various areas around the baseplate extension, allowing for corrosion to occur, with minor to moderate surface corrosion observed (Photo 6.6). The bearing pad has experienced severe degradation and is not providing sufficient clearance from the concrete ringwall foundation to prevent corrosion of the baseplate (Photo 6.7).

Concrete Foundation

The concrete ringwall foundation appeared to be in good condition. Minor hairline cracking approximately 12 to 18-inches on center was observed, but no signs of rebar corrosion were noted (Photo 6.8). The cracking may be due to a combination of concrete drying shrinkage that occurred during original construction and/or hoop stresses in the concrete ringwall, with minimal reinforcement. The cracking is not considered a structural issue at this time. No signs of differential settlement, scouring or other foundation issues were observed.

Anchorage

The reservoir is unanchored (Photo 6.8).

Roof Plate

The exterior surface of the roof plate appeared to be in good condition. Little to no surface corrosion was observed and the plates appear to be performing well (Photo 6.9). The roof slope appeared adequate to provide proper drainage; however, some areas appeared to be subject to localized ponding, concentrated near roof plate seams (Photo 6.10).

Appurtenances

The exterior appurtenances appeared to be in good condition. The reservoir manways, piping, overflow and pipe supports were observed to be in good condition, with minor localized corrosion concentrated at welds and at bolt hardware (Photo 6.11 – 6.13). Flexible (seismic) couplings were not observed at any of the exterior piping. The concrete encasement around the overflow pipe was observed with large cracks approximately 1/4-inch wide, however the concrete is mostly a nonstructural component, and the cracking is not a concern. The roof access stairs and supports appeared to be in good condition, with little to no corrosion observed (Photo 6.14). The roof access hatches (three square) appeared to be in fair condition with moderate corrosion to the interior lifting mechanisms, hardware and surrounding roof framing and are also not Cal-OSHA compliant, with no integral fall protection system (netting, railing or similar) provided (Photo 6.15 & 6.16). The center vent appeared to be in fair condition with minor to moderate surface corrosion with no screening or netting provided at the vent openings (Photo 6.17).

The four (4) perimeter roof vents were also observed to be in a similar condition, though less surface corrosion was observed. The roof handrail system appeared to be in good condition; however, is not Cal-OSHA compliant in both extents and railing height and is a potential fall hazard (6.18).

6.2.2 Interior Findings

The following interior assessment findings are based on the limited observations of the reservoir interior that could be performed by Kelsey Structural from the exterior of the reservoir roof plate through the roof hatches as well as from a review of the previous dive inspection report provided by the City and listed in the previous Data Review summary of Section 2.1. The reservoir was not entered by Kelsey Structural.

Coatings

The interior coatings appeared to be in fair condition. The interior shell coating appeared mostly adhered, with isolated areas of uniform discoloration below the waterline and isolated quadrant of blistering and more advanced deterioration as indicated in the dive inspection report (Photo 6.19). The baseplate coating was uniformly chalking but well adhered (per dive inspection report review). The roof framing columns coating was uniformly chalking but well adhered, with the center column showing signs of more advanced deterioration, though still adhered (per dive inspection report). The roof framing coating on the rafter and girders appeared to be mostly adhered, with the exception of the top flange of the rafters at the interface between the roof plate and rafter tails near access hatches, where minor surface corrosion was observed (Photo 6.20). Similarly, the roof plate coating appeared mostly adhered, with the exception of the interface between the roof rafters.

Shell Plate

The interior surface of the shell plate appeared to be in good condition with Quadrant 1 exhibiting moderate coating blistering and rust bleed below the waterline as indicated in the dive inspection report (Photo 6.21).

Baseplate

The interior surface of the base plate appeared to be in good condition. No signs of significant deterioration were observed or noted in the dive inspection report.

Roof Plate

The interior surface of the roof plate appeared to be in good condition. Minor rust bleed was observed at the majority of roof plate seams and minor plate corrosion was observed concentrated over the roof rafters, with minor metal loss assumed (Photo 6.22).

Roof Framing

The roof framing appeared to be in fair condition, with roof rafters near the access hatches and roof plate openings exhibiting more advanced deterioration. The top flanges of the majority of the rafters showed signs of minor rust bleed and surface corrosion at the interface between the roof plate (Photo 6.23). Previous pitting and metal loss were also observed under the coatings at several rafters, concentrated near the access hatch and roof penetrations. The center and inner ring of columns were noted to have moderate coating blistering and rust staining, but significant metal loss was not noted (per dive inspection report review). The center dollar plate appeared to be in good to fair condition based on the limited visibility from the center roof hatch, with minimal surface rust bleeding observed (Photo 6.24). The roof girders appeared to be in good condition with only minor surface rust bleeding observed at connections to the roof rafters and column bearing plates (Photo 6.25).

Connections and Hardware

The connections and hardware at the interior of the reservoir appeared to be in good condition. Rust bleeding and minor surface staining were observed at framing and appurtenance bolts, with minor metal loss assumed (Photo 6.26). Minor to

moderate corrosion was observed at the welded shear tab connections at the exterior bay of roof rafters around the roof access hatch but was not observed away from the hatch at other connection plates (Photo 6.27).

Appurtenances

The interior appurtenances appeared to be in fair condition. Minor rust bleed, concentrated around welds, was observed at pipe penetrations through the shell (per dive inspection report review). The interior access ladder rungs were observed with moderate corrosion and metal loss (Photo 6.28 and per dive inspection report review).

6.3 Recommendations

6.3.1 Exterior Recommendations

Coatings

Continue to monitor the exterior coatings every 3 to 5 years. The existing coating system is estimated to have a remaining useful life of approximately 10 years, at which point the exterior of the reservoir is recommended to be recoated. An overcoat recoating will likely be possible given the condition of the existing coating system.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle.

Baseplate and Bearing Pad

Perform corrosion repairs to the baseplate edge and replace the bearing pad with nonshrink epoxy grout during the next coating cycle.

Concrete Foundation

Continue to monitor the hairline cracking in the foundation.

Anchorage

Not applicable.

Roof Plate

Perform minor corrosion touchup repairs during the next coating cycle.

Appurtenances

Install additional roof handrailing to meet Cal-OSHA requirements. Replace access hatch lifting mechanisms at center hatch. Replace all roof vents (5 total) with current industry standard vents. Perform minor corrosion touchup repairs to piping, stairs and supports during the next coating cycle.

6.3.2 Interior Recommendations

Coatings

Continue to monitor the interior coatings every 3 to 5 years. The existing coating system is estimated to have a remaining useful life of approximately 10 years, at which point the interior of the reservoir is recommended to be recoated. During the next reservoir cleaning, the Quadrant 1 shell surface as indicated in the dive inspection report is recommended to be inspected to determine whether repairs and/or localized recoating are required.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle. During the next reservoir cleaning, the Quadrant 1 shell surface as indicated in the dive inspection report is recommended to be inspected to determine whether repairs and/or localized recoating are required.

Baseplate

Perform minor corrosion touchup repairs during the next coating cycle.

Roof Plate

Remove surface corrosion over roof rafters and perform minor corrosion touchup repairs during the next coating cycle.

Roof Framing

Perform localized repairs and recoating of the rafters near the roof access hatches and roof plate penetrations during the next cleaning cycle. Remove surface corrosion over roof rafters and perform minor corrosion touchup repairs during the next coating cycle. Anticipate approximately 5% of framing replacement during the next coating cycle.

Connections and Hardware

Repair the shear tab connections at the outer rafter bay near the access hatch during the next cleaning cycle. Anticipate approximately 5% of bolt replacement during the next coating cycle.

Appurtenances

Perform minor corrosion touchup repairs at all piping connections during the next coating cycle. Replace the interior ladder, preferably with new fiber-reinforced polymer (FRP) or stainless-steel ladder during the next cleaning cycle or as soon as possible.

6.3.3 Additional Recommendations

Due to the high seismicity of the site, it is recommended that a structural and seismic analysis of the reservoir be performed to determine code deficiencies and risks associated with seismic events. Historical earthquakes in the area have resulted in failures of similar reservoirs such as shell yielding, buckling or partial roof collapse due to sloshing waves. Kelsey Structural practices in analysis of water storage reservoirs and can provide this service, if requested.

7 La Brucherie Reservoir

7.1 Structure Summary

The La Brucherie Reservoir is a 5.0 million-gallon (MG) AWWA D100 welded steel reservoir originally constructed in 1994 and is located at the La Brucherie Pump Station site (Photo 7.1). The reservoir measures 150'-0" in diameter with an overflow height of 40'-0". The reservoir shell consists of five (5) courses and transitions to a steel cone roof with a flat angle edge (no knuckle). The roof framing system consists of two (2) bays of steel rafters supported by a center column and dollar plate, one (1) row of intermediate girders and steel columns, and the shell plate. The base plate is supported on a minimum 2'-8" wide concrete ringwall foundation and is unanchored. The reservoir is known to have been repaired due to seismic damage occurring approximately in the early to mid-2010s.

The overall condition of the reservoir is considered **GOOD** with varying levels of minor to moderate deterioration observed. Table 7.1 below summarizes the condition ratings and improvement recommendations for each structural element of the reservoir, with detailed assessment findings and recommendations provided for each element following the table.

Table 7.1 La Brucherie Reservoir Findings and Recommendation Summary

Structural Element		Condition	Condition Rating	Recommendations
EXTERIOR	Coatings	Good	7	Continue to monitor. Recoat roof within 5-10 years.
	Shell Plate	Good	9	Perform minor touchups during next coating cycle.
	Baseplate and Bearing Pad	Fair	6	Repair baseplate extension and replace bearing pad with epoxy grout.
	Concrete Foundation	Good	7	Continue to monitor cracking for widening and rebar corrosion.
	Anchorage	-		-
	Roof Plate	Good	8	Perform minor touchups during next coating cycle.
	Appurtenances	Good	8	Perform minor touchups during next coating cycle.
INTERIOR	Coatings	Fair (1)	4	Replace interior coatings as soon as possible.
	Shell Plate	Good	8	Perform minor repairs during next coating cycle.
	Baseplate	Good	8	Perform minor repairs during next coating cycle.
	Roof Plate	Good	7	Clean surface corrosion and perform minor repairs during next coating cycle.
	Roof Framing	Good	7	Clean surface corrosion and perform minor repairs during next coating cycle.
	Connections and Hardware	Good	7	Perform minor repairs during next coating cycle.
	Appurtenances	Good	7	Perform surface repairs during next coating cycle. Replace ladder.
OVERALL		**Good**	**7.2**	

1) Roof coating is in poor condition.

7.2 Assessment Findings

7.2.1 Exterior Findings

The following exterior assessment findings are based solely on the observations performed by Kelsey Structural.

Coatings

The exterior coatings appeared to be in good condition. The exterior shell coating was mostly well adhered with mild to no chalking and appeared to be performing well (Photo 7.2). The exterior roof plate coating exhibited moderate chalking and small areas of coating delamination and flaking throughout the surface, concentrated near appurtenances and roof plate seams (Photo 7.3). Multiple layers of coatings (2 minimum) were identified, with overcoats appearing to be the previous method of recoating application.

Shell Plate

The exterior surface of the shell plate appeared to be in good condition. Little to no corrosion was observed, with only very minor pinhole rust spots in isolated locations (Photos 7.4 and 7.5).

Baseplate and Bearing Pad

The exterior surface of the baseplate appeared to be in fair condition. The coating has delaminated uniformly around the baseplate extension, allowing for varying levels of corrosion to occur, with minor to moderate surface corrosion observed (Photo 7.6). The bearing pad has experienced severe degradation and is not providing sufficient clearance from the concrete ringwall foundation to prevent corrosion of the baseplate (Photo 7.7).

Concrete Foundation

The concrete ringwall foundation appeared to be in good condition. Hairline cracking was observed approximately 12 to 18-inches on center around the reservoir perimeter, with mild rust staining visible at many of the cracks (Photo 7.8). It was not apparent from visual observation whether the rust staining was due to corroding rebar within the foundation, but this is not likely based on the crack sizing, and the more likely reason is due to rust bleed from the adjacent corroding base plate extension staining the cracks. The cracking itself may be due to a combination of concrete drying shrinkage that occurred during original construction and/or hoop stresses in the concrete ringwall, with minimal reinforcement. The cracking is not considered a structural issue at this time. No signs of differential settlement, scouring or other foundation issues were observed.

Anchorage

The reservoir is unanchored (Photo 7.8).

Roof Plate

The exterior surface of the roof plate appeared to be in good condition. Little to no surface corrosion was observed and the plates appear to be performing well (Photo 7.9). The roof slope appeared adequate to provide proper drainage; however, some areas appeared to be subject to localized ponding, concentrated near roof plate seams and at the roof edge where the slope flattened out (Photo 7.10).

Appurtenances

The exterior appurtenances appeared to be in good condition. The reservoir manways, piping, overflow and pipe supports were observed to be in good condition, with minor localized corrosion concentrated at bolt hardware (Photo 7.11 – 7.13). Flexible (seismic) couplings were not observed at any of the exterior piping. The roof access stairs and supports appeared to be in good condition, with little to no corrosion observed (Photo 7.14); however, the upper rail height is not in compliance with current Cal-OSHA requirements and is a potential fall hazard. The roof access hatch (one square) appeared to be in good condition with

only minor corrosion of the roof plate connection and surrounding roof framing; however the hatch is not Cal-OSHA compliant, with no integral fall protection system (netting, railing or similar) provided (Photo 7.15). The roof vents (1 center and 2 perimeter) appeared to be in good condition with minor surface corrosion observed at the center vent beneath the vent hood (Photo 7.16 & 7.17). The roof handrail system appeared to be in good condition; however, is not Cal-OSHA compliant in both extents and railing height and is a potential fall hazard (7.18).

7.2.2 Interior Findings

The following interior assessment findings are based on the limited observations of the reservoir interior that could be performed by Kelsey Structural from the exterior of the reservoir roof plate through the roof hatches as well as from a review of the previous dive inspection report provided by the City and listed in the previous Data Review summary of Section 2.1. The reservoir was not entered by Kelsey Structural.

Coatings

The interior coatings appeared to be in overall fair condition with the roof framing and roof plate coatings being in poor condition. The interior shell coating appeared mostly adhered, with isolated areas of uniform discoloration below the waterline and areas of moderate coating blistering observed below the waterline as indicated in the dive inspection report (Photo 7.19). The baseplate coating was in good condition with minor blistering observed (per dive inspection report review). The roof framing column coatings were observed with minor cracking and blistering (per dive inspection report). The roof framing coating on the rafter and girders appeared to be in poor condition with various areas of blistering and large delaminations located at random locations along the member lengths (Photo 7.20). Similarly, the roof plate coating was observed with various areas of blistering and large delaminations (Photo 7.21). The roof coatings overall exhibited poor coating adhesion, possibly due to poor surface preparation, humidity control or coating application during the last recoating.

Shell Plate

The interior surface of the shell plate appeared to be in good condition with no signs of significant corrosion observed (Photo 7.22).

Baseplate

The interior surface of the base plate appeared to be in good condition. No signs of significant deterioration were observed or noted in the dive inspection report.

Roof Plate

The interior surface of the roof plate appeared to be in good condition, though moderate surface corrosion was observed at the areas where the coating has delaminated (Photo 7.23). The corrosion appeared to be only surficial at the time of observation and significant metal loss is not anticipated at this time; however, corrosion will continue to progress if not addressed.

Roof Framing

The roof framing appeared to be in good condition, though moderate surface corrosion was observed at the roof rafters and girders where the coating has delaminated. The corrosion appeared to be only surficial at the time of observation and significant metal loss is not anticipated at this time; however, corrosion will continue to progress if not addressed. Surface corrosion of both the roof rafters and roof girders was observed at several locations along the member lengths and at an estimated 75% of all roof framing (Photos 7.24). Minor surface staining was also observed at the rafter top flanges, between the interface of the flange and the roof plate. The roof columns appeared to be in good condition with no corrosion observed above the waterline during the site investigation and only minor blistering of the columns below the waterline noted in the dive inspection report. The center cone was difficult to observe from the roof hatch but appeared to be in similar condition to the columns.

Connections and Hardware

The connections and hardware at the interior of the reservoir appeared to be in good condition. The rafter shear tabs and bolts that could be observed near the roof hatch did not exhibit signs of corrosion (Photo 7.25). It is assumed based on the observed coating delamination at the rafters and girders that other connections near the center of the tank may have similar surface corrosion due to coating delamination, but this could not be observed from the roof hatch.

Appurtenances

The interior appurtenances appeared to be in good condition. Minor rust bleed, concentrated around welds, was observed at pipe penetrations through the shell (per dive inspection report review). The interior access ladder rungs were observed with minor corrosion and rust tubercles above the waterline but did not continue to exhibit corrosion below the waterline (Photo 7.26 and per dive inspection report review).

7.3 Recommendations

7.3.1 Exterior Recommendations

Coatings

Continue to monitor the exterior coatings every 3 to 5 years. The existing coating system is estimated to have a remaining useful life of approximately 10 years, possibly only 5 years at the roof, at which point the exterior of the reservoir is recommended to be recoated. An overcoat recoating will likely be possible given the condition of the existing coating system.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle.

Baseplate and Bearing Pad

Perform corrosion repairs to the baseplate edge and replace the bearing pad with nonshrink epoxy grout during the next coating cycle.

Concrete Foundation

Continue to monitor the hairline cracking in the foundation for progression or signs of rebar corrosion.

Anchorage

Not applicable.

Roof Plate

Perform minor corrosion touchup repairs during the next coating cycle.

Appurtenances

Perform minor corrosion touchup repairs to all appurtenances during the next coating cycle. Optionally, provide additional handrailing at roof perimeter to meet Cal-OSHA requirements and add upper handrail to stair railing system.

7.3.2 Interior Recommendations

Coatings

Recoat the interior of the reservoir as soon as possible. The existing roof coating system has reached the end of its useful life, and the shell and baseplate coatings are recommended to be replaced during the same recoating effort.

Shell Plate

Perform minor corrosion touchup repairs during the next coating cycle.

Baseplate

Perform minor corrosion touchup repairs during the next coating cycle.

Roof Plate

Remove surface corrosion over roof rafters and at currently exposed surfaces where coating delamination has occurred and perform minor corrosion touchup repairs during the next coating cycle.

Roof Framing

Remove surface corrosion over roof rafters and at exposed web and flanges where coating delamination has occurred and perform minor corrosion touchup repairs during the next coating cycle.

Connections and Hardware

Assume minor surface corrosion repairs at the connection points near the center of the reservoir at the rafter-to-girder connections and center cone connections.

Appurtenances

Perform minor corrosion touchup repairs at all piping connections during the next coating cycle. Replace the interior ladder, preferably with new fiber-reinforced polymer (FRP) or stainless-steel ladder during the next coating cycle.

7.3.3 Additional Recommendations

Due to the high seismicity of the site, it is recommended that a structural and seismic analysis of the reservoir be performed to determine code deficiencies and risks associated with seismic events. Historical earthquakes in the area have resulted in failures of similar reservoirs such as shell yielding, buckling or partial roof collapse due to sloshing waves. Kelsey Structural practices in analysis of water storage reservoirs and can provide this service, if requested.

8 Raw Water Ponds

8.1 Structure Summary

The WTP Raw Water Ponds consist of four (4) concrete-slope and lined ponds, each measuring approximately 315-feet wide by 520-feet long from the outer edges of the sloping concrete embankments. The ponds are divided by earthen berms with asphalt pavement along the top of the berm. Erosion control of the exterior berm surfaces around the ponds is not present. Based on discussions with City staff, the ponds were originally constructed as two (2) ponds, one North pond and one South pond, and were subsequently divided into four (4) ponds by means of the construction of a central, North-South embankment with new sloping embankment concrete. The original date of construction and alteration date of construction are unknown, and no record drawings were available for review. Measurements of the original concrete thickness and reinforcement were taken at Pond No. 4 in an area of deterioration where the reinforcement was exposed, with the concrete measuring approximately 3-inches thick reinforced with a 6x6 welded wire mesh (WWM).

Figure 8.1 below provides identification of the ponds as named in this assessment, approximate delineation between original and new concrete and highlighted areas of significant concrete damage observed during the site investigation.

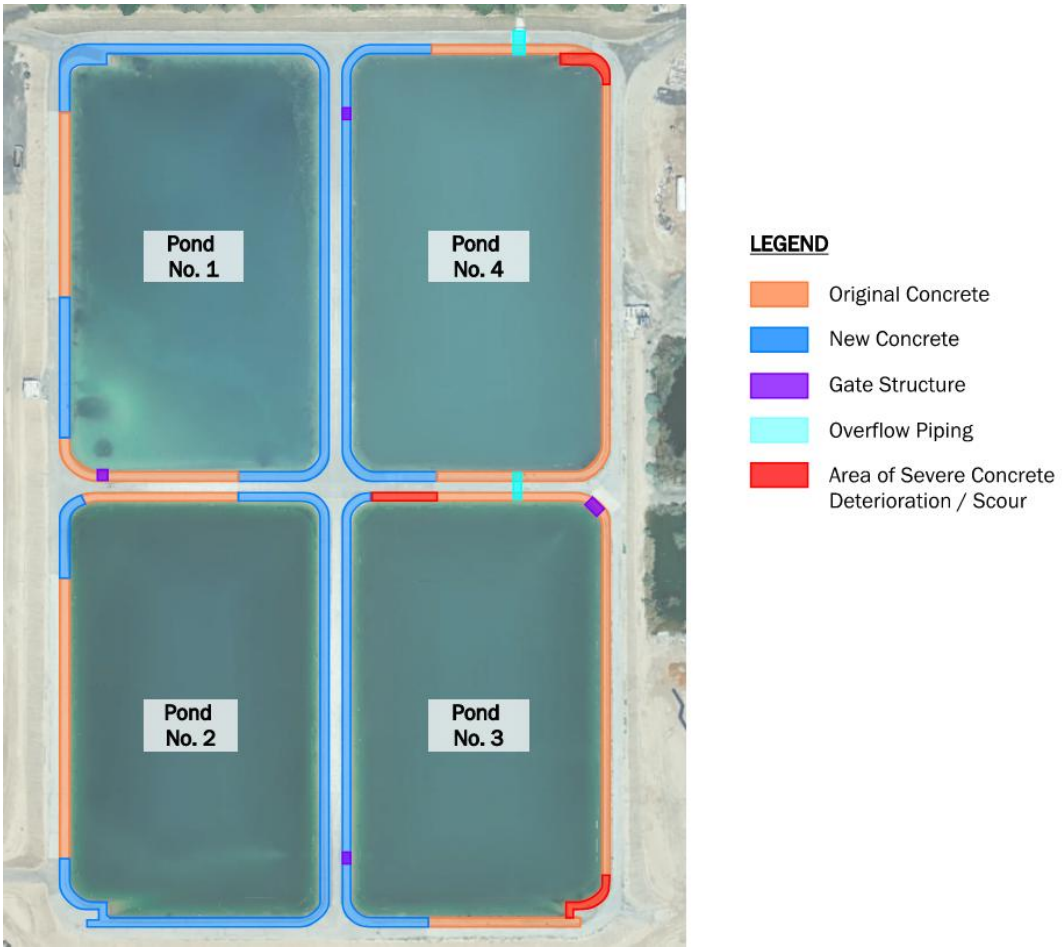

Figure 8.1: Raw Water Ponds Nomenclature and Identification

The overall condition of the Raw Water Ponds is considered **Fair** with varying levels of minor to severe deterioration observed. Table 8.1 below summarizes the condition ratings and improvement recommendations for each structural element of the structure, with detailed assessment findings and recommendations provided for each element following the table.

Table 8.1 Raw Water Ponds Findings and Recommendation Summary

Structural Element	Condition	Condition Rating	Recommendations
Pond No. 1	Good	7	Continue to monitor for signs of settlement and scour. Replace all original sloping embankment concrete within next 10 years.
Pond No. 2	Good	7	Continue to monitor for signs of settlement and scour. Replace all original sloping embankment concrete within next 10 years.
Pond No. 3	Fair	5	Replace all original sloping embankment concrete as soon as possible, particularly at the southeast access ramp where significant scour has occurred.
Pond No. 4	Fair	4	Replace all original sloping embankment concrete as soon as possible, particularly at the northeast access ramp where significant scour has occurred.
OVERALL	**Fair**	**5.8**	

8.2 Assessment Findings

8.2.1 Pond No. 1

Pond No. 1 appeared to be in good condition, with noticeable deterioration of the original sloping embankment concrete observed (Photo 8.1). The original concrete was observed with uniform moderate cracking up to 1/4-inch wide extending full lengths between concrete joints and from top to bottom of the sloping sections (Photo 8.2). The original concrete produced a low pitch ping when tested with a sounding hammer, indicating poor concrete quality and deterioration (Photo 8.3). The concrete near the slope edges was easily spalled away when impacted with the sounding hammer. The new sloping embankment concrete was in better condition, with only minor cracking observed near the northeast corner of the pond (Photo 8.4). The new concrete produced a high pitch ping when tested with a sounding hammer, indicating relatively good concrete quality (Photo 8.5).

Signs of slope creep and scour were observed at the original sloping embankment concrete, as evidenced by cracking asphalt paving near the top of the slope (Photo 8.6). The original concrete was likely not constructed with a lower keyway/stem wall that would provide sliding stability and help prevent scour of the subgrade. This creep/scour has not yet significantly impacted the concrete stability but will likely continue to propagate if not addressed.

The concrete gate structure located at the southwest corner of the pond appeared to be in good condition, with minimal signs of deterioration observed (Photo 8.7). No cracking, corrosion or signs of settlement/scour were observed.

8.2.2 Pond No. 2

Pond No. 2 appeared to be in good condition, with noticeable deterioration of the original sloping embankment concrete observed (Photo 8.8). The original concrete was observed with uniform moderate cracking up to 1/8-inch wide extending partial lengths between concrete joints and from top to bottom of the sloping sections (Photo 8.9). The original concrete produced a low pitch ping when tested with a sounding hammer, indicating poor concrete quality and deterioration. The new sloping embankment concrete was in better condition, with only minor cracking observed at isolated locations, with one larger crack located near the East pipe penetration connection to Pond No. 3 (Photo 8.10). The new concrete produced a high pitch ping when tested with a sounding hammer, indicating relatively good concrete quality (Photo 8.11).

Signs of slope creep and scour were observed at the original sloping embankment concrete, as evidenced by cracking asphalt paving near the top of the slope (Photo 8.12). The original concrete was likely not constructed with a lower keyway/stem wall that would provide sliding stability and help prevent scour of the subgrade. This creep/scour has not yet significantly impacted the concrete stability but will likely continue to propagate if not addressed.

8.2.3 Pond No. 3

Pond No. 3 appeared to be in fair condition, with noticeable deterioration of the original sloping embankment concrete and significant scour and concrete deterioration observed near the southeast ramp (Photo 8.13). The original concrete was observed with widespread, moderate to severe cracking up to 1/2-inch wide extending full lengths between concrete joints and from top to bottom of the sloping sections (Photo 8.14). The original concrete produced a low pitch ping when tested with a sounding hammer, indicating poor concrete quality and deterioration (Photo 8.15). The concrete near the slope edges was easily spalled away when impacted with the sounding hammer. Areas of previous concrete repairs and severe concrete deterioration were observed at the North end of the pond in the original sloping embankment concrete (Photo 8.16). Additionally, significant scour, concrete undermining and severe concrete damage were observed at the access ramp at the southeast corner of the pond (Photo 8.17). During the site investigation, significant westerly winds were creating small waves and turbulence of the pond water, which continuously impacted the bottom of the concrete slope on the East side of the pond, likely contributing to and accelerating the scour in this area. The new sloping embankment concrete was in significantly better condition, with only minor, isolated hairline cracking observed (Photo 8.18). The new concrete produced a high pitch ping when tested with a sounding hammer, indicating relatively good concrete quality (Photo 8.19).

Signs of slope creep and scour were observed at the original sloping embankment concrete, as evidenced by cracking asphalt paving near the top of the slope (Photo 8.20). The original concrete was likely not constructed with a lower keyway/stem wall that would provide sliding stability and help prevent scour of the subgrade.

The concrete gate structure located at the southwest corner of the pond appeared to be in good condition, with minimal signs of deterioration observed (Photo 8.21). No cracking, corrosion or signs of settlement/scour were observed.

8.2.4 Pond No. 4

Pond No. 4 appeared to be in fair condition, with noticeable deterioration of the original sloping embankment concrete and significant scour and concrete deterioration observed near the northeast ramp (Photo 8.22). The original concrete was observed with widespread, moderate to severe cracking up to 1/2-inch wide extending full lengths between concrete joints and from top to bottom of the sloping sections (Photo 8.23). The original concrete produced a low pitch ping when tested with a sounding hammer, indicating poor concrete quality and deterioration (Photo 8.24). The concrete near the slope edges was easily spalled away when impacted with the sounding hammer. Areas of previous concrete repairs were observed at the South end of the pond in the original sloping embankment concrete (Photo 8.25). Additionally, significant scour, concrete undermining and severe concrete damage were observed at the access ramp at the northeast corner of the pond (Photo 8.26 and 8.27). The ramp is considered unstable and at risk of collapse. During the site investigation, significant westerly winds were creating small waves and turbulence of the pond water, which continuously impacted the bottom of the concrete slope on the East side of the pond, likely contributing to and accelerating the scour in this area. The new sloping embankment concrete was in significantly better condition, with only minor, isolated hairline cracking observed (Photo 8.28). The new concrete produced a high pitch ping when tested with a sounding hammer, indicating relatively good concrete quality (Photo 8.29).

Signs of slope creep and scour were observed at the original sloping embankment concrete, as evidenced by cracking asphalt paving near the top of the slope (Photo 8.30). The original concrete was likely not constructed with a lower keyway/stem wall that would provide sliding stability and help prevent scour of the subgrade.

The concrete gate structure located at the northwest corner of the pond appeared to be in good condition, with minimal signs of deterioration observed (Photo 8.31). No cracking, corrosion or signs of settlement/scour were observed.

8.3 Recommendations

8.3.1 Pond No. 1

Continue to monitor Pond No. 1 for progressing signs of scour, concrete creep and settlement, particularly at the areas of original sloping embankment concrete. Repair cracks greater than 1/16" wide by means of epoxy injection, estimated at approximately 500 linear feet total.

The original sloping embankment concrete has an estimated remaining useful life of approximately 10 years, at which point the original concrete is recommended to be replaced entirely with a new concrete slope constructed with top and bottom keyways/stem walls to prevent stability issues such as sliding, settlement and scour. The newer sloping embankment concrete is performing well and has an estimated remaining useful life of approximately 20 years.

8.3.2 Pond No. 2

Continue to monitor Pond No. 1 for progressing signs of scour, concrete creep and settlement, particularly at the areas of original sloping embankment concrete. Repair cracks greater than 1/16" wide by means of epoxy injection, estimated at approximately 250 linear feet total.

The original sloping embankment concrete has an estimated remaining useful life of approximately 10 years, at which point the original concrete is recommended to be replaced entirely with a new concrete slope constructed with top and bottom keyways/stem walls to prevent stability issues such as sliding, settlement and scour. The newer sloping embankment concrete is performing well and has an estimated remaining useful life of approximately 20 years.

8.3.3 Pond No. 3

The original sloping embankment concrete has reached the end of its useful life, with significant damage, deterioration and stability issues observed. Replace all original sloping embankment concrete with a new concrete slope constructed with top and bottom keyways/stem walls to prevent stability issues such as sliding, settlement and scour. Until replacement can occur, restrict access to the southeast access ramp from vehicular traffic to minimize the risk of structural collapse and personnel injury.

The newer sloping embankment concrete is performing well and has an estimated remaining useful life of approximately 20 years. Repair cracks in newer sloping embankment concrete greater than 1/16" wide by means of epoxy injection, estimated at approximately 100 linear feet total.

8.3.4 Pond No. 4

The original sloping embankment concrete has reached the end of its useful life, with significant damage, deterioration and stability issues observed. Replace all original sloping embankment concrete with a new concrete slope constructed with top and bottom keyways/stem walls to prevent stability issues such as sliding, settlement and scour. Until replacement can occur, restrict access to the northeast access ramp from vehicular traffic to minimize the risk of structural collapse and personnel injury.

The newer sloping embankment concrete is performing well and has an estimated remaining useful life of approximately 20 years. Repair cracks in newer sloping embankment concrete greater than 1/16" wide by means of epoxy injection, estimated at approximately 100 linear feet total.

8.3.5 Additional Recommendations

Additional geotechnical investigations into the general stability of the earthen berms/embankments are recommended. Scour prevention, erosion control and similar mitigation measures may be warranted based on the findings of this investigation.

9 Raw Water Pump Station

9.1 Structure Summary

The Raw Water Pump Station (RWPS) consists of a multi-level concrete structure measuring approximately 36-feet wide by 40-feet long with elevated pumps and a small, wood-framed control building located on the top slab and a wood-framed deck overhang located at the southwest (Photo 9.1). The structure is located directly East of the Raw Water Ponds at the WTP. The pumps are supported by concrete beams elevated over a wet well with ships ladder access and elevated catwalk system. The structure is partially buried, with sloping backfill varying approximately 6-feet from the northwest corner to the southeast corner of the structure. The date of original construction is unknown, and no record drawings were available for review.

The wood-framed control building was not assessed as part of this project.

The overall condition of the Raw Water Ponds is considered **Fair** with varying levels of minor to severe deterioration observed. Table 9.1 below summarizes the condition ratings and improvement recommendations for each structural element of the structure, with detailed assessment findings and recommendations provided for each element following the table.

Table 9.1 Raw Water Pump Station Findings and Recommendation Summary

Structural Element	Condition	Condition Rating	Recommendations
Concrete Walls	Good	7	Continue to monitor for signs of deterioration.
Concrete Top Slab	Poor	3	Repair cracking greater than 1/16" by means of epoxy injection. Repair pump support beams and top slab over wet well with repair mortar and FRP strengthening.
Platform Structure	Fair	5	Replace wood planking on platform, preferably with aluminum or noncorrosive material.
Nonstructural Components	Fair	6	Replace grating supports at deteriorated pump beams.
Appurtenances	Fair	6	Replace corroded equipment anchor bolts. Repair corroded equipment base plates.
OVERALL	**Fair**	**5.4**	

9.2 Assessment Findings

9.2.1 Raw Water Pump Station

Concrete Walls

The exterior surface of the concrete walls appeared to be in good condition. General signs of concrete aging were observed in the form of surface staining and discoloration, but no signs of significant cracking, spalling or rebar corrosion were observed (Photos 9.2 and 9.3). The interior surface of the concrete walls within the wet well appeared to be in good condition. Similar

to the exterior surface, general signs of concrete aging were observed in the form of surface staining and discoloration, but no signs of significant cracking, spalling or rebar corrosion were observed (Photos 9.4 and 9.5).

Concrete Top Slab

In general, the top slab appeared to be in fair condition, with the pump support beams observed to be in poor condition. The exterior surface of the top slab was observed with several cracks up to 1/8-inch in width, with localized surface spalling and deterioration located in front of the control building underneath a mobile gantry crane (Photo 9.6). The spalling may be due to impacts from equipment lifted by the crane. The underside surface of the top slab in areas away from the pump support beams and openings was observed with only minor surface discoloration and staining from adjacent metallic corrosion of the pump support beam reinforcement and equipment supports (Photo 9.7). The pump support beams are in poor condition and were observed with severe concrete spalling, cracking, delamination and reinforcement corrosion (Photo 9.8 and 9.9). The pumps may be considered at risk of collapse due to structural support failure of these beams. Additionally, the top slab appears to have been sawcut to provide the ships ladder access, as evident by the sharp concrete edges and exposed rebar ends around the opening (Photo 9.10).

Platform Structure

The wooden platform structure located to the south end of the structure appeared to be in overall fair condition with the wood planking walking surface in poor condition. General deterioration and aging of the wooden plank members serving as the deck of the platform was observed, with concern of their overall structural integrity (Photo 9.11). The steel support column and ledger framing appeared to be in fair condition, with minor surface deterioration and signs of aging, but no significant metal loss observed.

Nonstructural Components

Nonstructural components that were observed during the site investigation included the handrailing system, grating systems, wet well access ladder and wet well catwalk system. The handrailing system appeared to be in good to fair condition, with general surface deterioration of the coating/paint systems and minor surface corrosion of bolted hardware observed (Photo 9.12). The grating at the pump penetrations was in good condition with general oxidation and surface staining observed; however, the ledger supports for the grating are compromised due to the deterioration of the concrete pump support beams below (Photos 9.13 and 9.14). The wet well ships ladder, catwalk system and their anchorage appeared to be in fair condition, with general surface oxidation and staining observed (Photo 9.15).

Appurtenances

The RWPS wet well pumps were the only appurtenant items observed as part of the site investigation. The base plates and anchorage of the pumps varied from fair to poor condition, with coating failures and minor to moderate surface corrosion observed (Photo 9.16). The pump base plates are undersized for the penetration width below and have very minimal edge distance available for anchorage into the pump support beams (Photo 9.17).

9.3 Recommendations

9.3.1 Raw Water Pump Station

Concrete Walls

Continue to monitor the concrete walls for signs of deterioration.

Concrete Top Slab

Repair the cracking in the top slab by means of epoxy injection. Repair the isolated top slab spalling by means of epoxy repair mortar. Repair the pump support beams by chipping to sound material and patching with an epoxy repair mortar. Fiber-

reinforced polymer (FRP) strengthening shall be installed on beams where reinforcing steel corrosion exceeds 10% of the rebar area. This work may be performed sequentially to allow removal of one pump at a time for continued operation of the facility.

Platform Structure

Replace the wooden plank decking, preferably with an aluminum or similarly noncorrosive walking surface.

Nonstructural Components

Replace the top slab grating supports as part of the pump support beam repair identified above. Post-installed anchorage is anticipated for this repair. Continue to monitor the other nonstructural components for signs of deterioration and corrosion.

Appurtenances

Replace the corroded pump anchor bolts with new, stainless steel anchor bolts. Modify/replace the pump base plates with larger plates to extend the anchorage points further away from the top slab pump penetrations and repair the pump frames and bases for surface corrosion. Recoat the pumps and pump frames.

10 Engineer's Opinion of Probable Construction Cost

The tables on the following pages summarize the engineer's opinion of probable construction cost (EOPCC) for the structural improvements as recommended in Sections 4 through 9 of this TM. Each EOPCC is based on current industry standard pricing for the market area and is a planning level estimate following the Association for the Advancement of Cost Engineering (AACE) Class 4 designation. The EOPCC makes use of rough unit costs, recent bid results, vendor/manufacturer quotations, subcontractor estimates and recent Engineering News-Record (ENR) cost-indices. A detailed breakdown of each EOPCC is provided in Appendix B. The EOPCC was developed with the following assumptions:

- Engineering Design is 10% of total construction cost.
- Engineering Services During Construction (ESDC) is 2% of total construction cost.
- Construction Management is not included.
- Insurance is 4% of total construction cost.
- Bonds are 1.5% of total construction cost.
- Contractor Overhead and Profit is 18% of total construction cost.
- Escalation is not included to allow for present value comparison of cost estimates.

The costs are provided for the items explicitly detailed in the estimate schedules of Appendix B. Other discipline costs or additional project costs may be required as CIP projects are developed. The included items pertain primarily to structural improvements. Reservoir coating costs have been provided based on recent bid results reviewed by Kelsey Structural, with an average cost of interior recoating and exterior overcoating currently set at approximately $0.60 per gallon of nominal reservoir size. This value may vary slightly based on reservoir geometry, roof framing layout and member sizing, but provides an overall median estimate of current market reservoir coating values. Detailed information on reservoir framing sizes is not known at this time, which makes estimating the square footage of interior framing coating difficult, therefore this cost per gallon approach has been utilized.

10.1 WTP Reservoir No. 1

The WTP Reservoir No. 1 EOPCC is provided in Table 10.1 below and assumes interior recoating and exterior overcoating of the reservoir. This work has been recommended to occur within the next 5 years as indicated in Section 4.3.

Table 10.1 WTP Reservoir No. 1 EOPCC

Item	Specification Division	Total Cost
1	DIVISION 1 - GENERAL REQUIREMENTS	$125,610
2	DIVISION 2 - SITEWORK AND EXISTING CONDITIONS	$652,500
3	DIVISION 3 - CONCRETE	$0
4	DIVISION 4 - MASONRY	$0
5	DIVISION 5 - METALS	$157,000
6	DIVISION 6 - WOOD, PLASTICS AND COMPOSITES	$12,500
7	DIVISION 7 - THERMAL AND MOISTURE PROTECTION	$0
8	DIVISION 8 - OPENINGS	$39,000
9	DIVISION 9 - FINISHES	$918,750
10	DIVISION 10 - SPECIALTIES	$0
11	DIVISION 11 - EQUIPMENT	$0
12	DIVISION 12 - FURNISHINGS	$0
13	DIVISION 13 - SPECIAL CONSTRUCTION	$0
14	DIVISION 14 - CONVEYING SYSTEMS	$0
15	DIVISION 15 - MECHANICAL	$0
16	DIVISION 16 - ELECTRICAL	$0
17	DIVISION 17 - PROCESS INSTRUMENTATION, CONTROLS AND MONITORING	$0
	SUBTOTAL	**$1,905,360**
	Engineering Design: 10.0%	$190,540
	Engineering Services During Construction (ESDC): 2.0%	$38,110
	Insurance: 4.0%	$76,220
	Bond: 1.5%	$28,590
	Contractor Overhead and Profit: 18.0%	$342,970
	Escalation: 0 year @ 5.0%	$0
	PROJECT TOTAL:	**$2,581,790**
	AACE CLASS 4 ESTIMATE: Low: -30.0%	**$1,807,300**
	High: 50.0%	**$3,872,700**

10.2 WTP Reservoir No. 2

The WTP Reservoir No. 2 EOPCC is provided in Table 10.2 below and assumes interior recoating and exterior overcoating of the reservoir. This work has been recommended to occur as soon as possible as indicated in Section 5.3.

Table 10.2 WTP Reservoir No. 2 EOPCC

Item	Specification Division			Total Cost
1	DIVISION 1 - GENERAL REQUIREMENTS			$131,280
2	DIVISION 2 - SITEWORK AND EXISTING CONDITIONS			$652,500
3	DIVISION 3 - CONCRETE			$0
4	DIVISION 4 - MASONRY			$0
5	DIVISION 5 - METALS			$434,500
6	DIVISION 6 - WOOD, PLASTICS AND COMPOSITES			$12,500
7	DIVISION 7 - THERMAL AND MOISTURE PROTECTION			$0
8	DIVISION 8 - OPENINGS			$39,000
9	DIVISION 9 - FINISHES			$918,750
10	DIVISION 10 - SPECIALTIES			$0
11	DIVISION 11 - EQUIPMENT			$0
12	DIVISION 12 - FURNISHINGS			$0
13	DIVISION 13 - SPECIAL CONSTRUCTION			$0
14	DIVISION 14 - CONVEYING SYSTEMS			$0
15	DIVISION 15 - MECHANICAL			$0
16	DIVISION 16 - ELECTRICAL			$0
17	DIVISION 17 - PROCESS INSTRUMENTATION, CONTROLS AND MONITORING			$0
	SUBTOTAL			**$2,188,530**
	Engineering Design:		10.0%	$218,860
	Engineering Services During Construction (ESDC):		2.0%	$43,780
	Insurance:		4.0%	$87,550
	Bond:		1.5%	$32,830
	Contractor Overhead and Profit:		18.0%	$393,940
	Escalation:	0 year @	5.0%	$0
	PROJECT TOTAL:			**$2,965,490**
	AACE CLASS 4 ESTIMATE:	Low:	-30.0%	**$2,075,800**
		High:	50.0%	**$4,448,200**

10.3 WTP Reservoir No. 3

The WTP Reservoir No. 3 EOPCC is provided in Table 10.3 below and assumes interior recoating and exterior overcoating of the reservoir. This work has been recommended to occur within the next 10 years as indicated in Section 6.3.

Table 10.3 WTP Reservoir No. 3 EOPCC

Item	Specification Division			Total Cost
1	DIVISION 1 - GENERAL REQUIREMENTS			$188,800
2	DIVISION 2 - SITEWORK AND EXISTING CONDITIONS			$1,277,500
3	DIVISION 3 - CONCRETE			$25,200
4	DIVISION 4 - MASONRY			$0
5	DIVISION 5 - METALS			$144,400
6	DIVISION 6 - WOOD, PLASTICS AND COMPOSITES			$12,500
7	DIVISION 7 - THERMAL AND MOISTURE PROTECTION			$0
8	DIVISION 8 - OPENINGS			$79,000
9	DIVISION 9 - FINISHES			$1,837,500
10	DIVISION 10 - SPECIALTIES			$0
11	DIVISION 11 - EQUIPMENT			$0
12	DIVISION 12 - FURNISHINGS			$0
13	DIVISION 13 - SPECIAL CONSTRUCTION			$0
14	DIVISION 14 - CONVEYING SYSTEMS			$0
15	DIVISION 15 - MECHANICAL			$0
16	DIVISION 16 - ELECTRICAL			$0
17	DIVISION 17 - PROCESS INSTRUMENTATION, CONTROLS AND MONITORING			$0
	SUBTOTAL			**$3,564,900**
	Engineering Design:		10.0%	$356,490
	Engineering Services During Construction (ESDC):		2.0%	$71,300
	Insurance:		4.0%	$142,600
	Bond:		1.5%	$53,480
	Contractor Overhead and Profit:		18.0%	$641,690
	Escalation:	0 year @	5.0%	$0
	PROJECT TOTAL:			**$4,830,460**
	AACE CLASS 4 ESTIMATE:	Low:	-30.0%	**$3,381,300**
		High:	50.0%	**$7,245,700**

10.4 La Brucherie Reservoir

The La Brucherie Reservoir EOPCC is provided in Table 10.4 below and assumes that only the interior of the reservoir is recoated at this time. This work has been recommended to occur as soon as possible as indicated in Section 7.3. The EOPCC does not account for exterior overcoating, which was not recommended for approximately 5 to 10 years.

Table 10.4 La Brucherie Reservoir EOPCC

Item	Specification Division			Total Cost
1	DIVISION 1 - GENERAL REQUIREMENTS			$169,970
2	DIVISION 2 - SITEWORK AND EXISTING CONDITIONS			$1,020,000
3	DIVISION 3 - CONCRETE			$19,200
4	DIVISION 4 - MASONRY			$0
5	DIVISION 5 - METALS			$89,300
6	DIVISION 6 - WOOD, PLASTICS AND COMPOSITES			$12,500
7	DIVISION 7 - THERMAL AND MOISTURE PROTECTION			$0
8	DIVISION 8 - OPENINGS			$0
9	DIVISION 9 - FINISHES			$1,312,500
10	DIVISION 10 - SPECIALTIES			$0
11	DIVISION 11 - EQUIPMENT			$0
12	DIVISION 12 - FURNISHINGS			$0
13	DIVISION 13 - SPECIAL CONSTRUCTION			$0
14	DIVISION 14 - CONVEYING SYSTEMS			$0
15	DIVISION 15 - MECHANICAL			$0
16	DIVISION 16 - ELECTRICAL			$0
17	DIVISION 17 - PROCESS INSTRUMENTATION, CONTROLS AND MONITORING			$0
	SUBTOTAL			**$2,623,470**
	Engineering Design:		10.0%	$262,350
	Engineering Services During Construction (ESDC):		2.0%	$52,470
	Insurance:		4.0%	$104,940
	Bond:		1.5%	$39,360
	Contractor Overhead and Profit:		18.0%	$472,230
	Escalation:	0 year @	5.0%	$0
	PROJECT TOTAL:			**$3,554,820**
	AACE CLASS 4 ESTIMATE:	Low:	-30.0%	**$2,488,400**
		High:	50.0%	**$5,332,200**

10.5 Raw Water Ponds

The Raw Water Ponds EOPCC is provided in Table 10.5 below and assumes replacement of the original sloping embankment concrete at Pond No. 2 and Pond No. 3. The EOPCC does not account for original sloping embankment concrete replacement at Pond No. 1 and Pond No.2, which were not recommended for replacement for approximately 10 years.

Table 10.5 Raw Water Ponds EOPCC

Item	Specification Division			Total Cost
1	DIVISION 1 - GENERAL REQUIREMENTS			$75,230
2	DIVISION 2 - SITEWORK AND EXISTING CONDITIONS			$142,500
3	DIVISION 3 - CONCRETE			$1,543,750
4	DIVISION 4 - MASONRY			$0
5	DIVISION 5 - METALS			$0
6	DIVISION 6 - WOOD, PLASTICS AND COMPOSITES			$0
7	DIVISION 7 - THERMAL AND MOISTURE PROTECTION			$0
8	DIVISION 8 - OPENINGS			$0
9	DIVISION 9 - FINISHES			$0
10	DIVISION 10 - SPECIALTIES			$0
11	DIVISION 11 - EQUIPMENT			$0
12	DIVISION 12 - FURNISHINGS			$0
13	DIVISION 13 - SPECIAL CONSTRUCTION			$0
14	DIVISION 14 - CONVEYING SYSTEMS			$0
15	DIVISION 15 - MECHANICAL			$0
16	DIVISION 16 - ELECTRICAL			$0
17	DIVISION 17 - PROCESS INSTRUMENTATION, CONTROLS AND MONITORING			$0
	SUBTOTAL			**$1,761,480**
	Engineering Design:		10.0%	$176,150
	Engineering Services During Construction (ESDC):		2.0%	$35,230
	Insurance:		4.0%	$70,460
	Bond:		1.5%	$26,430
	Contractor Overhead and Profit:		18.0%	$317,070
	Escalation:	0 year @	5.0%	$0
	PROJECT TOTAL:			**$2,386,820**
	AACE CLASS 4 ESTIMATE:	Low:	-30.0%	**$1,670,800**
		High:	50.0%	**$3,580,200**

10.6 Raw Water Pump Station

The Raw Water Pump Station EOPCC is provided in Table 10.6 below.

Table 10.6 Raw Water Pump Station EOPCC

Item	Specification Division			Total Cost
1	DIVISION 1 - GENERAL REQUIREMENTS			$42,520
2	DIVISION 2 - SITEWORK AND EXISTING CONDITIONS			$13,250
3	DIVISION 3 - CONCRETE			$140,000
4	DIVISION 4 - MASONRY			$0
5	DIVISION 5 - METALS			$29,375
6	DIVISION 6 - WOOD, PLASTICS AND COMPOSITES			$0
7	DIVISION 7 - THERMAL AND MOISTURE PROTECTION			$0
8	DIVISION 8 - OPENINGS			$0
9	DIVISION 9 - FINISHES			$0
10	DIVISION 10 - SPECIALTIES			$0
11	DIVISION 11 - EQUIPMENT			$0
12	DIVISION 12 - FURNISHINGS			$0
13	DIVISION 13 - SPECIAL CONSTRUCTION			$0
14	DIVISION 14 - CONVEYING SYSTEMS			$0
15	DIVISION 15 - MECHANICAL			$0
16	DIVISION 16 - ELECTRICAL			$0
17	DIVISION 17 - PROCESS INSTRUMENTATION, CONTROLS AND MONITORING			$0
	SUBTOTAL			**$225,145**
	Engineering Design:		10.0%	$22,520
	Engineering Services During Construction (ESDC):		2.0%	$4,510
	Insurance:		4.0%	$9,010
	Bond:		1.5%	$3,380
	Contractor Overhead and Profit:		18.0%	$40,530
	Escalation:	**0** year @	5.0%	$0
	PROJECT TOTAL:			**$305,095**
	AACE CLASS 4 ESTIMATE:	Low:	-30.0%	**$213,600**
		High:	50.0%	**$457,600**

11 Appendix A – Site Investigation Photographs

(See following pages)

11.1 WTP Reservoir No. 1



Photo 4.1: WTP Reservoir No. 1



Photo 4.2: Exterior coating on reservoir shell



Photo 4.3: Failing exterior coating on roof plate



Photo 4.4: Exterior surface of shell plate



Photo 4.5: Isolated minor surface corrosion at exterior shell welds



Photo 4.6: Exterior surface of base plate (no foundation or anchorage)



Photo 4.7: Minor surface corrosion at exterior surface of roof plate



Photo 4.8: Patch plates on exterior surface of roof plate



Photo 4.9: Signs of minor ponding at exterior surface of roof plate (plate seams)



Photo 4.10: Reservoir access manway



Photo 4.11: Reservoir exterior piping



Photo 4.12: Reservoir exterior piping and supports (overflow)



Photo 4.13: Roof access ladder and safety cage



Photo 4.14: Roof access hatch (from MIT dive inspection report)



Photo 4.15: Center vent with surface corrosion and partial installed screening



Photo 4.16: Roof handrailing



Photo 4.17: Interior coating on reservoir shell



Photo 4.18: Coating failures at rafter top flanges



Photo 4.19: Interior surface of shell plate

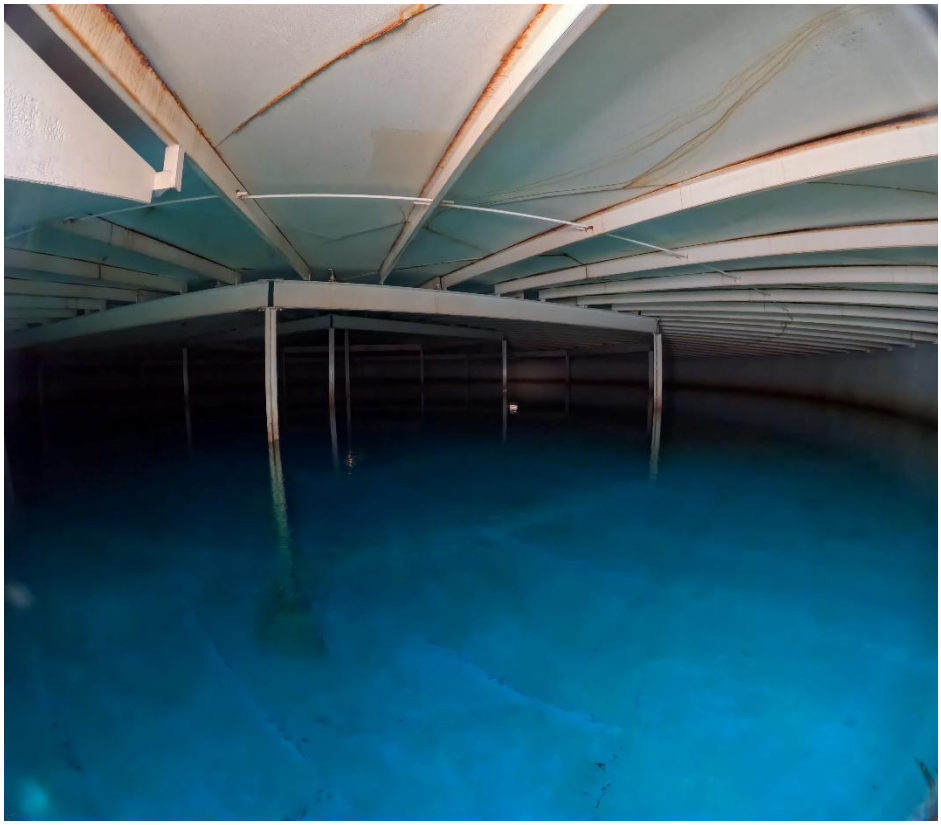

Photo 4.20: Rust bleed and corrosion at roof plate over rafters and plate seams



Photo 4.21: Previous deterioration at rafter ends



Photo 4.22: Corrosion at rafter top flange

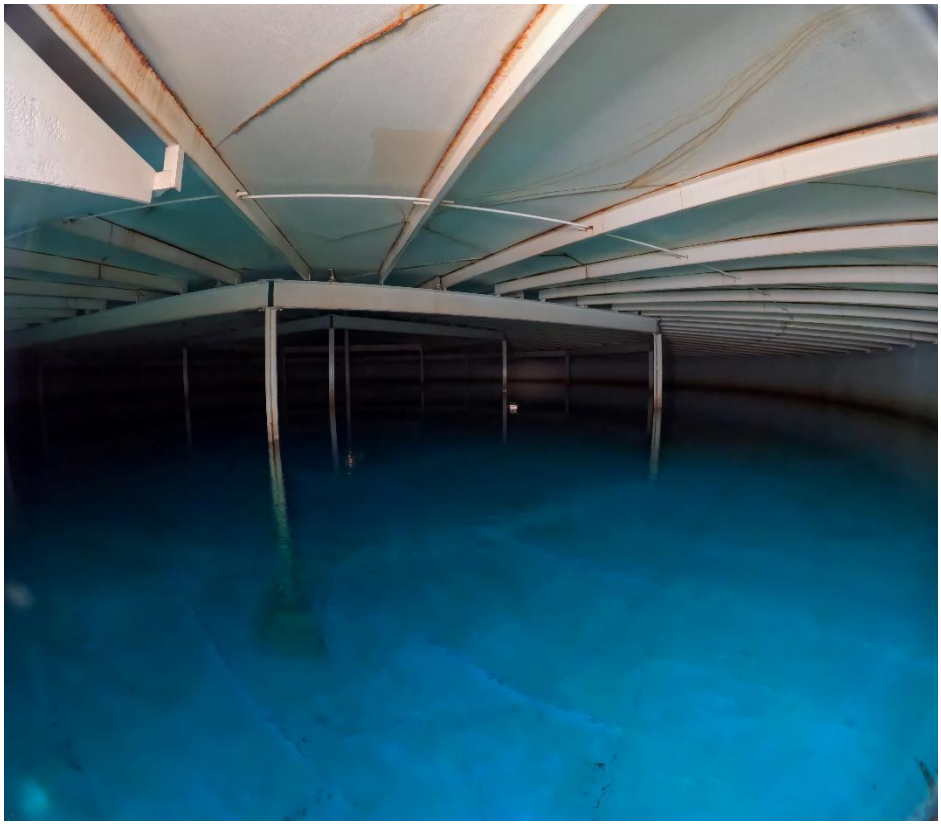

Photo 4.23: Roof girders and connections beyond



Photo 4.24: Corrosion at rafter shear tab to shell



Photo 4.25: Interior ladder (refer to MIT dive inspection report for additional photos)

11.2 WTP Reservoir No. 2



Photo 5.1: WTP Reservoir No. 2



Photo 5.2: Exterior coating on reservoir shell



Photo 5.3: Coating on exterior of baseplate



Photo 5.4: Failing exterior coating on roof plate



Photo 5.5: Exterior surface of shell plate



Photo 5.6: Isolated minor surface corrosion at exterior surface of shell



Photo 5.7: Exterior surface of base plate (no foundation or anchorage)



Photo 5.8: Minor surface corrosion at exterior surface of roof plate (rust bleed)



Photo 5.9: Signs of ponding and localized deterioration at roof plate seam



Photo 5.10: Reservoir access manway with bolt corrosion



Photo 5.11: Reservoir exterior piping



Photo 5.12: Reservoir exterior piping and supports (overflow)



Photo 5.13: Cracking in overflow pipe concrete encasement



Photo 5.14: Roof access ladder and safety cage



Photo 5.15: Roof access hatch with severe corrosion



Photo 5.16: Center vent with surface corrosion and roof plate repair



Photo 5.17: Roof handrailing



Photo 5.18: Interior coating on reservoir shell (above waterline)



Photo 5.19: Coating failures at rafter top flanges and ends



Photo 5.20: Coating failure at roof plate above rafters and plate seams



Photo 5.21: Rust bleed and corrosion at roof plate over rafters and plate seams



Photo 5.22: Moderate to severe corrosion of rafters



Photo 5.23: Moderate corrosion at roof girders and severe corrosion at rafter tie rods



Photo 5.24: Severe corrosion at rafter shear tab to shell



Photo 5.25: Severe deterioration at interior ladder with failed rung

11.3 WTP Reservoir No. 3



Photo 6.1: WTP Reservoir No. 3



Photo 6.2: Exterior coating on reservoir shell



Photo 6.3: Exterior coating on roof plate



Photo 6.4: Exterior surface of shell plate



Photo 6.5: Minor coating flaking at exterior shell



Photo 6.6: Moderate corrosion on baseplate extension and deteriorated bearing pad



Photo 6.7: Minor corrosion on baseplate extension and deteriorated bearing pad



Photo 6.8: Hairline cracking in concrete ringwall foundation



Photo 6.9: Exterior surface of roof plate



Photo 6.10: Signs of minor ponding at exterior surface of roof plate



Photo 6.11: Reservoir access manway



Photo 6.12: Reservoir exterior piping



Photo 6.13: Reservoir exterior piping and supports (overflow)



Photo 6.14: Roof access stair



Photo 6.15: Center roof access hatch



Photo 6.16: Perimeter roof access hatch with failed lifting mechanism



Photo 6.17: Center vent with moderate corrosion and no screening



Photo 6.18: Handrailing at roof (secondary perimeter roof access hatch)



Photo 6.19: Interior coating on reservoir shell



Photo 6.20: Coating rust bleed at roof rafter to shell interface



Photo 6.21: Interior surface of shell plate



Photo 6.22: Interior surface of roof plate



Photo 6.23: Rust bleed and previous pitting at rafter top flange near access hatch

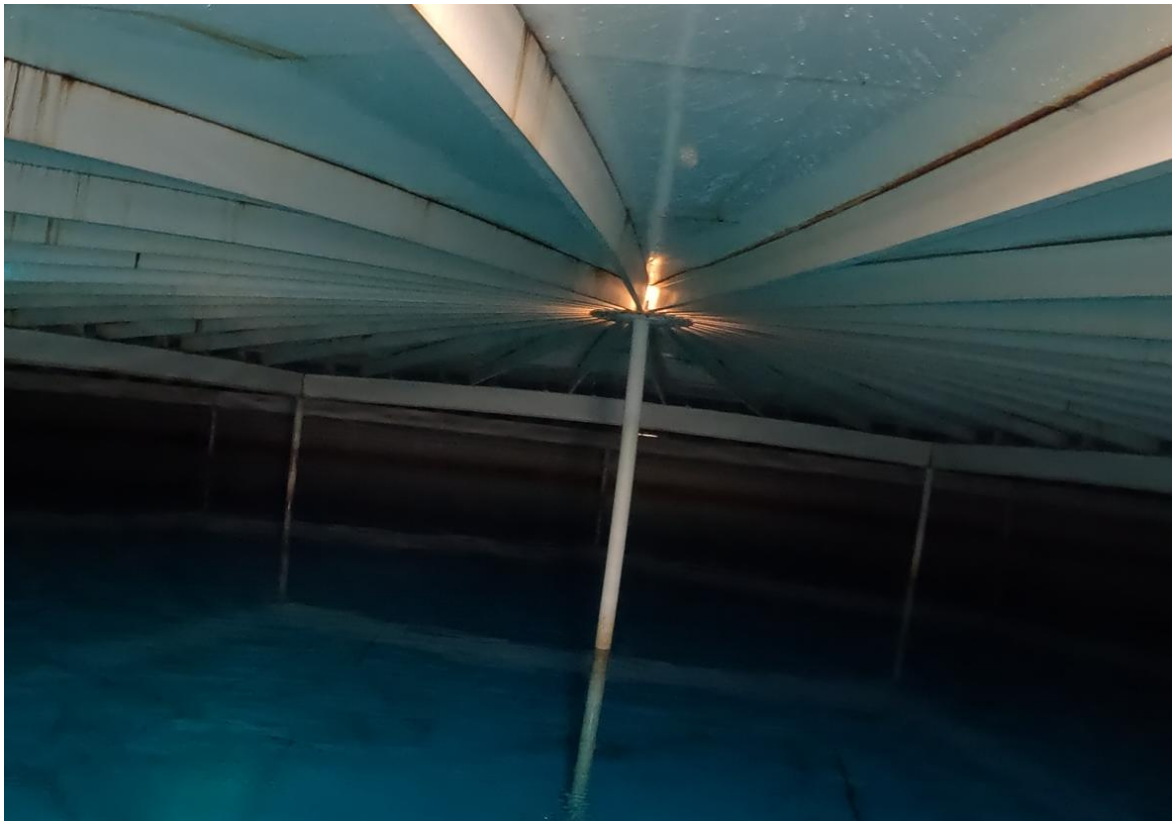

Photo 6.24: Center dollar plate as viewed from center roof access hatch



Photo 6.25: Roof girders and connections



Photo 6.26: Minor rust bleed and staining at roof framing hardware



Photo 6.27: Moderate corrosion at rafter shear tab to shell



Photo 6.28: Interior ladder rung corrosion

11.4 La Brucherie Reservoir



Photo 7.1: La Brucherie Reservoir



Photo 7.2: Exterior coating on reservoir shell



Photo 7.3: Exterior coating on roof plate



Photo 7.4: Exterior surface of shell plate



Photo 7.5: Exterior surface of shell plate



Photo 7.6: Moderate corrosion on baseplate extension and deteriorated bearing pad



Photo 7.7: Minor corrosion on baseplate extension and deteriorated bearing pad



Photo 7.8: Hairline cracking in concrete ringwall foundation



Photo 7.9: Exterior surface of roof plate



Photo 7.10: Coating delamination and minor surface corrosion near center vent



Photo 7.11: Reservoir access manway



Photo 7.12: Reservoir exterior piping



Photo 7.13: Reservoir exterior piping and supports (overflow)



Photo 7.14: Roof access stair and supports



Photo 7.15: Roof access hatch



Photo 7.16: Perimeter roof vent



Photo 7.17: Center roof vent with minor surface corrosion



Photo 7.18: Handrailing at roof



Photo 7.19: Interior coating on reservoir shell

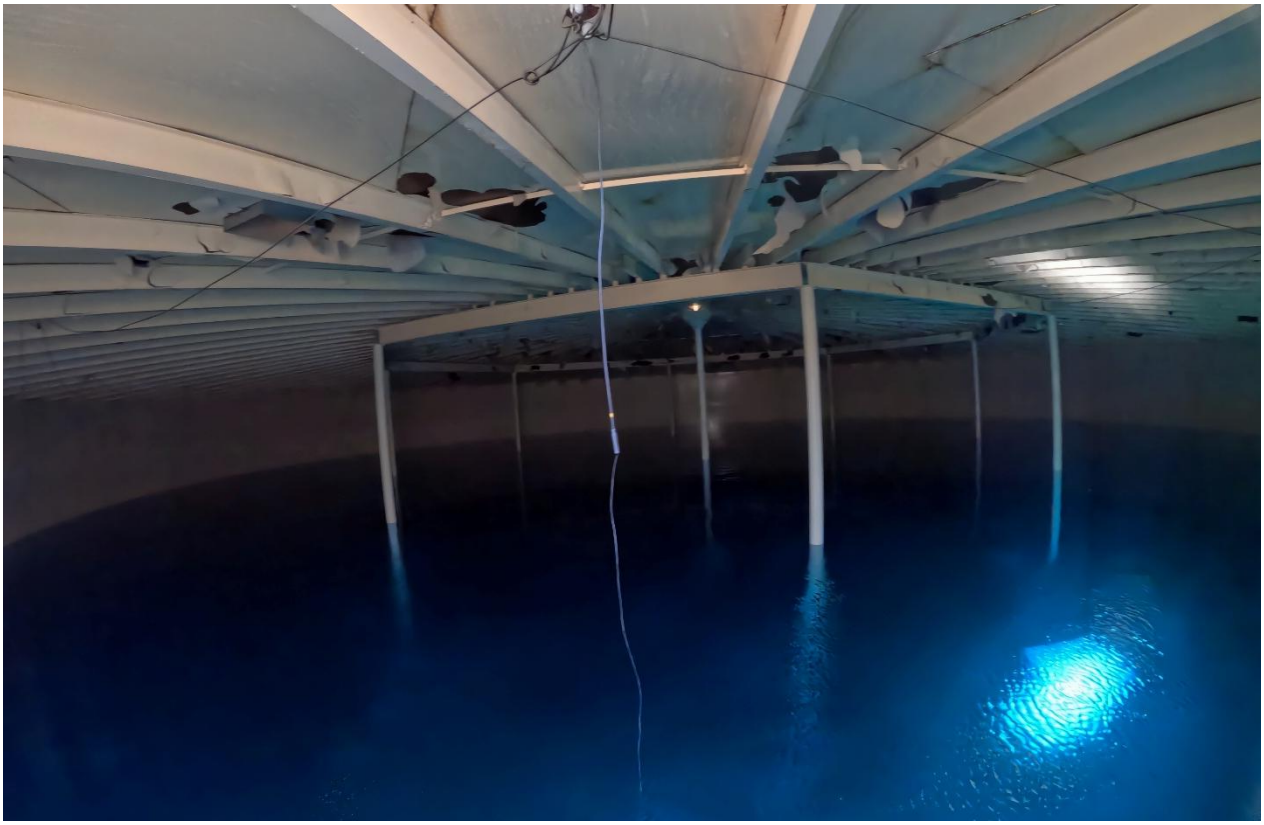

Photo 7.20: Coating delamination at roof framing and roof plate



Photo 7.21: Coating delamination at roof framing and roof plate



Photo 7.22: Interior surface of shell plate

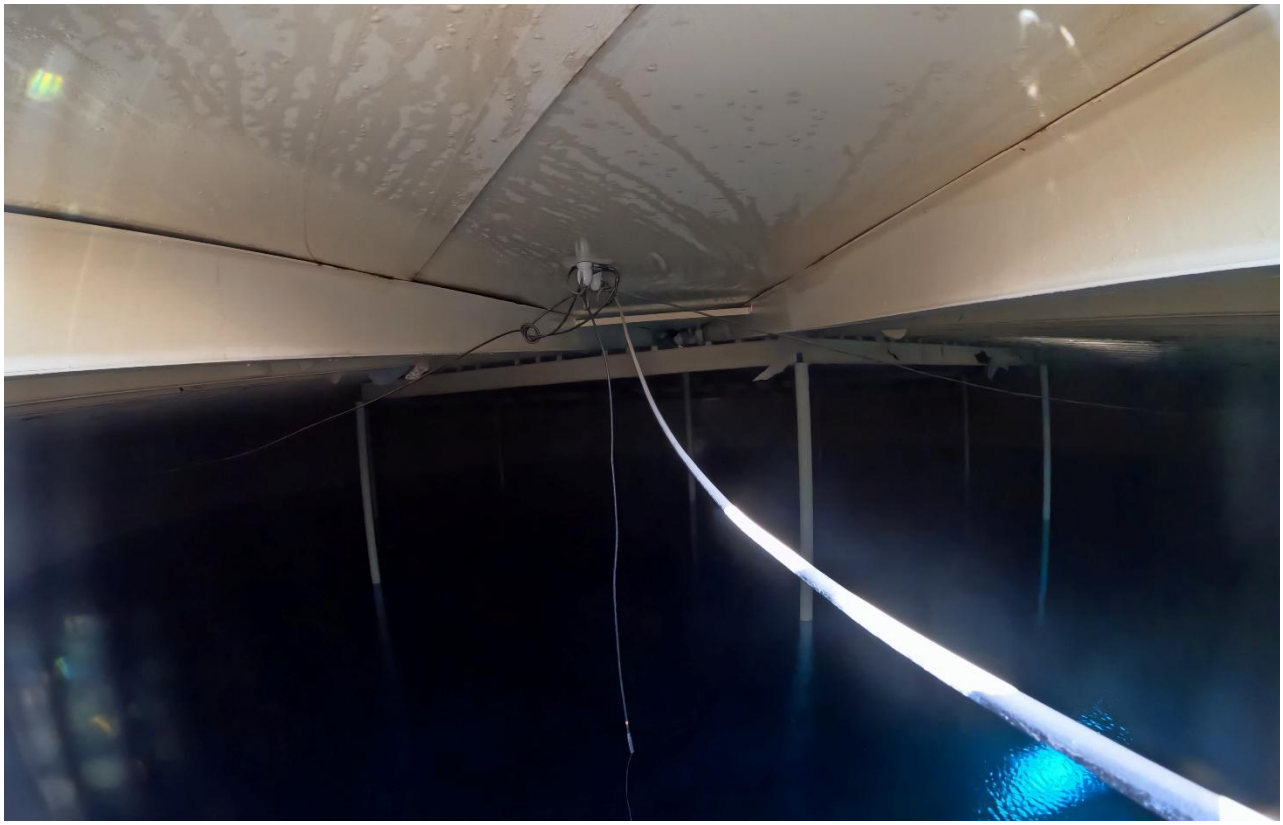

Photo 7.23: Interior surface of roof plate



Photo 7.24: Surface corrosion of roof rafters and girders



Photo 7.25: Rafter shear tab connection to shell



Photo 7.26: Interior ladder rung corrosion above waterline

11.5 WTP Raw Water Ponds



Photo 8.1: Raw Water Pond No. 1

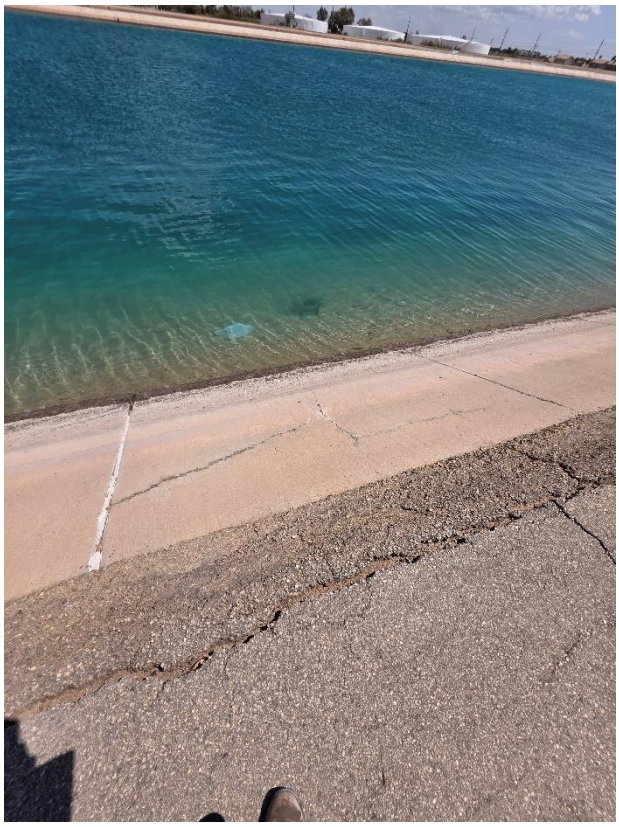

Photo 8.2: Pond No. 1 cracking at original concrete



Photo 8.3: Pond No. 1 original concrete

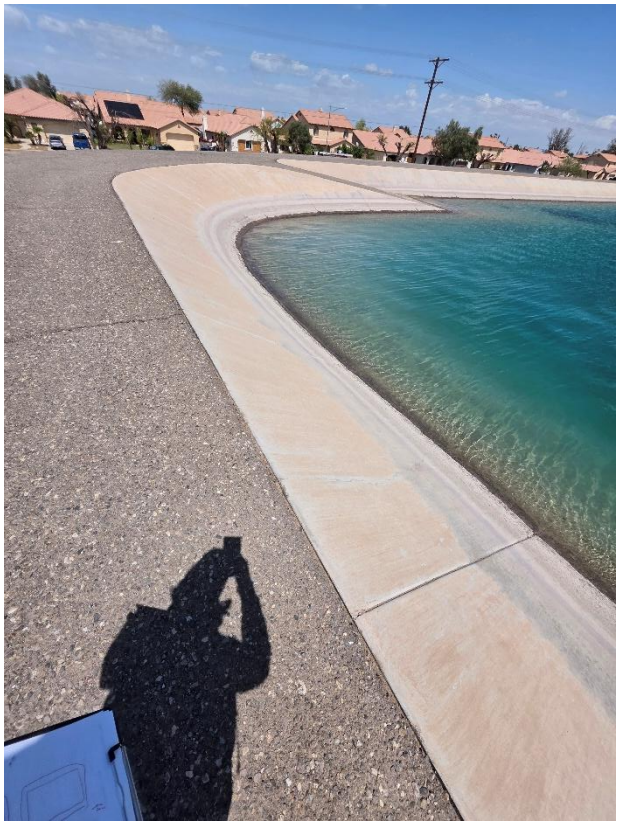

Photo 8.4: Pond No. 1 new concrete



Photo 8.5: Pond No. 1 new concrete

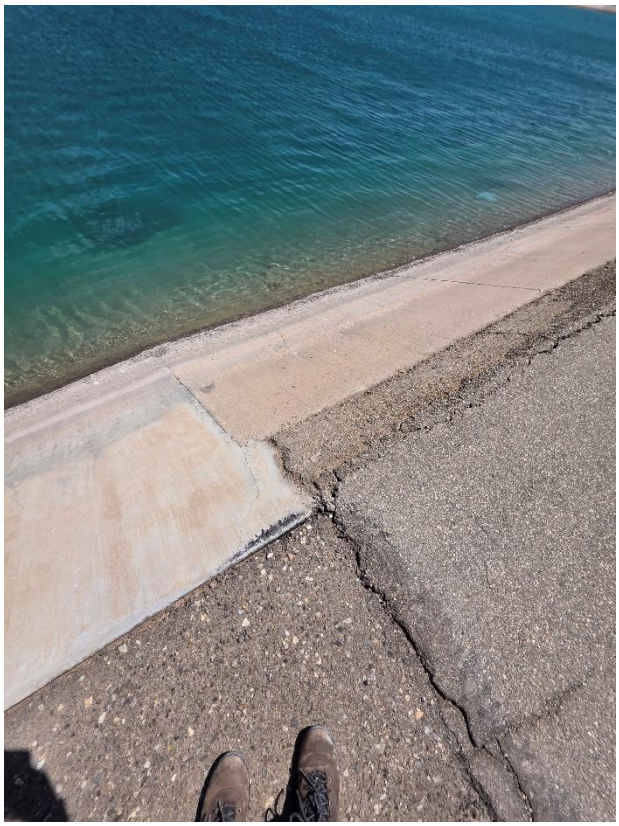

Photo 8.6: Pond No. 1 signs of scour and creep of original concrete



Photo 8.7: Pond No. 1 gate structure



Photo 8.8: Raw Water Pond No. 2



Photo 8.9: Pond No. 2 original concrete



Photo 8.10: Pond No. 2 new concrete



Photo 8.11: Pond No. 2 new concrete



Photo 8.12: Pond No. 2 signs of creep at original concrete and asphalt paving



Photo 8.13: Raw Water Pond No. 3



Photo 8.14: Pond No. 3 cracking at original concrete



Photo 8.15: Pond No. 3 original concrete



Photo 8.16: Pond No. 3 severe deterioration of original concrete at North end



Photo 8.17: Pond No. 3 scour and severe concrete damage at southeast access ramp



Photo 8.18: Pond No. 3 new concrete



Photo 8.19: Pond No. 3 new concrete



Photo 8.20: Pond No. 3 signs of scour and creep at East side original concrete



Photo 8.21: Pond No. 3 gate structure



Photo 8.22: Raw Water Pond No. 4



Photo 8.23: Pond No. 4 cracking and spalling at original concrete



Photo 8.24: Pond No. 4 original concrete



Photo 8.25: Pond No. 4 previously repaired are near South of pond



Photo 8.26: Pond No. 4 scour and severe concrete damage at northeast ramp



Photo 8.27: Pond No. 4 scour and severe concrete damage at northeast ramp



Photo 8.28: Pond No. 4 new concrete with hairline cracking



Photo 8.29: Pond No. 4 new concrete



Photo 8.30: Pond No. 4 signs of scour and creep at original concrete along East side



Photo 8.31: Pond No. 4 gate structure

11.6 WTP Raw Water Pump Station



Photo 9.1: Raw Water Pump Station (RWPS)



Photo 9.2: RWPS exterior wall surface



Photo 9.3: RWPS exterior wall surface and surface staining



Photo 9.4: RWPS interior wall surface



Photo 9.5: RWPS interior wall surface



Photo 9.6: Spalling and cracking at exterior surface of RWPS top slab



Photo 9.7: Bottom surface of RWPS top slab (away from pump support beams)



Photo 9.8: Severe deterioration of concrete pump support beams



Photo 9.9: Severe deterioration and exposed rebar at RWPS concrete pump support beams

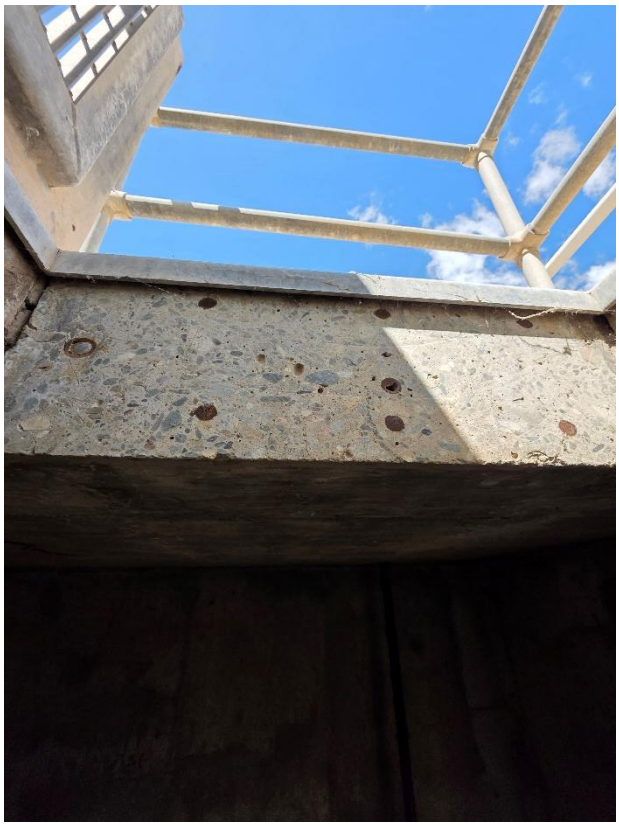

Photo 9.10: Sawcut opening at RWPS top slab



Photo 9.11: Wood plank platform at South end of RWPS



Photo 9.12: RWPS handrail system



Photo 9.13: Grating system at RWPS



Photo 9.14: Grating system support at RWPS

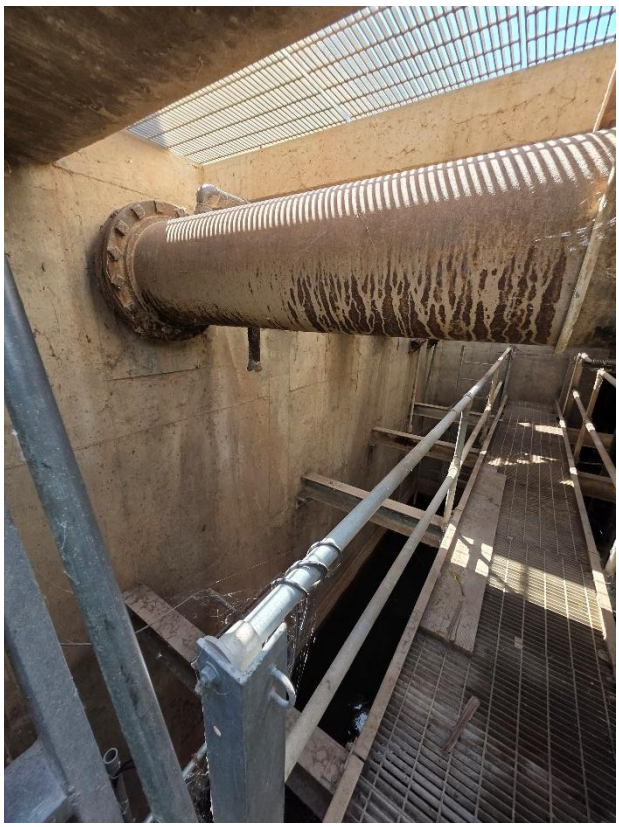

Photo 9.15: Platform/walkway at RWPS wet well



Photo 9.16: RWPS pump base plates and surface corrosion (oversized plate)



Photo 9.17: RWPS pump base plates with minimal concrete edge distance

12 Appendix B – Detailed Engineer's Opinion of Probable Construction Cost

(See following pages)

KELSEY STRUCTURAL	8064 Allison Ave. No. 1706 La Mesa, CA 91942	Phone #: (619) 920-1262	*Project No.* 110-65	*Sheet No.*
Project City of El Centro Water and Sewer Master Plan			*Date* 6/13/2025	
Subject Engineer's Opinion of Probable Construction Cost	*Description* Structural Condition Assessment - WTP Reservoir No. 1	*Submittal* -	*Prepared by* MS	*Checked by* DI

Bid Item	Description	Details	QTY	unit	Cost/unit	Cost
1	**DIVISION 1 - GENERAL REQUIREMENTS**					**$125,610**
2	General Conditions	Lump Sum	1	LS	$25,000.00	$25,000
3	Mobilization/Demobilization	(2%. Site access, equipment, rigging, formwork, scaffolding, etc.)	1	LS	$38,110.00	$38,110
4	Cleaning & Disinfection	Clean & disinfect all interior tank surfaces upon completion of work	1	LS	$7,500.00	$7,500
5	Construction Manway	Access Manway for Construction (stiffened and reused shell plate)	1	LS	$20,000.00	$20,000
6	Scaffolding/Shoring	Temporary scaffolding and shoring	1	LS	$15,000.00	$15,000
7	Dehumidification	Control interior environment for coating	1	LS	$20,000.00	$20,000
7	**DIVISION 2 - SITEWORK AND EXISTING CONDITIONS**					**$652,500**
8	Exterior Metal Surface Prep	Grind exterior welds, sharp edges smooth. Remove surface corrosion.	1	LS	$7,500.00	$7,500
9	Interior Metal Surface Prep	Grind interior welds, sharp edges smooth. Remove surface corrosion.	1	LS	$15,000.00	$15,000
10	Miscellaneous Surface Prep	Additional surface prep for nonstructural and appurtenant components	1	LS	$5,000.00	$5,000
11	Exterior Coating Prep	Hydroblast cleaning of exterior coatings and touchup prior to overcoat	2,500,000	Gal	$0.05	$125,000
12	Interior Coating Removal	Abrasive blasting of existing interior coatings, grit removal and disposal	2,500,000	Gal	$0.20	$500,000
12	**DIVISION 3 - CONCRETE**					**$0**
12	**DIVISION 4 - MASONRY**					**$0**
12	**DIVISION 5 - METALS**					**$157,000**
13	Minor Exterior Corrosion Repairs	Removal of surface corrosion and minor patching of exterior surfaces	100	SF	$20.00	$2,000
14	Minor Interior Corrosion Repairs	Removal of surface corrosion and minor patching of interior surfaces	1,250	SF	$20.00	$25,000
15	Roof Rafter Minor Repairs	Removal of surface corrosion and minor patching at 50% roof framing	75	EA	$500.00	$37,500
16	Replace Select Roof Rafters	Replace approximately 10% of roof rafters (assumed W10x12)	5,000	LB	$6.00	$30,000
17	Replace Shear Tabs at Outer Rafters	Replace shear tab connections at outer roof rafters to shell	80	EA	$250.00	$20,000
18	Replace Exterior Ladder	Install new Cal-OSHA compliant exterior ladder	1	EA	$12,500.00	$12,500
19	New Roof Handrailing	Install Cal-OSHA compliant roof handrailing at roof hatches	150	LF	$150.00	$22,500
20	5% Miscellaneous Steel	Contingent 5% miscellaneous steel for various plates, bolts, appurt. Etc.	1	LS	$7,500.00	$7,500
20	**DIVISION 6 - WOOD, PLASTICS AND COMPOSITES**					**$12,500**
21	New FRP Ladder	Replace interior ladder with new FRP Ladder	1	EA	$12,500.00	$12,500
21	**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**					**$0**
21	**DIVISION 8 - OPENINGS**					**$39,000**
22	Replace roof hatches	Install (2) new Cal-OSHA compliant roof hatches	2	EA	$12,000.00	$24,000
23	New Center Vent	Install new center vent	1	EA	$15,000.00	$15,000
23	**DIVISION 9 - FINISHES**					**$918,750**
24	Exterior Overcoat	New exterior overcoating	2,500,000	Gal	$0.10	$250,000
25	Interior Recoating	New interior coatings	2,500,000	Gal	$0.25	$625,000
26	5% Miscellaneous Coating	Contingent 5% miscellaneous coating for various plates, bolts, appurt. Etc.	1	LS	$43,750.00	$43,750
26	**DIVISION 10 - SPECIALTIES**					**$0**
26	**DIVISION 11 - EQUIPMENT**					**$0**
26	**DIVISION 12 - FURNISHINGS**					**$0**
26	**DIVISION 13 - SPECIAL CONSTRUCTION**					**$0**
26	**DIVISION 14 - CONVEYING SYSTEMS**					**$0**
26	**DIVISION 15 - MECHANICAL**					**$0**
26	**DIVISION 16 - ELECTRICAL**					**$0**
26	**DIVISION 17 - PROCESS INTRUMENTATION, CONTROLS AND MONITORING**					**$0**
		SUBTOTAL:				**$1,905,360**
		Engineering Design:			10.0%	$190,540
		Engineering Services During Construction (ESDC):			2.0%	$38,110
		Insurance:			4.0%	$76,220
		Bond:			1.5%	$28,590
		Contractor Overhead and Profit:			18.0%	$342,970
		Escalation:	0	year @	5.0%	$0
		PROJECT TOTAL:				**$2,581,790**
AACE Class:	4	**AACE CLASS 4 ESTIMATE:**	Low:	-30.0%		**$1,807,300**
	L: -15% to -30% H: +20% to +50%		High:	50.0%		**$3,872,700**

NOTES: This cost estimate is intended to be used for budgeting purposes only and is not a guarantee of the final cost of the project. The costs included reflect the items explicitly identified above.

KELSEY STRUCTURAL	8064 Allison Ave. No. 1706 La Mesa, CA 91942	Phone #: (619) 920-1262	*Project No.* 110-65	*Sheet No.*
Project City of El Centro Water and Sewer Master Plan			*Date* 6/13/2025	
Subject Engineer's Opinion of Probable Construction Cost	*Description* Structural Condition Assessment - WTP Reservoir No. 2	*Submittal* -	*Prepared by* MS	*Checked by* DI

Bid Item	Description	Details	QTY	unit	Cost/unit	Cost
1	**DIVISION 1 - GENERAL REQUIREMENTS**					**$131,280**
2	General Conditions	Lump Sum	1	LS	$25,000.00	$25,000
3	Mobilization/Demobilization	(2%. Site access, equipment, rigging, formwork, scaffolding, etc.)	1	LS	$43,780.00	$43,780
4	Cleaning & Disinfection	Clean & disinfect all interior tank surfaces upon completion of work	1	LS	$7,500.00	$7,500
5	Construction Manway	Access Manway for Construction (stiffened and reused shell plate)	1	LS	$20,000.00	$20,000
6	Scaffolding/Shoring	Temporary scaffolding and shoring	1	LS	$15,000.00	$15,000
7	Dehumidification	Control interior environment for coating	1	LS	$20,000.00	$20,000
7	**DIVISION 2 - SITEWORK AND EXISTING CONDITIONS**					**$652,500**
8	Exterior Metal Surface Prep	Grind exterior welds, sharp edges smooth. Remove surface corrosion.	1	LS	$7,500.00	$7,500
9	Interior Metal Surface Prep	Grind interior welds, sharp edges smooth. Remove surface corrosion.	1	LS	$15,000.00	$15,000
10	Miscellaneous Surface Prep	Additional surface prep for nonstructural and appurtenant components	1	LS	$5,000.00	$5,000
11	Exterior Coating Prep	Hydroblast cleaning of exterior coatings and touchup prior to overcoat	2,500,000	Gal	$0.05	$125,000
12	Interior Coating Removal	Abrasive blasting of existing interior coatings, grit removal and disposal	2,500,000	Gal	$0.20	$500,000
12	**DIVISION 3 - CONCRETE**					**$0**
12	**DIVISION 4 - MASONRY**					**$0**
12	**DIVISION 5 - METALS**					**$434,500**
13	Minor Exterior Corrosion Repairs	Removal of surface corrosion and minor patching of exterior surfaces	250	SF	$20.00	$5,000
14	Minor Interior Corrosion Repairs	Removal of surface corrosion and minor patching of interior surfaces	1,250	SF	$20.00	$25,000
15	Replace all Roof Framing	Install new roof rafters, girders, columns, center cone and connections	55,000	LB	$6.00	$330,000
16	Replace Exterior Ladder	Install new Cal-OSHA compliant exterior ladder	1	EA	$12,500.00	$12,500
17	New Roof Handrailing	Install Cal-OSHA compliant roof handrailing at roof hatches	150	LF	$150.00	$22,500
18	10% Miscellaneous Steel	Contingent 10% miscellaneous steel for various plates, bolts, appurt. Etc.	1	LS	$39,500.00	$39,500
18	**DIVISION 6 - WOOD, PLASTICS AND COMPOSITES**					**$12,500**
19	New FRP Ladder	Replace interior ladder with new FRP Ladder	1	EA	$12,500.00	$12,500
19	**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**					**$0**
19	**DIVISION 8 - OPENINGS**					**$39,000**
20	Replace roof hatches	Install (2) new Cal-OSHA compliant roof hatches	2	EA	$12,000.00	$24,000
21	New Center Vent	Install new center vent	1	EA	$15,000.00	$15,000
21	**DIVISION 9 - FINISHES**					**$918,750**
22	Exterior Overcoat	New exterior overcoating	2,500,000	Gal	$0.10	$250,000
23	Interior Recoating	New interior coatings	2,500,000	Gal	$0.25	$625,000
24	5% Miscellaneous Coating	Contingent 5% miscellaneous coating for various plates, bolts, appurt. Etc.	1	LS	$43,750.00	$43,750
24	**DIVISION 10 - SPECIALTIES**					**$0**
24	**DIVISION 11 - EQUIPMENT**					**$0**
24	**DIVISION 12 - FURNISHINGS**					**$0**
24	**DIVISION 13 - SPECIAL CONSTRUCTION**					**$0**
24	**DIVISION 14 - CONVEYING SYSTEMS**					**$0**
24	**DIVISION 15 - MECHANICAL**					**$0**
24	**DIVISION 16 - ELECTRICAL**					**$0**
24	**DIVISION 17 - PROCESS INTRUMENTATION, CONTROLS AND MONITORING**					**$0**
		SUBTOTAL:				**$2,188,530**
		Engineering Design:			10.0%	$218,860
		Engineering Services During Construction (ESDC):			2.0%	$43,780
		Insurance:			4.0%	$87,550
		Bond:			1.5%	$32,830
		Contractor Overhead and Profit:			18.0%	$393,940
		Escalation:	0	year @	5.0%	$0
		PROJECT TOTAL:				**$2,965,490**
AACE Class: 4	L: -15% to -30% H: +20% to +50%	**AACE CLASS 4 ESTIMATE:**	Low: High:	-30.0% 50.0%		**$2,075,800** **$4,448,200**

NOTES: This cost estimate is intended to be used for budgeting purposes only and is not a guarantee of the final cost of the project. The costs included reflect the items explicitly identified above.

KELSEY STRUCTURAL	8064 Allison Ave. No. 1706 La Mesa, CA 91942	Phone #: (619) 920-1262	*Project No.* 110-65	*Sheet No.*
Project City of El Centro Water and Sewer Master Plan			*Date* 6/13/2025	
Subject Engineer's Opinion of Probable Construction Cost	*Description* Structural Condition Assessment - WTP Reservoir No. 3	*Submittal* -	*Prepared by* MS	*Checked by* DI

Bid Item	Description	Details	QTY	unit	Cost/unit	Cost
1	**DIVISION 1 - GENERAL REQUIREMENTS**					**$188,800**
2	General Conditions	Lump Sum	1	LS	$40,000.00	$40,000
3	Mobilization/Demobilization	(2%. Site access, equipment, rigging, formwork, scaffolding, etc.)	1	LS	$71,300.00	$71,300
4	Cleaning & Disinfection	Clean & disinfect all interior tank surfaces upon completion of work	1	LS	$7,500.00	$7,500
5	Construction Manway	Access Manway for Construction (stiffened and reused shell plate)	1	LS	$20,000.00	$20,000
6	Scaffolding/Shoring	Temporary scaffolding and shoring	1	LS	$20,000.00	$20,000
7	Dehumidification	Control interior environment for coating	1	LS	$30,000.00	$30,000
7	**DIVISION 2 - SITEWORK AND EXISTING CONDITIONS**					**$1,277,500**
8	Exterior Metal Surface Prep	Grind exterior welds, sharp edges smooth. Remove surface corrosion.	1	LS	$7,500.00	$7,500
9	Interior Metal Surface Prep	Grind interior welds, sharp edges smooth. Remove surface corrosion.	1	LS	$15,000.00	$15,000
10	Miscellaneous Surface Prep	Additional surface prep for nonstructural and appurtenant components	1	LS	$5,000.00	$5,000
11	Exterior Coating Prep	Hydroblast cleaning of exterior coatings and touchup prior to overcoat	5,000,000	Gal	$0.05	$250,000
12	Interior Coating Removal	Abrasive blasting of existing interior coatings, grit removal and disposal	5,000,000	Gal	$0.20	$1,000,000
12	**DIVISION 3 - CONCRETE**					**$25,200**
13	Replace Bearing Pad	Replace bearing pad with nonshrink epoxy grout pad	630	LF	$40.00	$25,200
13	**DIVISION 4 - MASONRY**					**$0**
13	**DIVISION 5 - METALS**					**$144,400**
14	Minor Exterior Corrosion Repairs	Removal of surface corrosion and minor patching of exterior surfaces	250	SF	$20.00	$5,000
15	Minor Interior Corrosion Repairs	Removal of surface corrosion and minor patching of interior surfaces	1,500	SF	$20.00	$30,000
16	Roof Rafter Minor Repairs	Removal of surface corrosion and minor patching at 25% roof framing	50	EA	$500.00	$25,000
17	Replace Select Roof Rafters	Replace approximately 5% of roof rafters (assumed W12x14)	5,000	LB	$6.00	$30,000
18	Replace Select Framing Hardware	Replace approximately 5% of roof rframing hardware (bolts)	1	LS	$10,000.00	$10,000
19	New Roof Handrailing	Install Cal-OSHA compliant roof handrailing at roof hatches	250	LF	$150.00	$37,500
20	5% Miscellaneous Steel	Contingent 5% miscellaneous steel for various plates, bolts, appurt. Etc.	1	LS	$6,900.00	$6,900
20	**DIVISION 6 - WOOD, PLASTICS AND COMPOSITES**					**$12,500**
21	New FRP Ladder	Replace interior ladder with new FRP Ladder	1	EA	$12,500.00	$12,500
21	**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**					**$0**
21	**DIVISION 8 - OPENINGS**					**$79,000**
22	Repair Roof Hatches	Repair roof hatch lifting mechanisms	2	EA	$2,000.00	$4,000
23	New Vents	Install (5) new roof vents	5	EA	$15,000.00	$75,000
23	**DIVISION 9 - FINISHES**					**$1,837,500**
24	Exterior Overcoat	New exterior overcoating	5,000,000	Gal	$0.10	$500,000
25	Interior Recoating	New interior coatings	5,000,000	Gal	$0.25	$1,250,000
26	5% Miscellaneous Coating	Contingent 5% miscellaneous coating for various plates, bolts, appurt. Etc.	1	LS	$87,500.00	$87,500
26	**DIVISION 10 - SPECIALTIES**					**$0**
26	**DIVISION 11 - EQUIPMENT**					**$0**
26	**DIVISION 12 - FURNISHINGS**					**$0**
26	**DIVISION 13 - SPECIAL CONSTRUCTION**					**$0**
26	**DIVISION 14 - CONVEYING SYSTEMS**					**$0**
26	**DIVISION 15 - MECHANICAL**					**$0**
26	**DIVISION 16 - ELECTRICAL**					**$0**
26	**DIVISION 17 - PROCESS INTRUMENTATION, CONTROLS AND MONITORING**					**$0**
		SUBTOTAL:				**$3,564,900**
		Engineering Design:			10.0%	$356,490
		Engineering Services During Construction (ESDC):			2.0%	$71,300
		Insurance:			4.0%	$142,600
		Bond:			1.5%	$53,480
		Contractor Overhead and Profit:			18.0%	$641,690
		Escalation:	0	year @	5.0%	$0
		PROJECT TOTAL:				**$4,830,460**
AACE Class:	4	**AACE CLASS 4 ESTIMATE:**	Low:	-30.0%		**$3,381,300**
	L: -15% to -30% H: +20% to +50%		High:	50.0%		**$7,245,700**

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KELSEY STRUCTURAL	8064 Allison Ave. No. 1706 La Mesa, CA 91942	Phone #: (619) 920-1262	*Project No.* 110-65	*Sheet No.*
Project City of El Centro Water and Sewer Master Plan			*Date* 6/13/2025	
Subject Engineer's Opinion of Probable Construction Cost	*Description* Structural Condition Assessment - La Brucherie Reservoir	*Submittal* -	*Prepared by* MS	*Checked by* DI

Bid Item	Description	Details	QTY	unit	Cost/unit	Cost
1	**DIVISION 1 - GENERAL REQUIREMENTS**					**$169,970**
2	General Conditions	Lump Sum	1	LS	$40,000.00	$40,000
3	Mobilization/Demobilization	(2%. Site access, equipment, rigging, formwork, scaffolding, etc.)	1	LS	$52,470.00	$52,470
4	Cleaning & Disinfection	Clean & disinfect all interior tank surfaces upon completion of work	1	LS	$7,500.00	$7,500
5	Construction Manway	Access Manway for Construction (stiffened and reused shell plate)	1	LS	$20,000.00	$20,000
6	Scaffolding/Shoring	Temporary scaffolding and shoring	1	LS	$20,000.00	$20,000
7	Dehumidification	Control interior environment for coating	1	LS	$30,000.00	$30,000
7	**DIVISION 2 - SITEWORK AND EXISTING CONDITIONS**					**$1,020,000**
8	Interior Metal Surface Prep	Grind interior welds, sharp edges smooth. Remove surface corrosion.	1	LS	$15,000.00	$15,000
9	Miscellaneous Surface Prep	Additional surface prep for nonstructural and appurtenant components	1	LS	$5,000.00	$5,000
10	Interior Coating Removal	Abrasive blasting of existing interior coatings, grit removal and disposal	5,000,000	Gal	$0.20	$1,000,000
10	**DIVISION 3 - CONCRETE**					**$19,200**
11	Replace Bearing Pad	Replace bearing pad with nonshrink epoxy grout pad	480	LF	$40.00	$19,200
11	**DIVISION 4 - MASONRY**					**$0**
11	**DIVISION 5 - METALS**					**$89,300**
12	Minor Interior Corrosion Repairs	Removal of surface corrosion and minor patching of interior surfaces	1,000	SF	$20.00	$20,000
13	Roof Framing Minor Repairs	Removal of surface corrosion and minor patching at roof framing	100	EA	$500.00	$50,000
14	New Roof Handrailing	Install Cal-OSHA compliant roof handrailing at roof hatches	100	LF	$150.00	$15,000
15	5% Miscellaneous Steel	Contingent 5% miscellaneous steel for various plates, bolts, appurt. Etc.	1	LS	$4,300.00	$4,300
15	**DIVISION 6 - WOOD, PLASTICS AND COMPOSITES**					**$12,500**
16	New FRP Ladder	Replace interior ladder with new FRP Ladder	1	EA	$12,500.00	$12,500
16	**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**					**$0**
16	**DIVISION 8 - OPENINGS**					**$0**
16	**DIVISION 9 - FINISHES**					**$1,312,500**
17	Interior Recoating	New interior coatings	5,000,000	Gal	$0.25	$1,250,000
18	5% Miscellaneous Coating	Contingent 5% miscellaneous coating for various plates, bolts, appurt. Etc.	1	LS	$62,500.00	$62,500
18	**DIVISION 10 - SPECIALTIES**					**$0**
18	**DIVISION 11 - EQUIPMENT**					**$0**
18	**DIVISION 12 - FURNISHINGS**					**$0**
18	**DIVISION 13 - SPECIAL CONSTRUCTION**					**$0**
18	**DIVISION 14 - CONVEYING SYSTEMS**					**$0**
18	**DIVISION 15 - MECHANICAL**					**$0**
18	**DIVISION 16 - ELECTRICAL**					**$0**
18	**DIVISION 17 - PROCESS INTRUMENTATION, CONTROLS AND MONITORING**					**$0**
		SUBTOTAL:				**$2,623,470**
		Engineering Design:			10.0%	$262,350
		Engineering Services During Construction (ESDC):			2.0%	$52,470
		Insurance:			4.0%	$104,940
		Bond:			1.5%	$39,360
		Contractor Overhead and Profit:			18.0%	$472,230
		Escalation:	0	year @	5.0%	$0
		PROJECT TOTAL:				**$3,554,820**
AACE Class:	4	**AACE CLASS 4 ESTIMATE:**	Low:	-30.0%		**$2,488,400**
	L: -15% to -30% H: +20% to +50%		High:	50.0%		**$5,332,200**

NOTES: This cost estimate is intended to be used for budgeting purposes only and is not a guarantee of the final cost of the project. The costs included reflect the items explicitly identified above.

KELSEY STRUCTURAL	8064 Allison Ave. No. 1706 La Mesa, CA 91942	Phone #: (619) 920-1262	*Project No.* 110-65	*Sheet No.*
Project City of El Centro Water and Sewer Master Plan			*Date* 6/13/2025	
Subject Engineer's Opinion of Probable Construction Cost	*Description* Structural Condition Assessment - Raw Water Ponds	*Submittal* -	*Prepared by* MS	*Checked by* DI

Bid Item	Description	Details	QTY	unit	Cost/unit	Cost
1	**DIVISION 1 - GENERAL REQUIREMENTS**					**$75,230**
2	General Conditions	Lump Sum	1	LS	$40,000.00	$40,000
3	Mobilization/Demobilization	(2%. Site access, equipment, rigging, formwork, scaffolding, etc.)	1	LS	$35,230.00	$35,230
3	**DIVISION 2 - SITEWORK AND EXISTING CONDITIONS**					**$142,500**
4	Pond No. 3 Concrete Demo	Demo of original sloping emb. concrete at Pond No. 3 (15' wide assumed)	15,000	SF	$5.00	$75,000
5	Pond No. 4 Concrete Demo	Demo of original sloping emb. concrete at Pond No. 4 (15' wide assumed)	13,500	SF	$5.00	$67,500
5	**DIVISION 3 - CONCRETE**					**$1,543,750**
6	Epoxy Crack Injection at Pond No. 1	Epoxy crack injection for cracks greater than 1/16" at Pond No. 1	500	LF	$125.00	$62,500
7	Epoxy Crack Injection at Pond No. 2	Epoxy crack injection for cracks greater than 1/16" at Pond No. 2	250	LF	$125.00	$31,250
8	Epoxy Crack Injection at Pond No. 3	Epoxy crack injection for cracks greater than 1/16" at Pond No. 3	100	LF	$125.00	$12,500
9	Epoxy Crack Injection at Pond No. 4	Epoxy crack injection for cracks greater than 1/16" at Pond No. 4	100	LF	$125.00	$12,500
10	New Sloping Embankment at Pond No. 3	Construct new 9" sloping concrete emb. where original was demo'd at Pond No. 3	15,000	SF	$50.00	$750,000
11	New Sloping Embankment at Pond No. 4	Construct new 9" sloping concrete emb. where original was demo'd at Pond No. 4	13,500	SF	$50.00	$675,000
11	**DIVISION 4 - MASONRY**					**$0**
11	**DIVISION 5 - METALS**					**$0**
11	**DIVISION 6 - WOOD, PLASTICS AND COMPOSITES**					**$0**
11	**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**					**$0**
11	**DIVISION 8 - OPENINGS**					**$0**
11	**DIVISION 9 - FINISHES**					**$0**
11	**DIVISION 10 - SPECIALTIES**					**$0**
11	**DIVISION 11 - EQUIPMENT**					**$0**
11	**DIVISION 12 - FURNISHINGS**					**$0**
11	**DIVISION 13 - SPECIAL CONSTRUCTION**					**$0**
11	**DIVISION 14 - CONVEYING SYSTEMS**					**$0**
11	**DIVISION 15 - MECHANICAL**					**$0**
11	**DIVISION 16 - ELECTRICAL**					**$0**
11	**DIVISION 17 - PROCESS INTRUMENTATION, CONTROLS AND MONITORING**					**$0**
		SUBTOTAL:				**$1,761,480**
		Engineering Design:			10.0%	$176,150
		Engineering Services During Construction (ESDC):			2.0%	$35,230
		Insurance:			4.0%	$70,460
		Bond:			1.5%	$26,430
		Contractor Overhead and Profit:			18.0%	$317,070
		Escalation:	0	year @	5.0%	$0
		PROJECT TOTAL:				**$2,386,820**
AACE Class:	4	**AACE CLASS 4 ESTIMATE:**	Low:	-30.0%		**$1,670,800**
	L: -15% to -30% H: +20% to +50%		High:	50.0%		**$3,580,200**

NOTES: This cost estimate is intended to be used for budgeting purposes only and is not a guarantee of the final cost of the project. The costs included reflect the items explicitly identified above.

KELSEY STRUCTURAL	8064 Allison Ave. No. 1706 La Mesa, CA 91942	Phone #: (619) 920-1262	*Project No.* 110-65	*Sheet No.*
Project City of El Centro Water and Sewer Master Plan			*Date* 6/13/2025	
Subject Engineer's Opinion of Probable Construction Cost	*Description* Structural Condition Assessment - Raw Water Pump Station	*Submittal* -	*Prepared by* MS	*Checked by* DI

Bid Item	Description	Details	QTY	unit	Cost/unit	Cost
1	**DIVISION 1 - GENERAL REQUIREMENTS**					**$42,520**
2	General Conditions	Lump Sum	1	LS	$20,000.00	$20,000
3	Mobilization/Demobilization	(10%. Site access, equipment, rigging, formwork, scaffolding, etc.)	1	LS	$22,520.00	$22,520
3	**DIVISION 2 - SITEWORK AND EXISTING CONDITIONS**					**$13,250**
4	Concrete Demo and Surface Prep	Demo of spalling and unsound concrete and surface cleaning/prep	250	SF	$50.00	$12,500
5	Demo Wood Planking	Demo of wood planking at platform extension	75	SF	$10.00	$750
5	**DIVISION 3 - CONCRETE**					**$140,000**
6	Top Slab Crack Repair	Epoxy crack injection for cracks greater than 1/16" at top slab	30	LF	$125.00	$3,750
7	Top Slab Spall Repair	Concrete repair mortar at top slab spalling (less than 1" thick)	50	SF	$125.00	$6,250
8	Pump Support Beam Spall Repair	Concrete repair mortar at pump support beam spalling (2" to 4" depth)	200	SF	$250.00	$50,000
9	Pump Support Beam Strengthening	FRP strengthening at pump support beams	200	SF	$400.00	$80,000
9	**DIVISION 4 - MASONRY**					**$0**
9	**DIVISION 5 - METALS**					**$29,375**
10	New Metal Planking	Install new metal planking/walkway at paltform extension	75	SF	$125.00	$9,375
11	Slab Grating Supports	Replace the slab grating supports at pump support beams	120	LF	$50.00	$6,000
12	Replace Pump Anchor Bolts	Replace corrorded pump anchor bolts	16	EA	$250.00	$4,000
13	Repair Pump Frames	Repair pump pedestal/frames for surface corrosion and enlarge for anchorage	4	EA	$2,500.00	$10,000
13	**DIVISION 6 - WOOD, PLASTICS AND COMPOSITES**					**$0**
13	**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**					**$0**
13	**DIVISION 8 - OPENINGS**					**$0**
13	**DIVISION 9 - FINISHES**					**$0**
13	**DIVISION 10 - SPECIALTIES**					**$0**
13	**DIVISION 11 - EQUIPMENT**					**$0**
13	**DIVISION 12 - FURNISHINGS**					**$0**
13	**DIVISION 13 - SPECIAL CONSTRUCTION**					**$0**
13	**DIVISION 14 - CONVEYING SYSTEMS**					**$0**
13	**DIVISION 15 - MECHANICAL**					**$0**
13	**DIVISION 16 - ELECTRICAL**					**$0**
13	**DIVISION 17 - PROCESS INTRUMENTATION, CONTROLS AND MONITORING**					**$0**
		SUBTOTAL:				**$225,145**
		Engineering Design:			10.0%	$22,520
		Engineering Services During Construction (ESDC):			2.0%	$4,510
		Insurance:			4.0%	$9,010
		Bond:			1.5%	$3,380
		Contractor Overhead and Profit:			18.0%	$40,530
		Escalation:	0	year @	5.0%	$0
		PROJECT TOTAL:				**$305,095**
AACE Class:	4	**AACE CLASS 4 ESTIMATE:**	Low:	-30.0%		**$213,600**
	L: -15% to -30% H: +20% to +50%		High:	50.0%		**$457,600**

NOTES: This cost estimate is intended to be used for budgeting purposes only and is not a guarantee of the final cost of the project. The costs included reflect the items explicitly identified above.

Appendix D
Staffing Plan

TECHNICAL MEMORANDUM – STAFFING STUDY

To:	Abraham Campos and Liz Zarate, City of El Centro
From:	Dudek
Subject:	Staffing Study for City of El Centro
Date:	October 23, 2025

This Technical Memorandum (TM) provides high level investigations and analysis to date, along with recommended next steps to support the City of El Centro (City) in evaluating staffing needs for the water, sewer, and engineering divisions of the City's Public Works Department.

1 Introduction

As part of the City of El Centro's Water and Sewer Master Plans and Rate Study, this staffing analysis has been developed to estimate the additional personnel required to support the City's objectives for effective management of its water and wastewater systems. The scope of work considered in this study includes routine maintenance activities such as pipeline cleaning, lift station and booster station inspections, closed-circuit television (CCTV) inspections, infrastructure rehabilitation and replacement, and operations and maintenance of the water amd wastewater treatment plants.

By expanding its workforce, the City aims to enhance system reliability and operational efficiency. This study also establishes a staffing framework for the divisions within the Public Works Department responsible for managing both water and sewer systems. Key staff groups include personnel at the Water Treatment Plant (WTP), Wastewater Treatment Plant (WWTP), Underground Utilities staff within the Streets and Utilities Division, and Engineering staff.

As a full-service municipality, the City of El Centro provides potable water and sanitary sewer services to approximately 43,000 residents within an 11-square-mile service area. The City oversees the treatment and distribution of drinking water at the El Centro Water Treatment Plant and the collection and treatment of wastewater at the El Centro Wastewater Treatment Plant. A summary of the City's major infrastructure assets is presented in **Table 1.**

Table 1. City of El Centro's Sewer System and Water System Assets

Facilities	Quantity
Sewer Collection System	
Gravity Mainlines	123 miles
Pressure Force Mains	6.4 miles
Lift Stations	15
WWTP	
Rated Capacity / Current Average Daily Flow	8 MGD / 3.5 MGD
Potable Water System	
Water Pipelines (transmission mains and distribution mains)	157 miles
Booster Stations	2
Storage Reservoirs/ Tanks	8

Facilities	Quantity
WTP	
Rated Capacity / Current Average Daily Production	21 MGD / 7.2 MGD

The following sections outline the methodology used to estimate staffing requirements to maintain the City's WTP, WWTP, sewer collection system, and potable water system.

Sources of data used for this analysis include:

- publicpay.ca.gov, a website that lists government compensation in the state of California
- Publicly listed agency NPDES permits
- Publicly listed agency organizational charts

2 Limitations of the Evaluation

Several limitations should be considered when interpreting the results of this staffing evaluation:

- A comprehensive staffing analysis is typically conducted by a financial consultant and includes detailed financial modeling and long-term budgeting, which were beyond the scope of this study.
- Complete staffing plans or evaluations were obtained from only one agency. Most of the data used in this analysis was gathered through online research and publicly available documents.
- The full scope of staffing roles and responsibilities across agencies was not assessed. For example, while staff in the City of El Centro's Wastewater Treatment Plant (WWTP) Division also maintain lift stations, other agencies may assign lift station operations to dedicated collection system staff.
- The extent to which neighboring agencies may be understaffed is unknown.
- Information regarding the implementation of 24/7 staffing rotations at comparable facilities is not available.
- Staffing levels are influenced by each agency's available funding, which varies based on numerous factors.
- Sewer System Management Plans (SSMPs), which often include organizational charts for sewer system staffing, were more readily available online than those for water system staffing. As a result, more detailed information was obtained for sewer-related staffing.

Given these limitations, the analysis presented herein is based on the best available data and is intended to provide a general framework for evaluating staffing needs.

3 Current Staffing Structure

The current organizational structure of the City of El Centro's Public Works Department is illustrated in **Figure 1**. The department is divided into six functional groups: Administration, Building and Facility Maintenance, Wastewater

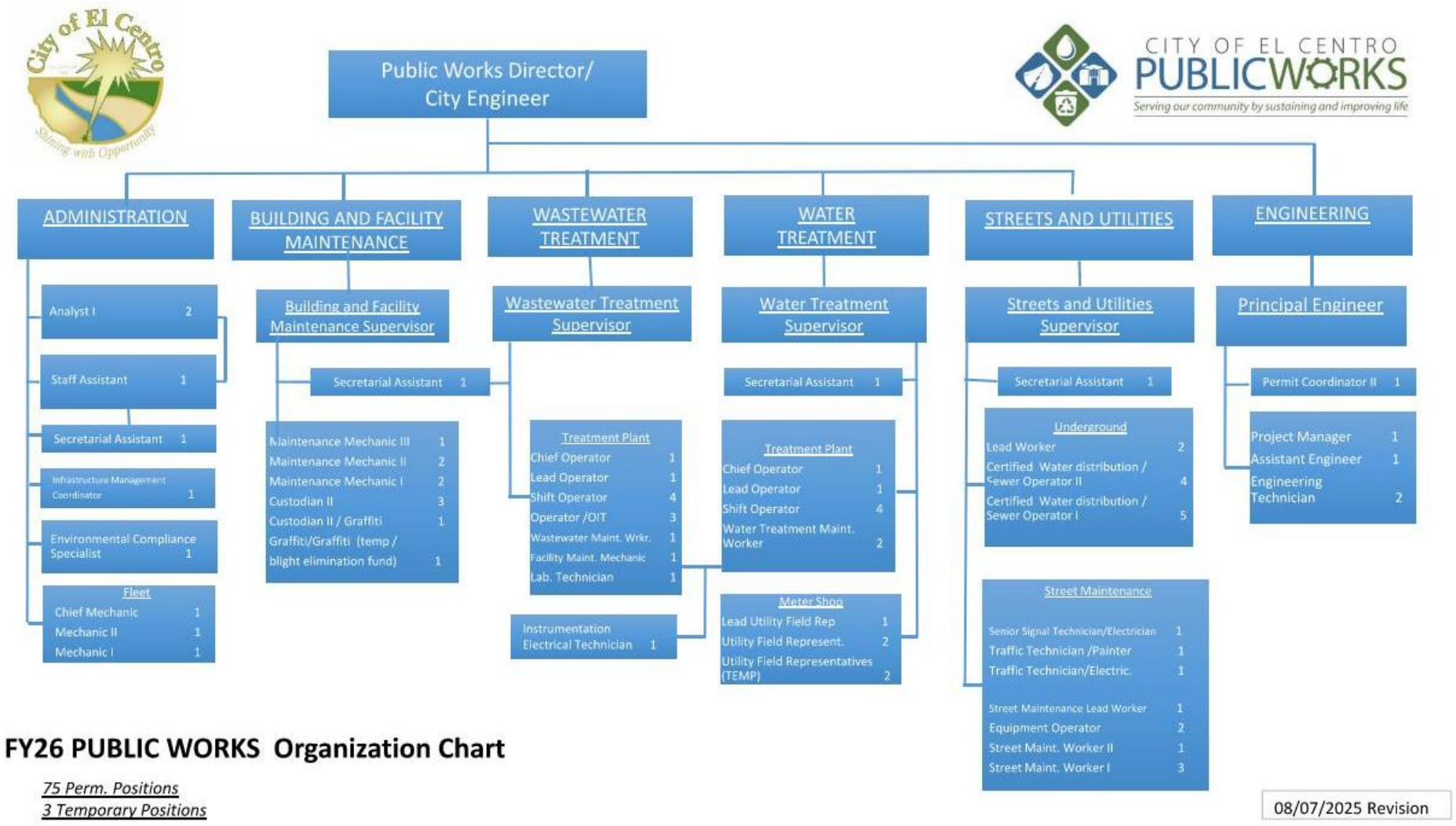
Treatment Plant (WWTP) staff (including lift station operations), Water Treatment Plant (WTP) staff, Streets and Utilities staff, and Engineering.

Table 2 outlines the number of full-time equivalents (FTEs) currently assigned to divisions responsible for maintaining the sewer collection and potable water distribution systems. Based on discussions with City staff, eight operators within the Streets and Utilities group are dedicated to the water system, while three operators are assigned to sewer system operations. Additionally, a single Instrumentation Electrical Technician supports both the WWTP and WTP teams.

Table 2. City of El Centro Public Works Department's Number of Full Time Employees

Department	Number of FTEs Currently
WWTP/Lift Station Staff	13
WTP Staff *WTP Operations Staff* *Meter Staff (included in WTP Group)* *Backflow Prevention*	13.5 *8* *5* *0.5*
Instrumentation Electrical Technician (shared between Water and Sewer)	1
Underground Utilities Staff – Water	8
Underground Utilities Staff – Sewer	3
Engineering	5
Administration (excluding Fleet Staff)	6

Figure 1. City of El Centro Public Works Department Organizational Structure



4 Staffing Studies

A review of El Centro's job description data was performed. The primary services of staff that maintain the sewer collection system are outlined in **Table 3. T**he services related to the maintenance of the potable water system are outlined in Table 4.

Table 3. City of El Centro Main Services for Maintenance of Sewer Collection System

Department	Services
WWTP Staff	• Inspects, operates, and maintains sewer lift stations, stormwater lift stations, and wastewater treatment plant facilities. • Ensures compliance with all local, state, and federal rules and regulations • Works to improve efficiency and effectiveness of operations. • Oversees and coordinates lift station operations and maintenance. • Confers with contractors, consultants, and the public on engineering and construction matters. • Prepares reports on public works projects. • Performs routine cleaning duties of City buildings and facilities. • Performs basic maintenance and repair of facilities and grounds by performing semi-skilled work involving plumbing, painting, electrical, mechanical and carpentry repairs. • Performs water quality and other laboratory testing for regulatory compliance, industrial waste source control, and plant process control; perform related responsibilities as required. • Performs specialized and skilled work in the design, construction, installation, calibration, and maintenance of electrical and instrumentation equipment at City's wastewater facilities.
Underground Utilities Staff – Sewer Operator	• Cleans, unplugs, maintains and services sewer lines • Operates backhoe, dump truck, skip loader, forklift, and other equipment • Install, taps, repairs, and relocates sewer lines
Instrumentation Electrical Technician	• Installs, maintains, troubleshoots, and repairs electronic components and instrumentation pertinent to the wastewater treatment process • Inspects and maintains medium voltage electrical power distribution equipment (i.e. switchgear, transformers, circuit breakers, selector switches, feeder cables, etc.)
Engineering	• Monitor and assess the condition of the sewer collection system, including pipelines, manholes, lift stations, and related infrastructure. • Coordinate routine inspections, cleaning, and emergency repairs. • Maintain GIS and asset management databases for sewer infrastructure. • Ensure compliance with local, state, and federal regulations (e.g., NPDES, SWRCB). • Collaborate with Operations and Maintenance teams to prioritize work orders and system upgrades. • Develop and manage the City's CIP for sewer and related infrastructure. • Prepare engineering designs, specifications, and cost estimates. • Oversee bidding, contracting, and construction management. • Track project budgets, schedules, and performance metrics. • Coordinate with consultants, contractors, and other departments.

Table 4. City of El Centro Main Services for Maintenance of Water Distribution System

Department	Services
WTP Staff	• Inspects, operates, and maintains water pump stations and water treatment plant facilities. • Ensures compliance with all local, state, and federal rules and regulations. • Works to improve efficiency and effectiveness of operations. • Oversees and coordinates pump station operations and maintenance. • Confers with contractors, consultants, and the public on engineering and construction matters. • Prepares reports on public works projects. • Performs routine cleaning duties of City buildings and facilities. • Performs basic maintenance and repair of facilities and grounds by performing semi-skilled work involving plumbing, painting, electrical, mechanical and carpentry repairs. • Performs water quality and other laboratory testing for regulatory compliance, and plant process control; perform related responsibilities as required. • Performs specialized and skilled work in the design, construction, installation, calibration, and maintenance of electrical and instrumentation equipment at City's water facilities.
Underground Utilities Staff – Water Operator	• Installs, taps, maintains, repairs, and relocates water lines • Monitors water pressure to ensure proper water flow to customers • Operates and maintains pump stations
Instrumentation Electrical Technician	• Installs, maintains, troubleshoots, and repairs electronic components and instrumentation pertinent to the water treatment process • Inspects and maintains medium voltage electrical power distribution equipment (i.e. switchgear, transformers, circuit breakers, selector switches, feeder cables, etc.)
Engineering	• Monitor and evaluate the performance of the water distribution system, including pipelines, valves, hydrants, reservoirs, and pump stations. • Coordinate routine inspections, repairs, and replacements to ensure system integrity and water quality. • Maintain and update GIS and asset management systems for water infrastructure. • Ensure compliance with state and federal drinking water regulations (e.g., SWRCB, EPA). • Collaborate with Operations staff to prioritize maintenance activities and emergency response. • Develop and manage the City's CIP for water infrastructure projects. • Prepare engineering designs, technical specifications, and cost estimates. • Oversee project bidding, contracting, and construction management. • Monitor project budgets, schedules, and performance metrics. • Coordinate with consultants, contractors, and other departments to ensure successful project delivery.

4.1 Methodology

To support the development of this staffing study, the following resources were reviewed:

- Organizational charts from various water and sewer service districts

- Staffing plans from peer agencies
- The City of El Centro's Sewer System Management Plan
- The City's ongoing Water and Sewer Master Plan
- Notes from interviews with City staff

The methodology for estimating staffing needs began with a review of organizational structures and staffing plans from multiple agencies to identify common workforce models. Staffing ratios relative to service area size and service volume were used as benchmarks to inform the recommended structure for the City of El Centro.

Key operational metrics from the City's Sewer System Management Plan and Water and Sewer Master Plans—including treatment capacity, production volumes, average flow rates, and total pipeline mileage—were incorporated into the analysis. These metrics served as scaling factors and were applied to peer agency staffing ratios to estimate the City's FTE staffing requirements.

4.2 Sewer System Staffing Analysis

4.2.1 WWTP Staff

For the Wastewater Treatment Plant staffing analysis, similar agencies and municipalities were compared based on the capacity (MGD) of their WWTPs and their average daily flows. These comparisons are presented in **Table 5**. **Figures 2** and **3** compare FTEs for various agencies against WWTP average daily flows and wages, respectively. Note that while the City of El Centro includes lift station maintenance in the WWTP staff, most agencies utilize collection system staff for lift station maintenance, resulting in El Centro's WWTP staffing being proportionately higher.

Table 5. Number of Wastewater Operators in Various Districts

Agency	Lift Station Count	Average Daily Dry Weather Flow (MGD)	Number of FTEs in WWTP	FTEs per WWTP Flow (persons/ MGD)	Wages ($)[1]	Population Served
Novato Sanitary District	2	7	10	1.4	1,166,664	60,000
City of Imperial	0	2.4	6	2.5	1,551,074	22,866
City of Coachella	1	4.5	8	1.7	788,269	345,056
City of Brawley	3	5.9	8	1.4	448,153	28,952
City of Calexico	0	4.3	7	1.6	551,502	40,073
City of Petaluma	9	6.7	28	4.2	3,490,673	59,094

Agency	Lift Station Count	Average Daily Dry Weather Flow (MGD)	Number of FTEs in WWTP	FTEs per WWTP Flow (persons/ MGD)	Wages ($)[1]	Population Served
City of El Centro	15	3.5	13	3.7	937,256	44,000

Note:

[1] Wage values per publicpay.ca.gov.

Figure 2. Full Time Equivalent Staff Members Relative to Average Daily Dry Weather Flow

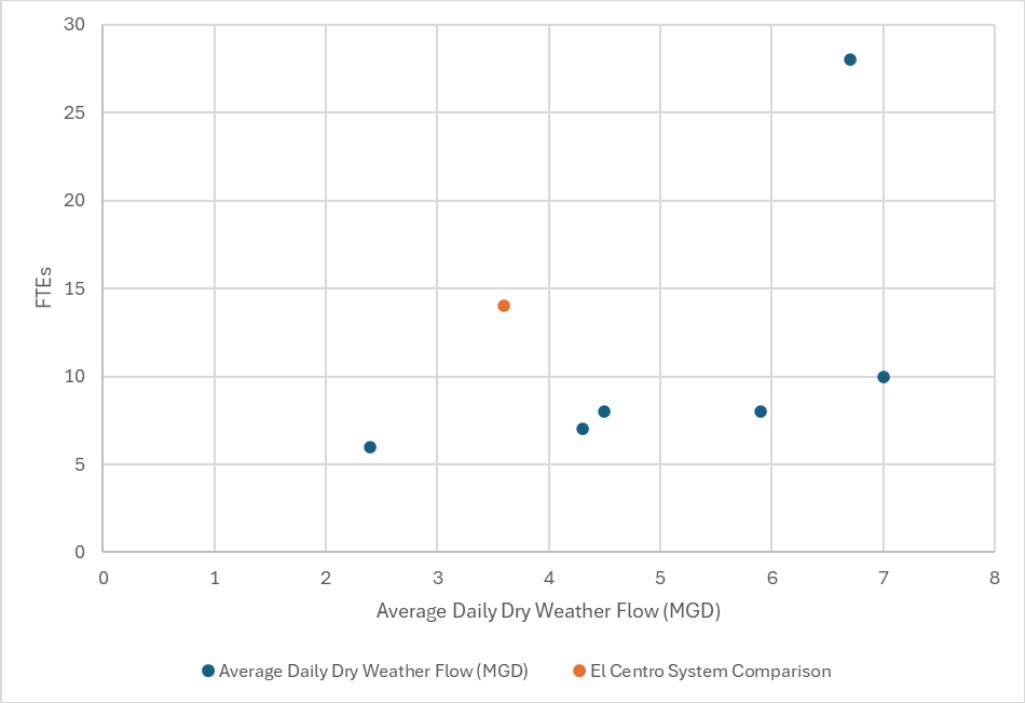
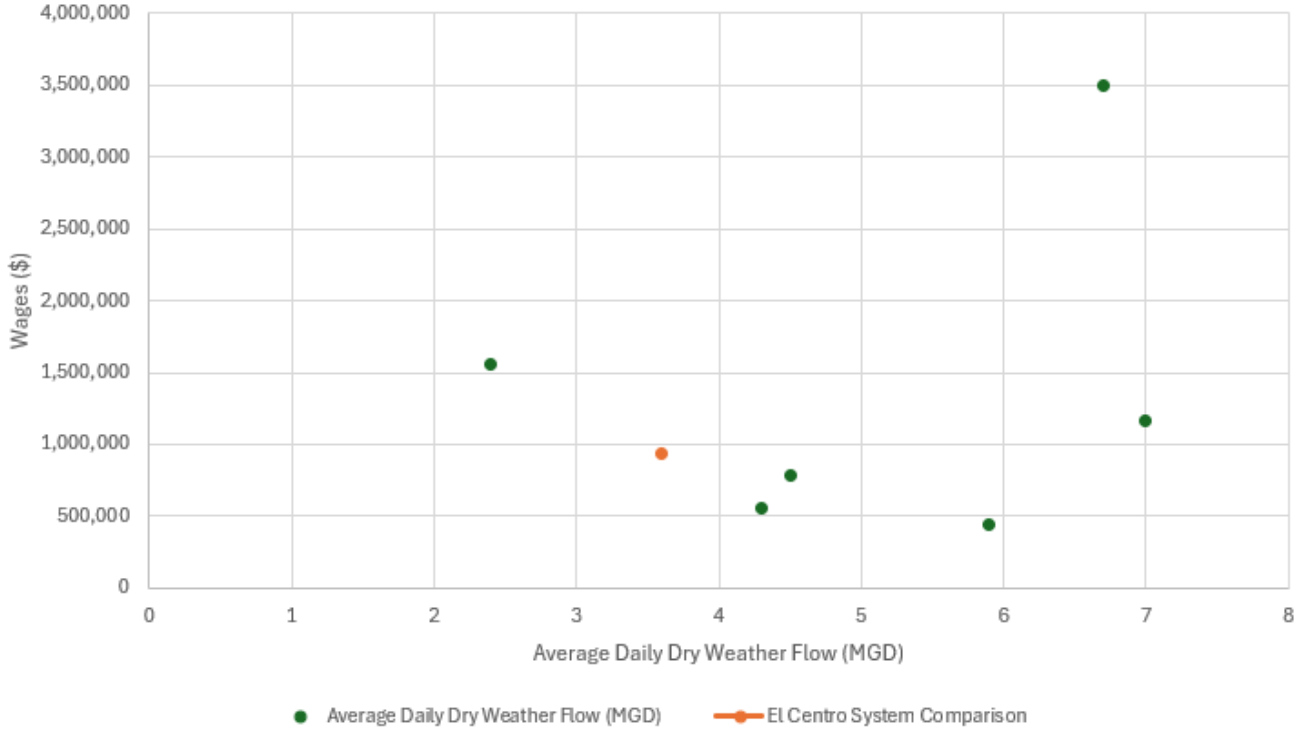


Figure 3. Staff Wages Relative to Average Daily Dry Weather Flow



El Centro's projected 2045 average dry weather flow of 4.7 MGD and peak wet weather flow of 9 MGD require a workforce capable of managing routine operations as well as high-flow events. Comparative analysis with other municipalities indicates that El Centro's staffing levels are within the typical range of staffing observed in similar municipalities, but given El Centro's larger quantity of lift stations, an additional operator with a mechanical technologist certificate as well as a dedicated instrumentation electrician technician is recommended, as shown in **Table 6**.

Table 6. Current and Recommended WWTP FTEs in El Centro

Current Staffing and Productivity	
Lift Station Count	8
Current Average Dry Weather Flow (MGD)	3.5
Current Peak Wet Weather Flow (MGD)	8.0
Current WWTP Operations and Maintenance FTEs	13
Current Instrumentation Electrical Technicians	0.5 (shared with WTP)

Recommended Future Staffing and Productivity	
Projected Dry Weather Flow (MGD)	4.7
Projected Peak Wet Weather Flow (MGD)	9.0
Recommended WWTP Operations & Maintenance FTEs	14
Recommended WWTP Instrumentation Electrical Technicians	1 (dedicated to WWTP)

4.2.2 Sewer Collection System Staff

To conduct a staffing analysis specifically for the maintenance of the sewer system, CCTV inspection and cleaning requirements will be reviewed to determine the staffing needs for each task. This analysis also considers the number of days staff are available throughout the year, as detailed in **Table 7.**

Table 7. Annual Crew Availability

Workday Availability		Notes
Days Available/Year/Crew	260	5 days a week for 52 weeks
Allowance for Benefits (15%)	39	12 holidays, 10 sick, 3 weeks (17 days) paid vacation
Allowance for Field Resolution (15%)	39	Equipment down time
Allowance for Special Events (5%)	13	Trainings, meetings
Net Annual Available Days/Crew	169	

According to the City's SSMP, the goal is to CCTV inspect 20% of the sewer system each year in order to meet their goal of inspecting the entire system, 157 miles or 828,960 linear feet (LF), every five years. Currently, inspections are done on an as-needed basis and are conducted manually by CCTV camera crews, with an assumed production rate of 1,000 linear feet (LF) per day. This rate is a standard estimate used to calculate staffing needs based on crew availability throughout the year. **Table 8** outlines the assumptions used to determine the number of additional staff required.

The City also plans to purchase a CCTV inspection truck within the next five to ten years. Once implemented, this automated method is expected to significantly increase the inspection production rate.

Table 8. Recommended CCTV Crew Staffing

System Overview	
Total System Length (LF)	828,960
Annual CCTV Inspection Goal (%)	20[1]
Annual CCTV Inspection Goal (LF)	165,792
Required CCTV Production Rate (LF/day)	981[2]
Staffing & Productivity	
Assumed Production Rate (LF/day)	1000
Number of days needed in a year to accomplish annual inspection goal at 1000 LF/day	166
Net Annual Available Days/Crew	169[3]
Required Crews	1[4]

Notes:
[1] Assuming the entire system is cleaned every five years.
[2] Annual CCTV inspection goal (LF) divided by the net annual available days per crew from Table 7.
[3] Calculated in Table 7.
[4] One crew is assumed to be made up of two people for this analysis.

Using the same approach as outlined for CCTV inspections, the City plans to reach their goal of cleaning the entire system every 5 years by cleaning 20% of the system each year, along with cleaning 125,000 LF of enhanced maintenance areas annually. A standard, yet conservative, cleaning production rate of 1,500 linear feet per day was used in **Table 9** to estimate the staffing requirements necessary to meet this goal.

Table 9. Recommended Cleaning Crew Staffing

System Overview	
Total System Length (LF)	828,960
Annual Cleaning Goal (%)	20[1]
Annual Cleaning Goal (LF)	165,792
Annual Cleaning Goal of Enhanced Maintenance Areas (Hot Spots) (LF)	125,000
Required Cleaning Production Rate (LF/day)	1,721[2]
Staffing & Productivity	
Assumed Production Rate (LF/day)	1,500
Number of days needed in a year to clean the entire system at 1000 LF/day	194
Net Annual Available Days/Crew	169[3]
Required Crews	**1.5 to 2**[4]

Notes:
[1] Assuming the entire system is cleaned every five years.
[2] Annual cleaning goal (LF) plus annual cleaning goal of enhanced maintenance areas (LF) divided by the net annual available days per crew from Table 7.
[3] Calculated in Table 7.
[4] Two crews is assumed to be made up of four people for this analysis.

Table 10 presents the final sewer collection system staffing recommendations, based on Tables 8 and 9.

Table 10. Summary of Staffing Requirements

Current Crews Staffed for both CCTV inspection and Cleaning	1.5
Required Number of Crews Total for both CCTV inspection and Cleaning	2.5 to 3
Additional 2-Person Crews Needed	**1 to 1.5** (2-3 people)

Based on the findings in Tables 7 through 10, the staffing requirement for CCTV inspections alone is one crew consisting of two people. Sewer system cleanings require two crews of two people. Currently, 1.5 crews, or three staff members, are dedicated to sewer system maintenance. To meet the City's goals of inspecting and cleaning 20 percent of the entire system annually and clean all their enhanced maintenance areas annually, it is recommended that staffing be increased to 2.5 to three full crews, totaling five to six people. Therefore, it is recommended two to three new staff members are hired for the sewer collection system maintenance team.

In addition to reviewing the City's cleaning and CCTV inspection requirements, **Table 11** below outlines the number of sewer operators by comparable city agencies and districts, or their recommended staffing levels. These figures were scaled and compared to the size of City of El Centro's sewer system to assess staffing adequacy.

Table 11. Number of Sewer Collection System Staff in Various Districts

Agency	Population Served	Size of Sewer Distribution System (miles)	Number of FTEs in Sewer Distribution Division	Miles of Collection System per FTE
Novato Sanitary District	60,000	235	7	33.5
Coachella Sanitary District	345,056	107	6	17.8
City of Placentia	52,000	84	7	12
City of Laguna Beach	22,723	98	8	12.3
City of El Centro	44,000	123	3	41

As shown in Table 11., Coachella Sanitary District's staffing plan recommends employing six full-time staff, including sewer operators and crew supervisors, to maintain a 107-mile system. In contrast, the City of El Centro operates a larger system spanning 157 miles, with only three operators currently assigned to its maintenance. Other cities, including Placentia and Laguna Beach, manage smaller systems of 84 and 98 miles respectively, yet employ seven and eight sewer distribution operators. The table also presents the ratio of system miles per full-time employee (FTE), highlighting that El Centro has the highest ratio at 41 miles per FTE, indicating the greatest workload per staff member among the cities compared. Based on these comparisons, it is recommended that the City of El Centro hire two to three additional full-time employees, bringing the total to five or six, to adequately support the maintenance of its sewer collection system, which supports the findings in Table 10.

4.2.3 Sewer Staffing Summary

Table 12 summarizes the total number of full-time employees needed to maintain both the sewer collection system and the WWTP, based on the analysis in Section 4.2. Based on the analysis of the sewer collection system maintenance requirements and the organizational charts for the WWTP staff, it is recommended that the City staff a total of 13 employees for the WWTP, five to six operators for sewer collection system maintenance, and one dedicated WWTP Instrumentation Electrical Technician.

Table 12. Summary of Total Recommended Full Time Employees for City of El Centro's Sewer System

Department	Current Number of FTTs	Recommended Additional FTEs	Recommended Total FTEs
WWTP Staff	13	1	14
Instrumentation Electrical Technician	0.5	0.5	1
Underground Utilities Staff (Sewer Operators)	3	2 to 3	5 to 6

4.3 Water System Staffing Analysis

4.3.1 WTP Staff

El Centro currently staffs 13 FTEs to operate its 21 MGD capacity Water Treatment Plant. This includes 8 FTEs to staff the WTP and 5 FTEs for the meter shop. The WTP is currently operating with one 8-hour shift, though the City anticipates the State of California to require staffing 16-hours per day in the next five years. Maybe WTPs in California operate with 24-hour staffing. To assess the adequacy of this staffing level, a comparative analysis was conducted using the methodology outlined in Section 4.1. This approach involved benchmarking El Centro's staffing against similar sized municipal water treatment facilities, as shown in **Table 13.** The staffing of the WTP is noted in the table, if known. The comparison reveals that municipalities with smaller treatment capacities often maintain similar or even higher staffing levels. The average FTEs per MGD of WTP Capacity for the comparison agencies is 1.06, with the City of El Centro operating at a ratio of 0.4. This value indicates that increased staffing at the plant

at the current 8-hour staffing would be supportive. To accommodate the anticipated regulatory-required shift from a single 8-hour schedule to 16-hour or 24-hour operations, a WTP staffing increase from the current 8 FTEs to up to 11 FTEs for the current 8-hour staffing and up to 22 FTEs for 16- to 24-hour staffing is justifiable. Additionally, a dedicated Instrumentation Electrical Technician is also justified. This adjustment would bring El Centro's staffing levels in line with regional norms and ensure sufficient personnel to maintain safe, efficient, and compliant operations.

Table 13. Number of Water Treatment Plant Staff in Various Districts

Agency/WTP (Staffed hours)	WTP Rated Capacity (MGD)	Number of FTEs in WTP	FTEs per MGD Capacity	Wages ($)[1]	Population Served
City of Imperial (8-hrs)	7	8	1.1	535,991	22,866
City of Corona	11.5	23	2	1,928,795	160,000
City of Calexico (24-hrs)	14	11	0.8	1,040,035	40,073
City of Brawley (18-hrs)	15	11	0.7	721,032	28,952
Baker Water Treatment Plant	28.1	20	0.7	3,120,175	183,000
City of El Centro (8-hrs)	21	8	0.4	957,559	44,000

Note:

[1] Wage values per publicpay.ca.gov.

The City currently staffs five FTEs in the meter shop—three permanent and two temporary employees. Based on operational needs and input from City staff, it is recommended that the meter program transition to six permanent full-time positions. This change would eliminate reliance on temporary staffing and enhance consistency, reliability, and long-term operational support.

For the backflow prevention program, the City currently relies on one part-time employee. To effectively manage hazard assessments, inspections, and regulatory compliance, it is recommended that the program be staffed with two additional FTE positions. This level of staffing would ensure consistent oversight and reduce the need for contracted support in critical public health and safety functions.

If additional support is required for backflow prevention and hazard assessment activities, the City may supplement its workforce with outside contractors. While comparative staffing data from peer agencies was not available, the City's stated operational needs support the recommendation for these additional FTEs. Should the two recommended backflow prevention FTEs not be approved, the City plans to allocate equivalent funding toward contracted services to maintain program continuity.

4.3.2 Water Distribution System Staff

Using the methodology outlined in Section 4.1, organizational charts from various districts were analyzed and scaled to align with the City of El Centro's system. This approach was used to help determine the appropriate number of water distribution system operators needed. Some comparisons were made with districts significantly larger than El Centro due to limited data from similarly sized agencies. Nevertheless, ratios were applied to adjust for El Centro's scale and ensure a more accurate analysis. **Table 14** below summarizes the number of operators employed by comparable city agencies and districts as compared to the City of El Centro.

Table 14. Number of Water Distribution Staff in Various Districts

Department	Population Served	Size of Water Distribution System (miles)	Number of FTEs in Water Distribution Division	Miles of Distribution Pipeline per FTE
Calexico	38,000	106	6	18
City of Lomita	20,175	46	4	11.5
Brawley	28,000	75	2	38
Coachella Valley Water District	260,000	2,075	6	346
City of Corona	160,000	800	9	89
City of El Centro	44,000	157	8	20

The City of El Centro currently employs eight water distribution system operators, organized into two crews of four, to maintain its 157-mile water distribution system. Based on comparative data presented in Table 14, other water systems with significantly greater pipeline mileage operate with either fewer personnel or only one additional staff member. El Centro's ratio of system miles per FTE is on the low end at 20. This suggests that the City's current staffing level for water distribution system maintenance is generally appropriate for the size of its system.

In addition to staffing for water distribution system maintenance, valve maintenance is an important operational responsibility of waterline distribution staff. The City's goal is to perform maintenance on all valves within the system annually. However, Table 14 does not clarify whether the staff included in the counts for comparison agencies are specifically assigned to valve maintenance or if a separate division is responsible for this task. Given the substantial effort required for both water distribution and valve maintenance, it is reasonable to assume that the staffing figures reflect only water distribution personnel, although this cannot be confirmed.

For example, Coachella Sanitary District employs 6 people for a water distribution system consisting of 2,000 miles of pipeline. This would result in a considerable about of valves requiring maintenance. It is unknown whether or not the valve maintenance staff is included in this count or is part of a separate department or division.

Last year, only 40 percent of the valves received maintenance due to limited staffing. Although the City did not provide specific data on the total number of valves or a detailed maintenance schedule, staff have indicated through their operational knowledge and experience that two additional personnel would be necessary to meet the annual maintenance goal. Therefore, it is recommended that two full-time water operators be added, dedicated specifically to valve maintenance.

4.3.3 Water Staffing Summary

Table 15 summarizes the total number of full-time employees needed to maintain the WTP, the water distribution, the meter shop and the backflow prevention program, based on the analysis in Section 4.3. Based on the findings, it is recommended that the City staff an additional 3 to 14 employees for the WTP, three permanent FTE positions for the meter shop (eliminating the two temporary positions), two backflow prevention staff, and one dedicated WWTP Instrumentation Electrical Technician.

Table 15. Summary of Total Recommended Full Time Employees for City of El Centro's Water System

Department	Current Number of FTEs	Recommended Additional FTEs	Recommended Total FTEs
WTP Staff[1]	11.5	8 / 17	19.5 to 30.5
WTP Only (8-hr/16+hr shifts)	*8*	*3 / 14*[1]	*11 / 22*
Meter Shop	*3*[2]	*3*	*6*
Backflow Prevention Program	*0.5*	*2*	*2.5*
Underground Utilities Staff (including Water Operators)	8	2	10
Dedicated Instrumentation Control Electrician	0.5	0.5	1

Note:
[1] WTP staffing recommendations offered for both 8-hour and 16+hr staffing options.
[2] Currently the City has 5 total meter staff, including 3 permanent staff and 2 temporary staff. The City would like all meter staff to be permanent.

4.4 Engineering and Administration Staff

Following the methodology outlined in Section 4.1, organizational charts from various districts were reviewed and scaled to align with the City of El Centro's organizational structure. The City's Engineering Department oversees a water distribution system spanning 157 miles, including 2 booster stations and 7 storage reservoirs, as well as a sewer collection system of approximately 130 miles and 15 lift stations for approximately 44,000 residents. The City's Engineering Department is not dedicated to utilities projects; it also oversees roads projects, development projects, grants and more. To ensure the City's water and sewer systems are effectively maintained and that rehabilitation and replacement projects remain on schedule, it is essential that the Engineering Department is adequately staffed. **Table 16** below summarizes the number of employees in the engineering department employed by comparable city agencies and districts.

The City of El Centro currently employs five staff members in its engineering division, with two being dedicated to water and sewer utilities projects and the remaining three concentrating primarily on roads projects. As shown in Table 16, this staffing level of two utilities engineers appears low when compared to other similar sized agencies. For example, Novato Sanitary District and the Cities of Placentia and Laguna Beach manage approximately 15 to 21 miles of system per Engineering FTE while the City of El Centro is managing closer to 145. The average of the four comparative agencies included in Table 16 is 92 miles per Engineering FTE.

Many agencies also utilize outside consultants to augment engineering staff. The availability of outside consultants varies by location. Due to the more remote location of the City of El Centro, the City may seek to be generally more self-sufficient. To effectively manage both the water and sewer systems, and specifically to support water and sewer CIP projects, additional Engineering FTEs would support the City. Based on comparative analysis, it is recommended the City hire between 1 and 5 additional Engineering FTEs dedicated to water and sewer utilities work.

Table 16. Number of Employees in Engineering Division in Various Districts

Department	Population Served	Size of Sewer Collection System (miles)	Size of Water Distribution System (miles)	Number of FTEs in Engineering Division	Total Miles of Systems per FTE
City of Corona (Utilities Only)	160,000	444	800	4	311
Novato Sanitary District	60,000	235	N/A	16	15
City of Placentia[1]	52,000	84	N/A	4	21
City of Laguna Beach[1]	22,723	100	N/A	5	20
City of El Centro (Utilities Only)[2]	44,000	130	157	2	143.5

Notes:
[1] Water service for the Cities of Placentia and Laguna Beach is provided by other agencies. These cities manage their sewer collection systems only.
[2] While the City of El Centro Engineering Department consists of five FTEs, only two are dedicated to the water and sewer systems, while the remaining three handle roads projects and other work.

The City currently has six non-fleet administrative FTEs that support the Engineering Department. While data on administrative staffing was not available for comparative agencies, to support the additional FTEs in the Engineering Department, an additional one to two administrative staff would be beneficial.

5 Conclusions and Recommendations

To continue delivering high-quality services to the City of El Centro and to further enhance public health and safety, the following recommendations are provided to help the City address both current and future challenges. Based on the staffing study conducted and considering the number of existing employees in each department, **Table 17** identifies the additional personnel needed beyond the City's current staffing levels. A total of up to 31 additional FTEs would support the City in improved water and sewer systems operation.

Table 17. Summary of Recommended Additional FTEs

Department	Number of FTEs Currently	Recommended Additional FTEs	Recommended Total FTEs
WWTP/LS Staff	13	1	14
WTP Staff *WTP Operations Staff (8-hr/16+hr)*[1] *Meter Staff* *Backflow Prevention*	11.5 *8* *3*[2] *0.5*	8 to 19 *3 / 14* *3* *2*	19.5 to 30.5 *11 / 22* *6* *2.5*
Instrumentation Electrical Technicians (Total between Water and Sewer)	1	1	2
Underground Utilities Staff – Water	8	2	10
Underground Utilities Staff – Sewer	3	2 to 3	5 to 6
Engineering	5	1 to 5	6 to 10
Administration (excluding Fleet staff)	6	1 to 2	7 to 8

Note:
[1] Recommendations for WTP Operations staff provided for current (8-hour) staffing as well as the anticipated increase to 16-hour or even 24-hour staffing in the future.
[2] Currently the City has 5 total meter staff, including 3 permanent staff and 2 temporary staff. The City would like all meter staff to be permanent.

City Council of the City of El Centro
1275 W. Main Street
El Centro, CA 92243
SUBMITTED
ACTION ITEM (ID # 2026-6)

Item: 16.
Meeting: 1/20/2026 3:30 PM
Department: City Clerk
Category: Informational Items
Prepared by: Norma Valenzuela, Secretarial Assistant
Department Head: Norma Wyles
DOC ID: 2026-6

Received and referred to Community Development Department, Application for Alcoholic Beverage License — El Centro Fueling Inc., El Centro Fueling Inc. 3003 S 4th St. El Centro, Ca 92243

CITY MANAGER'S RECOMMENDATION:

FISCAL IMPACT:

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

BACKGROUND:

DISCUSSION:

CONCLUSION:

ATTACHMENTS:

1. Application for Alcoholic Beverage License El Centro Fueling Inc

Department of Alcoholic Beverage Control — State of California

APPLICATION FOR ALCOHOLIC BEVERAGE LICENSE

ABC 211 (6/99)

TO: Department of Alcoholic Beverage Control
34-160 GATEWAY DR.
STE 120
PALM DESERT, CA 92211
(760) 324-2027

File Number: **675953**
Receipt Number: **3071742**
Geographical Code: **1304**
Copies Mailed Date: **January 6, 2026**
Issued Date:

RCVD CITY CLERK'S
JAN 9 '26 AM9:40

DISTRICT SERVING LOCATION: **PALM DESERT**

First Owner: **EL CENTRO FUELING INC**

Name of Business: **EL CENTRO FUELING INC**

Location of Business: **3003 S 4TH ST**
EL CENTRO, CA 92243

County: **IMPERIAL**

Is Premises inside city limits: **Yes** Census Tract: **0118.03**

Mailing Address: (If different from premises address) **1347 BROADWAY**
EL CAJON, CA 92021-5811

Type of license(s): **21** Dropping Partner: Yes___ No___

Transferor's license/name: **438028 / THRIFTY PAYLESS, INC.**

License Type	Transaction Type	Master	Secondary LT And Count
21 - Off-Sale General	PER/PRM	Y	

License Type	Transaction Description	Fee Code	Dup	Date	Fee
Application Fee	DBL TRF: PREMISES AND PERSON	NA	0	01/06/26	$1,525.00
Application Fee	FEDERAL FINGERPRINTS	NA	4	01/06/26	$96.00
Application Fee	STATE FINGERPRINTS	NA	4	01/06/26	$156.00
21 - Off-Sale General	ANNUAL FEE	NA	0	01/06/26	$984.00
				Total	$2,761.00

Have you ever been convicted of a felony? **No**
Have you ever violated any provisions of the Alcoholic Beverage Control Act, or regulations of the Department pertaining to the Act? **Yes**

STATE OF CALIFORNIA County of IMPERIAL Date: January 6, 2026

Applicant Name(s)

EL CENTRO FUELING INC

Received and referred to Community Development Department, Application for Alcoholic Beverage License — Casino Azul LLC 1510 Chophouse 1510 Adams Ave El Centro, CA 92243-1902

CITY MANAGER'S RECOMMENDATION:

FISCAL IMPACT:

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

BACKGROUND:

DISCUSSION:

CONCLUSION:

ATTACHMENTS:

1. Application for Alcoholic Beverage License Casino Azul LLC

Department of Alcoholic Beverage Control | State of California

APPLICATION FOR ALCOHOLIC BEVERAGE LICENSE

ABC 211 (6/99)

RCVD CITY CLERK'S JAN 12 '26 AM11:23

TO: Department of Alcoholic Beverage Control
34-160 GATEWAY DR.
STE 120
PALM DESERT, CA 92211
(760) 324-2027

File Number: **672221**
Receipt Number: **3072421**
Geographical Code: **1304**
Copies Mailed Date: **January 8, 2026**
Issued Date:

DISTRICT SERVING LOCATION: **PALM DESERT**

First Owner: **CASINO AZUL LLC**

Name of Business: **1510 CHOPHOUSE**

Location of Business: **1510 ADAMS AVE**
EL CENTRO, CA 92243-1902

County: **IMPERIAL**

Is Premises inside city limits: **Yes** Census Tract: **0112.02**

Mailing Address:(If different from premises address): **PO BOX 635**
ALPINE, CA 91903-0635

Type of license(s): **47** Dropping Partner: Yes___ No___

Transferor's license/name:

License Type	Transaction Type	Master	Secondary LT And Count
47 - On-Sale General Eating Place	ORI	Y	

License Type	Transaction Description	Fee Code	Dup	Date	Fee
Application Fee	ADD PRIMARY LICENSE TYPE	NA	0	09/16/25	$19,315.00
47 - On-Sale General Eating Plac	ANNUAL FEE	P40	0	01/08/26	$1,545.00
				Total	$20,860.00

Have you ever been convicted of a felony? **No**
Have you ever violated any provisions of the Alcoholic Beverage Control Act, or regulations of the Department pertaining to the Act? **No**

STATE OF CALIFORNIA County of IMPERIAL Date: September 12, 2025

Applicant Name(s)

CASINO AZUL LLC

PRIORITY WINNER RANK #1

Certificate of Mailing Notice of Application to the City, County and Municipal Governmental Agencies. Southern California Gas Company.

CITY MANAGER'S RECOMMENDATION:

FISCAL IMPACT:

STRATEGIC PLANNING PROGRAM 2022-2027 RELATION:

DUE DILIGENCE CHECK FOR CONTRACTORS/CONSULTANTS: DID THE DEPARTMENT VERIFY CURRENT EL CENTRO BUSINESS LICENSE, CONTRACTOR'S LICENSE, REFERENCE CHECKS, INSURANCE, ETC.:

BACKGROUND:

DISCUSSION:

CONCLUSION:

ATTACHMENTS:

1. Certificate of Mailing Notice of Application to the CIty, County

RCVD CITY CLERK'S
JAN 9 '26 AM9:40

STATE OF CALIFORNIA)
)
)
COUNTY OF SAN DIEGO)

Certificate of Mailing Notice of Application To the City, County and Municipal Governmental Agencies

I hereby certify that a Notice of Application made by Southern California Gas Company Regarding Authorization to Implement Revenue Requirement for Advanced Meter Infrastructure Replacement Project. Application No.25-12-019, was mailed First Class - US Mail on January 6, 2026, to all the appropriate state, county and municipal governmental agencies appearing on the current rooster.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct of my own personal knowledge.

Executed at San Diego, California this 6th day of January 2026.

Martha Cendejas
Name (Sign)

Martha Cendejas
Name (Print)

Regulatory Affairs Analyst
Title

Para más información sobre esta reunión pública, y cómo este cambio impactará su factura, llame al 1-800-342-4545

NOTICE OF SOUTHERN CALIFORNIA GAS COMPANY RATE INCREASE REQUEST SOUTHERN CALIFORNIA GAS COMPANY'S (SOCALGAS) ADVANCED METER INFRASTRUCTURE REPLACEMENT PROGRAM APPLICATION TO THE CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC) APPLICATION FILING A.25-12-019.

WHAT IS BEING REQUESTED?

SoCalGas is requesting an increase in revenue of approximately $3,700 million over the life of its Advanced Meter Infrastructure Replacement (AMIR) Project, beginning as early as 2027, which would provide for a planned, systemwide replacement of SoCalGas's existing AMI system which is reaching end of life and becoming obsolete.

Customer Class	$ Increase	% Increase
Residential ¢/th	14.041 ¢	9.4%
Commercial ¢/th	1.210 ¢	1.2%
Natural Gas Vehicles ¢/th	0.009 ¢	0.0%
Large Industrial (distribution level service) ¢/th	0.006 ¢	0.0%
Large Industrial (transmission level service) ¢/th	0.000 ¢	0.0%
System Total ¢/th	**3.824 ¢**	**5.9%**

(Continued inside)

HOW WOULD THIS IMPACT THE AVERAGE RESIDENTIAL CUSTOMER?

If the request is approved, the average residential customer using 36 therms per month would see a rate increase of approximately $5.10 per month. This increase will be phased in beginning 2027 through 2033. The actual impact will vary based on usage, baseline territory, and other factors.

ADDITIONAL INFORMATION

An administrative law judge will hold hearings, consider evidence, testimony, and public comments before drafting a proposed decision on this application. CPUC Commissioners will then vote on a final decision at a public meeting.

CONTACT CPUC

You can read more about the utility's request and make public comment by visiting **apps.cpuc.ca.gov/c/A2512019**.

For questions about participating in CPUC matters, you can contact the Public Advisor's Office at:

Phone: 1-866-849-8390
Email: Public.Advisor@cpuc.ca.gov
Mail: 505 Van Ness Ave.
San Francisco, CA 94102

WHERE CAN I GET MORE INFORMATION?

If you have questions about SoCalGas's request you may contact them at:

SoCalGas
Gregory Healy, Regulatory Case Manager
GHealy@socalgas.com
555 West Fifth Street, Los Angeles, CA 90013

A copy of the Application and any related documents may also be reviewed at https://www.socalgas.com/regulatory/cpuc

SoCalGas™

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29-2512

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HAWTHORNE CITY HALL
4455 W. 126TH ST.
HAWTHORNE, CA 90250

CITY CLERK
HAWTHORNE CITY HALL
4455 W. 126TH ST.
HAWTHORNE, CA 90250

CITY ATTORNEY
HEMET CITY HALL
450 E. LATHAN AVE.
HEMET, CA 92343

CITY CLERK
HEMET CITY HALL
450 E. LATHAM AVE.
HEMET, CA 92343

CITY CLERK
HERMOSA BEACH CITY HALL
1315 VALLEY DR.
HERMOSA BEACH, CA 90254

CITY ATTORNEY
LA CANADA FLINTRIDGE
300 SOUTH GRAND SUITE 1500
LOS ANGELES, CA 90071

CITY ATTORNEY
HESPERIA CITY
9700 SEVENTH AVE.
HESPERIA, CA 92345

CITY CLERK
HESPERIA CITY
9700 SEVENTH AVE.
HESPERIA, CA 92345

CITY ATTORNEY
HIDDEN HILLS CITY HALL
6165 SPRING VALLEY RD.
HIDDEN HILLS, CA 91302

CITY CLERK
HIDDEN HILLS CITY HALL
6165 SPRING VALLEY RD.
HIDDEN HILLS, CA 91302

CITY ATTORNEY
HIGHLAND CITY
26985 BASE LINE
HIGHLAND, CA 92346

CITY CLERK
HIGHLAND CITY
26985 BASE LINE
HIGHLAND, CA 92346

CITY ATTORNEY
HOLTVILLE CITY HALL
121 W. 5TH ST.
HOLTVILLE, CA 92250

CITY CLERK
HOLTVILLE CITY HALL
121 W. 5TH ST.
HOLTVILLE, CA 92250

CITY CLERK
LA CANADA FLINTRIDGE CITY HALL
1327 FOOTHILL BLVD.
LA CANADA FLINTRIDGE, CA 91011

CITY CLERK
HUNTINGTON BEACH CITY HALL
2000 MAIN ST.
HUNTINGTON BEACH, CA 92648

CITY ATTORNEY
HUNTINGTON PARK CITY HALL
6550 MILES AVE.
HUNTINGTON PARK, CA 90255

CITY CLERK
HUNTINGTON PARK CITY HALL
6550 MILES AVE.
HUNTINGTON PARK, CA 90255

CITY ATTORNEY
IMPERIAL CITY HALL
420 SO. IMPERIAL AVE.
IMPERIAL, CA 92251

CITY CLERK
IMPERIAL CITY HALL
420 SO. IMPERIAL AVE.
IMPERIAL, CA 92251

CITY ATTORNEY
INDIAN WELLS CITY HALL
44-950 EL DORADO DR.
INDIAN WELLS, CA 92210

CITY CLERK
INDIAN WELLS CITY HALL
44-950 EL DORADO DR.
INDIAN WELLS, CA 92210

CITY ATTORNEY
INDIO CITY HALL
150 CIVIC CENTER MALL
INDIO, CA 92202

CITY CLERK
INDIO CITY HALL
150 CIVIC CENTER MALL
INDIO, CA 92202

CITY ATTORNEY
INDUSTRY CITY HALL
15651 STANFORD ST.
CITY OF INDUSTRY, CA 91744

CITY CLERK
INDUSTRY CITY HALL
15651 STANFORD ST.
CITY OF INDUSTRY, CA 91744

CITY ATTORNEY
INGLEWOOD CITY HALL
1 MANCHESTER BLVD.
INGLEWOOD, CA 90301

CITY CLERK
INGLEWOOD CITY HALL
1 MANCHESTER BLVD.
INGLEWOOD, CA 90301

CITY ATTORNEY
IRVINE CITY HALL
P. 0. BOX 19575
IRVINE, CA 92713

CITY CLERK
IRVINE CITY HALL
P. 0. BOX 19575
IRVINE, CA 92713

CITY ATTORNEY
IRWINDALE CITY HALL
5050 NO. IRWINDALE AVE.
IRWINDALE, CA 91706

CITY CLERK
IRWINDALE CITY HALL
5050 NO. IRWINDALE AVE.
IRWINDALE, CA 91706

CITY ATTORNEY
KINGSBURG CITY HALL
1401 DRAPER ST.
KINGSBURG, CA 93631

CITY CLERK
KINGSBURG CITY HALL
1401 DRAPER ST.
KINGSBURG, CA 93631

CITY ATTORNEY
LINDSAY CITY HALL
251 E. HONOLULU ST.
LINDSAY, CA 93247

CITY CLERK
LINDSAY CITY HALL
251 E. HONOLULU ST.
LINDSAY, CA 93247

CITY ATTORNEY
LA HABRA CITY HALL
CIVIC CENTER
LA HABRA, CA 90631

CITY CLERK
LA HABRA CITY HALL
CIVIC CENTER
LA HABRA, CA 90631

CITY ATTORNEY
LA HABRA HEIGHTS CITY HALL
1245 NO. HACIENDA BLVD.
LA HABRA HEIGHTS, CA 90631

CITY CLERK
LA HABRA HEIGHTS CITY HALL
1245 NO. HACIENDA BLVD.
LA HABRA HEIGHTS, CA 90631

CITY ATTORNEY
LA MIRADA CITY HALL
13700 SO. LA MIRADA BLVD.
LA MIRADA, CA 90638

CITY CLERK
LA MIRADA CITY HALL
13700 SO. LA MIRADA BLVD.
LA MIRADA, CA 90638

CITY ATTORNEY
LA PALMA CITY HALL
7822 WALKER ST.
LA PALMA, CA 90623

CITY CLERK
LA PALMA CITY HALL
7822 WALKER ST.
LA PALMA, CA 90623

CITY ATTORNEY
LA PUENTE CITY HALL
15900 E. MAIN ST.
LA PUENTE, CA 91744

CITY CLERK
LA PUENTE CITY HALL
15900 E. MAIN ST.
LA PUENTE, CA 91744

CITY ATTORNEY
LA QUINTA CITY HALL
P. O. BOX 1504
LA QUINTA, CA 92253

CITY CLERK
LA QUINTA CITY HALL
P. O. BOX 1504
LA QUINTA, CA 92253

CITY ATTORNEY
LA VERNE CITY HALL
3660 D STREET
LA VERNE, CA 91750

CITY CLERK
LA VERNE CITY HALL
3660 D STREET
LA VERNE, CA 91750

CITY ATTORNEY
LAGUNA BEACH CITY HALL
505 FOREST AVE.
LAGUNA BEACH, CA 92651

CITY CLERK
LAGUNA BEACH CITY HALL
505 FOREST AVE.
LAGUNA BEACH, CA 92651

CITY ATTORNEY
LAGUNA NIGUEL CITY
30111 CROWN VALLEY PKWY
LAGUNA NIGUEL, CA 92677

CITY CLERK
LAGUNA NIGUEL CITY
30111 CROWN VALLEY PKWY
LAGUNA NIGUEL, CA 92656

CITY ATTORNEY
LAKE ELSINORE CITY HALL
130 S. MAIN ST.
LAKE ELSINORE, CA 92330

CITY CLERK
LAKE ELSINORE CITY HALL
130 S. MAIN ST.
LAKE ELSINORE, CA 92330

CITY ATTORNEY
LAKEWOOD CITY HALL
5050 CLARK AVE.
LAKEWOOD, CA 90714

CITY CLERK
LAKEWOOD CITY HALL
5050 CLARK AVE.
LAKEWOOD, CA 90714

CITY ATTORNEY
LANCASTER CITY HALL
44933 N. FERN AVE.
LANCASTER, CA 93534

CITY CLERK
LANCASTER CITY HALL
44933 N. FERN AVE.
LANCASTER, CA 93534

CITY ATTORNEY
LAWNDALE CITY
611 ANTON BL., SUITE 1400
COSTA MESA, CA 92628

CITY CLERK
LAWNDALE CITY HALL
14717 BURIN AVE.
LAWNDALE, CA 90260

CITY ATTORNEY
LEMOORE CITY HALL
119 FOX ST.
LEMOORE, CA 93245

CITY CLERK
LEMOORE CITY HALL
119 FOX ST.
LEMOORE, CA 9 3245

CITY ATTORNEY
MONTEBELLO CITY HALL
1600 BEVERLY BLVD.
MONTEBELLO, CA 90640

CITY CLERK
MONTEBELLO CITY HALL
1600 BEVERLY BLVD.
MONTEBELLO, CA 90640

CITY ATTORNEY
LOMA LINDA CITY
25541 BARTON RD.
LOMA LINDA, CA 92354

CITY CLERK
LOMA LINDA CITY HALL
25541 BARTON RD.
LOMA LINDA, CA 92354

CITY ATTORNEY
LOMITA CITY HALL
24300 NARBONNE AVE.
LOMITA, CA 90717

CITY CLERK
LOMITA CITY HALL
24300 NARBONNE AVE.
LOMITA, CA 90717

CITY ATTORNEY
LOMPOC CITY HALL
100 CIVIC CENTER PLAZA
LOMPOC, CA 93438

CITY CLERK
LOMPOC CITY HALL
100 CIVIC CENTER PLAZA
LOMPOC, CA 93438

CITY ATTORNEY
LONG BEACH CITY HALL
333 W. OCEAN BLVD.
LONG BEACH, CA 90802

CITY CLERK
LONG BEACH CITY HALL
333 W. OCEAN BLVD.
LONG BEACH, CA 90802

CITY ATTORNEY
LOS ALAMITOS CITY HALL
3191 KATELLA
LOS ALAMITOS, CA 90720

CITY CLERK
LOS ALAMITOS CITY HALL
3191 KATELLA
LOS ALAMITOS, CA 90720

CITY ATTORNEY
LOS ANGELES
200 NO. MAIN ST – ROOM 800.
LOS ANGELES, CA 90012

CITY CLERK
LOS ANGELES
200 NO. MAIN ST. – ROOM 800
LOS ANGELES, CA 90012

CITY ATTORNEY
LYNWOOD CITY HALL
11330 BULLIS RD.
LYNWOOD, CA 90262

CITY CLERK
LYNWOOD CITY HALL
11330 BULLIS RD.
LYNWOOD, CA 90262

CITY ATTORNEY
MANHATTAN BEACH CITY HALL
1400 HIGHLAND AVE.
MANHATTAN BEACH, CA 90266

CITY CLERK
MANHATTAN BEACH CITY HALL
1400 HIGHLAND AVE.
MANHATTAN BEACH, CA 90266

CITY ATTORNEY
MARICOPA CITY HALL
P. 0. BOX 548
MARICOPA, CA 93252

CITY CLERK
MARICOPA CITY HALL
P. 0. BOX 548
MARICOPA, CA 93252

CITY ATTORNEY
MAYWOOD CITY HALL
4319 E. SLAUSON AVE.
MAYWOOD, CA 90270

CITY CLERK
MAYWOOD CITY HALL
4319 E. SLAUSON AVE.
MAYWOOD, CA 90270

CITY ATTORNEY
MCFARLAND CITY HALL
401 W. KERN
MCFARLAND, CA 93250

CITY CLERK
MCFARLAND CITY HALL
401 W. KERN
MCFARLAND, CA 93250

CITY ATTORNEY
MISSION VIEJO CITY
200 CIVIC CENTER
MISSION VIEJO, CA 92691-5519

CITY CLERK
MISSION VIEJO CITY
200 CIVIC CENTER
MISSION VIEJO, CA 92691-5519

CITY ATTORNEY
MONROVIA CITY HALL
415 SO. IVY AVE.
MONROVIA, CA 91016

CITY CLERK
MONROVIA CITY HALL
415 SO. IVY AVE.
MONROVIA, CA 91016

CITY ATTORNEY
MONTCLAIR CITY HALL
5111 BENITO ST.
MONTCLAIR, CA 91763

CITY CLERK
MONTCLAIR CITY HALL
5111 BENITO ST.
MONTCLAIR, CA 91763

CITY ATTORNEY
PALM DESERT CITY HALL
73510 FRED WARING DR.
PALM DESERT, CA 92260

CITY CLERK
PALM DESERT CITY HALL
73510 FRED WARING DR.
PALM DESERT, CA 92260

CITY ATTORNEY
MONTEREY PARK CITY HALL
320 W. NEWMARK AVE.
MONTEREY PARK, CA 91754

CITY CLERK
MONTEREY PARK CITY HALL
320 W. NEWMARK AVE.
MONTEREY PARK, CA 91754

CITY ATTORNEY
MOORPARK CITY HALL
799 MOORPARK AVE.
MOORPARK, CA 93021

CITY CLERK
MOORPARK CITY HALL
799 MOORPARK AVE.
MOORPARK, CA 93021

CITY ATTORNEY
MORENO VALLEY CITY HALL
P. 0. BOX 1440
MORENO VALLEY, CA 92556

CITY CLERK
MORENO VALLEY CITY HALL
P. 0. BOX 1440
MORENO VALLEY, CA 92556

CITY ATTORNEY
MORRO BAY CITY HALL
DUNES ST. & SHASTA AVE.
MORRO BAY, CA 93442

CITY CLERK
MORRO BAY CITY HALL
DUNES ST. & SHASTA AVE.
MORRO BAY, CA 93442

CITY ATTORNEY – CITY HALL
ONE TOWNE SQUARE
24601 JEFFERSON AVE
MURRIETA, CA 92562

CITY CLERK – CITY HALL
ONE TOWNE SQUARE
24601 JEFFERSON AVE
MURRIETA, CA 92562

CITY ATTORNEY
FRESNO CITY HALL
2600 FRESNO ST., 2ND FLOOR
FRESNO, CA 93721

CITY CLERK
FRESNO CITY HALL
2600 FRESNO ST., 2ND FLOOR
FRESNO, CA 93721

CITY ATTORNEY
NEWPORT BEACH CITY HALL
3300 NEWPORT BLVD.
NEWPORT BEACH, CA 92660

CITY CLERK
NEWPORT BEACH CITY HALL
3300 NEWPORT BLVD.
NEWPORT BEACH, CA 92660

CITY ATTORNEY
NORCO CITY HALL
2870 CLARK AVE.
NORCO, CA 92860

CITY CLERK
NORCO CITY HALL
2870 CLARK AVE.
NORCO, CA 92860

CITY ATTORNEY
NORWALK CITY HALL
12700 NORWALK BLVD.
NORWALK, CA 90650

CITY CLERK
NORWALK CITY HALL
12700 NORWALK BLVD.
NORWALK, CA 90650

CITY ATTORNEY
OJAI CITY HALL
401 SO. VENTURA ST.
OJAI, CA 93023

CITY CLERK
OJAI CITY HALL
401 SO. VENTURA ST.
OJAI, CA 93023

CITY ATTORNEY
ONTARIO CITY HALL
303 "B" ST.
ONTARIO, CA 91764

CITY CLERK
ONTARIO CITY HALL
303 "B" ST.
ONTARIO, CA 91764

CITY ATTORNEY
ORANGE CITY HALL
300 E. CHAPMAN AVE.
ORANGE, CA 92666

CITY CLERK
ORANGE CITY HALL
300 E. CHAPMAN AVE.
ORANGE, CA 92666

CITY ATTORNEY
ORANGE COVE CITY HALL
633 SIXTH ST.
ORANGE COVE, CA 93646

CITY CLERK
ORANGE COVE CITY HALL
633 SIXTH ST.
ORANGE COVE, CA 93646

CITY ATTORNEY
OXNARD CITY HALL
305 W. THIRD ST.
OXNARD, CA 93030

CITY CLERK
OXNARD CITY HALL
305 W. THIRD ST
OXNARD, CA 93030

CITY ATTORNEY
RANCHO CUCAMONGA CITY HALL
P. 0. Box 807
RANCHO CUCAMONGA, CA 91729

CITY CLERK
RANCHO CUCAMONGA CITY HALL
P. 0. Box 807
RANCHO CUCAMONGA, CA 91729

CITY ATTORNEY
PALM SPRINGS CITY HALL
P. 0. BOX 2743
PALM SPRINGS, CA 92263

CITY CLERK
PALM SPRINGS CITY HALL
P. 0. BOX 2743
PALM SPRINGS, CA 92263

CITY ATTORNEY
PALMDALE CITY HALL
708 EAST PALMDALE BLVD.
PALMDALE, CA 93550

CITY CLERK
PALMDALE CITY HALL
708 EAST PALMDALE BLVD.
PALMDALE, CA 93550

CITY CLERK
PALOS VERDES ESTATES
340 PALOS VERDES DRIVE W.
PALOS VERDES ESTATES, CA 90274

CITY ATTORNEY
PALOS VERDES ESTATES
30940 HAWTHORNE BLVD.
RANCHO PALOS VERDES, CA 90275

CITY ATTORNEY
PARAMOUNT CITY HALL
16400 SO. COLORADO ST.
PARAMOUNT, CA 90274

CITY CLERK
PARAMOUNT CITY HALL
16400 SO. COLORADO ST.
PARAMOUNT, CA 90274

CITY ATTORNEY
PARLIER CITY HALL
1100 E. PARLIER AVE.
PARLIER, CA 93648

CITY CLERK
PARLIER CITY HALL
1100 E. PARLIER AVE.
PARLIER, CA 93648

CITY ATTORNEY
PASADENA CITY HALL
100 NO. GARFIELD AVE.
PASADENA, CA 91109

CITY CLERK
PASADENA CITY HALL
100 NO. GARFIELD AVE.
PASADENA, CA 91109

CITY ATTORNEY
PASO ROBLES CITY HALL
801 4TH ST.
PASO ROBLES, CA 93446

CITY CLERK
PASO ROBLES CITY HALL
801 4TH ST.
PASO ROBLES, CA 93446

CITY ATTORNEY
PERRIS CITY HALL
101 NO. "D" ST.
PERRIS, CA 92370

CITY CLERK
PERRIS CITY HALL
101 NO. "D" ST.
PERRIS, CA 92370

CITY ATTORNEY
PICO RIVERA CITY HALL
6615 PASSONS BLVD.
PICO RIVERA, CA 90660

CITY CLERK
PICO RIVERA CITY HALL
6615 PASSONS
PICO RIVERA, CA 90660

CITY ATTORNEY
PISMO BEACH CITY HALL
1000 BELLO ST.
PISMO BEACH, CA 93449

CITY CLERK
PISMO BEACH CITY HALL
1000 BELLO ST.
PISMO BEACH, CA 93449

CITY ATTORNEY
PLACENTIA CITY HALL
401 E. CHAPMAN AVE.
PLACENTIA, CA 92670

CITY CLERK
PLACENTIA CITY HALL
401 E. CHAPMAN AVE
PLACENTIA, CA 92670.

CITY ATTORNEY
POMONA CITY HALL
505 SO. GAREY
POMONA, CA 91769

CITY CLERK
POMONA CITY HALL
505 SO. GAREY
POMONA, CA 91769

CITY ATTORNEY
PORT HUENEME CITY HALL
250 NO. VENTURA RD.
PORT HUENEME, CA 93041

CITY CLERK
PORT HUENEME CITY HALL
250 NO. VENTURA RD.
PORT HUENEME, CA 93041

CITY ATTORNEY
PORTERVILLE CITY HALL
291 NO. MAIN ST.
PORTERVILLE, CA 93257

CITY CLERK
PORTERVILLE CITY HALL
291 NO. MAIN ST.
PORTERVILLE, CA 93257

CITY ATTORNEY
SAN GABRIEL CITY HALL
532 WEST MISSION DR.
SAN GABRIEL, CA 91778

CITY CLERK
SAN GABRIEL CITY HALL
532 WEST MISSION DR.
SAN GABRIEL, CA 91778

CITY ATTORNEY
RANCHO MIRAGE CITY HALL
69-825 HIGHWAY 111
RANCHO MIRAGE, CA 92270

CITY CLERK
RANCHO MIRAGE CITY HALL
69-825 HIGHWAY 111
RANCHO MIRAGE, CA 92270

CITY CLERK
RANCHO PALOS VERDES
30940 HAWTHORNE BLVD.
RANCHO PALOS VERDES, CA 90275

CITY ATTORNEY
RANCHO PALOS VERDES
30940 HAWTHORNE BLVD.
RANCHO PALOS VERDES, CA 90275

CITY ATTORNEY
REDLANDS CITY HALL
P. 0. BOX 280
REDLANDS, CA 92373

CITY CLERK
REDLANDS CITY HALL
P. 0. BOX 280
REDLANDS, CA 92373

CITY ATTORNEY
REDONDO BEACH CITY HALL
415 DIAMOND ST.
REDONDO BEACH, CA 90277

CITY CLERK
REDONDO BEACH CITY HALL
415 DIAMOND ST.
REDONDO BEACH, CA 90277

CITY ATTORNEY
REEDLEY CITY HALL
845 "G" ST.
REEDLEY, CA 93654

CITY CLERK
REEDLEY CITY HALL
845 "G" ST.
REEDLEY, CA 93654

CITY ATTORNEY
RIALTO CITY HALL
150 SO. PALM AVE.
RIALTO, CA 92376

CITY CLERK
RIALTO CITY HALL
150 SO. PALM AVE.
RIALTO, CA 92376

CITY ATTORNEY
RIVERSIDE CITY HALL
3900 MAIN ST.
RIVERSIDE, CA 92522

CITY CLERK
RIVERSIDE CITY HALL
3900 MAIN ST.
RIVERSIDE, CA 92522

CITY ATTORNEY
ROLLING HILLS CITY HALL
#2 PORTUGUESE BEND RD.
ROLLING HILLS, CA 90274

CITY CLERK
ROLLING HILLS CITY HALL
#2 PORTUGUESE BEND RD.
ROLLING HILLS, CA 90274

CITY ATTORNEY
ROLLING HILLS ESTS. CITY HALL
4045 PALOS VERDES DR.
ROLLING HILLS ESTS., CA 90274

CITY CLERK
ROLLING HILLS ESTS. CITY HALL
4045 PALOS VERDES DR.
ROLLING HILLS ESTS., CA 90274

CITY ATTORNEY
ROSEMEAD CITY HALL
8838 E. VALLEY BLVD.
ROSEMEAD, CA 91770

CITY CLERK
ROSEMEAD CITY HALL
8838 E. VALLEY BLVD.
ROSEMEAD, CA 91770

CITY CLERK
SAN BERNARDINO CITY HALL
300 NO. "D" STREET
SAN BERNARDINO, CA 92418

CITY ATTORNEY
SAN BERNARDINO CITY HALL
300 NO. "D" STREET
SAN BERNARDINO, CA 92418

CITY ATTORNEY
SAN CLEMENTE CITY HALL
100 AVENIDA PRESIDIO
SAN CLEMENTE, CA 92672

CITY CLERK
SAN CLEMENTE CITY HALL
100 AVENIDA PRESIDIO
SAN CLEMENTE, CA 92672

CITY ATTORNEY
SAN DIMAS CITY HALL
245 E. BONITA AVE.
SAN DIMAS, CA 91773

CITY CLERK
SAN DIMAS CITY HALL
245 E. BONITA AVE.
SAN DIMAS, CA 91773

CITY ATTORNEY
SAN FERNANDO CITY HALL
117 MACNEIL ST.
SAN FERNANDO, CA 91340

CITY CLERK
SAN FERNANDO CITY HALL
117 MACNEIL ST.
SAN FERNANDO, CA 91340

CITY ATTORNEY
SHAFTER CITY HALL
336 PACIFIC AVE.
SHAFTER, CA 93263

CITY CLERK
SHAFTER CITY HALL
336 PACIFIC AVE.
SHAFTER, CA 93263

CITY ATTORNEY
SAN JACINTO CITY HALL
595 S. SAN JACINTO
SAN JACINTO, CA 92383

CITY CLERK
SAN JACINTO CITY HALL
595 S. SAN JACINTO
SAN JACINTO, CA 92383

CITY ATTORNEY
SAN JUAN CAPISTRANO CITY HALL
32400 PASEO ADELANTO
SAN JUAN CAPISTRANO, CA 92675

CITY CLERK
SAN JUAN CAPISTRANO CITY HALL
32400 PASEO ADELANTO
SAN JUAN CAPISTRANO, CA 92675

CITY ATTORNEY
SAN LUIS OBISPO CITY HALL
990 PALM STREET
SAN LUIS OBISPO, CA 93401

CITY CLERK
SAN LUIS OBISPO CITY HALL
990 PALM ST.
SAN LUIS OBISPO, CA 93401

CITY ATTORNEY
SAN MARINO CITY HALL
2200 HUNTINGTON DR.
SAN MARINO, CA 91108

CITY CLERK
SAN MARINO CITY HALL
2200 HUNTINGTON DR.
SAN MARINO, CA 91108

CITY ATTORNEY
SANGER CITY
1700 7TH STREET
SANGER, CA 93657

CITY CLERK
SANGER CITY
1700 7TH STREET
SANGER, CA 93657

CITY ATTORNEY
SANTA ANA CITY HALL
22 CIVIC CENTER PLAZA
SANTA ANA, CA 92701

CITY CLERK
SANTA ANA CITY HALL
22 CIVIC CENTER PLAZA
SANTA ANA, CA 92701

CITY ATTORNEY
SANTA BARBARA CITY HALL
DE LA GUERRA PLAZA
SANTA BARBARA, CA 93102

CITY CLERK
SANTA BARBARA CITY HALL
DE LA GUERRA PLAZA
SANTA BARBARA, CA 93102

CITY ATTORNEY
SANTA CLARITA CITY
23920 VALENCIA BLVD., #300
SANTA CLARITA, CA 91355

CITY CLERK
SANTA CLARITA CITY
23920 VALENCIA BLVD., #300
SANTA CLARITA, CA 91355

CITY ATTORNEY
SANTA FE SPRINGS CITY HALL
11710 TELEGRAPH RD.
SANTA FE SPRINGS, CA 90670

CITY CLERK
SANTA FE SPRINGS CITY HALL
11710 TELEGRAPH RD.
SANTA FE SPRINGS, CA 90670

CITY ATTORNEY
SANTA MARIA CITY HALL
110 EAST COOK ST.
SANTA MARIA, CA 93454

CITY CLERK
SANTA MARIA CITY HALL
110 EAST COOK ST.
SANTA MARIA, CA 93454

CITY ATTORNEY
SANTA MONICA CITY HALL
1685 MAIN ST.
SANTA MONICA, CA 90401

CITY CLERK
SANTA MONICA CITY HALL
1685 MAIN ST.
SANTA MONICA, CA 90401

CITY ATTORNEY
SANTA PAULA CITY HALL
970 VENTURA ST.
SANTA PAULA, CA 93060

CITY CLERK
SANTA PAULA CITY HALL
970 VENTURA ST.
SANTA PAULA, CA 93060

CITY ATTORNEY
SEAL BEACH CITY HALL
211 8TH ST.
SEAL BEACH, CA 90740

CITY CLERK
SEAL BEACH CITY HALL
211 8TH ST.
SEAL BEACH, CA 90740

CITY ATTORNEY
SELMA CITY HALL
1814 TUCKER ST.
SELMA, CA 93662

CITY CLERK
SELMA CITY HALL
1814 TUCKER ST.
SELMA, CA 93662

CITY ATTORNEY
TULARE CITY
411 E. KERN AVE.
TULARE, CA 93274

CITY CLERK
TULARE CITY
411 E. KERN AVE.
TULARE, CA 93274

CITY ATTORNEY
SIERRA MADRE CITY HALL
232 W. SIERRA MADRE BLVD.
SIERRA MADRE, CA 91024

CITY CLERK
SIERRA MADRE CITY HALL
232 W. SIERRA MADRE BLVD.
SIERRA MADRE, CA 91024

CITY ATTORNEY
SIGNAL HILL CITY HALL
2175 CHERRY AVE.
SIGNAL HILL, CA 90806

CITY CLERK
SIGNAL HILL CITY HALL
2175 CHERRY AVE.
SIGNAL HILL, CA 90806

CITY ATTORNEY
SIMI VALLEY CITY HALL
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SIMI VALLEY, CA 93065

CITY CLERK
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SIMI VALLEY, CA 93065

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1644 OAK STREET
SOLVANG, CA 93463

CITY CLERK
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1415 SANTA ANITA DR.
SOUTH EL MONTE, CA 91733

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1415 SANTA ANITA DR.
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SOUTH GATE, CA 90280

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SOUTH GATE, CA 90280

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SOUTH PASADENA CITY HALL
1414 MISSION STREET
SOUTH PASADENA, CA 91030

CITY CLERK
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SOUTH PASADENA, CA 91030

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STANTON CITY HALL
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STANTON, CA 90680

CITY CLERK
STANTON CITY HALL
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STANTON, CA 90680

CITY ATTORNEY
TAFT CITY HALL
209 E. KERN ST.
TAFT, CA 93268

CITY CLERK
TAFT CITY HALL
209 E. KERN ST.
TAFT, CA 93268

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CITY CLERK
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TORRANCE, CA 90503

CITY CLERK
TORRANCE CITY HALL
3031 TORRANCE BLVD.
TORRANCE, CA 90503

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CITY CLERK
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17855 SANTIAGO BLVD.
VILLA PARK, CA 92667

CITY CLERK
VILLA PARK CITY HALL
17855 SANTIAGO BLVD.
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CITY ATTORNEY
VISALIA CITY HALL
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VISALIA, CA 93291

CITY CLERK
VISALIA CITY HALL
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WALNUT, CA 91789

CITY CLERK
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21201 LA PUENTE RD.
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WASCO CITY HALL
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WASCO, CA 93280

CITY CLERK
WASCO CITY HALL
746 8th STREET
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CITY ATTORNEY
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CITY CLERK
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CITY CLERK
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31200 OAK CREST DRIVE
WEST LAKE VILLAGE, CA 91361

CITY CLERK
WESTLAKE VILLAGE CITY HALL
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WESTMINSTER CITY HALL
8200 WESTMINSTER AVE.
WESTMINSTER, CA 92683

CITY CLERK
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8200 WESTMINSTER AVE.
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355 SO. CENTER ST.
WESTMORLAND, CA 92281

CITY CLERK
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CITY CLERK
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57090 29 PALMS HIGHWAY
YUCCA VALLEY, CA 92284

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34272 YUCAIPA BLVD.
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CITY CLERK
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908 PARK AVENUE
CALIMESA, CA 92320

CITY CLERK
CALIMESA CITY HALL
908 PARK AVENUE
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LAGUNA HILLS, CA 92653

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