

# City of San Diego

**CONTRACTOR'S NAME:** S.C. Valley Engineering, Inc.  
**ADDRESS:** 656 Front St., El Cajon, CA 92020  
**TELEPHONE NO.:** 619-444-2366 **FAX NO.:**  
**CITY CONTACT:** Rosa Riego, Senior Contract Specialist, Email: [RRiego@sandiego.gov](mailto:RRiego@sandiego.gov)  
Phone No. (619) 533-3426  
J. Gallardo / D. Hernandez / L. Ambriz

## BIDDING DOCUMENTS



**FOR**

## WATER GROUP JOB 952

**BID NO.:** K-22-2065-DBB-3  
**SAP NO. (WBS/IO/CC):** B-11048  
**CLIENT DEPARTMENT:** 2000  
**COUNCIL DISTRICT:** 3, 8  
**PROJECT TYPE:** KB

**HIS CONTRACT WILL BE SUBJECT TO THE FOLLOWING:**

- PHASED-FUNDING
- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM
- PREVAILING WAGE RATES: STATE  FEDERAL
- APPRENTICESHIP

**BID DUE DATE:**

**2:00 PM**

**MAY 17, 2022**

**CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS**

<http://www.sandiego.gov/cip/bidopps/index.shtml>

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**ENGINEER OF WORK**

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:

Sheila Bose  
City Engineer

3/23/22  
Date

Seal:



**Water Group Job 952 Plans numbered 38235-D (Sheets C-6 through C-7, C-12 through C-30, C-51, M-1 through M-3)**

Marc Weinberger  
Registered Engineer

3/23/2022  
Date

Seal:



**Water Group Job 952 Plans numbered 38235-D (Sheets E-1 thru E-6)**

Alan J. Brown  
Registered Engineer

3/23/2022  
Date

Seal:

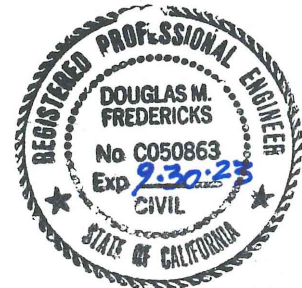


**Water Group Job 952 Plans numbered 38235-D (Sheets S-1 through S-3)**

Douglas M. Fredericks  
Registered Engineer

3/23/2022  
Date

Seal:



## REQUIRED DOCUMENTS SCHEDULE DURING BIDDING AND AWARDING

The Bidder's attention is directed to the City's Municipal Code §22.0807(e), (3)-(5) for important information regarding grounds for debarment for failure to submit required documentation.

The specified Equal Opportunity Contracting Program (EOCP) forms are available for download from the City's web site at:

<http://www.sandiego.gov/eoc/forms/index.shtml>

ITEM	DOCUMENT TO BE SUBMITTED	WHEN DUE	FROM
1.	Bid Bond (PDF via PlanetBids)	At Time of Bid	ALL BIDDERS
2.	Contractors Certification of Pending Actions	At Time of Bid	ALL BIDDERS
3.	List of Subcontractors for Alternate Items	At Time of Bid	ALL BIDDERS
4.	Mandatory Disclosure of Business Interests	At Time of Bid	ALL BIDDERS
5.	Debarment and Suspension Certification for Prime Contractors	At Time of Bid	ALL BIDDERS
6.	Debarment and Suspension Certification for Subcontractors, Suppliers & Mfgrs	At Time of Bid	ALL BIDDERS
7.	Bid Bond (Original)	By 5PM 3 working days after bid opening	ALL BIDDERS
8.	SLBE Good Faith Effort Documentation	By 5 PM 3 working days after bid opening	ALL BIDDERS
9.	Form AA60 – List of Work Made Available	By 5 PM 3 working days after bid opening with Good Faith Effort (GFE) documentation	ALL BIDDERS
10.	Phased Funding Schedule Agreement (when required)	Within 10 working days of receipt by the bidder of the Notice of Intent to Award	AWARDED BIDDER
11.	If the Contractor is a Joint Venture: <ul style="list-style-type: none"> <li>• Joint Venture Agreement</li> <li>• Joint Venture License</li> </ul>	Within 10 working days of receipt by bidder of contract forms	AWARDED BIDDER

ITEM	DOCUMENT TO BE SUBMITTED	WHEN DUE	FROM
12.	Payment & Performance Bond: Certificates of Insurance & Endorsements	Within 10 working days of receipt by bidder of contract forms and NOI	AWARDED BIDDER
13.	Signed Contract Agreement Page	Within 3 working days of receipt by bidder of Contract Agreement	AWARDED BIDDER
14.	Listing of "Other Than First Tier" Subcontractors	Within 10 working days of receipt by bidder of contract forms	AWARDED BIDDER

## NOTICE INVITING BIDS

1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for **Water Group Job 952**. For additional information refer to Attachment A.
2. **FULL AND OPEN COMPETITION:** This solicitation is subject to full and open competition and may be bid by Contractors on the City's approved Prequalified Contractors List. For information regarding the Contractors Prequalified list visit the City's web site: <http://www.sandiego.gov>.
3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$8,610,000**
4. **BID DUE DATE AND TIME ARE:** **May 17, 2022, at 2:00 PM**
5. **PREVAILING WAGE RATES APPLY TO THIS CONTRACT:** Refer to Attachment D
6. **LICENSE REQUIREMENT:** To be eligible for award of this contract, Prime contractor must possess the following licensing classification: **A** or **C-34**.
7. **SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract.
  - 7.1. The City has incorporated **mandatory** SLBE-ELBE subcontractor participation percentages to enhance competition and maximize subcontracting opportunities. For the purpose of achieving the mandatory subcontractor participation percentages, a recommended breakdown of the SLBE and ELBE subcontractor participation percentages based upon certified SLBE, and ELBE firms has also been provided to achieve the mandatory subcontractor participation percentages:

1. SLBE participation	<b>8.9%</b>
2. ELBE participation	<b>13.4%</b>
3. Total mandatory participation	<b>22.3%</b>
  - 7.2. The Bid may be declared non-responsive if the Bidder fails to meet the following requirements:
    - 7.2.1. Include SLBE-ELBE certified subcontractors at the overall mandatory participation percentage identified in this document, OR
    - 7.2.2. Submit Good Faith Effort (GFE) documentation, saved in searchable Portable Document Format (PDF), demonstrating the Bidder made a good faith effort to conduct outreach to and include SLBE-ELBE Subcontractors as required in this solicitation by 5 PM 3 Working Days after the Bid opening if the overall mandatory participation percentage is not met.

**All submittals in searchable PDF shall be submitted electronically within the prescribed time identified in the contract documents via PlanetBids by invitation to the point of contact named in the bid provided by the Contract Specialist to all bidders.**

**8. AWARD PROCESS:**

- 8.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions of Award as stated within these documents and within the Notice of Intent to Award.
- 8.2.** Upon acceptance of bids and determination of the apparent low bidder, the City will prepare the contract documents for execution within approximately 21 days of the date of the bid opening. The City will then award the contract upon receipt of properly signed Contract, bonds, and insurance documents.
- 8.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form by the City Attorney's Office.
- 8.4.** The low Bid will be determined by the Base Bid plus all the Alternates.
- 8.5.** Once the low bid has been determined, the City may, at its sole discretion, award the contract for the Base bid alone; or for the Base Bid plus one or more alternates.

**9. SUBMISSION OF QUESTIONS:**

- 9.1.** The Director (or Designee) of the Purchasing & Contracting Department is the officer responsible for opening, examining, and evaluating the competitive Bids submitted to the City for the acquisition, construction, and completion of any public improvement except when otherwise set forth in these documents. Any questions related to this solicitation shall be submitted to:

[RRiego@sandiego.gov](mailto:RRiego@sandiego.gov)

- 9.2.** Questions received less than 14 days prior to the date for opening of Bids may not be considered.
- 9.3.** Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.
- 9.4.** Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Bidder's responsibility to be informed of any addenda that have been issued and to include all such information in its Bid.

**10. PHASED FUNDING:** For Phased Funding Conditions, see Attachment B.

**11. ADDITIVE/DEDUCTIVE ALTERNATES:**

**11.1** The additive/deductive alternates have been established to allow the City to compare the cost of specific portions of the Work with the Project's budget and enable the City to make a decision whether to incorporate these portions prior to award. The award will be established as described in the Bid. The City reserves the right to award the Contract for the Base Bid only or for the Base Bid plus one or more Alternates.

**11.2** For water pipeline projects, the Plans typically show all cut and plug and connection work to be performed by City Forces. However, Bidders shall refer to Bidding Documents to see if all or part of this work will be performed by the Contractor.



## INSTRUCTIONS TO BIDDERS

### 1. PREQUALIFICATION OF CONTRACTORS:

- 1.1. Contractors submitting a Bid must be pre-qualified for the total amount proposed, including all alternate items, prior to the date of submittal. Bids from contractors who have not been pre-qualified as applicable and Bids that exceed the maximum dollar amount at which contractors are pre-qualified may be deemed **non-responsive** and ineligible for award.
- 1.2. The completed application must be submitted online no later than 2 weeks prior to the bid opening.
- 1.3. **Joint Venture Bidders Cumulative Maximum Bidding Capacity:** For projects with an engineer's estimate of \$30,000,000 or greater, Joint Ventures submitting bids may be deemed responsive and eligible for award if the cumulative maximum bidding capacity of the individual Joint Venture entities is equal to or greater than the total amount proposed.
  - 1.3.1. Each of the entities of the Joint Venture must have been previously prequalified at a minimum of \$15,000,000.
  - 1.3.2. Bids submitted with a total amount proposed of less than \$30,000,000 are not eligible for Cumulative Maximum Bidding Capacity prequalification. To be eligible for award in this scenario, the Joint Venture itself or at least one of the Joint Venture entities must have been prequalified for the total amount proposed.
  - 1.3.3. Bids submitted by Joint Ventures with a total amount proposed of \$30,000,000 or greater on a project with an engineer's estimate of less than \$30,000,000 are not eligible for Cumulative Maximum Bidding Capacity prequalification.
  - 1.3.4. The Joint Venture designated as the Apparent Low Bidder shall provide evidence of its corporate existence and furnish good and approved bonds in the name of the Joint Venture within 14 Calendar Days of receipt by the Bidder of a form of contract for execution.
- 1.4. Complete information and links to the on-line prequalification application are available at:  
<http://www.sandiego.gov/cip/bidopps/prequalification>
- 1.5. Due to the City's responsibility to protect the confidentiality of the contractors' information, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on [PlanetBids™](#).

2. **ELECTRONIC FORMAT RECEIPT AND OPENING OF BIDS:** Bids will be received in electronic format (eBids) EXCLUSIVELY at the City of San Diego's electronic bidding (eBidding) site, at: <http://www.sandiego.gov/cip/bidopps/index.shtml> and are due by the date, and time shown on the cover of this solicitation.

- 2.1. **BIDDERS MUST BE PRE-REGISTERED** with the City's bidding system and possess a system-assigned Digital ID in order to submit and electronic bid.
- 2.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.
- 2.3. The City's electronic bidding system is responsible for bid tabulations. Upon the bidder's or proposer's entry of their bid, the system will ensure that all required fields are entered. **The system will not accept a bid for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.
- 2.4. **BIDS REMAIN SEALED UNTIL BID DEADLINE.** eBids are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128–256-bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Bids submitted prior to the "Bid Due Date and Time" are not available for review by anyone other than the submitter who has until the "Bid Due Date and Time" to change, rescind, or retrieve its proposal should it desire to do so.
- 2.5. **BIDS MUST BE SUBMITTED BY BID DUE DATE AND TIME.** Once the bid deadline is reached, no further submissions are accepted into the system. Once the Bid Due Date and Time has lapsed, bidders, proposers, the general public, and City staff are able to immediately see the results online. City staff may then begin reviewing the submissions for responsiveness, EOCB compliance and other issues. The City may require any Bidder to furnish statement of experience, financial responsibility, technical ability, equipment, and references.
- 2.6. **RECAPITULATION OF THE WORK.** Bids shall not contain any recapitulation of the Work. Conditional Bids may be rejected as being non-responsive. Alternative proposals will not be considered unless called for.
- 2.7. **BIDS MAY BE WITHDRAWN** by the Bidder only up to the bid due date and time.
  - 2.7.1. Important Note: Submission of the electronic bid into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's eBidding system. It is the bidder's sole responsibility to ensure their bids are received on time by the City's eBidding system. The City of San Diego is not responsible for bids that do not arrive by the required date and time.

**2.8. ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE:** To request a copy of this solicitation in an alternative format, contact the Purchasing & Contracting Department, Public Works Division Contract Specialist listed on the cover of this solicitation at least five (5) working days prior to the Bid/Proposal due date to ensure availability.

**3. ELECTRONIC BID SUBMISSIONS CARRY FULL FORCE AND EFFECT:**

**3.1.** The bidder, by submitting its electronic bid, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.

**3.2.** By submitting an electronic bid, the bidder certifies that the bidder has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits, and the solicitation documents), and that by submitting the eBid as its bid proposal, the bidder acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.

**3.3.** The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this bid are true and correct.

**3.4.** The Bidder agrees to the construction of the project as described in Attachment "A-Scope of Work" for the City of San Diego, in accordance with the requirements set forth herein for the electronically submitted prices. The Bidder guarantees the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent.

**4. BIDS ARE PUBLIC RECORDS:** Upon receipt by the City, Bids shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the Bid. General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.

**5. CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:**

**5.1.** **Prior** to the Award of the Contract or Task Order, you and your Subcontractors and Suppliers must register with the City's web-based vendor registration and bid management system. For additional information go to:

<http://www.sandiego.gov/purchasing/bids-contracts/vendorreg>

- 5.2. The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.
6. **JOINT VENTURE CONTRACTORS:** Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 14 Calendar Days after receiving the Contract forms.
7. **INSURANCE REQUIREMENTS:**
- 7.1. All certificates of insurance and endorsements required by the contract are to be provided upon issuance of the City's Notice of Intent to Award letter.
- 7.2. Refer to sections 5-4, "INSURANCE" of the Supplementary Special Provisions (SSP) for the insurance requirements which must be met.
8. **REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK") <a href="http://www.greenbookspecs.org/">http://www.greenbookspecs.org/</a>	2021	ECPI010122-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* <a href="https://www.sandiego.gov/ecp/edocref/greenbook">https://www.sandiego.gov/ecp/edocref/greenbook</a>	2021	ECPI010122-02
City of San Diego Standard Drawings* <a href="https://www.sandiego.gov/ecp/edocref/standarddraw">https://www.sandiego.gov/ecp/edocref/standarddraw</a>	2021	ECPI010122-03
Citywide Computer Aided Design and Drafting (CADD) Standards <a href="https://www.sandiego.gov/ecp/edocref/drawings">https://www.sandiego.gov/ecp/edocref/drawings</a>	2018	PWPI010119-04
California Department of Transportation (CALTRANS) Standard Specifications <a href="https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications">https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications</a>	2018	PWPI030119-05
CALTRANS Standard Plans <a href="https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications">https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications</a>	2018	PWPI030119-06
California Manual on Uniform Traffic Control Devices Revision 6 (CA MUTCD Rev 6) <a href="https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files">https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files</a>	2014	PWPI060121-10
<b>NOTE:</b> *Available online under Engineering Documents and References at: <a href="https://www.sandiego.gov/ecp/edocref/">https://www.sandiego.gov/ecp/edocref/</a> *Electronic updates to the Standard Drawings may also be found in the link above		

9. **CITY'S RESPONSES AND ADDENDA:** The City, at its discretion, may respond to any or all questions submitted in writing via the City's eBidding web site in the **form of an addendum**. No other responses to questions, oral or written shall be of any force or effect with respect to this solicitation. The changes to the Contract Documents through addenda are made effective as though originally issued with the Bid. The Bidders shall acknowledge the receipt of Addenda at the time of bid submission.

**10. CITY'S RIGHTS RESERVED:** The City reserves the right to cancel the Notice Inviting Bids at any time, and further reserves the right to reject submitted Bids, without giving any reason for such action, at its sole discretion and without liability. Costs incurred by the Bidder(s) as a result of preparing Bids under the Notice Inviting Bids shall be the sole responsibility of each bidder. The Notice Inviting Bids creates or imposes no obligation upon the City to enter a contract.

**11. CONTRACT PRICING:** This solicitation is for a Lump Sum contract with Unit Price provisions as set forth herein. The Bidder agrees to perform construction services for the City of San Diego in accordance with these contract documents for the prices listed below. The Bidder further agrees to guarantee the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee may be extended, by mutual consent of the parties, by the number of days required for the City to obtain all items necessary to fulfill all contractual conditions.

**12. SUBCONTRACTOR INFORMATION:**

**12.1. LISTING OF SUBCONTRACTORS.** In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" of the California Public Contract Code, the Bidder shall provide the **NAME** and **ADDRESS** of each Subcontractor who will perform work, labor, render services or who specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of 0.5% of the Contractor's total Bid. The Bidder shall also state within the description, whether the subcontractor is a **CONSTRUCTOR, CONSULTANT** or **SUPPLIER**. The Bidder shall state the **DIR REGISTRATION NUMBER** for all subcontractors and shall further state within the description, the **PORTION** of the work which will be performed by each subcontractor under this Contract. The Contractor shall list only one Subcontractor for each portion of the Work. The **DOLLAR VALUE** of the total Bid to be performed shall be stated for all subcontractors listed. Failure to comply with this requirement may result in the Bid being rejected as **non-responsive** and ineligible for award. The Bidder's attention is directed to the Special Provisions - Section 3-2, "Self-Performance", which stipulates the percent of the Work to be performed with the Bidders' own forces. The Bidder shall list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which Bidders are seeking recognition towards achieving any mandatory, voluntary (or both) subcontracting participation goals.

Additionally, pursuant to California Senate Bill 96 and in accordance with the requirements of Labor Code sections 1771.1 and 1725.5, by submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the California Department of Industrial Relations (DIR). **The Bidder shall provide the name, address, license number, DIR registration number of any Subcontractor - regardless of tier** - who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement pursuant to the contract.

**12.2. LISTING OF SUPPLIERS.** Any Bidder seeking the recognition of Suppliers of equipment, materials, or supplies obtained from third party Suppliers towards

achieving any mandatory or voluntary (or both) subcontracting participation goals shall provide, at a minimum, the **NAME, LOCATION (CITY), DIR REGISTRATION NUMBER** and the **DOLLAR VALUE** of each supplier. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for materials and supplies unless vendor manufactures or substantially alters materials and supplies, in which case, 100% will be credited. The Bidder is to indicate within the description whether the listed firm is a supplier or manufacturer. If no indication is provided, the listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage.

- 12.3. LISTING OF SUBCONTRACTORS OR SUPPLIERS FOR ALTERNATES.** For subcontractors or suppliers to be used on additive or deductive alternate items, in addition to the above requirements, bidder shall further note "ALTERNATE" and alternate item number within the description.
- 13. SUBMITTAL OF "OR EQUAL" ITEMS:** See Section 4-6, "Trade Names" in The WHITEBOOK and as amended in the SSP.
- 14. AWARD:**
- 14.1.** The Award of this contract is contingent upon the Contractor's compliance with all condition's precedent to Award.
- 14.2.** Upon acceptance of a Bid, the City will prepare contract documents for execution within approximately 21 days of the date of the Bid opening and award the Contract approximately within 7 days of receipt of properly executed Contract, bonds, and insurance documents.
- 14.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form the City Attorney's Office.
- 15. SUBCONTRACT LIMITATIONS:** The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 3-2, "SELF-PERFORMANCE" in The GREENBOOK and as amended in the SSP which requires the Contractor to self-perform not less than the specified amount. Failure to comply with this requirement shall render the bid **non-responsive** and ineligible for award.
- 16. AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: <http://www.sandiego.gov/cip/>. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Purchasing & Contracting Department, Public Works Division.
- 17. ONLY ONE BID PER CONTRACTOR SHALL BE ACCEPTED:** No person, firm, or corporation shall be allowed to make, file, or be interested in more than one (1) Bid for the same work unless alternate Bids are called for. A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby

disqualified from submitting a sub-proposal or quoting prices to other Bidders or from submitting a Bid in its own behalf. Any Bidder who submits more than one bid will result in the rejection of all bids submitted.

**18. SAN DIEGO BUSINESS TAX CERTIFICATE:** The Contractor and Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, First floor and submit to the Contract Specialist upon request or as specified in the Contract Documents. Tax Identification numbers for both the Bidder and the listed Subcontractors must be submitted on the City provided forms within these documents.

**19. BIDDER'S GUARANTEE OF GOOD FAITH (BID SECURITY) FOR DESIGN-BID-BUILD CONTRACTS:**

**19.1.** For bids \$250,000 and above, bidders shall submit Bid Security at bid time. Bid Security shall be in one of the following forms: a cashier's check, or a properly certified check upon some responsible bank; or an approved corporate surety bond payable to the City of San Diego for an amount of not less than 10% of the total bid amount.

**19.2.** This check or bond, and the monies represented thereby, will be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into the contract and furnish the required final performance and payment bonds.

**19.3.** The Bidder agrees that in the event of the Bidder's failure to execute this contract and provide the required final bonds, the money represented by the cashier's or certified check will remain the property of the City; and the Surety agrees that it will pay to the City the damages, not exceeding the sum of 10% of the amount of the Bid, that the City may suffer as a result of such failure.

**19.4.** At the time of bid submission, bidders must upload and submit an electronic PDF copy of the aforementioned bid security. Whether in the form of a cashier's check, a properly certified check, or an approved corporate surety bond payable to the City of San Diego, the bid security must be uploaded to the City's eBidding system. By 5PM, 3 working days after the bid opening date, all bidders must provide the City with the original bid security.

**19.5.** Failure to submit the electronic version of the bid security at the time of bid submission AND failure to provide the original by 5PM, 3 working days after the bid opening date shall cause the bid to be rejected and deemed **non-responsive**.

Due to circumstances related to Covid-19, until further notice, all original bid bond submittals must be received by 5 PM, 3 working days after bid opening.

Upon circumstances returning to normal business as usual, the original bid bond shall once again be due by 5 PM the day after bid opening.

Original Bid Bond shall be submitted to:

Purchasing & Contracting Department, Public Works Division

1200 3<sup>rd</sup> Ave. Suite 200 MS56

San Diego, California, 92101

To the Attention of the Contract Specialist on the Front Page of this solicitation.

**20. AWARD OF CONTRACT OR REJECTION OF BIDS:**

- 20.1.** This contract may be awarded to the lowest responsible and reliable Bidder.
- 20.2.** Bidders shall complete ALL eBid forms as required by this solicitation. Incomplete eBids will not be accepted.
- 20.3.** The City reserves the right to reject any or all Bids, to waive any informality or technicality in Bids received, and to waive any requirements of these specifications as to bidding procedure.
- 20.4.** Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City within 3 Working Days of the bid opening, written notice from the Bidder which shows proof of honest, credible, clerical error of a material nature, free from fraud or fraudulent intent; and of evidence that reasonable care was observed in the preparation of the Bid.
- 20.5.** A bidder who is not selected for contract award may protest the award of a contract to another bidder by submitting a written protest in accordance with the San Diego Municipal Code.
- 20.6.** The City of San Diego will not discriminate in the award of contracts with regard to race, religion creed, color, national origin, ancestry, physical handicap, marital status, sex or age.
- 20.7.** Each Bid package properly signed as required by these specifications shall constitute a firm offer which may be accepted by the City within the time specified herein.
- 20.8.** The City reserves the right to evaluate all Bids and determine the lowest Bidder on the basis of the base bid and any proposed alternates or options as detailed herein.

**21. BID RESULTS:**

- 21.1.** The availability of the bids on the City's eBidding system shall constitute the public announcement of the apparent low bidder. In the event that the apparent low bidder is subsequently deemed non-responsive or non-responsible, a notation of such will be made on the eBidding system. The new ranking and apparent low bidder will be adjusted accordingly.
- 21.2.** To obtain the bid results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the bid name and number. The bid tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

**22. THE CONTRACT:**

- 22.1.** The Bidder to whom award is made shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance certificates specified by the City within 14 days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing.



- 22.2.** If the Bidder takes longer than 14 days to fulfill these requirements, then the additional time taken shall be added to the Bid guarantee. The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- 22.3.** If the Bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled, and the Bidder's Guarantee of Good Faith will be subject to forfeiture. An award may be made to the next lowest responsible and reliable Bidder who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.
- 22.4.** Pursuant to the San Diego City Charter section 94, the City may only award a public works contract to the lowest responsible and reliable Bidder. The City will require the Apparent Low Bidder to (i) submit information to determine the Bidder's responsibility and reliability, (ii) execute the Contract in form provided by the City, and (iii) furnish good and approved bonds and insurance certificates specified by the City within 14 Days, unless otherwise approved by the City, in writing after the Bidder receives notification from the City, designating the Bidder as the Apparent Low Bidder and formally requesting the above mentioned items.
- 22.5.** The award of the Contract is contingent upon the satisfactory completion of the above-mentioned items and becomes effective upon the signing of the Contract by the Mayor or designee and approval as to form by the City Attorney's Office. If the Apparent Low Bidder does not execute the Contract or submit required documents and information, the City may award the Contract to the next lowest responsible and reliable Bidder who shall fulfill every condition precedent to award. A corporation designated as the Apparent Low Bidder shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bond for the corporation is duly authorized to do so.
- 23. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK:** The Bidder shall examine carefully the Project Site, the Plans and Specifications, other materials as described in the Special Provisions, Section 3-9, "TECHNICAL STUDIES AND SUBSURFACE DATA", and the proposal forms (e.g., Bidding Documents). The submission of a Bid shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work, the quantities of materials to be furnished, and as to the requirements of the Bidding Documents Proposal, Plans, and Specifications.
- 24. CITY STANDARD PROVISIONS:** This contract is subject to the following standard provisions. See The WHITEBOOK for details.
- 24.1.** The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.

- 24.2. The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.
- 24.3. The City of San Diego Municipal Code §22.3004 for Contractor Standards.
- 24.4. The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.
- 24.5. Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.
- 24.6. The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).
- 24.7. The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.

**25. PRE-AWARD ACTIVITIES:**

- 25.1. The contractor selected by the City to execute a contract for this Work shall submit the required documentation as specified herein and in the Notice of Intent to Award. Failure to provide the information as specified may result in the Bid being rejected as **non-responsive**.
- 25.2. The decision that bid is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

**PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND**

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**FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:**

S.C. Valley Engineering, Inc., a corporation, as principal, and  
Western Surety Company, a corporation authorized to do  
business in the State of California, as Surety, hereby obligate themselves, their successors and assigns,  
Jointly and severally, to The City of San Diego a municipal corporation in the sum of **Thirteen Million  
One Hundred Sixty Three Thousand Six Hundred Ninety Six Dollars and Ten Cents  
(\$13,163,696.10)** for the faithful performance of the annexed contract, and in the sum of **Thirteen  
Million One Hundred Sixty Three Thousand Six Hundred Ninety Six Dollars and Ten Cents  
(\$13,163,696.10)** for the benefit of laborers and materialmen designated below.

**Conditions:**

If the Principal shall faithfully perform the annexed contract with the City of San Diego, California, then the obligation herein with respect to a faithful performance shall be void; otherwise, it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for or performing labor in the execution of this contract and shall pay all amounts due under the California Unemployment Insurance Act then the obligation herein with respect to laborers and materialmen shall be void; otherwise, it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants, (iii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives notice of same.

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

The Surety expressly agrees that the City of San Diego may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal.

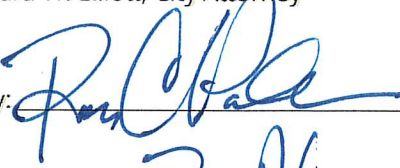
The Surety shall not utilize the Principal in completing the improvements and work specified in the Agreement in the event the City terminates the Principal for default.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)

THE CITY OF SAN DIEGO

APPROVED AS TO FORM

By: 

Mara W. Elliott, City Attorney  
By: 

Print Name: Claudia C. Abarca  
Director  
Purchasing & Contracting Department

Print Name: Paul Dole  
Deputy City Attorney

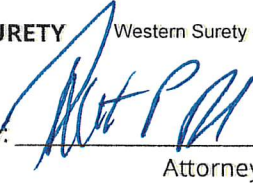
Date: September 28, 2022

Date: 9/28/22

CONTRACTOR S.C. Valley Engineering, Inc.

SURETY Western Surety Company

By: 

By:   
Attorney-In-Fact

Print Name: Sam Watnen

Print Name: Robert P. Dole

Date: 7/19/22

Date: July 13, 2022

Dole & Sons, Inc. dba: Paul Dole Insurance Agency  
PO Box 400, Bonita, CA 91908

Local Address of Surety

(619) 475-5200

Local Phone Number of Surety

\$74,962.00

Premium

30163723

Bond Number

# Western Surety Company

## POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Daniel P Dole, John T Dole, Robert P Dole, Michael Dole, Adam Dole, Patti Ewert, Individually**

of Bonita, CA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

### - In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 22nd day of June, 2021.



WESTERN SURETY COMPANY

*Paul T. Bruflat*

Paul T. Bruflat, Vice President

State of South Dakota }  
County of Minnehaha } ss

On this 22nd day of June, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026



*M. Bent*

M. Bent, Notary Public

### CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 13 day of July, 2022.



WESTERN SURETY COMPANY

*L. Nelson*

L. Nelson, Assistant Secretary

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

County of San Diego }

On July 13, 2022 before me, Patti Ewert, Notary Public,  
Date Insert Name of Notary exactly as it appears on the official seal

personally appeared Robert P. Dole  
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature Patti Ewert  
Signature of Notary Public, Patti Ewert



Place Notary Seal Above

## OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer(s)

Signer's Name: Robert P. Dole

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER

Top of thumb here

Signer is Representing:  
Western Surety Company

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER

Top of thumb here

Signer is Representing: \_\_\_\_\_

## ATTACHMENTS

**ATTACHMENT A**  
**SCOPE OF WORK**



## **SCOPE OF WORK**

1. **SCOPE OF WORK:** Construction of Water Group 952 consists of the installation of approximately 7440 linear feet of 8 inch, 12 inch, and 16 inch water mains, water services, valves, fire hydrants and markers, resurfacing, curb ramps, and all other related work and appurtenances.
  - 1.1. The Work shall be performed in accordance with:
    - 1.1.1. The Notice Inviting Bids and Plans numbered **38235-01-D** through **38235-64-D** and **38235-T01-D** through **38235-T33-D**, inclusive.
2. **LOCATION OF WORK:** The location of the Work is as follows:

See **Appendix E – Location Map.**
3. **CONTRACT TIME:** The Contract Time for completion of the Work, including the Plant Establishment Period, shall be **416 Working Days.**

**ATTACHMENT B**  
**PHASED FUNDING PROVISIONS**

## **PHASED FUNDING PROVISIONS**

### **1. PRE-AWARD**

**1.1.** Within 10 Working Days of the Notice of Intent to Award, the Contractor must contact the Project Manager to discuss fund availability for each phase and shall also submit the following:

**1.1.1.** Construction Cost Loaded Schedule in accordance with 6-1, "CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK" and 7-3, "PAYMENT."

**1.2.** Contractor's failure to perform any of the following may result cancelling the award of the Contract:

**1.2.1.** Meeting with the City's Project Manager to discuss the Phased Funding Schedule.

**1.2.2.** Agreeing to a Phased Funding Schedule within thirty days of meeting with the City's Project Manager.

### **2. POST-AWARD**

**2.1.** Do not start any construction activities for the next phase until the Notice to Proceed (NTP) has been issued by the City. The City will issue a separate NTP for each phase.

**2.2.** The City may issue the NTP for a subsequent phase before the completion of the preceding phase.

## PHASED FUNDING SCHEDULE AGREEMENT

The particulars left blank below, such as the total number of phases and the amounts assigned to each phase, will be completed with funding specific information from the Pre-Award Schedule and Construction Cost Loaded Schedule submitted to and approved by the City.

**BID NUMBER: K-22-2065-DBB-3**

**CONTRACT OR TASK TITLE: WATER GROUP JOB 952**

**CONTRACTOR: S.C. VALLEY ENGINEERING, INC.**

Funding Phase	Phase Description	Phase Start	Phase Finish	Not-to-Exceed Amount
1	Construction of Water Group 952 consists of the installation of approximately 7440 linear feet of 8-inch, 12-inch, and 16-inch water mains, water services, valves, fire hydrants and markers, resurfacing, curb ramps, and all other related work and appurtenances.  (Sheets 38235-01 thru 38235-10-D, 38235-13-D thru 38235-16, 38235- 22-D thru 28235-29-D, 28235-42-D thru 28235-52-D)	NTP	07/31/2023	\$8,000,000.00
2	Construction of Water Group 952 consists of the installation of approximately 7440 linear feet of 8-inch, 12-inch, and 16-inch water mains, water services, valves, fire hydrants and markers, resurfacing, curb ramps, and all other related work and appurtenances.  (Sheets 38235-11-D thru 38253-12-D, 28235-17-D thru 28235-21-D, 28235-30-D thru 28235-41-D)	08/01/2023	NOC	\$5,163,696.10
<b>Ph I:</b> \$8,000,000.00 <b>Ph II:</b> \$5,163,696.10 <b>Contract Total:</b>				<b>\$13,163,696.10</b>

**Notes:**

- 1) WHITEBOOK section 7-3.10, "Phased Funding Compensation" applies.
- 2) The total of all funding phases shall be equal to the TOTAL BID PRICE as shown on BID SCHEDULE 1 - PRICES.
- 3) This PHASED FUNDING SCHEDULE AGREEMENT will be incorporated into the CONTRACT and shall only be revised by written modifications to the CONTRACT.

**CITY OF SAN DIEGO**

PRINT NAME: PINO CIAFRE  
Construction Senior Engineer

Signature: 

Date: 8/2/22

PRINT NAME: Jaime A. Ramos  
Design Senior Engineer

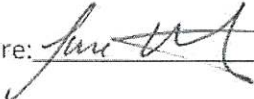
Signature: 

Date: 08.02.2022

**CONTRACTOR**

PRINT NAME: Sam Witten

Title: President

Signature: 

Date: 8/2/22

**ATTACHMENT C**  
**EQUAL OPPORTUNITY CONTRACTING PROGRAM**

## EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

### SECTION A - GENERAL REQUIREMENTS

#### A. INTRODUCTION.

1. This document sets forth the following specifications:
  - a) The City's general EOCP requirements for all Construction Contracts.
  - b) Special Provisions for Contracts subject to SLBE and ELBE requirements only.
2. Additional requirements may apply for state or federally funded projects.
3. These requirements shall be included as Contract provisions for all Subcontracts.
4. The City specified forms, instructions, and guides are available for download from the EOCP's web site at:  
<http://www.sandiego.gov/eoc/forms/index.shtml>

#### B. GENERAL.

1. The City of San Diego promotes equal employment and subcontracting opportunities.
2. The City is committed to ensuring that taxpayer dollars spent on public Contracts are not paid to businesses that practice discrimination in employment or subcontracting.
3. The City encourages all companies seeking to do business with the City to share this commitment.

#### C. DEFINITIONS.

1. For the purpose of these requirements: Terms "Bid" and "Proposal", "Bidder" and "Proposer", "Subcontractor" and "Subconsultant", "Contractor" and "Consultant", "Contractor" and "Prime Contractor", "Consultant" and "Professional Service Provider", "Suppliers" and "Vendors", "Suppliers" and "Dealers", and "Suppliers" and "Manufacturers" may have been used interchangeably.
2. The following definitions apply:
  - a) **Emerging Business Enterprise (EBE)** - A for-profit business that is independently owned and operated; that is not a subsidiary or franchise of another business and whose gross annual receipts do not exceed the amount set by the City Manager and that meets all other criteria set forth in regulations implementing Municipal Code Chapter 2, Article 2, Division 36. The City Manager shall review the threshold amount for EBEs on an annual basis and adjust as necessary to reflect changes in the marketplace.

- b) **Emerging Local Business Enterprise (ELBE)** - A Local Business Enterprise that is also an Emerging Business Enterprise.
- c) **Minority Business Enterprise (MBE)** - A certified business that is at least fifty-one percent (51%) owned by one or more minority individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more minority individuals; and (2) whose daily business operations are managed and directed by one or more minorities owners. Minorities include the groups with the following ethnic origins: African, Asian Pacific, Asian Subcontinent, Hispanic, Native Alaskan, Native American, and Native Hawaiian.
- d) **Women Business Enterprise (WBE)** - A certified business that is at least fifty-one percent (51%) owned by a woman or women, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more women; and (2) whose daily business operations are managed and directed by one or more women owners.
- e) **Disadvantaged Business Enterprise (DBE)** - a certified business that is at least fifty-one percent (51%) owned by socially and economically disadvantaged individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more socially and economically disadvantaged individuals; and (2) whose daily business operations are managed and directed by one or more socially and economically disadvantaged owners.
- f) **Disabled Veteran Business Enterprise (DVBE)** - A certified business that is at least fifty-one percent (51%) owned by one or more disabled veterans; and (2) business operations must be managed and controlled by one or more disabled veterans. Disabled Veteran is a veteran of the U.S. military, naval, or air service; the veteran must have a service-connected disability of at least 10% or more; and the veteran must reside in California.
- g) **Other Business Enterprise (OBE)** - Any business which does not otherwise qualify as a Minority, Woman, Disadvantaged, or Disabled Veteran Business Enterprise.
- h) **Small Business Enterprise (SBE)** - A for-profit business that is independently owned and operated; that is not a subsidiary or franchise of another business and whose gross annual receipts do not exceed the amount set by the City Manager and that meets all other criteria set forth in regulations implementing Municipal Code Chapter 2, Article 2, Division 36. The City Manager shall review the threshold amount for SBEs on an annual basis and adjust as necessary to reflect changes in the marketplace. A business certified as a Micro Business (MB) or a Disabled Veteran Business Enterprise (DVBE) by the State of California and that has provided proof of such certification to the City Manager shall be deemed to be an SBE.



- i) **Small Local Business Enterprise (SLBE)** - A Local Business Enterprise that is also a Small Business Enterprise.

**D. CITY'S EQUAL OPPORTUNITY COMMITMENT.**

**1. Nondiscrimination in Contracting Ordinance.**

- a) You, your Subcontractors, and Suppliers shall comply with the requirements of the City's Nondiscrimination in Contracting Ordinance, San Diego Municipal Code §§22.3501 through 22.3517.

You shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers. You shall provide equal opportunity for Subcontractors to participate in subcontracting opportunities. You understand and agree that the violation of this clause shall be considered a material breach of the Contract and may result in Contract termination, debarment, or other sanctions.

You shall include the foregoing clause in all Contracts between you and your Subcontractors and Suppliers.

- b) **Disclosure of Discrimination Complaints.** As part of its Bid or Proposal, you shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against you in a legal or administrative proceeding alleging that you discriminated against your employees, Subcontractors, vendors, or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.
- c) Upon the City's request, You agree to provide to the City, within 60 Calendar Days, a truthful and complete list of the names of all Subcontractors and Suppliers that you have used in the past 5 years on any of your Contracts that were undertaken within the San Diego County, including the total dollar amount paid by you for each Subcontract or supply Contract.
- d) You further agree to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance, Municipal Code §§22.3501 through 22.3517. You understand and agree that violation of this clause shall be considered a material breach of the Contract and may result in remedies being ordered against you up to and including contract termination, debarment, and other sanctions for the violation of the provisions of the Nondiscrimination in Contracting Ordinance. You further understand and agree that the procedures, remedies, and sanctions provided for in the Nondiscrimination in Contracting Ordinance apply only to violations of the Ordinance.

**E.**

**EQUAL EMPLOYMENT OPPORTUNITY OUTREACH PROGRAM.**

1. You, your Subcontractors, and Suppliers shall comply with the City's Equal Employment Opportunity Outreach Program, San Diego Municipal Code §§22.2701 through 22.2707.

You shall not discriminate against any employee or applicant for employment on any basis prohibited by law. You shall provide equal opportunity in all employment practices. You shall ensure that your Subcontractors comply with this program. Nothing in this section shall be interpreted to hold you liable for any discriminatory practices of your Subcontractors.

You shall include the foregoing clause in all Contracts between you and your Subcontractors and Suppliers.

2. If the Contract is competitively solicited, the selected Bidder shall submit a Work Force Report (Form BB05) within 10 Working Days after receipt by the Bidder to the City for approval as specified in the Notice of Intent to Award letter.
3. The selected Bidder shall submit an Equal Employment Opportunity Plan if a Work Force Report is submitted and if the City determines that there are under-representations when compared to County Labor Force Availability data.
4. If the selected Bidder submits an Equal Employment Opportunity Plan, it shall include the following assurances:
  - a) You shall maintain a working environment free of discrimination, harassment, intimidation, and coercion at all Sites and in all facilities at which your employees are assigned to Work.
  - b) You shall review your EEO Policy annually with all on-Site supervisors involved in employment decisions.
  - c) You shall disseminate and review your EEO Policy with all employees at least once a year, post the policy statement and EEO posters on all company bulletin boards and job sites, and document every dissemination, review, and posting with a written record to identify the time, place, employees present, subject matter, and disposition of meetings.
  - d) You shall review, at least annually, all supervisors' adherence to and performance under the EEO Policy and maintain written documentation of these reviews.
  - e) You shall discuss your EEO Policy Statement with Subcontractors with whom you anticipate doing business, including the EEO Policy Statement in your Subcontracts, and provide such documentation to the City upon request.

- f) You shall document and maintain a record of all Bid solicitations and outreach efforts to and from Subcontractors, contractor associations, and other business associations.
- g) You shall disseminate your EEO Policy externally through various media, including the media of people of color and women, in advertisements to recruit. Maintain files documenting these efforts and provide copies of these advertisements to the City upon request.
- h) You shall disseminate your EEO Policy to union and community organizations.
- i) You shall provide immediate written notification to the City when any union referral process has impeded your efforts to maintain your EEO Policy.
- j) You shall maintain a current list of recruitment sources, including those outreaching to people of color and women, and provide written notification of employment opportunities to these recruitment sources with a record of the organizations' responses.
- k) You shall maintain a current file of names, addresses and phone numbers of each walk-in applicant, including people of color and women, and referrals from unions, recruitment sources, or community organizations with a description of the employment action taken.
- l) You shall encourage all present employees, including people of color and women employees, to recruit others.
- m) You shall maintain all employment selection process information with records of all tests and other selection criteria.
- n) You shall develop and maintain documentation for on-the-job training opportunities, participate in training programs, or both for all of your employees, including people of color and women, and establish apprenticeship, trainee, and upgrade programs relevant to your employment needs.
- o) You shall conduct, at least annually, an inventory and evaluation of all employees for promotional opportunities and encourage all employees to seek and prepare appropriately for such opportunities.
- p) You shall ensure that the company's working environment and activities are non-segregated except for providing separate or single-user toilets and necessary changing facilities to assure privacy between the sexes.

**F. SUBCONTRACTING.**

1. The City encourages all eligible business enterprises to participate in City contracts as a Contractor, Subcontractor, and joint venture partner with you, your Subcontractors, or your Suppliers. You are encouraged to take positive

steps to diversify and expand your Subcontractor solicitation base and to offer subcontracting opportunities to all eligible business firms including SLBEs, ELBEs, MBEs, WBEs, DBEs, DVBEs, and OBEs.

2. For Subcontractor participation level requirements, see the Contract Documents where applicable.
3. For the purposes of achieving the mandatory Subcontractor participation percentages, City percentage calculations will not account for the following:
  - a) "Field Orders" and "City Contingency" Bid items.
  - b) Alternate Bid items.
  - c) Allowance Bid items designated as "EOC Type II".
4. Allowance Bid items designated as "EOC Type I" will be considered as part of the Base Bid and will be included in the percentage calculation.
5. Each joint venture partner shall be responsible for a clearly defined Scope of Work. In addition, an agreement shall be submitted and signed by all parties identifying the extent to which each joint venture partner shares in ownership, control, management, risk, and profits of the joint venture.

**G. LISTS OF SUBCONTRACTORS AND SUPPLIERS.**

1. You shall comply with the Subletting and Subcontracting Fair Practices Act, Public Contract Code §§4100 through 4113, inclusive.
2. You shall list all Subcontractors who will receive more than 0.5% of the total Bid amount or \$10,000, whichever is greater on the form provided in the Contract Documents (Subcontractor's list).
3. The Subcontractors list shall include the Subcontractor's name, telephone number including area code, physical address, Scope of Work, the dollar amount of the proposed Subcontract, the California contractor license number, the Public Works contractor registration number issued pursuant to Section 1725.5 of the Labor Code, and the Subcontractor's certification status with the name of the certifying agency.
4. The listed Subcontractor shall be appropriately licensed pursuant to Contractor License Laws.
5. For Design-Build Contracts, refer to the RFQ and RFP for each Project or Task Order.

**H. SUBCONTRACTOR AND SUPPLIER SUBSTITUTIONS.**

1. Listed Subcontractors and Suppliers shall not be substituted without the Express authorization of the City or its duly authorized agent.

2. Request for Subcontractor or Supplier substitution shall be made in writing to Purchasing & Contracting Department, Public Works Division, Attention Contract Specialist, 1200 3rd Ave., Suite 200, MS56, San Diego, CA 92101 with a copy to the Engineer.
3. The request shall include a thorough explanation of the reason(s) for the substitution, including dollar amounts and a letter from each substituted Subcontractor or Supplier stating that they (the Subcontractors or Suppliers) release all interest in working on the Project and written confirmation from the new Subcontractor or Supplier stating that they agree to work on the Project along with the dollar value of the Work to be performed.
4. Written approval of the substitution request shall be received by you or from the City or its authorized officer prior to any unlisted Subcontractor or Supplier performing Work on the Project.
5. Substitution of Subcontractors and Suppliers without authorization shall subject you to those penalties set forth in Public Contract Code §4110.
6. Requests for Supplier substitution shall be made in writing at least 10 Days prior to the provision of materials, supplies, or services by the proposed Supplier and shall include proof of written notice to the originally listed Supplier of the proposed substitution.
7. A Contractor whose Bid is accepted shall not:
  - a) Substitute a person as Subcontractor or Supplier in place of the Subcontractor or Supplier listed in the original bid, except that the City, or its duly authorized officer, may consent to the substitution of another person as a Subcontractor or Supplier in any of the following situations:
    - i. When the Subcontractor or Supplier listed in the Bid, after having a reasonable opportunity to do so, fails or refuses to execute a written Contract for the scope of work specified in the subcontractor's bid and at the price specified in the subcontractor's bid, when that written contract, based upon the general terms, conditions, plans, and specifications for the project involved or the terms of the subcontractor's written bid, is presented to the subcontractor by the prime contractor.
    - ii. When the listed Subcontractor or Supplier becomes insolvent or the subject of an order for relief in bankruptcy.
    - iii. When the listed Subcontractor or Supplier fails or refuses to perform his or her subcontract.

- iv. When the listed Subcontractor fails or refuses to meet bond requirements as set forth in Public Contract Code §4108.
  - v. When you demonstrate to the City or its duly authorized officer, subject to the provisions set forth in Public Contract Code §4107.5, that the name of the Subcontractor was listed as the result of an inadvertent clerical error.
  - vi. When the listed Subcontractor is not licensed pursuant to Contractor License Law.
  - vii. When the City, or its duly authorized officer, determines that the Work performed by the listed Subcontractor or that the materials or supplies provided by the listed Supplier are substantially unsatisfactory and not in substantial accordance with the Plans and specifications or that the Subcontractor or Supplier is substantially delaying or disrupting the progress of the Work.
  - viii. When the listed Subcontractor is ineligible to work on a public works project pursuant to §§1777.1 or 1777.7 of the Labor Code.
  - ix. When the City or its duly authorized agent determines that the listed Subcontractor is not a responsible contractor.
- b) Permit a Contract to be voluntarily assigned or transferred or allow it to be performed by anyone other than the original Subcontractor, Supplier listed in the original Bid without the consent of the City, or its duly authorized officer.
  - c) Other than in the performance of "Change Orders" causing changes or deviations from the Contract, sublet or subcontract any portion of the Work, or contract for materials or supplies in excess of 0.5% of your total bid or \$10,000, whichever is greater, as to which his or her original Bid did not designate a Subcontractor or Supplier.
8. Following receipt of notice from you of the proposed substitution of a Subcontractor or Supplier, the listed Subcontractor or Supplier who has been so notified shall have 5 Working Days within which to submit written objections to the substitution to the Contract Specialist with a copy to the Engineer. Failure to file these written objections shall constitute the listed Subcontractor or Supplier's consent to the substitution. If written objections are filed, the City shall give notice in writing of at least 5 Working Days to the listed Subcontractor or Supplier of a hearing by the City on your request for substitution.

**I. PROMPT PAYMENT.**

- 1. You or your Subcontractors shall pay to any subcontractor, not later than 7 Calendar Days of receipt of each progress payment, unless otherwise agreed

to in writing, the respective amounts allowed you on account of the Work performed by the Subcontractors, to the extent of each Subcontractor's interest therein. In cases of Subcontractor performance deficiencies, you shall make written notice of any withholding to the Subcontractor with a copy to the Contracts Specialist. Upon correction of the deficiency, you shall pay the Subcontractor the amount previously withheld within 14 Calendar Days after payment by the City.

2. Any violation of California Business and Professions Code, §7108.5 concerning prompt payment to Subcontractors shall subject the violating Contractor or Subcontractor to the penalties, sanctions, and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to you or your Subcontractor in the event of a dispute involving late payment or nonpayment by the Prime Contractor, deficient subcontract performance, or noncompliance by a Subcontractor.

**J. PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS.**

1. The City will hold retention from you and will make prompt and regular incremental acceptances of portions, as determined by the Engineer, of the Work and pay retention to you based on these acceptances.
2. You or your Subcontractors shall return all monies withheld in retention from a Subcontractor within 30 Calendar Days after receiving payment for Work satisfactorily completed and accepted including incremental acceptances of portions of the Work by the City.
3. Federal law (49CFR26.29) requires that any delay or postponement of payment over 30 Calendar Days may take place only for good cause and with the City's prior written approval. Any violation of this provision by you or your Subcontractor shall subject you or your Subcontractor to the penalties, sanctions, and other remedies specified in §7108.5 of the Business and Professions Code.
4. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to you or your Subcontractor in the event of a dispute involving late payment or nonpayment by you, deficient subcontract performance, or noncompliance by a Subcontractor.

**K. CERTIFICATION.**

1. The City accepts certifications of DBE, DVBE, MBE, SMBE, SWBE, or WBE by any of the following certifying agencies:
  - a) Current certification by the State of California Department of Transportation (CALTRANS) as DBE, SMBE, or SWBE.
  - b) Current MBE, WBE, or DVBE certification from the California Public Utilities Commission.

- c) DVBE certification is received from the State of California's Department of General Services, Office of Small and Minority Business.
- d) Current certification by the City of Los Angeles as DBE, WBE, or MBE.
- e) Subcontractors' valid proof of certification status (copies of MBE, WBE, DBE, or DVBE certifications) shall be submitted as required.

**L. CONTRACT RECORDS AND REPORTS.**

- 1. You shall maintain records of all subcontracts and invoices from your Subcontractors and Suppliers for work on this project. Records shall show name, telephone number including area code, and business address of each Subcontractor, Supplier, and joint venture partner, and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.
- 2. You shall retain all records, books, papers, and documents pertinent to the Contract for a period of not less than 5 years after Notice of Completion and allow access to said records by the City's authorized representatives.
- 3. You shall submit the following reports using the City's web-based contract compliance (Prism® portal):
  - a. **Monthly Payment.** You shall submit Monthly Payment Reporting by the 10<sup>th</sup> day of the subsequent month. Incomplete and/or delinquent reporting may cause payment delays, non-payment of invoices, or both.
- 4. The records maintained under item 1, described above, shall be consolidated into a Final Summary Report, certified as correct by an authorized representative of the Contractor. The Final Summary Report shall include all subcontracting activities and be sent to the EOCP Program Manager prior to Acceptance. Failure to comply may result in assessment of liquidated damages or withholding of retention. The City will review and verify 100% of subcontract participation reported in the Final Summary Report prior to approval and release of final retention to you. In the event your Subcontractors are owed money for completed Work, the City may authorize payment to subcontractor via a joint check from the withheld retention.



## **EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)**

### **SECTION B - SLBE-ELBE SUBCONTRACTING REQUIREMENTS**

**THESE SPECIAL PROVISIONS SUPPLEMENT THE POLICIES AND REQUIREMENTS ESTABLISHED BY THE CITY OF SAN DIEGO EQUAL OPPORTUNITY CONTRACTING PROGRAM SPECIFIED IN THE CITY'S GENERAL EOCP REQUIREMENTS.**

#### **A. GENERAL.**

1. It is the City's policy to encourage greater availability, capacity development, and contract participation by SLBE and ELBE firms in City contracts. This policy is, in part, intended to further the City's compelling interest to stimulate economic development through the support and empowerment of the local community, ensure that it is neither an active nor passive participant in marketplace discrimination, and promote equal opportunity for all segments of the contracting community.
2. The City is committed to maximizing subcontracting opportunities for all qualified and available firms.
3. This policy applies to City-funded construction contracts. Bidders shall be fully informed of this policy as set forth in these specifications. Mandatory or voluntary subcontracting percentages, Bid Discounts, and restricted competitions are specified in the Contract Documents.
4. You shall make subcontracting opportunities available to a broad base of qualified Subcontractors and shall achieve the minimum SLBE-ELBE Subcontractor participation identified for your project.
5. Failure to subcontract the specified minimum (mandatory) percentages of the Bid to qualified available SLBE-ELBE Subcontractors will cause a Bid to be rejected as non-responsive unless the Bidder has demonstrated compliance with the affirmative steps as specified in the City's document titled "Small Local Business (SLBE) Program, INSTRUCTIONS FOR BIDDERS COMPLETING THE GOOD FAITH EFFORT SUBMITTAL" and has submitted documentation showing that all required positive efforts were made prior to the Bid submittal due date. The required Good Faith Effort (GFE) documentation shall be submitted to the Contract Specialist. The instructions for completing the good faith effort submittal can be found on the City's website:  
<https://www.sandiego.gov/sites/default/files/legacy/eoc/pdf/slbegfeinst.pdf>
6. The current list of certified SLBE-ELBE firms and information for completing the GFE submittal can be found on the City's EOC Department website:  
<http://www.sandiego.gov/eoc/programs/slbe.shtml>
7. These requirements may be waived, at the City's sole discretion, on projects deemed inappropriate for subcontracting participation.

**B.**

**DEFINITIONS.**

1. The following definitions shall be used in conjunction with these specifications:

- a) **Bid Discount** – Additional inducements or enhancements in the bidding process that are designed to increase the chances for the selection of SLBE firms in competition with other firms.
- b) **Commercially Useful Function** – An SLBE-ELBE performs a commercially useful function when it is responsible for the execution of the Work and is carrying out its responsibilities by actually performing, managing, and supervising the Work involved. To perform a commercially useful function, the SLBE-ELBE shall also be responsible, with respect to materials and supplies used on the Contract, for negotiating price, determining quantity and quality, ordering the material, and installing (where applicable) and paying for the material itself.

To determine whether an SLBE-ELBE is performing a commercially useful function, an evaluation will be performed of the amount of Work subcontracted, normal industry practices, whether the amount the SLBE-ELBE firm is to be paid under the contract is commensurate with the Work it is actually performing, and the SLBE-ELBE credit claimed for its performance of the Work, and other relevant factors. Specifically, an SLBE-ELBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of meaningful and useful SLBE-ELBE participation, when in similar transactions in which SLBE-ELBE firms do not participate, there is no such role performed.

- c) **Good Faith Efforts (GFE)** – Documentation of the Bidder's intent to comply with SLBE Program goals and procedures included in the City's SLBE Program, Instructions for Completing Good Faith Effort Submittal available from the City's EOCP website or the Contract Specialist.
- d) **Independently Owned, Managed, and Operated** – Ownership of a SLBE-ELBE firm shall be direct, independent, and by individuals only. Business firms that are owned by other businesses or by the principals or owners of other businesses that cannot themselves qualify under the SLBE-ELBE eligibility requirements shall not be eligible to participate in the Program. Moreover, the day-to-day management of the SLBE-ELBE firm shall be direct and independent of the influence of any other businesses that cannot themselves qualify under the SLBE-ELBE eligibility requirements.
- e) **Joint Venture** – An association of two or more persons or business entities that is formed for the single purpose of carrying out a single defined business enterprise for which purpose they combine their

capital, efforts, skills, knowledge, or property. Joint ventures shall be established by written agreement to qualify for this program.

- f) **Local Business Enterprise (“LBE”)** – A firm having a Principal Place of Business and a Significant Employment Presence in San Diego County, California that has been in operation for 12 consecutive months and a valid business tax certificate. This definition is subsumed within the definition of Small Local Business Enterprise.
- g) **Minor Construction Program** – A program developed for bidding exclusively among SLBE-ELBE Construction firms.
- h) **Principal Place of Business** – A location wherein a firm maintains a physical office and through which it obtains no less than 50% of its overall customers or sales dollars.
- i) **Protégé** – A firm that has been approved and is an active participant in the City’s Mentor-Protégé Program and that has signed the required program participation agreement and has been assigned a mentor.
- j) **Significant Employee Presence** – No less than 25% of a firm’s total number of employees are domiciled in San Diego County.

**C. SUBCONTRACTOR PARTICIPATION.**

- 1. For the purpose of satisfying subcontracting participation requirements, only 1<sup>st</sup> tier SLBE-ELBE Subcontractors will be recognized as participants in the Contract according to the following criteria:
  - a) For credit to be allowed toward a respective participation level, all listed SLBE-ELBE firms shall have been certified by the Bid due date.
  - b) The Subcontractor shall perform a commercially useful function for credit to be allowed toward subcontractor participation levels. The Subcontractor shall be required by you to be responsible for the execution of a distinct element of the Work and shall carry out its responsibility by actually performing and supervising its own workforce.
  - c) If the Bidder is seeking the recognition of materials, supplies, or both towards achieving any mandatory subcontracting participation level, the Bidder shall indicate on Form AA40 – Named Equipment/Material Supplier List with the Bid the following:
    - i. If the materials or supplies are obtained from a SLBE-ELBE manufacturer, the Bidder will receive 100% of the cost of the materials or supplies toward SLBE participation. For the purposes of counting SLBE-ELBE participation, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the Contract and of the general character described by the specifications.

- ii. If the materials or supplies are obtained from a SLBE-ELBE supplier, the Bidder will receive 60% of the cost of the materials or supplies toward SLBE participation. For the purposes of counting SLBE-ELBE participation a Supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a supplier, the firm shall be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A person may be a supplier in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business if the person both owns and operates distribution equipment for the products. Any supplementing of the suppliers' own distribution equipment shall be by a long-term lease agreement and shall not be on an ad hoc or contract-by-contract basis.
  - iii. If the materials or supplies are obtained from a SLBE-ELBE, which is neither a manufacturer nor a supplier, the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees, or transportation charges for the delivery of materials or supplies required on a job site will be counted toward SLBE-ELBE participation, provided the fees are reasonable and not excessive as compared with fees customarily allowed for similar services. No portion of the cost of the materials and supplies themselves will be counted toward SLBE-ELBE participation.
- d) If the Bidder is seeking the recognition of SLBE-ELBE Trucking towards achieving any mandatory subcontracting participation level, the Bidder shall indicate it on Form AA35 – List of Subcontractors with the Bid. The following factors will be evaluated in determining the credit to be allowed toward the respective participation level:
- i. The SLBE-ELBE shall be responsible for the management and supervision of the entire trucking operation for which it is getting credit on a particular Contract and there shall not be a contrived arrangement for the purpose of counting SLBE-ELBE participation.
  - ii. The SLBE-ELBE shall itself own and operate at least 1 fully licensed, insured, and operational truck used on the Contract.

- iii. The SLBE-ELBE receives credit for the total value of the transportation services it provides on the Contract using trucks it owns, insures, and operates using drivers it employs.
- iv. The SLBE-ELBE may lease trucks from another SLBE-ELBE firm including an owner-operator who is certified as a SLBE-ELBE. The SLBE-ELBE who leases trucks from another SLBE-ELBE receives credit for the total value of the transportation services the lessee SLBE-ELBE provides on the contract.
- v. The SLBE-ELBE may also lease trucks from a non-SLBE-ELBE firm, including an owner-operator. The SLBE-ELBE who leases trucks from a non-SLBE-ELBE is entitled to credit for the total value of transportation services provided by non-SLBE-ELBE lessees not to exceed the value of transportation services provided by SLBE-ELBE owned trucks on the contract. Additional participation by non-SLBE-ELBE lessees receive credit only for the fee or commission it receives as a result of the lease arrangement.
- vi. A lease shall indicate that the SLBE-ELBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the SLBE-ELBE so long as the lease gives the SLBE-ELBE absolute priority for use of the leased truck.

**D. SLBE-ELBE SUBCONTRACTOR PARTICIPATION PERCENTAGES.**

1. Contracts valued at \$1,000,000 and above will be considered Major Public Works Contracts and will include a mandatory Subcontractor participation requirement for SLBE-ELBE firms.
  - a) The Bidder shall achieve the mandatory Subcontractor participation requirement or demonstrate GFE.
  - b) The Bidders shall indicate the participation on Forms AA35 - List of Subcontractors and AA40 - Named Equipment/Material Supplier List as applicable regardless of the dollar value.
  - c) An SLBE-ELBE Bidder may count its own participation toward achieving the mandatory goal as long as the SLBE-ELBE Bidder performs 51% of the Contract Price.
2. Contracts Valued over \$500,000 and under \$1,000,000 will also be considered Major Public Works Contracts and will include the mandatory subcontractor participation requirements described above and the following:
  - a) 5% bid discount for SLBE-ELBE firms.
  - b) Non-certified Contractor will receive 5% bid discount if they achieve the specified mandatory Subcontracting participations.
  - c) Bid discounts shall not apply if the award will result in a total contract cost of \$50,000 in excess of the apparent lowest Bid.

- d) In the event of a tie bid between a SLBE-ELBE Bidder and a non-SLBE-ELBE Bidder, the SLBE-ELBE Bidder will be awarded the Contract.
  - e) In the event of a tie bid between a discounted Bid and a non-discounted Bid, the discounted Bid will be awarded the Contract.
- 3. Contracts valued over \$250,000 up to \$500,000 will be considered Minor Public Works Contracts and will be awarded through a competitive Bid process open only to City certified SLBE-ELBE firms. If there are no bidders or no responsible bidders, the Contract will be made available to all Bidders and will be subject to requirements listed in items 1 and 2 for Major Public Works Contracts above.
  - 4. Contracts valued at \$250,000 and below will also be considered Minor Public Works Contracts and will be awarded through a competitive bid process open only to City certified ELBEs unless there are less than 2 firms available at which it will be awarded through a competitive process open only to the City certified SLBE-ELBE firms. If there are no bidders or no responsible bidders, the Contract will be made available to all Bidders and subject to requirements listed in items 1 and 2 for Major Public Works Contracts above.

**E. JOINT VENTURES.**

- 1. The City may allow for Joint Venture bid discounts on some Contracts. Contracts that allow for Joint Venture bid discounts will be designated in Bid documents. A firm that is bidding or competing for City Contracts may partner with a certified SLBE or ELBE to compete for Contracts as a Joint Venture.
- 2. A Joint Venture shall be between two entities with the same discipline or license as required by the City. Joint ventures will receive bid discounts depending on the SLBE or ELBE percentage of participation. To be eligible for a discount, a Joint Venture Agreement shall be approved by the City at the time of Bid submittal. The maximum allowable discount shall be 5%. The parties shall agree to enter in the relationship for the life of the projects.
- 3. Joint Venture shall submit a Joint Venture Management Plan, a Joint Venture Agreement, or both at least 2 weeks prior to the Bid due date. Copies of the Joint Venture applications are available upon request to the Contract Specialist. Each agreement or management plan shall include the following:
  - a) Detailed explanation of the financial contribution for each partner.
  - b) List of personnel and equipment used by each partner.
  - c) Detailed breakdown of the responsibilities of each partner.
  - d) Explanation of how the profits and losses will be distributed.
  - e) Description of the bonding capacity of each partner.
  - f) Management or incentive fees available for any one of the partners (if any).

4. Each Joint Venture partner shall perform a Commercially Useful Function. An SLBE or ELBE that relies on the resources and personnel of a non-SLBE or ELBE firm will not be deemed to perform a Commercially Useful Function.
5. Each Joint Venture partner shall possess licenses appropriate for the discipline for which a proposal is being submitted. If a Joint Venture is bidding on a single trade project, at the time of bid submittal, each Joint Venture partner shall possess the requisite specialty license for that trade bid.
6. The SLBE or ELBE partner shall clearly define the portion of the Work to be performed. This Work shall be of the similar type of Work the SLBE or ELBE partner performs in the normal course of its business. The Joint Venture Participation Form shall specify the Bid items to be performed by each individual Joint Venture partner. Lump sum Joint Venture participation shall not be acceptable.
7. Responsibilities of the SLBE or ELBE Joint Venture Partner:
  - a) The SLBE or ELBE partner shall share in the control, management responsibilities, risks and profits of the Joint Venture in proportion with the level of participation in the project.
  - b) The SLBE or ELBE partner shall perform Work that is commensurate with its experience.
  - c) The SLBE or ELBE partner shall use its own employees and equipment to perform its portion of the Work.
  - d) The Joint Venture as a whole shall perform Bid items that equal or exceed 50% of the Contract Price, excluding the cost of manufactured items, in order to be eligible for a Joint Venture discount.

**F. MAINTAINING PARTICIPATION LEVELS.**

1. Credit and preference points are earned based on the level of participation proposed prior to the award of the Contract. Once the Project begins you shall achieve and maintain the SLBE-ELBE participation levels for which credit and preference points were earned. You shall maintain the SLBE-ELBE percentages indicated at the Award of Contract and throughout the Contract Time.
2. If the City modifies the original Scope of Work, you shall make reasonable efforts to maintain the SLBE-ELBE participation for which creditor preference points were earned. If participation levels will be reduced, approval shall be received from the City prior to making changes.
3. You shall notify and obtain written approval from the City in advance of any reduction in subcontract scope, termination, or substitution for a designated SLBE-ELBE Subcontractor. Failure to do so shall constitute a material breach of the Contract.
4. If you fail to maintain the SLBE-ELBE participation listed at the time the Contract is awarded and have not received prior approval from the City, the

City may declare you in default and will be considered grounds for debarment under Chapter 2, Article 2, Division 8, of the San Diego Municipal Code.

**G. SUBCONTRACTING EFFORTS REVIEW AND EVALUATION.**

1. Documentation of your subcontracting efforts will be reviewed by EOCP to verify that you made subcontracting opportunities available to a broad base of qualified Subcontractors, negotiated in good faith with interested Subcontractors, and did not reject any bid for unlawful discriminatory reasons. The EOCP review is based on the federal "Six Good Faith Efforts" model.
2. The GFEs are required methods to ensure that all ELBE and SLBE firms have had the opportunity to compete for the City's Public Works procurements. The Six Good Faith Efforts, also known as affirmative steps, attract and utilize ELBE and SLBE firms:
  - a) Ensure ELBE firms are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities.
  - b) Make information of forthcoming opportunities available to SLBE-ELBE firms and arrange time for Contracts and establish delivery schedules, where requirements permit, in a way that encourages and facilitates participation by SLBE-ELBE firms in the competitive process. This includes posting solicitations for Bids or proposals to SLBE-ELBE firms for a minimum of 10 Working Days before the Bid or Proposal due date.
  - c) Consider in the contracting process whether firms competing for large Contracts could subcontract with SLBE-ELBE firms.
  - d) Encourage contracting with a consortium of ELBE-SLBE firms when a Contract is too large for one of these firms to handle individually.
  - e) Use the services and assistance of the City's EOC Office and the SLBE-ELBE Directory.
  - f) If you award subcontracts, require your Subcontractors to take the steps listed above.

**H. GOOD FAITH EFFORT DOCUMENTATION.**

1. If the specified SLBE-ELBE Subcontractor participation percentages are not met, you shall submit information necessary to establish that adequate GFEs were taken to meet the Contract Subcontractor participation percentages. See the City's document titled "Small Local Business (SLBE) Program, INSTRUCTIONS FOR BIDDERS COMPLETING THE GOOD FAITH EFFORT SUBMITTAL." The instructions for completing the good faith effort submittal can be found on the City's website:

<https://www.sandiego.gov/sites/default/files/legacy/eoc/pdf/slbefgest.pdf>



**I. SUBCONTRACTOR SUBSTITUTION.**

1. Evidence of fraud or discrimination in the substitution of Subcontractors will result in sanctions including assessment of penalty fines, termination of Contract, or debarment. This section does not replace applicable California Public Contract Code.

**J. FALSIFICATION OF SUB-AGREEMENT AND FRAUD.**

1. Falsification or misrepresentation of a sub-agreement as to company name, Contract amount or actual Work performed by Subcontractors, or any falsification or fraud on the part your submission of documentation and forms pursuant to this program, will result in sanctions against you including assessment of penalty fines, termination of the Contract, or debarment. Instances of falsification or fraud which are indicative of an attempt by you to avoid subcontracting with certain categories of Subcontractors on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability shall be referred to the Equal Opportunity Contracting Program's Investigative Unit for possible violations of Article 2, Division 35 of the City Administrative Code, §§22.3501 et seq. (Nondiscrimination in Contracting).

**K. RESOURCES.**

1. The current list of certified SLBE-ELBE firms and information for completing the GFE submittal can be found on the City's EOC Department website:  
<http://www.sandiego.gov/eoc/programs/slbe.shtml>
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**ATTACHMENT D**  
**PREVAILING WAGE**

## PREVAILING WAGE

1. **PREVAILING WAGE RATES:** Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair, and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.
  - 1.1. **Compliance with Prevailing Wage Requirements.** Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.
    - 1.1.1. Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.
    - 1.1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.
  - 1.2. **Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720 – 1861.

- 1.3. Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying, and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.

  - 1.3.1.** Contractor and their subcontractors shall also furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.
- 1.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.
- 1.5. Working Hours.** Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on contractors and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.
- 1.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.
- 1.7. Labor Code Section 1861 Certification.** Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California 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."
- 1.8. Labor Compliance Program.** The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Prevailing Wage Unit at 858-627-3200.
- 1.9. Contractor and Subcontractor Registration Requirements.** This project is subject to compliance monitoring and enforcement by the DIR. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid or proposal, subject to the requirements of section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified

to perform public work pursuant to Labor Code 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.

**1.9.1.** A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.

**1.9.2.** By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration for themselves and all listed subcontractors to the City at the time of bid or proposal due date or upon request.

**1.10. Stop Order.** For Contractor or its subcontractors engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractors or unregistered subcontractor(s) on ALL public works until the unregistered contractor or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.

**1.11. List of all Subcontractors.** The Contractor shall provide the list of subcontractors (regardless of tier), along with their DIR registration numbers, utilized on this Contract prior to any work being performed; and the Contractor shall provide a complete list of all subcontractors with each invoice. Additionally, Contractor shall provide the City with a complete list of all subcontractors (regardless of tier) utilized on this contract within ten working days of the completion of the contract, along with their DIR registration numbers. The City shall withhold final payment to Construction Management Professional until at least thirty (30) days after this information is provided to the City.

**1.12. Exemptions for Small Projects.** There are limited exemptions for installation, alteration, demolition, or repair work done on projects of \$25,000 or less. The Contractor shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:

**1.12.1.** Registration. The Contractor will not be required to register with the DIR for small projects. (Labor Code section 1771.1).

**1.12.2.** Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego but will

not be required to be submitted online with the DIR directly. The Contractor will need to keep those records for at least three years following the completion of the Contract. (Labor Code section 1771.4).

- 1.12.3.** List of all Subcontractors. The Contractor shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 1.11 above. (Labor code section 1773.3).

**ATTACHMENT E**  
**SUPPLEMENTARY SPECIAL PROVISIONS**

## **SUPPLEMENTARY SPECIAL PROVISIONS**

The following Supplementary Special Provisions (SSP) modifies the following documents:

1. The **2021 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK").
2. The **2021 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK"), including the following:
  - a) General Provisions (A) for all Construction Contracts.

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### **SECTION 1 - GENERAL, TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS**

- 1-2 TERMS AND DEFINITIONS.** To the "WHITEBOOK", item 55, "Normal Working Hours", ADD the following:

The **Normal Working Hours** are **7:00 AM** to **5:00 PM**.

### **SECTION 2 - SCOPE OF THE WORK**

- 2-2 PERMITS, FEES, AND NOTICES.** To the "WHITEBOOK", ADD the following:

2. You shall obtain the following permits:

- a) Port of San Diego Permit
- b) MTS Right of Entry Permit

- 2-2.2 Caltrans Encroachment Permit.** To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:

1. You shall apply and obtain the Caltrans Encroachment Permit.
  - a) You shall pay for and secure the permit prior to construction.
  - b) You shall arrange and pay for inspection as required by Caltrans.
  - c) Caltrans Encroachment Permit will be for the following areas:
    - a) Additive Alternate C: Eleventh Ave, Sheet C-3
    - b) Additive Alternate D: Tenth Ave, Sheet C-4
    - c) Additive Alternate E: B St, Sheet C-9
    - d) Additive Alternate F: Market St, Sheet C-14
    - e) Broadway Overcrossing: Sheet C-15



**2-2.3 Payment.** To the "WHITEBOOK", item 2, DELETE in its entirety and SUBSTITUTE with the following:

2. The payment for applying and obtaining the Caltrans Encroachment Permit shall be included in the Allowance Bid item for "**Caltrans Encroachment Permit Submittal**" and shall include preparing plans and addressing Caltrans comments.

To the "WHITEBOOK", ADD the following:

3. The payment for Port of San Diego Permit procurement work including railroad liability insurance, Engineering Traffic Control Plans reviews by the Port of San Diego, inspections, flagging, and fees shall be included in the allowance Bid Item for "**Port of San Diego Permit.**"

### **SECTION 3 – CONTROL OF THE WORK**

**3-2 SELF-PERFORMANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. You shall perform, with your own organization, Contract Work amounting to at least 50% of the base Bid.

**3-8.7 Contractor's Quality Control Plan (QCP).** To the "WHITEBOOK", ADD the following:

7. The establishment and implementation of a Quality Control Plan (QCP), as defined in the standard specifications, shall be required for this Contract. See example in **Appendix F - Sample Contractor's Daily Quality Control Inspection Report.**

**3-9 TECHNICAL STUDIES AND SUBSURFACE DATA.** To the "WHITEBOOK", ADD the following:

5. In preparation of the Contract Documents, the designer has relied upon the following reports of explorations and tests at the Work Site:
  1. Potholing Final Report X170271 Dated July 20, 2017, prepared by AIRX.
  2. Potholing Report (Supplemental) Dated Oct 31, 2017, prepared by AIRX.
  3. Pacific Gateway Complex Geotechnical Investigation Dated Feb 29, 2016, prepared by Geocon Inc.

<https://drive.google.com/drive/folders/1ziabSFrrsgQKBWP3A7GNzqrlZVuImN5g>

**3-12.7 Drinking Water Discharges Requirements.** To the "WHITEBOOK", ADD the following:

1. You shall record the results for each discharge event on the City's Drinking Water Discharge Monitoring form included as **Appendix G - Monthly Drinking Water Discharge Monitoring Form.**

**3-15.3 Coordination.** To the "WHITEBOOK", ADD the following:

2. Work within the specified areas below shall be coordinated with the following contacts prior to the start of construction:

Sheet C-1: West A St

Joe Relyea, [jrelyea@wyndham.com](mailto:jrelyea@wyndham.com)

Director of Engineering for Wyndham Hotel

O: (619) 358-6038

C: (619) 876-7512

Sheet C-2: Marina Park Way (San Diego Convention Center)

Donald Bottger, [Donald.Bottger@visitsandiego.gov](mailto:Donald.Bottger@visitsandiego.gov)

Convention Center Building Superintendent

O: (619) 505-5425

Dennis Legg, [dlegg@sandiegosymphony.org](mailto:dlegg@sandiegosymphony.org)

Director of Facility Operations for The San Diego Symphony

O: (619) 615-3916

Todd Roberts, [todd@marinegroupbw.com](mailto:todd@marinegroupbw.com)

Fifth Avenue Landing

O: (619) 954-5353

Sheet C-12: F St

Jim Kanady, [jkanady@irvinecompany.com](mailto:jkanady@irvinecompany.com)

Community Manager for Harbor View Apartment Homes

O: (619) 696-6644

Office Depot

Daniel Bertz, [ods00934cpc@officedepot.com](mailto:ods00934cpc@officedepot.com)

Office Depot Supervisor

825 W E St One Block S. Of Broadway, San Diego, CA 92101

O: (619) 238-4991

#### **SECTION 4 - CONTROL OF MATERIALS**

**4-3.4 Specialty Inspection Paid for by the Contractor.** To the "WHITEBOOK", ADD the following:

2. The specialty inspections required are listed as follows:
  - a) Welding Inspector
  - b) Settling Monitor Inspector

**4-6 TRADE NAMES.** To the "WHITEBOOK", ADD the following:

11. You shall submit your list of proposed substitutions for an "equal" item **no later than 5 Working Days after the issuance of the Notice of Intent to Award** and on the City's Product Submittal Form available at:

<https://www.sandiego.gov/ecp/edocref/>

#### **SECTION 5 – LEGAL RELATIONS AND RESPONSIBILITIES**

**5-4 INSURANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

**5-4 INSURANCE.**

1. The insurance provisions herein shall not be construed to limit your indemnity and defense duties set forth in the Contract.

**5-4.1 Policies and Procedures.**

1. You shall procure the insurance described below, at your sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
3. You shall maintain this insurance as required by this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your duties under the Contract, including your indemnity obligations, are not limited to the insurance coverage required by this Contract.
4. If you maintain broader coverage or higher limits than the minimums shown below, City requires and shall be entitled to the broader coverage, or the higher limits maintained by you. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to City.
5. Your payment for insurance shall be included in the Contract Price you bid. You are not entitled to any additional payment from the City to cover your insurance unless the City specifically agrees to payment in writing. Do not begin any Work under this Contract or allow any Subcontractors to begin work, until you have provided, and the City has approved, all required insurance.
6. Policies of insurance shall provide that the City is entitled to 30 days advance written notice of cancellation or non-renewal of the policy or 10 days advance written notice for cancellation due to non-payment of premium. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage and to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

**5-4.2 Types of Insurance.**

**5-4.2.1 General Liability Insurance.**

1. Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.
2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).
3. There shall be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.
4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

<u>General Annual Aggregate Limit</u>	<u>Limits of Liability</u>
Other than Products/Completed Operations	\$10,000,000
Products/Completed Operations Aggregate Limit	\$10,000,000
Personal Injury Limit	\$5,000,000
Each Occurrence	\$5,000,000

**5-4.2.2 Commercial Automobile Liability Insurance.**

1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").
2. All costs of defense shall be outside the limits of the policy.

**5-4.2.3 Workers' Compensation Insurance and Employers Liability Insurance.**

1. In accordance with the provisions of California Labor Code section 3700, you shall provide, at your expense, Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers' compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with this requirement.
2. Statutory Limits shall be provided for Workers' Compensation Insurance as required by the state of California, and Employer's Liability Insurance with limits of no less than \$1,000,000 per accident for bodily injury or disease.

3. By signing and returning the Contract, you certify that you are aware of the provisions of California's Workers' Compensation laws, including Labor Code section 3700, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance, and that you will comply with these provisions before commencing the Work..

**5-4.2.4 Contractors Pollution Liability Insurance.**

1. You shall procure and maintain at your expense or require your Subcontractor, as described below, to procure and maintain Contractors Pollution Liability Insurance applicable to the Work being performed, with a limit no less than \$2,000,000 per claim or occurrence and \$4,000,000 aggregate per policy period of one year.
2. All costs of defense shall be outside the limits of the policy.
3. You shall obtain written approval from the City for any insurance provided by your Subcontractor instead of you.
4. For approval of a substitution of your Subcontractor's insurance, you shall certify that all activities for which the Contractors Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance. The deductible shall not exceed \$25,000 per claim unless the City has provided prior, written approval.
5. Occurrence based policies shall be procured before the Work commences. Claims Made policies shall be procured before the Work commences, shall be maintained for the Contract Time, and shall include a 12-month extended Claims Discovery Period applicable to this contract or the existing policy or policies that shall continue to be maintained for 12 months after the completion of the Work without advancing the retroactive date.

**5-4.2.5 Contractors Hazardous Transporters Pollution Liability Insurance.**

1. You shall procure and maintain at your expense or require your Subcontractor, as described below, to procure and maintain Contractors Hazardous Transporters Pollution Liability Insurance, including contractual liability coverage to cover liability arising out of transportation of hazardous or toxic, materials, substances, or any other pollutants by you or any Subcontractor in an amount no less than \$2,000,000 limit per occurrence and \$4,000,000 aggregate per policy period of one year.
2. All costs of defense shall be outside the limits of the policy.
3. You shall obtain written approval from the City from any insurance provided by a Subcontractor instead of you..
4. To obtain City approval of a Subcontractor's insurance coverage in lieu of the Contractor's insurance, the Contractor shall certify that all activities under the Contractor's Hazardous Transporters Pollution Liability Insurance will be performed exclusively by the Subcontractor providing the insurance. The deductible shall not exceed \$25,000 per claim without prior approval of the City

5. Occurrence based policies shall be procured before the Work commences. Claims Made policies shall be procured before the Work commences, shall be maintained for the duration of this contract, and shall include a 12-month extended Claims Discovery Period applicable to this Contract or the existing policy or policies that shall continue to be maintained for 12 months after the completion of the Work under this Contract without advancing the retroactive date.

**5-4.2.7 Railroad Protective Liability Insurance.** Exclusions relating to performance of operations within the vicinity of any railroad, bridge, trestle, roadbed, tunnel, underpass, or cross shall be deleted from all policies to which they may apply. Alternatively, you may provide separate Railroad Protective Liability insurance providing coverage, including endorsements, equivalent to that required for the CGL described herein.

**5-4.2.8 Architects and Engineers Professional Insurance (Errors and Omissions Insurance).**

1. For Contracts with required engineering services, including Design-Build and preparation of engineered Traffic Control Plans (TCP) by you, you shall keep or require all of your employees and Subcontractors, who provide professional engineering services under Contract, to provide to the City proof of Professional Liability coverage with a limit of no less than **\$1,000,000** per claim and **\$2,000,000** aggregate per policy period of one year.
2. You shall ensure the following:
  - a) The policy retroactive date is on or before the date of commencement of the Project.
  - b) The policy will be maintained in force for a period of three years after completion of the Project or termination of the Contract, whichever occurs last. You agree that, for the time period specified above, there will be no changes or endorsements to the policy that affect the specified coverage.
3. If professional engineering services are to be provided solely by the Subcontractor, you shall:
  - a) Certify this to the City in writing, and
  - b) Agree in writing to require the Subcontractor to procure Professional Liability coverage in accordance with the requirements set forth here.

**5-4.3 Rating Requirements.** Except for the State Compensation Insurance Fund, all insurance required by this Contract shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the state of California, and that have been approved by the City.

**5-4.3.1 Non-Admitted Carriers.** The City will accept insurance provided by non-admitted, “surplus lines” carriers only if the carrier is authorized to do business in the state of California and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described in this Contract.

**5-4.4 Evidence of Insurance.** You shall furnish the City with original Certificates of Insurance, including all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause), prior to your commencement of Work under this Contract. In addition, The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

**5-4.5 Policy Endorsements.**

**5-4.5.1 Commercial General Liability Insurance.**

**5-4.5.1.1 Additional Insured.** To the fullest extent permitted by law and consistent with the limiting provisions set forth at California Civil Code section 2782, California Insurance Code section 11580.04, and any applicable successor statutes limiting indemnification of public agencies that bind the City, the policy or policies shall be endorsed to include as an Additional Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:

- i. Ongoing operations performed by you or on your behalf,
- ii. your products,
- iii. your work, e.g., your completed operations performed by you or on your behalf, or
- iv. premises owned, leased, controlled, or used by you.

**5-4.5.1.2 Primary and Non-Contributory Coverage.** The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents, and representatives shall be in excess of your insurance and shall not contribute to it.

**5-4.5.1.3 Project General Aggregate Limit.** The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.

**5-4.5.2 Workers' Compensation Insurance and Employers Liability Insurance.**

**5-4.5.2.1 Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.

**5-4.5.3 Contractors Pollution Liability Insurance Endorsements.**

**5-4.5.3.1 Additional Insured.** To the fullest extent permitted by law and consistent with the limiting provisions set forth at California Civil Code section 2782, California Insurance Code section 11580.04, and any applicable successor statutes limiting indemnification of public agencies that bind the City, the policy or policies shall be endorsed to include as an Additional Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:

- a. Ongoing operations performed by you or on your behalf,
- b. your products,
- c. your work, e.g., your completed operations performed by you or on your behalf, or
- d. premises owned, leased, controlled, or used by you.

**5-4.5.3.2 Primary and Non-Contributory Coverage.** The policy or policies shall be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents, and representatives shall be in excess of your insurance and shall not contribute to it.

**5-4.5.3.2 Severability of Interest.** For Contractors Pollution Liability Insurance, the policy or policies shall provide that your insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

**5-4.5.4 Contractors Hazardous Transporters Pollution Liability Insurance Endorsements.**

**5-4.5.4.1 Additional Insured.** To the fullest extent permitted by law and consistent with the limiting provisions set forth at California Civil Code section 2782, California Insurance Code section 11580.04, and any applicable successor statutes limiting indemnification of public agencies that bind the City, the policy or policies shall be



endorsed to include as an Additional Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:

- a. Ongoing operations performed by you or on your behalf,
- b. your products,
- c. your work, e.g., your completed operations performed by you or on your behalf, or
- d. premises owned, leased, controlled, or used by you.

**5-4.5.4.2 Primary and Non-Contributory Coverage.** The policy or policies shall be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

**5-4.5.4.3 Severability of Interest.** For Contractors Hazardous Transporters Pollution Liability Insurance, the policy or policies shall provide that your insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

**5-4.6 Deductibles and Self-Insured Retentions.** You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided. The City may require you to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

**5-4.7 Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles, and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer, but not required by this Contract.

**5-4.8 Notice of Changes to Insurance.** You shall notify the City, in writing, 30 days prior to any material change to the policies of insurance provided under this Contract. This written notice is in addition to the requirements of paragraph 8 of Section 5-4.1. Policies of insurance shall provide that the City is entitled to 30 days advance written notice of cancellation or non-renewal of the policy or 10 days advance written notice for cancellation due to non-payment of premium. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew

coverage and to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

**5-4.9 Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies, including, all endorsements.

**ADD:**

**5-10.1.3 Weekly Updates Recipients.**

1. Submit a weekly correspondence with updates, traffic control issues and locations, lane closures, and any other pertinent information (with additional contact names given during award process) to the following recipients:

Sheila Bose, Senior Engineer, [sbose@sandiego.gov](mailto:sbose@sandiego.gov)

Jericho Gallardo, Project Engineer, [jgallardo@sandiego.gov](mailto:jgallardo@sandiego.gov)

**5-10.3 Exclusive Community Liaison Services.** To the "WHITEBOOK", ADD the following:

2. You shall retain an Exclusive Community Liaison for the Project that shall implement Work in accordance with the specifications described in 5-10.2 "Community Outreach Services" and 5-10.3 "Exclusive Community Liaison Services".

## **SECTION 6 – PROSECUTION AND PROGRESS OF THE WORK**

**6-1.1 Construction Schedule.** To the "WHITEBOOK", ADD the following:

3. Refer to the Sample City Invoice materials in **Appendix D – Sample City Invoice with Cash Flow Forecast** and use the format shown.
4. The **90 Calendar Day** Plant Establishment Period is included in the stipulated Contract Time and shall begin with the acceptance of installation of the vegetation plan in accordance with Section 801-6, "MAINTENANCE AND PLANT ESTABLISHMENT".

**6-1.2.1 Construction Phasing.** To the "WHITEBOOK", ADD the following:

3. All construction work listed below shall be completed as first order of work. Contractor to make arrangements through the Resident Engineer to coordinate all construction activities.
  - a) A St & Eleventh Ave (Sheet C-3)
  - b) Market St, between 17th St & 19th St (Sheet C-14)
  - c) Broadway Overcrossing, between 17th St & 19th St (Sheet C-15)
  - d) B St, between 16th St & Pershing Dr (Sheet C-9)

**6-1.3 Work Outside Normal Working Hours.** To the "WHITEBOOK", ADD the following

4. Scope of work within the San Diego Convention Center on Sheet C-2 (Marina Park Way) will occur during the hours of 8:00 pm to 5:00 am.

**6-2.1 Moratoriums.** To the "WHITEBOOK", ADD the following:

4. Do not work in the areas where there is currently a moratorium issued by the City. Moratoriums will be in effect during the entire contract time of 416 working days, which include calendar year 2023. The areas subject to moratorium are listed below:
  - a) Holiday Moratorium near shopping areas from Thanksgiving Day to New Year's Day (inclusive). See Appendix L, Annual Holiday Construction Restrictions.
  - b) Petco Park Events. The Ball Park District which controls activities around PETCO park is bordered by 6th Ave on the west, Market St on the North and 16<sup>th</sup> St on the east. Anything in this area should be restricted to end 4 hours prior to any home games or large events at PETCO park (including concerts, supercross, monster jam). Listing of events can be seen in the links below:  
<https://www.petcoparkinsider.com/petco-park-events>  
<https://www.mlb.com/padres/schedule/printable-schedule>
  - c) San Diego Comic Convention, July 20-24, 2022. Moratorium includes 3 days in July 2023. Exact dates to be determined.
  - d) Transplant Games Parade on Harbor Drive between Grape St and Pacific Highway, July 31, 2022. Area of work on Sheet C-2, Sheet C-13 and Sheet C-14 shall be shut down, if necessary.

**ADD:**

**6-6.1.1 Environmental Document.**

1. The City of San Diego has prepared an **Addendum to a Mitigated Negative Declaration** for **Water Group Job 952**, Project No. **527958**, as referenced in the Contract Appendix. You shall comply with all requirements of the **Addendum to a Mitigated Negative Declaration** as set forth in **Appendix A**.
2. Compliance with the City's environmental document shall be included in the Contract Price unless separate bid items have been provided.

**6-6.2.1 Archaeological and Native American Monitoring Program.** To the "WHITEBOOK", ADD the following:

4. You shall retain a qualified archaeologist and Native American Monitor for this Contract. You shall coordinate your activities and Schedule with the activities and schedules of the archaeologist and Native American monitor. Notify the Engineer before noon of the Working Day before monitoring is required. See 3-5, "INSPECTION" for details.

## SECTION 7 – MEASUREMENT AND PAYMENT

**7-3.1 General.** To the “WHITEBOOK”, ADD the following:

4. The Lump Sum Bid item for “**Electrical Work**” shall include the following scopes referenced in ATTACHMENT E:
  - I. TECHNICALS, SECTION 26 05 19, Measurement and Payment.
  - II. TECHNICALS, SECTION 26 05 26, Measurement and Payment.
  - III. TECHNICALS, SECTION 26 05 29, Measurement and Payment.
  - IV. TECHNICALS, SECTION 26 05 30, Measurement and Payment.
  - V. TECHNICALS, SECTION 26 05 33, Measurement and Payment.
  - VI. TECHNICALS, SECTION 26 05 43, Measurement and Payment.
  - VII. TECHNICALS, SECTION 26 05 44, Measurement and Payment.
  - VIII. TECHNICALS, SECTION 26 05 53, Measurement and Payment.
  - IX. TECHNICALS, SECTION 26 05 63, Measurement and Payment.
  - X. TECHNICALS, SECTION 26 28 16, Measurement and Payment.
5. Each “**Precast Concrete Vault**” shall include all scope referenced in ATTACHMENT E – TECHNICALS, SECTION 33 05 16 Measurement and Payment.

**7-3.11 Compensation Adjustments for Price Index Fluctuations.** To the “WHITEBOOK”, ADD the following:

5. This Contract is not subject to the provisions of The “WHITEBOOK” for Compensation Adjustments for Price Index Fluctuations for paving asphalt.

## SECTION 206 – MISCELLANEOUS METAL ITEMS

**206-8 FLOOR ACCESS DOOR.** To the “WHITEBOOK”, ADD the following:

**206-8.1 General.** The PRS vault shall be equipped with a 4-leaf floor aluminum or steel access door intended for off-street locations that occasionally receive H2O loadings. The hatch opening shall be as shown on the plans with hinges on the side as shown on the drawings and yellow fiberglass protective grating.

**206-8.2****Materials.**

1. The door leaf shall be minimum 1/4" (7mm) aluminum or steel diamond plate reinforced for an AASHTO H20 uniform live load with maximum allowable deflection of 1/150 of the span.
2. The frame shall be extruded aluminum trough section with an integral anchor flange on all four sides. The frame shall include an EPDM odor reduction gasket that reduces the amount of odor that escapes from below the door and a 1-1/2-inch threaded drain coupling. Provide a bituminous coating on the frame surface in contact with concrete.
3. The floor access door shall be equipped with a flush lifting handle that does not protrude above the cover, and a 316 stainless steel hold open arm with red vinyl grip that automatically keeps the cover in its upright, open position.
4. Provide stainless steel horizontal springs for easy opening
5. The door shall have 316 stainless steel hinges and 316 stainless steel tamper resistant bolts/locknuts.
6. The door shall be equipped with a watertight 316 stainless steel slam lock with threaded plug, removable outside key, and fixed inside handle. The slam lock latches onto a 316 stainless steel striker plate that is bolted to the frame.
7. An adhesive backed vinyl material that protects the product during shipping and installation shall cover the entire top of the frame and cover.
8. Provide custom lettering: "City of San Diego Water Department"
9. Provide yellow fiberglass protective grating. The hinges for this grating shall be placed on the opposite side of the ladder.
10. Installation shall be in accordance with the manufacturer's attached instructions. The entire frame including the seat on which the reinforcing rests shall be supported by concrete or other material designed to support the specified load.
11. The door shall be manufactured and assembled in the United States.
12. Manufacturer shall guarantee the door against defects in materials and workmanship for a period of ten years.

**206-8.3**

**Submittals.** The Contractor shall submit the following product data from the manufacturer.

1. Product data including dimensional drawings
2. Materials of Construction
3. Design calculations for H20 loading
4. Installation and Operation instructions
5. Warranty

## SECTION 208 – PIPE JOINT TYPES AND MATERIALS

**208-7**            **MECHANICAL JOINT RESTRAINTS.** To the “WHITEBOOK”, ADD the following:

**208-7.1**           **General.** Mechanical joints for all piping associated with the pressure reducing station shall be fully restrained using restraint devices suitable for use on Ductile iron pipe and PVC where applicable.

**208-7.2**           **Materials:**

1. Restraint devices for mechanical joint fittings and appurtenances shall conform to either ANSI/AWWA C111/A21.11 or ANSI/AWWA C153/A21.53
2. Restraint devices for nominal pipe sizes 3 inch through 48 inch shall consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ANSI/AWWA C110/A21.10.
3. The devices shall have a working pressure rating at least equal to the pressure rating of the piping. Ratings are for water pressure and must include a minimum safety factor of 2 to 1 in all sizes.
4. Gland body, wedges and wedge actuating components shall be cast from grade 65-45-12 ductile iron material in accordance with ASTM A536.
5. Ductile iron gripping wedges shall be heat treated within a range of 370 to 470 BHN.
6. Proper actuation of the gripping wedges shall be ensured with torque limiting twist off nuts.
7. Restraint devices shall be Listed by Underwriters Laboratories (3” through 24” inch size) and Approved by Factory Mutual (3” through 12” inch size).
8. For ductile iron pipe, the mechanical joint restraint shall be Megalug Series 1100 produced by EBAA Iron Inc. or approved equal.
9. For C900 PVC, the mechanical joint restraint shall be 2000PV Megalug by EBAA Iron Inc. or approved equal.

**208-8**            **RESTRAINED COUPLINGS.**

**208-8.1**           **General.** The flexible couplings connecting proposed piping to existing shall be fully restrained to prevent axial separation.

**208-8.2**           **Materials:**

1. The restraint mechanism shall consist of a plurality of individually actuated gripping surfaces to maximize restraint capability.
2. Torque limiting twist off nuts shall be used to insure proper actuating of the restraint devices.
3. The restraint devices shall be coated using two coats of liquid thermoset epoxy coating with heat cure following each coat.
4. Ductile Iron components shall be of a minimum of 65-45-12 ductile iron meeting the requirements of ASTM A536 of the latest revision and shall be

tested in accordance with the stated standard.

5. The restrained joining system shall meet the applicable requirements of AWWA C219, ANSI/AWWA C111/A21.11, and ASTM D2000.
6. The restrained joining system shall be the EBAA Iron Series 3800 or approved equal.

**208-9 FLEXIBLE COUPLINGS.**

**208-9.1 General.** The pressure reducing station shall come equipped with flexible couplings with restraint rods for quick assembly/disassembly of internal components. Flexible couplings shall meet AWWA C219 standards.

**208-9.2 Materials.**

1. End rings and center rings are cast from ductile iron.

**208-10 MODULAR SEALS.**

**208-10.1 General.** Pipe penetrations through the precast pressure reducing station vault shall be provided with modular seals to prevent soil and water intrusion into the vault.

Sizing shall be adequate for 8" ductile iron pipe, pressure class 350.

**208-10.2 Materials.**

1. Use a modular, mechanical seal, consisting of rubber links shaped to continuously fill the annular space between the pipe and wall opening.
2. Pressure plates shall be molded of glass reinforced nylon.
3. Hardware shall be mild steel with a 60,000-psi minimum tensile strength and 2-park Zinc Dichromate coating per ASTM B-633 and Organic Coating, tested in accordance with ASTM B117 to pass a 1,500-hour salt spray test.
4. Bolts and nuts shall be Type 316.
5. Use Link-Seal, Modular Seal Model "S-316" or approved equal.

**SECTION 209 – PRESSURE PIPE**

**209-1.1.1 General.** To the "WHITEBOOK", ADD the following:

2. PVC products, specifically type C900 and C905, as manufactured or distributed by J-M Manufacturing Company or JM Eagle shall not be used on the Contract for pressurized pipe.
3. Refer to AWWA C900-16 for all references to AWWA C905.

**SECTION 212 – WATER AND SEWER SYSTEM VALVES AND APPURTENANCES**

**212-5.7 PRESSURE REDUCING VALVES AND PRESSURE RELIEF VALVES.**

**212-5.7.1 General.** Furnish and install a complete operating pilot-operated control valve including appurtenant mechanical connections and pillory required for compliance with manufacturer's installation requirements, building codes and standards.

## 212-5.7.2 Materials.

1. At a minimum each pressure reducing valve shall provide the following:
  - a) Electronic and manual control.
  - b) Local and remote pressure control at multiple set points for normal operation and low flow operations.
  - c) Local and remote flow monitoring and totalizing capability.
  - d) Hydraulic backup in case of power failure.
  - e) The valve manufacturer shall certify that at a minimum, these criteria can be met. Anything less will be rejected.
2. Pilot-operated Control Valves shall conform to AWWA C530.
3. Pilot-operated Control Valves for potable water service shall conform to NSF/ANSI 61.
4. Pressure Relief Valves shall maintain constant operator-set upstream pressure within close limits and discharge to atmosphere when pressure is exceeded, relieving pressures enough to avoid damage to station.
5. Pressure reducing valves shall automatically reduce a higher inlet pressure to an operator-set steady lower downstream pressure regardless of changing flow rate and/or varying inlet pressure.
6. The pressure reducing valve shall be electronically actuated to combine precise control of hydraulic pilots with remote valve control capability. The control method shall be simple remote set-point change from an RTU to the motorized pilot controls where the 4-20 mA command signal is ranged to a specific pressure range. In the event of power or control input failure, the pilot controls remain in hydraulic control, assuring system stability
7. The valves shall be hydraulically operated, single diaphragm actuated, globe pattern consisting of three major components: the body with seat installed, the cover with bearing installed, and the diaphragm assembly. The diaphragm assembly shall be the only moving part and shall form a sealed chamber in the upper portion of the valve, separating operating pressure from line pressure. Valve body and cover shall be of ductile iron with steel as an acceptable alternative.
8. The valve shall contain a resilient synthetic rubber disc forming a tight seal against a single removable seat. The disc guide shall permit smooth transition of flow and shall hold the disc firmly in place. The disc retainer shall be capable of withstanding opening and closing shocks.
9. The stem shall be fully guided through its complete stroke by a removable bearing in the valve cover and an integral bearing in the valve seat. The stem shall have machined flats on its shoulder or other means to facilitate disassembly. All pressure reducing/sustaining/relief valves shall come equipped with a specially designed stem with angled rifling, or other design, that channels deposits away and minimizes the risk of scale buildup or other mineral deposits from seizing the valve.



10. The valve seat shall be either threaded or screwed to the body in a way that eases maintenance. The seat with integral bearing shall be of the solid, one-piece design and shall have a taper on the seating surface for positive drip tight shut-off. Dual piece seats shall not be permitted. The lower bearing of the valve stem shall be contained concentrically within the seat.
11. To ensure proper alignment of the valve stem, the valve body and cover shall be machined with a locating lip. No "pinned" covers to the valve body shall be permitted. All necessary repairs and/or modifications other than replacement of the main valve body shall be possible without removing the valve from the pipeline.
12. The Contractor shall require the valve manufacturer to warrant the valve to be free of defects in material and workmanship for a period of one year from date of shipment, provided the valve is installed and used in accordance with all applicable instructions. The valve manufacturer shall also provide a computerized cavitation analysis which shows flow rate, differential pressure, percentage of valve opening, Cv, system velocity, and the incidence of cavitation damage.
13. The pressure reducing valve come standard with a valve position indicator.
14. Electronic Pilot Control: Each pressure reducing valve shall come equipped with an electronically controlled pilot control valve with remote pressure sensing capability that automatically reduces higher inlet pressures to a lower outlet pressure. They shall be direct-acting, spring-loaded, diaphragm-type control regulator that operate hydraulically. They are to be held open by the force of the compression spring above the diaphragm and close when the downstream pressure acting on the underside of the diaphragm exceeds the spring setting.  
  
The hydraulic control valve pilot system shall consist of an electronic actuator that allows a remote set-point command signal from a SCADA control system. The motor-driven actuator adjusts the pilot controls by altering the spring pressure setting.
15. Hydraulic Pilot Control: In case of power failure, hydraulic backup shall be provided for all pressure reducing valves with a low volume, direct-acting, adjustable, spring-loaded, normally open diaphragm valve, designed to permit flow when controlled pressure is less than the spring setting. The valve shall maintain a constant downstream pressure within close limits and regardless of varying inlet pressure. Body porting provisions shall provide for either straight through or 90-degree angle installation. It shall operate in any position.
  - a) The valve shall be equipped with a stainless-steel seat and a resilient sealing disc molded into a renewable holder. The disc assembly shall be threaded into a retainer-stem assembly. This assembly shall be aligned by a guide plug installed in the bottom of the body and by the diaphragm on the top. The diaphragm center hole shall fit snugly to the stem. The diaphragm shall be supported by a large diameter, stainless steel washer which shall be secured with a stainless-steel

constant tension washer and a stainless-steel nut. A threaded cap shall protect the adjusting screw and jam nut. Provision shall be provided for the securing of the protecting cap with a seal wire to discourage unauthorized changes to the setting.

- b) Disassembly and re-assembly shall be easily accomplished for maintenance and repairs.
  - c) The adjustment range and pilot settings shall accommodate a pressure drop of approximately 70-75 psi.
16. All pressure relief valves shall be provided with a limit switch actuated by the opening and closing of the valve to which it is mounted. Switch must be connected to the RTU with a connection to the PUD's SCADA that sends a signal when the valve opens and another signal when the valve closes.
- a) A stainless-steel actuating stem with a swivel adapter fastened directly to the main valve stem moves through an adapter and gland with two O-ring seals allowing the stop collar to actuate the micro switch bracket mounted on the exterior of the adapter which is attached to the cover of the main valve.
  - b) The single pole, double-throw micro switch can be connected either to open or to close the circuit when actuated.
  - c) Must be easily adjusted for operation at any point of the valve's travel by loosening a screw and raising or lowering the collar on the actuating stem.
  - d) The switch shall be in a weatherproof enclosure (NEMA rated). All assemblies must be capable of accommodating up to 3 switches.
  - e) The switch shall be a Cla-Val Model X105L or approved equal.
17. The pilot system should be capable of a differential pressure up to 200 psi and have a pressure rating up to 400 psi.
18. The pressure reducing valves shall be Cla-Val Model 390-02 or approved equal.
19. The pressure relief valve shall be a Cla-Val Model 50-01 or approved equal.
20. Unless otherwise stated, pressure reducing/relief valves shall be constructed of the following materials:

ITEM	MATERIAL	SPECIFICATION
Main valve body and cover	Ductile iron	ASTM A 536
Flanges for valves 3"	Ductile Iron	Flat faced

diameter and above (Drilled and Faced)	Pressures 0-275 psi	ASME/ANSI B16.42 Class 150 Ductile Iron
	Alignment	Boltholes of flanged valves shall straddle horizontal and vertical centerlines of pipe run to which valves are attached.
Flange Bolts and Nuts	SS Type 316	
Bonnet Bolts, Nuts, and	Type 316	ASTM A 276 or A 1931

ITEM	MATERIAL	SPECIFICATION
Main valve trim and seat (except stem)	Type 316 Stainless Steel	ASTM A 276 or A 351
Stem	Type 316 Stainless Steel	ASTM A 276 or A 351 Provide oxy-nitrite treated stem for potable water system
Pilotry (Tubing)	Type 316 stainless steel	
Pilotry (Valves, strainers, flow controls, other appurtenances)	Bronze body, ASTM B 62 and B 61	
Epoxy Lining	Epoxy	AWWA C550 12 mil minimum DFT Meet NSF 61 for potable water applications Do not coat sealing areas and bronze or stainless steel parts.
Exterior Finish Coat	Epoxy Urethane	Fusion-Bonded per manufacturer's recommendation

21. The following product design criteria, options and accessories are required for pilot-operated control valves:

ITEM	DESCRIPTION
Ends – Valves larger than 2.5 inches	Flanged per ANSI B16.1 Flat face. Boltholes shall straddle horizontal and vertical centerlines of pipe run to which valves are attached.
Flow Rate	At a minimum, valves shall provide the following flowrates: 1-210 gpm (2-inch valve) 2-300 gpm (2½-inch valve) 2-460 gpm (3-inch valve) 4-800 gpm (4-inch valve) 10-1800 gpm (6-inch valve) 15-3100 gpm (8-inch valve) 35-4900 gpm (10-inch valve) 50-7000 gpm (12-inch valve)
Maximum Non-Shock Inlet Pressure	200 psi
Maximum Transient Pressure	250 psi
Minimum Pressure Drop across Seat	5 psi
Maximum Pressure Drop across seat	100 psi
Anti-Cavitation Trim	Not required. Manufacturer to provide cavitation calcs to confirm
Pressure sustaining feature	Not required
Check feature	Required

Isolation Valves on Pilot Lines	Required on both sides of pilot for all pilot systems
Opening and Closing Speed Control	Required
In Line Y-Strainer on Pilot Line	Required
Position Indicator	Required
Pressure Gauges	Not required

ITEM	DESCRIPTION
Differential pressure transmitters	Not required
Pressure transmitters	2 per pressure reducing valve
Remote pressure control	Required on all pressure reducing valves
Remote Flow monitoring	Required on all pressure reducing valves

**212-5.7.3 Submittals.** The Contractor shall furnish the following submittals.

SUBMITTAL	DESCRIPTION
Shop Drawings	Required for valves per valve and equipment shop drawing requirements.
	Required for flow curves, electronic and manual pressure reducing controls, valve stem operators, valve position transmitters, all pilot tubing, controls and appurtenances per valve and equipment shop drawing requirements.
Catalog Data	Required per catalog data requirements.
	Include manufacturer's maximum/minimum recommended flows and maximum/minimum operating pressures.
	Show lining and coating data and thicknesses.
	Material data and pressure ratings for all components of the valve
Installation Instructions	Required per installation instruction requirements.
O & M Instructions	Required per operation and maintenance instruction requirements.
Certificates of Compliance	Submit certified report of testing of factory-applied linings
Engineering Calculations	Required for cavitation per engineering calculations requirements. Required for pressure relief valves to verify valves are sized properly to work together. If calculations show valves shown in Contract Documents to be improperly sized or specified, submit letter to engineer requesting appropriate variance.
Warranty	Furnish 1 year warranty from date of final acceptance

**212-5.7.4 Spare Parts:** Provide 3 diaphragm and rubber kits for each pressure reducing valve.

### SECTION 300 – EARTHWORK

**300-1.1 General.** To the "WHITEBOOK", ADD the following:

- Fill materials should be free of biodegradable materials, hazardous substance contamination, other deleterious debris, and or rocks or hard lumps greater than 6 inches. If the fill materials contain rocks or hard lumps, at least 70% (by weight) of its particles shall pass a U.S. standard ¾-inch sieve. Fill materials should consist of predominantly granular soil (less than 40% passing the U.S. standard #200 sieve with Expansion Index < 50.

11. Backfill materials should be moisture-conditioned, spread and placed in lifts not to exceed 6" in loose (uncompacted) thickness and uniformly compacted to 90% relative compaction. Soil moisture content should be maintained at or within 2%-3% above the optimum moisture content of the backfill materials. The upper 24" beneath the roadway pavement and base materials should be compacted to at least 95% relative compaction. The maximum dry density and optimum moisture content of the backfill materials should be determined in the laboratory in accordance with the ASTM D1557 testing procedures.
12. Flooding or jetting should not be used to densify the backfill.

### **SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION**

**303-5.10.2 Payment.** To the "WHITEBOOK", ADD the following:

6. The payment for each "Type A Island Passageway" will be per Sheet A88B of the Caltrans "Standard Plans".

### **SECTION 306 - OPEN TRENCH CONDUIT CONSTRUCTION**

**ADD:**

**306-1.1 High-line Phasing.** To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:

1. Build the Project in accordance with the water high-lining phasing shown on the Plans and in phases as follows:
  - a) Phase I: Sheet C-1
  - b) Phase II: Sheet C-3
  - c) Phase III: Sheet C-3
  - d) Phase IV: Sheet C-4 thru C-6, C-8
  - e) Phase V: Sheet C-4
  - f) Phase VI: Sheet C-9
  - g) Phase VII: Sheet C-14
  - h) Phase VIII: Sheet C-15
  - i) Phase IX: Sheet C-17

**306-3.3.4 Payment.** To the "WHITEBOOK", ADD the following:

12. The payment for the removal and installation of the Pressure Reducing Station (PRS) at the intersection of L St. and 17<sup>th</sup> St. shall include all labor tools, materials, equipment and incidentals to remove and construct the pressure reducing station, including piping, valves and appurtenances including: associated sump discharge, earthwork, sheeting, shoring and bracing, construction dewatering including disposal and treatment, associated electrical and instrumentation, complete and in place, shall be included in the Lump Sum Bid item for "**Removal and Installation of Pressure Reducing Station (PRS)**".

**306-15.1 General.** To the "WHITEBOOK", ADD to the following:

- p) Pipe Support for Bridge Work
- q) Double Ball Expansion Joint
- r) Casing Spacers

### **SECTION 307 – JACKING AND TUNNELING**

**307-1.1 General.** To the "WHITEBOOK", ADD the following:

The trenchless operations shall be approved by MTS and adhere to the MTS permit. The Contractor will be responsible for submitting means and methods for pipe installation to MTS and obtaining the final approved permit necessary to perform the work.

Based on the conditions encountered in the borings, it is anticipated that the trenchless construction operation will encounter Old Paralac Deposits which can be classified as being firm to slow raveling as described by the Tunnelman's Ground Classification System (Bickel & Kuesel, 1995). For assessing the stability of the trenchless tunnel, the Old Paralac Deposits may be modeled as having an undrained shear strength of 2,500 psf.

See the soils report in Section 3-9 for more information related to trenchless construction.

**307-1.7 Payment.** To the "WHITEBOOK", ADD the following

- 2. The payment for jacking operations shall include the casing and the carrier pipes and shall be included in the Bid items as applicable to each location for "**Trenchless Crossing.**"

### **SECTION 402 – UTILITIES**

**402-2 PROTECTION.** To the "WHITEBOOK", item 2, ADD the following:

- g) Refer to **Appendix K - Advanced Metering Infrastructure (AMI) Device Protection** for more information on the protection of AMI devices.

### **SECTION 601 - TEMPORARY TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK ZONES**

**601-2.1.2 Engineered Traffic Control Plans (TCP).** To the "WHITEBOOK", ADD the following:

- 5. Engineered TCP (2 foot x 3 foot size) shall be required for the following areas:
  - a. A St at North Harbor Drive (Sheet C-1)
  - b. F St at Pacific Highway (Sheet C-12)

These Engineered Traffic Control Plans will have to be submitted to the Port of San Diego for plan review.

**SECTION 1001 – CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)**

**1001-1**      **GENERAL.** To the “WHITEBOOK”, ADD the following:

8.      Based on a preliminary assessment by the City, this Contract is subject to **WPCP.**
-

## TECHNICALS



# TECHNICALS

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## SECTION 03 30 00

### CAST-IN-PLACE CONCRETE

#### PART 1 – GENERAL

##### 1.1 WORK OF THIS SECTION

- A. The Contractor shall provide finished structural concrete, complete, in accordance with the contract documents.
- B. The following types of concrete are covered in this section:
  - 1. Structural Concrete: Normal weight (145 pcf) concrete to be used in all cases except where noted otherwise in the contract documents.

##### 1.2 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Except as otherwise indicated in this section, the Contractor shall comply with the latest adopted edition of the Standard Specifications for Public Works Construction (SSPWC), together with the latest adopted editions of the Regional Amendments.
- B. The 2018 edition of the California Building Code (CBC)
- C. Except at otherwise indicated, the current editions of the following standards apply to the work of this section:
  - 1. Federal Specifications:
    - UU-B-790A (1) (2) Building Paper, Vegetable Fiber (Kraft, Water-proofed, Water Repellant and Fire Resistant)
  - 2. Commercial Standards:
    - ACI 117 Standard Tolerances for Concrete Construction and Materials
    - ACI 214 Recommended Practice for Evaluation of Strength Test Results of Concrete
    - ACI 301 Specifications for Structural Concrete for Buildings
    - ACI 309 Consolidation of Concrete
    - ACI 315 Details and Detailing of Concrete Reinforcement
    - ACI 318 Building Code Requirements for Reinforced Concrete
    - ACI 350 Environmental Engineering Concrete Structures
    - ASTM Standards in Building Codes

- ASTM C-31 Practice for Making and Curing Concrete Test Specimens in the Field
- ASTM C-33 Specification for Concrete Aggregates
- ASTM C-39 Test Method for Compressive Strength of Cylindrical Concrete Specimens
- ASTM C-40 Test Method for Organic Impurities in Fine Aggregates for Concrete
- ASTM C-42 Test Method of Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
- ASTM C-88 Test Method of Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
- ASTM C-94 Specification for Ready-Mixed Concrete
- ASTM C-136 Test Method for Sieve Analysis of Fine and Coarse Aggregates
- ASTM C-138 Test Method for Unit Weight, Yield and Air Content of Concrete
- ASTM C-143 Test Method for Slump of Hydraulic Cement Concrete
- ASTM C-150 Specification for Portland Cement
- ASTM C-156 Test Method for Water Retention by Concrete Curing Materials
- ASTM C-157 Test Method for Length Change of Hardened Hydraulic Cement Mortar and Concrete
- ASTM C-192 Practice for Making and Curing Concrete Test Specimens in the Laboratory
- ASTM C-231 Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
- ASTM C-260 Specification for Air-Entraining Admixtures for Concrete
- ASTM C-289 Test Method for Potential Reactivity of Aggregates (Chemical Method)
- ASTM C-309 Specifications for Liquid Membrane Forming Compounds for Curing Concrete
- ASTM C-494 Specification for Chemical Admixtures for Concrete

ASTM C-1077 Practice for Laboratories Testing Concrete and Concrete Aggregates for use in Construction & Criteria for Laboratory Evaluation

ASTM D-1751 Specification for Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types)

ASTM D-2419 Test Method for Sand Equivalent Value of Soils and Fine Aggregate

ASTM E-119 Method of Fire Tests of Building Construction and Materials

### 1.3 CONTRACTOR SUBMITTALS

- A. Mix Designs: Before starting the work and within 14 days of the notice to proceed, the Contractor shall submit to the Construction Manager, for review, preliminary concrete mix designs which show the proportions and gradations of all materials proposed for each class and type of concrete specified herein accordance with Section 3-8 of the Standard Specifications for Public Works Construction. The mix designs shall be checked and certified to conform to these specifications by an independent testing laboratory acceptable to the Construction Manager to be in conformance with these specifications. All costs related to such checking and testing shall be borne by the Contractor at no increased cost to the Owner.
- B. Delivery Tickets: Where ready-mix concrete is used, the Contractor shall furnish delivery tickets at the time of delivery of each load of concrete. Each ticket shall show the state certified equipment used for measuring and the total quantities, by weight, of cement, sand, each class of aggregate, admixtures and the amounts of water in the aggregate added at the batching plant and the amount allowed to be added at the site for the specific design mix. In addition, each ticket shall state the mix number, total yield in cubic yards and the time of day, to the nearest minute, corresponding to the times when the batch was dispatched, when it left the plant, when it arrived at the site, when unloading began and when unloading was finished.
- C. The Contractor shall provide the following submittals in accordance with ACI 301:
  - 1. Mill tests for cement.
  - 2. Admixture certification. Chloride ion content must be included.
  - 3. Aggregate gradation and certification
  - 4. Materials and methods for curing
- D. The Contractor shall provide catalog cuts and other manufacturer's technical data demonstrating compliance with the requirements indicated and specified herein for all admixtures used in the concrete mix design.

### 1.4 QUALITY ASSURANCE

A. General:

1. Tests on component materials and for compressive strength and shrinkage of concrete will be performed as specified herein. Test for determining slump will be in accordance with requirements of ASTM C-143.
2. The cost of all laboratory tests requested by the Construction Manager on cement, aggregates and concrete will be borne by the Owner. However, the Contractor will be charged for the cost of any additional tests and investigation on work performed which does not meet the specifications. The laboratory must meet or exceed the requirements of ASTM C-1077.
3. Concrete testing shall be supplied by the Contractor at no cost to the Owner and the Contractor shall provide assistance to the Construction Manager in obtaining samples and disposal and clean-up of excess material.

B. Field Compression Tests:

1. Compression test specimens will be taken during construction from the first placement of each class of concrete specified herein and at intervals thereafter as selected by the Construction Manager to ensure continued compliance with these specifications. Each set of test specimens will be a minimum of five cylinders.
2. Compression test specimens for concrete shall be made in accordance with section 9.2 of ASTM C-31. Specimens shall be 6-inch diameter by 12-inch high cylinders.
3. Compression tests shall be performed in accordance with ASTM C-39. One test cylinder will be tested at 7 days and two at 28 days. The remaining cylinders will be held to verify test results, if needed.

C. Evaluation and Acceptance of Concrete:

1. Evaluation and acceptance of the compressive strength of concrete shall be according to the requirements of ACI 318, Chapter 5 "Concrete Quality" and as specified herein.
2. A statistical analysis of compression test results will be performed according to the requirements of ACI 214. The standard deviation of the test results shall not exceed 640 psi when ordered at equivalent water content as estimated by slump.
3. If any concrete fails to meet these requirements, immediate corrective action shall be taken to increase the compressive strength for all subsequent batches of the type of concrete affected.
4. When the standard deviation of the test results exceeds 640 psi, the average strength for which the mix is designed shall be increased by an amount necessary to satisfy the statistical requirement that the probability of any test

being more than 500 psi below or the average of any three consecutive tests being below the specified compressive strength is 1 in 100. The required average strength shall be calculated by Criterion No. 3 of ACI 214 using the actual standard of deviation.

5. All concrete which fails to meet the ACI requirements and these specifications is subject to removal and replacement at no increase in cost to the Owner.

## **PART 2 – PRODUCTS**

### **2.1 CONCRETE MATERIALS**

- A. Materials shall be delivered, stored and handled so as to prevent damage by water or breakage. Only one brand of cement shall be used. Cement reclaimed from cleaning bags or leaking containers shall not be used. All cement shall be used in the sequence of receipt of shipments.
- B. All materials furnished for the work shall comply with the requirements of Sections 201, 203 and 204 of ACI 301 as applicable.
- C. Storage of materials shall conform to the requirements of Section 2.5 of ACI 301 or the SSPWC.
- D. Materials for concrete shall conform to the following requirements:
  1. Cement shall be standard brand portland cement conforming to ASTM C 150 for Type V, including Table 2 optional requirements. A minimum of 85 percent of cement by weight shall pass a 325 screen. A single brand of cement shall be used throughout the work and before its use, the brand shall be acceptable to the Construction Manager. The cement shall be suitably protected from exposure to moisture until used. Cement that has become lumpy shall not be used. Sacked cement shall be stored in such a manner so as to permit access for inspection and sampling. Certified mill test reports, including fineness, for each shipment of cement to be used shall be submitted to the Construction Manager if requested regarding compliance with these specifications.
  2. Water for mixing and curing shall be potable, clean and free from objectionable quantities of silty organic matter, alkali, salts and other impurities. The water shall be considered potable for the purposes of this section only, if it meets the requirements of the local governmental agencies. Agricultural water with high total dissolved solids concentration (over 1,000 mg/l) shall not be used.
  3. Aggregates shall be obtained from pits acceptable to the Construction Manager, shall be nonreactive and shall conform to ASTM C-33. Maximum size of coarse aggregate shall be as specified herein. Lightweight sand for fine aggregate will not be permitted.
    - a. Coarse aggregate shall consist of clean, hard, durable gravel, crushed gravel, crushed rock or a combination thereof. The coarse aggregates

shall be prepared and handled in two or more size groups for combined aggregates with a maximum size greater than 3/4 inch. When the aggregates are proportioned for each batch of concrete the two size groups shall be combined. See the paragraph in Part 2 entitled "Trial Batch and Laboratory Tests" for the use of the size groups.

- b. Fine aggregates shall be natural sand or a combination of natural and manufactured sand that are hard and durable. When tested in accordance with ASTM D-2419, the sand equivalency shall not be less than 75 percent for an average of three samples, nor less than 70 percent for individual test. Gradation of fine aggregate shall conform to ASTM C-33 with 15 to 30 percent passing the number 50 screen and 5 to 10 percent passing the number 100 screen. The fineness modulus of sand shall not be over 3.00.
  - c. Combined aggregates shall be well graded from coarse to fine sizes, and shall be uniformly graded between screen sizes to produce a concrete that has optimum workability and consolidation characteristics. Where a trial batch is required for a mix design, the final combined aggregate gradations will be established during the trial batch process.
  - d. When tested in accordance with ASTM C-22, the ratio of silica released to reduction in alkalinity shall not exceed 1.0.
  - e. When tested in accordance with ASTM C-33, the fine aggregate shall produce a color in the supernatant liquid no darker than the reference standard color solution.
  - f. When tested in accordance with ASTM C-33, the coarse aggregate shall show a loss not exceeding 42 percent after 500 revolutions or 10.5 percent after 100 revolutions.
  - g. When tested in accordance with ASTM C-33, the loss resulting after five cycles shall not exceed 10 percent for fine or coarse aggregate when using sodium sulfate.
4. Ready-mix concrete shall conform to the requirements of ASTM C-94,
5. Admixtures: All admixtures shall be compatible and by a single manufacturer capable of provided qualified field service representation. Admixtures shall be used in accordance with manufacturer's recommendations. If the use of an admixture is producing an inferior end result, discontinue use of the admixture. Admixtures shall not contain thiocyanates nor more than 0.05 percent chloride ion, and shall be nontoxic after 30 days.
- a. Set controlling and water reducing admixtures: Admixtures may be added at the Contractor's option to control the set, effect water reduction and increase workability. The addition of an admixture shall be at no increase in cost to the Owner. The use of an admixture shall be subject to acceptance by the Construction Manager. Concrete containing an admixture shall be first placed at a location determined by the Construction Manager. Admixtures specified herein shall conform to the requirements of ASTM C-494.

- b. The required quantity of cement shall be used in the mix regardless of whether or not an admixture is used.
- (1) Concrete shall not contain more than one water-reducing admixture. Concrete containing an admixture shall be first placed at a location determined by the Construction Manager.
  - (2) Set controlling admixture shall be either with or without water-reducing properties. Where the air temperature at the time of placement is expected to be consistently over 80 degrees F, a set retarding admixture such as Plastocrete by Sika Corporation; Pozzolith 300R by BASF; Daratard by Grace; or equal shall be used. Where the air temperature at the time of placement is expected to be consistently under 40 degrees F, a noncorrosive set accelerating admixture such as Plastocrete 161FL by Sika Corporation; Pozzutec 20 by BASF; Daraset by Grace; or equal shall be used.
  - (3) Normal range water reducer shall conform to ASTM C-494, Type A. WRDA 79 by Grace; Pozzolith 322-N by BASF; Plastocrete 161 by Sika Corporation; or equal. The quantity of admixture used and the method of mixing shall be in accordance with the Manufacturer's instructions and recommendations.
  - (4) High range water reducer shall conform to ASTM C-494, Type F or G. Daracem 100 or WDRA 19 by Grace; Sikament FF or Sikament 86 by Sika Corporation; Rheobuild 1000 or Rheobuild 716 by BASF; or equal. High range water reducer shall be added to the concrete after all other ingredients have been mixed and initial slump has been verified. No more than 14 ounces of water reducer per sack of cement shall be used. Water reducer shall be considered as part of the mixing water when calculating water cement ratio.
  - (5) If the high range water reducer is added to the concrete at the job site, it may be used in conjunction with the same water reducer added at the batch plant. Concrete shall be a slump of 3 inches + 1/2 inch before adding the high range water reducing admixture at the job site. The high range water reducing admixture shall be accurately measured and pressure injected into the mixer as a single dose by an experienced technician. A standby system shall be provided and tested before each day's operation of the job site system.
  - (6) Concrete shall be mixed at mixing speed for a minimum of 30 mixer revolutions after the addition of the high range water reducer.

## 2.2 CURING MATERIALS



- A. Materials for curing concrete as specified herein shall conform to the following requirements and ASTM C-309.
1. All curing compounds shall be white pigmented and resin based. Sodium silicate compounds shall not be allowed. Concrete curing compound shall be Spartan Cote Cure-Seal Hardener by the Burke Company; Super Rez Seal by Euclid Chemical Company; MB-429 as manufactured by BASF; or equal. Water based resin curing compounds shall be used only where local air quality regulations prohibit the use of a solvent based compound. Water based curing compounds shall be Aqua Resinure by Edoco; Aqua-Cure by Euclid Chemical Company; MasterKure-W by BASF' or equal.
  2. Polyethylene sheet for use as concrete curing blanket shall be white and shall have a nominal thickness of 6 mils. The loss of moisture when determined in accordance with the requirements of ASTM C-156 shall not exceed 0.055 grams per square centimeter of surface.
  3. Polyethylene-coated waterproof paper sheeting for use as concrete curing blanket shall consist of white polyethylene sheeting free of visible defects, uniform in appearance, having a nominal thickness of 2 mils and permanently bonded to waterproof paper conforming to the requirements of Federal Specification UU-B-790A (1) (2). The loss of moisture when determined in accordance with the requirements of ASTM C-156, shall not exceed 0.055 gram per square centimeter of surface.
  4. Polyethylene-coated burlap for use as concrete curing blanket shall be 4 mils thick, white opaque polyethylene film impregnated or extruded into one side of the burlap. Burlap shall weigh not less than 9 ounces per square yard. The loss of moisture, when determined in accordance with the requirements of ASTM C-156, shall not exceed 0.055 gram per square centimeter of surface.

### 2.3 MISCELLANEOUS MATERIALS

- A. Damp-proofing agent shall be an asphalt emulsion, such as MasterSeal 600 by BASF Master Builders; Damp-proofing Asphalt Coating by Euclid Chemical Company; Sealmastic by W.R. Meadows, Inc. or equal.
- B. Bonding agents shall be epoxy adhesives conforming to the following products for the applications specified:
1. For bonding freshly-mixed, plastic concrete to hardened concrete, Sikadur 32 Hi-Mod Epoxy Adhesive as manufactured by Sika Corporation; Concessive Liquid (LPL), as manufactured by BASF; BurkEpoxy MV as manufactured by Edoco; or equal.
  2. For bonding hardened concrete or masonry to steel, Sikadur 31 Hi-Mod Gel as manufactured by Sika Corporation; BurkEpoxy NS as manufactured by Edoco; Concessive Paste (LPL) as manufactured by BASF; or equal.

### 2.4 CONCRETE DESIGN REQUIREMENTS

A. Mix Design

1. General: Concrete shall be composed of cement, admixtures, aggregates and water. These materials shall be of the qualities specified. The exact proportions in which these materials are to be used for different parts of the work will be determined during the trial batch. In general, the mix shall be designed to produce a concrete capable of being deposited so as to obtain maximum density and minimum shrinkage and, where deposited in forms, to have good consolidation properties and maximum smoothness of surface. In mix designs, the percentage of sand of the total weight of fine and coarse aggregate shall not exceed 41 for hydraulic structures or 50 for all other structures, unless noted otherwise. The aggregate gradations shall be formulated to provide fresh concrete that will not promote rock pockets around reinforcing steel or embedded items. The proportions shall be changed whenever necessary or desirable to meet the required results at no additional cost to the Owner. All changes shall be subject to review by the Construction Manager.
  
2. Water-Cement Ratio and Compressive Strength: The minimum compressive strength and cement content of concrete shall be not less than specified in the following tabulation:

Type of Work:	Min 28-Day Compressive Strength (psi)	Max Size Aggregate (in)	Minimum Cement per cu yd (lb)	Max W/C Ratio (by weight)
Structural Concrete				
Normal weight reinforced concrete (145 pcf)	4,500	1 1/2	564	0.45

Note: The Contractor is cautioned that the limiting parameters specified above are not a mix design. Additional cement or water reducing agent may be required to achieve workability demanded by the Contractor's construction methods and aggregates. The Contractor is responsible for any cost associated with furnishing concrete with the required workability.

3. Adjustments to Mix Design: The mixes used shall be changed whenever such change is necessary or desirable to secure the required strength, density, workability and surface finish and the Contractor shall be entitled to no additional compensation because of such charges.

B. Consistency:

1. The quantity of water entering into a batch of concrete shall be just sufficient, with a normal mixing period, to produce a concrete which can be worked properly into place without segregation and which can be compacted by the vibratory methods therein specified to give the desired density, impermeability and smoothness of surface. The quantity of water shall be changed as necessary, with variations in the nature or moisture content of the aggregates, to maintain uniform production of a desired consistency. The consistency of the concrete in success batches shall be determined by the slump tests in accordance with ASTM C-143. The slumps shall be as follows:

<u>Part of Work</u>	<u>Slump (in)</u>
All concrete, unless noted otherwise	4 inches $\pm$ 1 inch
With high range water reducer added	7 inches $\pm$ 1 inch

C. Trial Batch and Laboratory Tests:

1. Before placing any concrete, a testing laboratory designated by the Construction Manager will prepare a trial batch of each class of structural concrete, based on the preliminary concrete mixes submitted by the Contractor. During the trial batch, the aggregate proportions may be adjusted by the testing laboratory using the two coarse aggregate size ranges to obtain the required properties. If one size range produces an acceptable mix, a second size range need not be used. Such adjustments shall be considered refinements to the mix design and shall not be the basis for extra compensation to the Contractor. All concrete shall conform to the requirements of this section, whether the aggregate proportions are from the Contractor's preliminary mix design, or whether the proportions have been adjusted during the trial batch process. The trial batch will be prepared using the aggregates, cement and admixture proposed for the project. The trial batch materials shall be of a quantity such that the testing laboratory can obtain 3 drying shrinkage, and six compression test specimens from each batch. The cost of not more than three laboratory trial batch tests for each specified concrete strength will be borne by the Owner, but the Contractor shall furnish and deliver the materials in steel drums at no cost. Any additional trial batch testing required shall be performed by the Contractor at no additional cost to the Owner.
2. The determination of compressive strength will be made by testing 6-inch diameter by 12-inch high cylinders; made, cured and tested in accordance with ASTM C-192 and ASTM C-39. Three compression test cylinders will be tested at 7 days and 3 at 28 days. The average compressive strength for the three cylinders tested at 28 days for any given trial batch shall not be less than 125 percent of the specified compressive strength.
3. A sieve analysis of the combined aggregate for each trial batch shall be performed according to the requirements of ASTM C-136. Values shall be given for percent passing each sieve.
4. In lieu of trial batch and laboratory tests specified in the Section, the Contractor may submit previously-designed, tested, and successfully-used concrete

mixes, using materials similar to those intended for this project, together with a minimum of three certified test reports of the 28-day strength of the proposed concrete mix.

D. Measurement of Cement and Aggregate:

1. The amount of cement and of each separate size of aggregate entering into each batch of concrete shall be determined by direct weighing equipment acceptable to the Construction Manager.
2. Weighing Tolerances:

<u>Material</u>	<u>Percentage of Total Weight</u>
Cement	1
Aggregates	3
Admixtures	3

E. Measurement of Water:

1. The quantity of water entering the mixer shall be measured by a suitable water meter or other measuring device of a type acceptable to the Construction Manager and capable of measuring the water in variable amounts within a tolerance of one percent. The water feed control mechanism shall be capable of being locked in position so as to deliver constantly any specified amount of water to each batch of concrete. A positive quick-acting valve shall be used for a cut-off in the water line to the mixer. The operating mechanism must be such that leakage will not occur when the valves are closed.

2.5 READY MIXED CONCRETE

- A. At the Contractor's option, ready-mixed concrete may be used meeting the requirements as to materials, batching, mixing, transporting, and placing as specified herein and in accordance with ASTM C094, including the following supplementary requirements.
- B. Ready-mixed concrete shall be delivered to the site of the work and discharge shall be completed within one and one-half hour (90 minutes) after the addition of the cement to the aggregates or before the drum has been revolved 250 revolutions, whichever is first.
- C. Truck mixers shall be equipped with electrically-actuated counters by which the number of revolutions of the drum or blades may be readily verified. The counter shall be of the resettable, recording type, and shall be mounted in the driver's cab. The counters shall be actuated at the time of starting mixers at mixing speeds.
- D. Each batch of concrete shall be mixed in a truck mixer for not less than 70 revolutions of the drum or blades at the rate of rotation designated by the manufacturer of equipment. Additional mixing, if any, shall be at the speed

designated by the manufacturer of the equipment as agitating speed. All materials, including mixing water shall be in the mixer drum before actuating the revolution counter for determining the number of revolution of mixing.

- E. Truck mixers and their operation shall be such that the concrete throughout the mixed batch as discharged is within acceptable limits of uniformity with respect to consistency, mix and grading. If slump tests taken at approximately the 1/4 and 3/4 points of the load during discharge give slumps differing by more than one inch when the specified slump is 3 inches or less, or if they differ by more than 2 inches when the specified slump is more than 3 inches, the mixer shall not be used on the work unless the causing condition is corrected and satisfactory performance is verified by additional slump tests. All mechanical details of the mixer, such as water measuring and discharge apparatus, condition of the blades, speed of rotation, general mechanical condition of the unit and clearance of the drum shall be checked before a further attempt to use the unit will be permitted.
- F. Each batch of ready-mixed concrete delivered at the job site shall be accompanied by a delivery ticket furnished to the Construction Manager.
- G. The use of non-agitating equipment for transporting ready-mixed concrete will not be permitted. Combination truck and trailer equipment for transporting ready-mixed concrete will not be permitted. The quality and quantity of materials used in ready-mixed concrete and in batch aggregates shall be subject to continuous inspection at the batching plant by the Construction Manager.

### **PART 3 – EXECUTION**

#### **3.1 PROPORTIONING AND MIXING**

- A. Proportioning: Proportioning of the concrete mix shall conform to the requirements of Chapter 3 “Proportioning of ACI 301.
- B. Mixing: Mixing of concrete shall conform to the requirements of Chapter 7 of said ACI 301 Specifications.
- C. Slump: Maximum slumps shall be as specified herein.
- D. Re-tempering: Re-tempering of concrete or mortar which has partially hardened shall not be permitted.

#### **3.2 PREPARATION OF SURFACES FOR CONCRETING**

- A. General: Earth surfaces shall be thoroughly wetted by sprinkling, before the placing of any concrete, and these surfaces shall be kept moist by frequent sprinkling up to the time of placing concrete thereon. The surface shall be free from standing water, mud and debris at the time of placing concrete.
- B. Joints in Concrete: Concrete surfaces upon or against which concrete is to be placed, where the placement of the concrete has been stopped or interrupted so that, as determined by the Construction Manager, the new concrete cannot be

incorporated integrally with that previously placed, are defined as construction joints. The surfaces of horizontal joints shall be given a compacted roughened surface for good bond. The joint surfaces shall be cleaned out of all laitance, loose or defective concrete, foreign material and roughened to a minimum 1/4-inch amplitude. Such cleaning and roughening shall be accomplished by hydro-blasting or sandblasting (exposing aggregate) followed by thorough washing. All pools of water shall be removed from the surface of construction joints, and the joint surface shall be coated with an epoxy-bonding agent, unless indicated otherwise, before the new concrete is placed.

- C. Placing Interruptions: When placing of concrete is to be interrupted long enough for the concrete to take a set, the working face shall be given a shape by the use of forms or other means, that will secure proper union with subsequent work; provided that construction joints shall be made only where acceptable to the Construction Manager.
- D. Embedded Items: No concrete shall be placed until all formwork, installation of parts to be embedded, reinforcement steel and preparation of surfaces involved in the placing have been completed and accepted by the Construction Manager at least 4 hours before placement of concrete. All surfaces of forms embedded items that have become encrusted with dried grout from concrete previously placed shall be cleaned of all such grout before the surrounding or adjacent concrete is placed.
- E. All inserts or other embedded items shall conform to the requirements herein.
- F. All reinforcement, anchor bolts, sleeves, inserts and similar items shall be set and secured in the forms where shown or by shop drawings and shall be acceptable to the Construction Manager before any concrete is placed. Accuracy of placement is the responsibility of the Contractor.
- G. No concrete shall be placed in any structure until all water entering the space to be filled with concrete has been properly cut off or has been diverted by pipes, or other means, and carried out of the forms, clear of the work. No concrete shall be deposited underwater nor shall the Contractor allow still water to rise on any concrete until the concrete has attained its initial set. Water shall not be permitted to flow over the surface of any concrete in such manner and at such velocity as will injure the surface finish of the concrete. Pumping or other necessary dewatering operations for removing ground water, if required, will be subject to the review of the Construction Manager.
- H. Corrosion Protection: Pipe, conduit, dowels and other ferrous items required to be embedded in concrete construction shall be so positioned and supported before placement of concrete that there will be a minimum of 2 inches clearance between said items and any part of the concrete reinforcement. Securing such items in position by wiring or welding them to the reinforcement will not be permitted.
- I. Openings for pipes, inserts for pipe hangers and brackets and the setting of anchors shall, where practicable, be provided for, during the placing of concrete.
- J. Anchor bolts shall be accurately set and shall be maintained in position by templates while being embedded in concrete.

- K. Cleaning: The surfaces of all metalwork to be in contact with concrete shall be thoroughly cleaned of all dirt, grease, loose scale and rust, grout, mortar and other foreign substances immediately before the concrete is placed.

### 3.3 HANDLING, TRANSPORTING AND PLACING

- A. General: Placing of concrete shall conform to the applicable requirements of Chapter 8 of ACI 301 and the requirements of this section. No aluminum materials shall be used in conveying any concrete.
- B. Non-Conforming Work of Materials: Concrete which upon or before placing is found not to conform to the requirements specified herein shall be rejected and immediately removed from the work. Concrete which is not placed in accordance with these specifications, or which is of inferior quality, shall be removed and replaced at no additional expense to the Owner.
- C. Unauthorized Placement: No concrete shall be placed except in the presence of a duly authorized representative of the Construction Manager. The Contractor shall notify the Construction Manager in writing at least 24 hours in advance of placement of any concrete.
- C. Conveyor Belts and Chutes: All ends of chutes, hopper gates and all other points of concrete discharge throughout the Contractor's conveying, hoisting and placing system shall be so designed and arranged that concrete passing from them will not fall separated into whatever receptacle immediately receives it. Conveyor belts, if used, shall be of a type acceptable to the Construction Manager. Chutes longer than 50 feet will not be permitted. Minimum slopes of chutes shall be such that concrete of the specified consistency will readily flow in them. If a conveyor belt is used, it shall be wiped clean by a device operated in such a manner that none of the mortar adhering to the belt will be wasted. All conveyor belts and shuts shall be covered.
- D. Temperature of Concrete: The temperature of concrete when it is being placed shall be not more than 90 degrees F nor less than 55 degrees F for sections less than 12 inches thick nor less than 50 degrees for all other sections. Concrete ingredients shall not be heated to a temperature higher than that necessary to keep the temperature of the mixed concrete, as placed, from falling below the specified minimum temperature. When the temperature of the concrete is 85 degrees F or above, the time between the introduction of the cement to the aggregates and discharged shall not exceed 45 minutes. If concrete is placed when the weather is such that the temperature of the concrete would exceed 90 degrees F, the Contractor shall employ effective means, such as pre-cooling aggregates and mixing water using ice or placing at night, as necessary to maintain the temperature of the concrete, as it is placed, below 90 degrees F. The Contractor shall be entitled to no additional compensation on account of foregoing requirements.
- E. Hot Weather Placement:

1. Placement of concrete shall conform to ACI 305R – Hot Weather Concreting, and the following.
2. Only set retarding admixture shall be used in concrete when air temperature is expected to be consistently over 80 degrees F.
3. The maximum temperature of concrete shall not exceed 90 degrees F immediately before placement.
4. From the initial placement to the curing state, concrete shall be protected from the adverse effect of high temperature, low humidity and wind.

### 3.4 PUMPING OF CONCRETE

- A. General: If the pumped concrete does not produce satisfactory end results, discontinue the pumping operation and proceed with the placing of concrete using conventional methods.
- B. Pumping Equipment: The pumping equipment must have two cylinders and be designed to operate with one cylinder only in case the other is not functioning. In lieu of this requirement, the Contractor may have a standby pump on the site during pumping.
- C. The minimum diameter of the hose (conduits) shall be in accordance with ACI 304.2R
- D. Pumping equipment and hoses (conduits) that are not functioning properly shall be replaced.
- E. Aluminum conduits for conveying the concrete shall not be permitted.
- F. Field Control: Concrete samples for slump, air content and test cylinders will be taken at the placement (discharge) end of the line.

### 3.5 ORDER OF PLACING CONCRETE

- A. The order of placing concrete in all parts of the work shall be acceptable to the Construction Manager. In order to minimize the effects of shrinkage, the concrete shall be placed in units as bounded by construction joints. The placing of units shall be done by placing alternate units in a manner such that each unit placed shall be done by placing alternate units in a manner such that each unit placed shall have cured at least 7 days for hydraulic structures and 3 days for all other structures before the contiguous unit or units are placed, except that the corner sections of vertical walls shall not be placed until the two adjacent wall panels have cured at least 14 days for hydraulic structures and 7 days for all structures.
- B. The surface of the concrete shall be level whenever a run of concrete is stopped. To ensure a level, straight joint on the exposed surface of walls, a wood strip at least 3/4 inch thick shall be tacked to the forms on these surfaces. The concrete shall be carried about 1/2 inch above the underside of the strip. About one hour



after the concrete is placed, the strip shall be removed and irregularities in the edge formed by the strip shall be leveled with a trowel and all laitance shall be removed.

### 3.6 TAMPING AND VIBRATING

- A. As concrete is placed in the forms or in excavations, it shall be thoroughly settled and compacted throughout the entire depth of the layer which is being consolidated, into a dense homogeneous mass, filling all corners and bringing only a slight excess of water to the exposed surface of concrete during placement. Vibrators shall be Group 3 (per ACI 309) high speed power vibrators (8,000 to 12,000 rpm) of an immersion type in sufficient number and with (at least one) standby units as required. Group 2 vibrators may be used only at specific locations when accepted by the Construction Manager.

### 3.7 FINISHING CONCRETE SURFACES

- A. General: Surfaces shall be free from fins, bulges, ridges, offsets, honeycombing or roughness of any kind, and shall present a finished, smooth, continuous hard surface. Allowable deviations from plumb to level and from the alignment, profiles, and dimensions shown are defined as tolerances and are specified in Part 1.0.5.D, herein. These tolerances are to be distinguished from irregularities in finish as described herein. Aluminum finishing tools shall not be used.

### 3.8 CURING

- A. General: All concrete shall be cured for not less than 14 days after placing, in accordance with the methods specified.
- B. The surface shall be sprayed with a liquid curing compound.
  - 1. It shall be applied in accordance with the manufacturer's printed instructions at a maximum coverage rate of 200 square feet per gallon and in such a manner as to cover the surface with a uniform film which will seal thoroughly.
  - 2. Where the curing compound method is used, care shall be exercised to avoid damage to the seal during the curing period. Should the seal be damaged or broken before the expiration of the curing period, the break shall be repaired immediately by the application of additional curing compound over the damaged portion.
  - 3. Wherever curing compound may have been applied by mistake to surfaces against which concrete subsequently is to be placed and to which it is to adhere, said compound shall be entirely removed by wet sandblasting just before placing the new concrete.
  - 4. Where curing compound is specified, it shall be applied as soon as the concrete has hardened enough to prevent marring on unformed surfaces, and within 2 hours after removal of formed surfaces shall be made within the said

2-hour period; provided, however, that any such repairs which cannot be made within said 2-hour period shall be delayed until after the curing compound has been applied. When repairs are to be made to an area on curing compound has been applied, the area involved shall first be wet sandblasted to remove the curing compound, following which repairs shall be made as specified herein.

5. Before final acceptance of the work, all visible traces of curing compound shall be removed from all surfaces in such a manner that does not damage surface finish.

### 3.9 PROTECTION

- A. Protect all concrete against injury until final acceptance by the Owner.
- B. Fresh concrete shall be protected from damage due to rain, hail sleet or snow. Provide such protection while the concrete is still plastic and whenever such precipitation is imminent or occurring.

### 3.10 TREATMENT OF SURFACE DEFECTS

- A. As soon as forms are removed, all exposed surfaces shall be carefully examined and any irregularities shall be immediately rubbed or ground in a satisfactory manner in order to secure a smooth, uniform and continuous surface. Plastering or coating of surfaces to be smoothed will not be permitted. No repairs shall be made until after inspection by the Construction Manager. In no case will extensive patching of honeycombed concrete be permitted. Concrete containing minor voids, holes, honeycombing or similar depression defects shall have them repaired as specified herein. Concrete containing extensive voids, holes, honeycombing or similar depression defects, shall be completely removed and replaced. All repairs and replacements herein specified shall be promptly executed by the Contractor at its own expense.
- B. Defective surfaces to be repaired shall be cut back from "true line" a minimum depth of 1/2 inch over the entire area. Feathered edges will not be permitted. Where chipping or cutting tools are not required in order to deepen the area properly, the surface shall be prepared for bonding by the removal of all laitance or soft material and not less than 1/32 inch depth of the surface from all hard portions, by means of an efficient sandblast. After cutting and sandblasting, the surface shall be wetted sufficiently in advance of shooting with shotcrete or with cement mortar so that while the repair material is being applied, the surfaces under repair will remain moist, but not so wet as to overcome the suction upon which a good bond depends. The material used for repair proposed shall consist of a mixture of one sack of cement to 3 cubic feet of sand.
- C. All repairs shall be built up and shaped in such a manner that the completed work will conform to the requirements of this section, as applicable, using approved methods which will not disturb the bond, causing sagging or cause horizontal fractures. Surfaces of said repairs shall receive the same kind and amount of curing treatment as required for concrete in the repaired section.

### 3.11 CARE AND REPAIR OF CONCRETE

- A. The Contractor shall protect all concrete against injury or damage from excessive heat, lack of moisture, overstress or any other cause until final acceptance by Owner. Particular care shall be taken to prevent the drying of concrete and to avoid roughening or otherwise damaging the surface. Any concrete found to be damaged, or which may have been originally defective, or which becomes defective at any time before the final acceptance of the completed work or which departs from the established line or grade, or which, for any other reason, does not conform to the requirements of the contract documents, shall be satisfactorily repaired or removed and replaced with acceptable concrete at the Contractors expense.

**END OF SECTION**

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## SECTION 26 05 19

### LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

- A. Section Includes:
  - 1. Building wires and cables rated 2000 V and less.
  - 2. Connectors, splices, and terminations rated 2000 V and less.
- B. Related Requirements:

##### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

#### PART 2 - PRODUCTS

##### 2.1 CONDUCTORS AND CABLES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. Alpha Wire Company.
  - 2. Belden Inc.
  - 3. General Cable Technologies Corporation.
  - 4. Southwire Company.
  - 5. Or Equal

- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Conductor and Cable Marking: Comply with wire and cable marking according to UL's "Wire and Cable Marking and Application Guide."
- D. Conductors: Copper, complying with NEMA WC 70/ICEA S-95-658.
  - 1. Conductor Insulation: Comply with NEMA WC 70/ICEA S-95-658 for Type THHN/THWN-2.

## 2.1 CONNECTORS AND SPLICES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. 3M Electrical Products.
  - 2. Hubbell Power Systems, Inc.
  - 3. Ideal Industries, Inc.
  - 4. ILSCO.
  - 5. O-Z/Gedney; a brand of Emerson Industrial Automation.
  - 6. Or Equal.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated; listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

## PART 3 - EXECUTION

### 3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Copper; solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
- B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

### 3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

- A. Exposed Feeders: Type THHN/THWN-2, single conductors in raceway.
- B. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN/THWN-2, single conductors in raceway.
- C. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN/THWN-2, single conductors in raceway.

### 3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Conceal cables in finished walls, ceilings, and floors unless otherwise indicated.
- B. Complete raceway installation between conductor and cable termination points according to Section 260533 "Raceways and Boxes for Electrical Systems" prior to pulling conductors and cables.
- C. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- D. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips that will not damage cables or raceway.

### 3.4 CONNECTIONS

- A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- B. Make splices, terminations, and taps that are compatible with conductor material.
- C. Limit quantity of splices to reconnect existing loads only. All other wiring shall be continuous.
- D. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches (150 mm) of slack.

### 3.5 IDENTIFICATION

- A. Identify and color-code conductors and cables according to Section 26 05 53 "Identification for Electrical Systems."

### 3.6 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 26 05 44 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

### 3.7 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
  - 1. After installing conductors and cables and before electrical circuitry has been energized, test service entrance and feeder conductors and feeder conductors for compliance with requirements.
  - 2. Perform each of the following visual and electrical tests:
    - a. Inspect exposed sections of conductor and cable for physical damage and correct connection according to the single-line diagram.
    - b. Test bolted connections for high resistance.
    - c. Inspect compression applied connectors for correct cable match and indentation.
    - d. Inspect for correct identification.
    - e. Inspect cable jacket and condition.
    - f. Insulation-resistance test on each conductor with respect to ground and adjacent conductors. Apply a potential of 500-V dc for 300-V rated cable and 1000-V dc for 600-V rated cable for a one-minute duration.
    - g. Continuity test on each conductor and cable.
    - h. Uniform resistance of parallel conductors.
- B. Cables will be considered defective if they do not pass tests and inspections.
- C. Prepare test and inspection reports to record the following:
  - 1. Procedures used.
  - 2. Results that comply with requirements.
  - 3. Results that do not comply with requirements and corrective action taken to achieve compliance with requirements.



## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.1 MEASUREMENT AND PAYMENT**

- A. Full compensation for Section 26 05 19 – Low-voltage Electrical Power Conductors and Cables, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 19\*\*\***

## SECTION 26 05 26

### GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

Section includes grounding and bonding systems and equipment.

##### 1.3 ACTION SUBMITTALS

Product Data: For each type of product indicated.

##### 1.4 INFORMATIONAL SUBMITTALS

As-Built Data: Plans showing dimensioned as-built locations of grounding features, including the following:

Test wells.

Ground rods.

Field quality-control reports.

#### Part 2 - PART PRODUCTS

##### 2.1 MANUFACTURERS

Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

Burndy; Part of Hubbell Electrical Systems.

ERICO International Corporation.

Harger Lightning & Grounding.

ILSCO.

O-Z/Gedney; a brand of Emerson Industrial Automation.

Thomas & Betts Corporation; A Member of the ABB Group.

Or Approved Equal.

## 2.2 SYSTEM DESCRIPTION

Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

Comply with UL 467 for grounding and bonding materials and equipment.

## 2.3 CONDUCTORS

Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

Bare Copper Conductors:

Solid Conductors: ASTM B 3.

Stranded Conductors: ASTM B 8.

Tinned Conductors: ASTM B 33.

Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch (6 mm) in diameter.

Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.

Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.

Tinned Bonding Jumper: Tinned-copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.

## 2.4 CONNECTORS

Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.

Bolted Connectors for Conductors and Pipes: Copper or copper alloy.

Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

Bus-Bar Connectors: Mechanical type, cast silicon bronze, solderless compression-type wire terminals, and long-barrel, two-bolt connection to ground bus bar.

## 2.5 GROUNDING ELECTRODES

Ground Rods: Copper-clad steel; 3/4 inch by 10 feet.

## PART 3 - EXECUTION

### 3.1 APPLICATIONS

Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger unless otherwise indicated.

Underground Grounding Conductors: Install bare tinned-copper conductor, No. 2/0 AWG minimum.

Bury at least 24 inches (600 mm) below grade.

Conductor Terminations and Connections:

Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.

Underground Connections: Welded connectors except at test wells and as otherwise indicated.

Connections to Ground Rods at Test Wells: Bolted connectors.

Connections to Structural Steel: Welded connectors.

### 3.2 EQUIPMENT GROUNDING

Install insulated equipment grounding conductors with all feeders and branch circuits.

Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:

Feeders and branch circuits.

Lighting circuits.

Receptacle circuits.

Single-phase motor and appliance branch circuits.

Three-phase motor and appliance branch circuits.

Flexible raceway runs.

Poles Supporting Outdoor Lighting Fixtures or structures: Install grounding electrode and a separate insulated equipment grounding conductor in addition to grounding conductor installed with branch-circuit conductors.

### 3.3 INSTALLATION

Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

Ground Rods: Drive rods until tops are 2 inches (50 mm) below finished floor or final grade unless otherwise indicated.

Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.

### 3.4 FIELD QUALITY CONTROL

Tests and Inspections:

After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.

Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.

Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal, and at individual ground rods. Make tests at ground rods before any conductors are connected.

Measure ground resistance no fewer than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.

Perform tests by fall-of-potential method according to IEEE 81.

Grounding system will be considered defective if it does not pass tests and inspections.

Prepare test and inspection reports.

Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Owner promptly and include recommendations to reduce ground resistance.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.1 MEASUREMENT AND PAYMENT**

A. Full compensation for Section 26 05 26 – Grounding and Bonding for Electrical Systems, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 26\*\*\***

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## SECTION 26 05 29

### HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

- B. Section Includes:
  - 1. Hangers and supports for electrical equipment and systems.
  - 2. Construction requirements for concrete bases.

##### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
    - a. Hangers.
    - b. Steel slotted support systems.
    - c. Clamps.
  - 2. Include rated capacities and furnished specialties and accessories.
- B. Shop Drawings: Signed and sealed by a qualified professional engineer. For fabrication and installation details for electrical hangers and support systems.
  - 1. Trapeze hangers. Include product data for components.
  - 2. Steel slotted-channel systems.
  - 3. Equipment supports.
  - 4. Vibration Isolation Base Details: Detail fabrication, including anchorages and attachments to structure and to supported equipment. Include adjustable motor bases, rails, and frames for equipment mounting.
- C. Delegated-Design Submittal: For hangers and supports for electrical systems.



1. Include design calculations and details of trapeze hangers.
2. Include design calculations for seismic restraints.

#### 1.4 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M.

### **PART 2 - PRODUCTS**

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer to design hanger and support system.
- B. Seismic Performance: Hangers and supports shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
  1. The term "withstand" means "the supported equipment and systems will remain in place without separation of any parts when subjected to the seismic."

#### 2.2 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

- A. Steel Slotted Support Systems: Comply with MFMA-4 factory-fabricated components for field assembly.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Allied Tube & Conduit; a part of Atkore International.
    - b. ERICO International Corporation.
    - c. GS Metals Corp.
    - d. Thomas & Betts Corporation; A Member of the ABB Group.
    - e. Unistrut; Part of Atkore International.
    - f. Or Approved Equal.
  2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
  3. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane, or polyester coating applied according to MFMA-4.

4. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
  5. Channel Dimensions: Selected for applicable load criteria.
- B. Conduit and Cable Support Devices: Steel hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
- C. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M steel plates, shapes, and bars; black and galvanized.
- D. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:
1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
    - a. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
      - 1) Hilti, Inc.
      - 2) ITW Ramset/Red Head; Illinois Tool Works, Inc.
      - 3) MKT Fastening, LLC.
      - 4) Or Equal.
    2. Mechanical-Expansion Anchors: Insert-wedge-type, stainless steel, for use in hardened Portland cement concrete, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
      - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
        - 1) B-line, an Eaton business.
        - 2) Empire Tool and Manufacturing Co., Inc.
        - 3) Hilti, Inc.
        - 4) ITW Ramset/Red Head; Illinois Tool Works, Inc.
        - 5) Or Approved Equal.
    3. Concrete Inserts: Steel or malleable-iron, slotted support system units are similar to MSS Type 18 units and comply with MFMA-4 or MSS SP-58.

4. Clamps for Attachment to Steel Structural Elements: MSS SP-58 units are suitable for attached structural element.
5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
6. Toggle Bolts: Stainless-steel springhead type.
7. Hanger Rods: Threaded steel.

### 2.3 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

- A. Description: Welded or bolted structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

## **PART 3 - EXECUTION**

### 3.1 APPLICATION

- A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems unless requirements in this Section are stricter.
- B. Comply with requirements for raceways and boxes specified in Section 26 05 33 "Raceways and Boxes for Electrical Systems."
- C. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMTs, IMCs, and RMCs as required by NFPA 70. Minimum rod size shall be 1/4 inch (6 mm) in diameter.
- D. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.
  1. Secure raceways and cables to these supports with two-bolt conduit clamps.

### 3.2 SUPPORT INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this article.
- B. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb (90 kg).

- C. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
  - 1. To New Concrete: Bolt to concrete inserts.
  - 2. To Existing Concrete: Expansion anchor fasteners.
  - 3. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches (100 mm) thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches (100 mm) thick.
- D. Drill holes for expansion anchors in concrete at locations and to depths that avoid the need for reinforcing bars.

### 3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

- A. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.
- B. Field Welding: Comply with AWS D1.1/D1.1M.

### 3.4 CONCRETE BASES

- A. Construct concrete bases of dimensions indicated but not less than 4 inches (100 mm) larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.
- B. Use 3000-psi (20.7-MPa), 28-day compressive-strength concrete.
- C. Anchor equipment to concrete base as follows:
  - 1. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  - 2. Install anchor bolts to elevations required for proper attachment to supported equipment.
  - 3. Install anchor bolts according to anchor-bolt manufacturer's written instructions.

### 3.5 PAINTING

- A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for

shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.

1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils (0.05 mm).
- B. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.1 MEASUREMENT AND PAYMENT**

- A. Full compensation for Section 26 05 29 – Hanger and Supports for Electrical Systems, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 29\*\*\***

## SECTION 26 05 30

### PROCESS INSTRUMENTATION AND CONTROL SYSTEM (PICS)

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. This section of the specifications includes materials, testing, and installation of process instrumentation and control system as specified herein and indicated on the drawings.
- B. These specifications shall not be interpreted as permission or direction to violate any governing code or ordinance. Equipment, materials, and workmanship shall comply with the latest revisions of the following codes and standards:
  - 1. Instrumentation: Instrument Society of America (ISA).
  - 2. Wiring: California Electrical Code (CEC), ISA S5.3 and S5.4.
  - 3. Control Panels and Equipment: NEMA, UL, and ANSI.
  - 4. Control Logic: NFPA 79.
  - 5. Piping: ANSI B31.3 (instrumentation piping).

##### 1.2 SCOPE OF WORK

- A. The work involves furnishing all hardware, installation, labor, material, equipment, and engineering in strict compliance with the contract documents for the Owner.
- B. Specific items include, but not limited to, the following:
  - 6. Field instruments.
  - 7. Control Panel.
- C. Submittal drawings shall show interface between PLC and field instruments.

##### 1.3 SUBMITTALS

- A. Detailed System Drawings and Data: The submittal shall consist of six sets of detailed drawings and data prepared and organized by the Contractor. All drawings, schematics, layouts, and diagrams shall be

done on 11" x 17" sheets utilizing AutoCAD. Two sets of submittals will be returned to the Contractor.

- B. Submittals shall be in three-ring hard-cover binders and arranged for convenient use including tab sheets, all indexed, and cross referenced with a separate index for each item.
1. Provide manufacturers cut sheets and manuals for all hardware to be provided.
  2. Provide ISA type instrumentation data sheets for each component, together with a technical product brochure or bulletin. The data sheets, as a minimum, shall show:
    - a. Instrument tag designation.
    - b. Component name.
    - c. Manufacturer's model number.
    - d. Calibrated range.
    - e. Instrument location.
    - f. Input and output characteristics.
    - g. Scale range and units (if any) and multiplier (if any).
    - h. Requirements for electric supply.
    - i. Vendor/ distributor
  3. Group the data sheets together in the submittal by type. Provide individual data sheets for each instrument with one brochure or bulletin to cover all identical uses of that component.
  4. Drawing submittal shall include, as a minimum, the following types of drawings and diagrams required for the construction of this project:
    - a. Legend, Symbols, and Index.
    - b. Power Distribution Diagrams.
    - c. Instrument Control Panel Layouts/Construction Drawings/Details.
    - d. Internal Panel Wiring Diagrams.
    - e. Digital I/O Module Wiring Diagrams.
    - f. Analog I/O Module Wiring Diagrams.
    - g. Detailed Loop Interconnection Wiring Diagrams (per ISA S5.3 and S5.4) for the entire system showing all control equipment, instrumentation, electrical equipment, components, wiring, routing, J-boxes, terminations, wire tags, and wire colors. The

diagrams shall show the detailed interconnection of all electrical equipment, instrumentation, panels, enclosures, components and the like provided under this contract.

- h. Detailed Ladder Diagrams in a format similar to NFPA 79 (for discrete wiring) to meet the following minimum requirements:
  - i. Where the internal wiring diagrams of subassemblies are furnished on separate sheets, they shall be shown as a rectangle in the schematic diagram with all external points identified and cross-referenced to the separate sheets of the control circuit. Coils and contacts internal to the subassemblies shall be shown in the rectangle connected to their terminal points.
5. A cross-referencing system shall be used in conjunction with each relay coil so that associated contacts may be readily located on the diagram. Where a relay contact appears on a sheet separate from the one on which the coil is shown, the purpose of the contact shall be described on the same sheet. Spare contacts shall be shown.
6. Limit, pressure, float, flow, temperature sensitive, and similar switch symbols shall be shown on the schematic (ladder) diagram with all utilities turned off (electric power, air, gas, oil, water, lubrication, etc.) and with the equipment at its normal starting position. If the equipment is shown in a specific position, the position shall be identified.
7. Contacts of multiple contact devices, e.g., selector switches, shall be shown on the line of the schematic diagram where they are connected in a circuit. A mechanical connection between the multiple contacts shall be indicated by a dotted line or arrow. This does not apply to control relays, starters, or contactors. Additional charts or diagrams may be used to indicate the position of multiple contact devices such as drum, cam, and selector switches.
8. The purpose or function of all switches shall be shown adjacent to the symbols. The purpose or function of controls such as relays, starters, contactors, solenoids, subassemblies, and timers on the diagram shall be shown adjacent to their respective symbols. The number of positions of the solenoid valve shall be shown adjacent to the valve solenoid symbol.
9. Arrangement and construction drawings for consoles, control panels, and for other special panels for field installation. These drawings shall include dimensions, location of all components, identification of all components, bill of materials, detailed schematics of all internal wiring, preparation and finish data, nameplates, and the like. These drawings also shall include enough other details to define the style and overall appearance of the assembly; include a finish sample for all panel surfaces.



10. Installation, mounting, and anchoring details for all field instruments and panel mounted components.
  11. An instrument list including all instruments provided under this project
  12. An I/O List for each PLC in the project.
- B. Complete detailed bills of material: Detailed bill of material for all components shall be provided including complete manufacturers name and model number, quantity to be provided, and cross references to data sheet sections.
- C. Operation, Maintenance, and Repair Manuals:
1. The Operation and Maintenance (O&M) manuals shall be submitted and approved prior to the testing of the project systems. The O&M manuals shall be used to assist with commissioning and any red-lines made during testing shall be revised and resubmitted as the final set of six (6) O&M manuals.
  2. The organization of the initial submittal required above shall be compatible to eventual inclusion as one volume of the operation, maintenance, and repair manuals.
  3. Operation manuals shall be prepared and submitted to the Owner's Representative for preliminary review in six copies. When the Owner's Representative is satisfied that these are complete and properly prepared, six final sets shall be delivered to the Owner's Representative.
  4. The complete operation manual shall contain all the information included in the preliminary equipment submittal, the detailed installation submittal, and the additional information required herein, all bound in hard-cover binders and arranged for convenient use including tab sheets, all indexed and cross referenced with a separate index for each item, and all final as-built drawings with the AutoCAD electronic files.
  5. The operation manuals shall contain: (1) calibration and maintenance instructions, (2) trouble-shooting instructions, and (3) instructions for ordering replacement parts.

#### 1.4 QUALIFICATIONS AND RESPONSIBILITY OF CONTRACTOR

- A. The Contractor shall furnish and install all proposed hardware as shown on the drawings and as specified herein. The PLC system installation and wiring connections to peripheral equipment and instruments shall be the responsibility of the system supplier using qualified personnel possessing the necessary equipment and having experience in making similar installations. Evidence of such qualification, as well as notification of the system supplier assuming

unit responsibility, shall be furnished to the Owner in writing prior to commencement of the work. The qualification evidence shall include the following:

1. The system supplier shall have experience with the installation of industrial control systems similar in type to those to be installed in this project.
2. A list of completed similar installations including name and address of owner, name of project, and date of completion.
3. The name and qualifications of supervisory personnel to be directly responsible for the installation of the control system.

B. Under this section, the Contractor shall furnish the following:

1. Special tools and test equipment required by the supplier.
2. Control Panel
3. Installation, integration and testing.
4. Documentation.
5. Warranty (one year).
6. Shipping and receiving.

C. All calibration and final checkout of the process instrumentation and control system shall be witnessed by the Owner's Representative to determine if the system complies with the contract documents.

D. The Contractor shall be responsible for coordinating and interfacing with equipment supplied under these contract documents which are an integral part of the system. Interfacing shall be incorporated in the detailed systems drawings and data section of the contract documents.

E. The system supplier shall be experienced in the design, programming, and service of this type of equipment. In the event of a dispute as to the acceptability of the system supplier, the Owner's Representative shall make the final determination.

## 1.5 GUARANTEE

A. The Contractor shall repair or replace defective components, rectify malfunctions, correct faulty workmanship, all at no additional cost to the Owner during the guarantee.

- B. To fulfill this obligation, he shall utilize technical service personnel designated by the Contractor who was originally assigned project responsibility. Services shall be performed within five calendar days after notification by the Owner's Representative.

## **PART 2 - MATERIALS**

### **2.1 DESIGNATIONS OF COMPONENTS**

- A. In these specifications and on the plans, all systems, and other elements are represented schematically and are designated by numbers, as derived from criteria in Instrument Society of America Standards. The nomenclature and numbers designated herein and on the plans shall be employed exclusively throughout shop drawings, data sheets, and the like. Any other symbols, designations, and nomenclature unique to a manufacturer's standard methods shall not replace those prescribed above, as used herein, and on the plans.

### **2.2 INSTRUMENT TAGGING**

- A. Attach a stainless-steel tag to the instrument at the factory. Permanently mark the stainless-steel tag with the instrument tag number. The manufacturer's standard metal nameplate as a minimum shall denote model number, serial number, operating electrical voltage and amperage (when applicable), and date of manufacture.

### **2.3 INSTRUMENT SYSTEM POWER**

- A. Power provided for the instrument system at the facility shall be 120-volt a-c, single phase, 60 Hz. The PLC system controls shall be 24VDC.
- B. Where d-c power supplies are not furnished integral with any one instrument system loop, then provide separate solid-state power supplies.

### **2.4 MATCHING STYLE, APPEARANCE, AND TYPE**

- A. All display instruments of each type shall represent the same outward appearance, having the same physical size and shape and the same size and style of numbers and pointers.

## **PART 3 - EXECUTION**

### 3.1 UNIFORMITY OF COMPONENTS

- A. Components which perform the same or similar functions shall, to the greatest degree possible, be of the same or similar type, the same manufacture, the same grade of construction, the same size, and the same appearance.

### 3.2 MOUNTING OF EQUIPMENT AND ACCESSORIES

- A. Mount equipment in accordance with the installation detail drawings as prepared by the Contractor and reviewed by the Engineer. Mount equipment so that they are rigidly supported, level and plumb, and in such a manner as to provide accessibility; protection from damage; isolation from heat, shock, and vibration; and freedom from interference with other equipment, piping, and electrical work. Do not install consoles, cabinets, and panels until heavy construction work adjacent to computer and telemetry equipment has been completed to the extent that there shall be no damage to the equipment.
- B. Locate devices, including accessories, where they shall be accessible from grade, except as shown otherwise.
- C. Mount local equipment in cabinets or existing panels as specified. Mount associated I/O terminals on a common panel or rack; mounting panels and rack shall be baked enamel.
- D. Coordinate the installation of the electrical service to components related to the system to assure a compatible and functionally correct system. All accessories shall be coordinated, and installation supervised by the Contractor.

### 3.3 CALIBRATION

- A. Each instrument requiring factory calibration shall be furnished with calibration data. The calibration data shall be factory certified.
- B. Calibrate systems after installation in conformance with the component manufacturer's instructions. This shall provide that those components having adjustable features are set carefully for the specific conditions and applications of this installation and that the components and/or systems are within the specified limits of accuracy. Defective elements which cannot achieve proper calibration or accuracy, either individually or within a system, shall be replaced. Accomplish this calibration work by a technical field representative of the single instrument supplier. He

shall certify in writing to the Engineer that all calibrations have been made and that all systems are ready to operate.

### 3.4 PLC PROGRAMMING REQUIREMENTS

- A. Provide PLC programming as follows:
  - a. Language shall be performed in Function Blocks
  - b. Unity Pro XL. (version per city specification – to be confirmed at contract award).
  - c. Contractor shall be responsible for programming of the PLC and system tuning. Contractor shall interface with the City for defined memory registers for SCADA. SCADA programming shall be by the City.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.1 MEASUREMENT AND PAYMENT

- A. Full compensation for Section 26 05 30 – Process Instrumentation and Control System (PICS), shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 30\*\*\***

## SECTION 26 05 33

### RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

###### A. Section Includes:

1. Metal conduits, tubing, and fittings.
2. Nonmetal conduits, tubing, and fittings.
3. Boxes, enclosures, and cabinets.

###### B. Related Requirements:

1. Section 26 05 43 "Underground Ducts and Raceways for Electrical Systems" for exterior duct banks, manholes, and underground utility construction.

##### 1.3 DEFINITIONS

- A. GRC: Galvanized rigid steel conduit.
- B. IMC: Intermediate metal conduit.
- C. EMT: Electrical Metal Tubing

##### 1.4 ACTION SUBMITTALS

- A. Product Data: For surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.
- B. Shop Drawings: For custom enclosures and cabinets. Include plans, elevations, sections, and attachment details.

## PART 2 - PRODUCTS

### 2.1 METAL CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. AFC Cable Systems; a part of Atkore International.
  2. Allied Tube & Conduit; a part of Atkore International.
  3. Electri-Flex Company.
  4. O-Z/Gedney; a brand of Emerson Industrial Automation.
  5. Western Tube and Conduit Corporation.
  6. Or Equal.
- B. Listing and Labeling: Metal conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. GRC: Comply with ANSI C80.1 and UL 6.
- D. PVC-Coated Steel Conduit: PVC-coated rigid steel conduit.
1. Comply with NEMA RN 1.
  2. Coating Thickness: 0.040 inch (1 mm), minimum.
- E. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.
- F. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.
1. Coordinate "Conduit Fittings for Hazardous (Classified) Locations" Subparagraph below with Drawings.
  2. Conduit Fittings for Hazardous (Classified) Locations: Comply with UL 886 and NFPA 70.
  3. Expansion Fittings: PVC or steel to match conduit type, complying with UL 651, rated for environmental conditions where installed, and including flexible external bonding jumper.
  4. Coating for Fittings for PVC-Coated Conduit: Minimum thickness of 0.040 inch (1 mm), with overlapping sleeves protecting threaded joints.

- G. Joint Compound for GRC: Approved, as defined in NFPA 70, by authorities having jurisdiction for use in conduit assemblies, and compounded for use to lubricate and protect threaded conduit joints from corrosion and to enhance their conductivity.

## 2.2 NONMETALLIC CONDUITS, TUBING, AND FITTINGS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. AFC Cable Systems; a part of Atkore International.
2. Anamet Electrical, Inc.
3. Arnco Corporation.
4. Condux International, Inc.
5. RACO; Hubbell.
6. Or Equal.

- B. Listing and Labeling: Nonmetallic conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

- C. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651 unless otherwise indicated.

- D. Fittings for ENT and RNC: Comply with NEMA TC 3; match to conduit or tubing type and material.

- E. Solvents and Adhesives: As recommended by conduit manufacturer.

## 2.3 BOXES, ENCLOSURES, AND CABINETS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Crouse-Hinds, an Eaton business.
2. EGS/Appleton Electric.
3. Erickson Electrical Equipment Company.
4. Hoffman; a brand of Pentair Equipment Protection.
5. Hubbell Incorporated.



6. RACO; Hubbell.
7. Thomas & Betts Corporation; A Member of the ABB Group.
8. Or Equal.

B. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations shall be listed for use in wet locations.

C. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A.

D. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, ferrous alloy, Type FD, with gasketed cover.

E. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.

F. Cast-Metal Access, Pull, and Junction Boxes: Comply with NEMA FB 1 and UL 1773, galvanized, cast iron with gasketed cover.

## 2.4 HAZARDOUS LOCATIONS

A. Electrical materials, equipment, and devices for installation in hazardous locations, as defined by NFPA 70: specifically approved by Underwriters' Laboratories, Inc., or Factory Mutual for particular "Class," "Division," and "Group" of hazardous locations involved. Boundaries and classifications of hazardous locations: as indicated. Equipment in hazardous locations: comply with UL 1203 for electrical equipment and industrial controls and UL 674 for motors.

## PART 3 - EXECUTION

### 3.1 RACEWAY APPLICATION

A. Outdoors: Apply raceway products as specified below unless otherwise indicated:

1. Exposed Conduit: GRC.
2. Concealed Conduit, Aboveground: GRC.
3. Underground Conduit: RNC, Type EPC-40-PVC.
4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
5. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.

B. Indoors: Apply raceway products as specified below unless otherwise indicated:

1. Exposed, Not Subject to Physical Damage: GRC.

2. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
3. Damp or Wet Locations: GRC.
4. Boxes and Enclosures: Explosion proof.

C. Minimum Raceway Size: 3/4-inch trade size.

D. Raceway Fittings: Compatible with raceways and suitable for use and location.

1. Rigid Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.
2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with this type of conduit. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer and apply in thickness and number of coats recommended by manufacturer.
3. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.

E. Do not install aluminum conduits, boxes, or fittings in contact with concrete or earth.

### 3.2 INSTALLATION

- A. Hazardous Locations: Perform work in hazardous locations, as defined by NFPA 70, in strict accordance with NFPA 70 for particular "Class," "Division," and "Group" of hazardous locations involved. Provide conduit and cable seals where required by NFPA 70. Provide conduit with tapered threads.
- B. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NECA 102 for aluminum conduits. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.
- C. Keep raceways at least 6 inches (150 mm) away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.
- D. Complete raceway installation before starting conductor installation.
- E. Comply with requirements in Section 26 05 29 "Hangers and Supports for Electrical Systems" for hangers and supports.
- F. Arrange stub-ups so curved portions of bends are not visible above finished slab.
- G. Install no more than the equivalent of three 90-degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches (300 mm) of changes in direction.

- H. Support conduit within 12 inches of enclosures to which attached.
- I. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.
- J. Coat field-cut threads on PVC-coated raceway with a corrosion-preventing conductive compound prior to assembly.
- K. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors including conductors smaller than No. 4 AWG.
- L. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch (35mm) trade size and insulated throat metal bushings on 1-1/2-inch (41-mm) trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.
- M. Install raceways square to the enclosure and terminate at enclosures with locknuts. Install locknuts hand tight plus 1/4 turn more.
- N. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to assure a continuous ground path.
- O. Cut conduit perpendicular to the length. For conduits 2-inch (53-mm) trade size and larger, use roll cutter or a guide to make cut straight and perpendicular to the length.
- P. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb (90-kg) tensile strength. Leave at least 12 inches (300 mm) of slack at each end of pull wire. Cap underground raceways designated as spare above grade alongside raceways in use.
- Q. Install raceway sealing fittings at accessible locations according to NFPA 70 and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings according to NFPA 70.
- R. Install devices to seal raceway interiors at accessible locations. Locate seals so no fittings or boxes are between the seal and the following changes of environments. Seal the interior of all raceways at the following points:
  - 1. Where an underground service raceway enters a building or structure.
  - 2. Where otherwise required by NFPA 70.
- S. Comply with manufacturer's written instructions for solvent welding RNC and fittings.
- T. Flexible Conduit Connections: Comply with NEMA RV 3. Use a maximum of 72 inches (1830 mm) of flexible conduit for equipment subject to vibration, noise transmission, or movement; and for transformers and motors.

1. Use LFMC in damp or wet locations subject to severe physical damage.
- U. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to center of box unless otherwise indicated.
  - V. Horizontally separate boxes mounted on opposite sides of walls so they are not in the same vertical channel.
  - W. Locate boxes so that cover or plate will not span different building finishes.
  - X. Support boxes of three gangs or more from more than one side by spanning two framing members or mounting on brackets specifically designed for the purpose.
  - Y. Fasten junction and pull boxes to or support from building structure. Do not support boxes by conduits.

### 3.3 PROTECTION

- A. Protect coatings, finishes, and cabinets from damage and deterioration.
  1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
  2. Repair damage to PVC coatings or paint finishes with matching touchup coating recommended by manufacturer.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.1 MEASUREMENT AND PAYMENT

- A. Full compensation for Section 26 05 33 – Raceway and Boxes for Electrical Systems, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 33\*\*\***

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## SECTION 26 05 43

### UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

- A. Section Includes:
  - 1. Direct-buried conduit, ducts, and duct accessories.

##### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include duct-bank materials, including separators and miscellaneous components.
  - 2. Include ducts and conduits and their accessories, including elbows, end bells, bends, fittings, and solvent cement.

##### 1.4 INFORMATIONAL SUBMITTALS

- A. Source quality-control reports.
- B. Field quality-control reports.

##### 1.5 FIELD CONDITIONS

- A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions, and then only after arranging to provide temporary electrical service according to requirements indicated:
  - 1. Notify Owner no fewer than 14 days in advance of proposed interruption of electrical service.
  - 2. Do not proceed with interruption of electrical service without Owner's written permission.

## PART 2 - PRODUCTS

### 2.1 GENERAL REQUIREMENTS FOR DUCTS AND RACEWAYS

- A. Comply with ANSI C2.

### 2.2 CONDUIT

- A. RNC: NEMA TC 2, Type EPC-40-PVC, UL 651, with matching fittings by same manufacturer as the conduit, complying with NEMA TC 3 and UL 514B.
- B. PVC-Coated Steel Conduit: PVC-coated rigid steel conduit.
  - 1. Comply with NEMA RN 1.
  - 2. Coating Thickness: 0.040 inch (1 mm), minimum.

### 2.3 NONMETALLIC DUCTS AND DUCT ACCESSORIES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. ARNCO Corp.
  - 2. CANTEX INC.
  - 3. Condux International, Inc.
  - 4. Electri-Flex Company.
  - 5. Or Equal.
- B. Solvents and Adhesives: As recommended by conduit manufacturer.
- C. Duct Accessories:
  - 1. Warning Tape: Underground-line warning tape specified in Section 26 05 53 "Identification for Electrical Systems."

## **PART 3 - EXECUTION**

### **3.1 PREPARATION**

- A. Coordinate layout and installation of ducts, manholes, handholes, and boxes with final arrangement of other utilities, site grading, and surface features as determined in the field. Notify Architect if there is a conflict between areas of excavation and existing structures or archaeological sites to remain.
- B. Coordinate elevations of ducts and duct-bank entrances into manholes, handholes, and boxes with final locations and profiles of ducts and duct banks, as determined by coordination with other utilities, underground obstructions, and surface features. Revise locations and elevations as required to suit field conditions and to ensure that duct runs drain to manholes and handholes, and as approved by Architect.

### **3.2 UNDERGROUND DUCT APPLICATION**

- A. Ducts for Electrical Feeders 600 V and Less: RNC, NEMA Type EPC-40-PVC, in direct-buried duct bank unless otherwise indicated.

### **3.3 EARTHWORK**

- A. Excavation and Backfill: Do not use heavy-duty, hydraulic-operated, compaction equipment.
- B. Restore surface features at areas disturbed by excavation, and re-establish original grades unless otherwise indicated. Replace removed sod immediately after backfilling is completed.
- C. Cut and patch existing pavement in the path of underground ducts and utility structures.

### **3.4 DUCT INSTALLATION**

- A. Install ducts according to NEMA TCB 2.
- B. Slope: Pitch ducts a minimum slope of 1:300 down toward manholes and handholes and away from buildings and equipment. Slope ducts from a high point in runs between two manholes, to drain in both directions.
- C. Curves and Bends: Use 5-degree angle couplings for small changes in direction. Use manufactured long sweep bends with a minimum radius of 48 inches (1200 mm), both horizontally and vertically, at other locations unless otherwise indicated.
- D. Joints: Use solvent-cemented joints in ducts and fittings and make watertight according to manufacturer's written instructions. Stagger couplings so those of adjacent ducts do not lie in same plane.



- E. Wall Penetrations: Make a transition from underground duct to rigid steel conduit at least 10 feet (3 m) outside the building wall, without reducing duct line slope away from the building, and without forming a trap in the line. Use fittings manufactured for duct-to-conduit transition.
- F. Sealing: Provide temporary closure at terminations of ducts that have cables pulled. Seal spare ducts at terminations. Use sealing compound and plugs to withstand at least 15-psig (1.03-MPa) hydrostatic pressure.
- G. Pulling Cord: Install 100-lbf- (445-N-) test nylon cord in empty ducts.
- H. Direct-Buried Duct Banks:
  - 1. Excavate trench bottom to provide firm and uniform support for duct bank. Comply with requirements in the 2021 Greenbook and 2021 Whitebook, Section 300 "Earthwork" for preparation of trench bottoms for pipes less than 6 inches (150 mm) in nominal diameter.
  - 2. Support ducts on duct separators coordinated with duct size, duct spacing, and outdoor temperature.
  - 3. Depth: Install top of duct bank at least 36 inches (900 mm) below finished grade unless otherwise indicated.
  - 4. Install ducts with a minimum of 3 inches (75 mm) between ducts for like services and 6 inches (150 mm) between power and signal ducts.
  - 5. Elbows: Install manufactured duct elbows for stub-ups at poles and equipment, at building entrances through floor, and at changes of direction in duct run unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
  - 6. Install manufactured PVC jacketed rigid steel conduit elbows for stub-ups at poles and equipment, at building entrances through floor, and at changes of direction in duct run.
    - a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches (75 mm) of concrete.
    - b. For equipment mounted on outdoor concrete bases, extend steel conduit horizontally a minimum of 60 inches (1500 mm) from edge of equipment pad or foundation. Install insulated grounding bushings on terminations at equipment.
  - 7. After installing first tier of ducts, backfill and compact. Start at tie-in point and work toward end of duct run, leaving ducts at end of run free to move with expansion and contraction as temperature changes during this process. Repeat procedure after placing each tier. After placing last tier, hand place backfill to 4 inches (100 mm) over ducts and hand tamp. Firmly tamp backfill around ducts to provide maximum supporting

strength. Use hand tamper only. After placing controlled backfill over final tier, make final duct connections at end of run and complete backfilling with normal compaction. Comply with requirements in Section 300 "Earthwork" for installation of backfill materials.

- a. Place minimum 3 inches (75 mm) of sand as a bed for duct bank. Place sand to a minimum of 6 inches (150 mm) above top level of duct bank.
- I. Warning Tape: Bury warning tape approximately 12 inches (300 mm) above all concrete-encased ducts and duct banks. Align tape parallel to and within 3 inches (75 mm) of centerline of duct bank. Provide an additional warning tape for each 12-inch (300-mm) increment of duct-bank width over a nominal 18 inches (450 mm). Space additional tapes 12 inches (300 mm) apart, horizontally.

### 3.5 GROUNDING

- A. Ground underground ducts and utility structures according to Section 26 05 26 "Grounding and Bonding for Electrical Systems."

### 3.6 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections and prepare test reports:
  1. Demonstrate capability and compliance with requirements on completion of installation of underground ducts and utility structures.
  2. Pull solid aluminum or wood test mandrel through duct to prove joint integrity and adequate bend radii, and test for out-of-round duct. Provide a minimum 6-inch- (150-mm-) long mandrel equal to 80 percent fill of duct. If obstructions are indicated, remove obstructions and retest.
- B. Correct deficiencies and retest as specified above to demonstrate compliance.

### 3.7 CLEANING

- A. Pull leather-washer-type duct cleaner, with graduated washer sizes, through full length of ducts. Follow with rubber duct swab for final cleaning and to assist in spreading lubricant throughout ducts.
- B. Clean internal surfaces of manholes, including sump. Remove foreign material.

## **PART 4 - MEASUREMENT AND PAYMENT**

### MEASUREMENT AND PAYMENT

- A. Full compensation for Section 26 05 43 – Underground Ducts and Raceways for Electrical Systems, shall be considered as included in the Contract lump sum price

paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 43\*\*\***

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## SECTION 26 05 44

### SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

- A. Section Includes:
  - 1. Sleeves for raceway and cable penetration of non-fire-rated construction walls and floors.
  - 2. Sleeve-seal systems.
  - 3. Sleeve-seal fittings.
  - 4. Grout.
  - 5. Silicone sealants.

##### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

#### PART 2 - PRODUCTS

##### 2.1 SLEEVES

- A. Wall Sleeves:
  - 1. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, zinc coated, plain ends.
  - 2. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop unless otherwise indicated.
- B. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies: Galvanized-steel sheet; 0.0239-inch (0.6-mm) minimum thickness; round tube closed with welded longitudinal joint, with tabs for screw-fastening the sleeve to the board.
- C. PVC-Pipe Sleeves: ASTM D 1785, Schedule 40.

- D. Molded-PVC Sleeves: With nailing flange for attaching to wooden forms.
- E. Molded-PE or -PP Sleeves: Removable, tapered-cup shaped, and smooth outer surface with nailing flange for attaching to wooden forms.
- F. Sleeves for Rectangular Openings:
  - 1. Material: Galvanized sheet steel.
  - 2. Minimum Metal Thickness:
    - a. For sleeve cross-section rectangle perimeter less than 50 inches (1270 mm) and with no side larger than 16 inches (400 mm), thickness shall be 0.052 inch (1.3 mm).
    - b. For sleeve cross-section rectangle perimeter 50 inches (1270 mm) or more and one or more sides larger than 16 inches (400 mm), thickness shall be 0.138 inch (3.5 mm).

## 2.2 SLEEVE-SEAL SYSTEMS

- A. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.
  - 1. Sealing Elements: EPDM rubber interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
  - 2. Pressure Plates: Stainless steel.
  - 3. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements.

## 2.3 SLEEVE-SEAL FITTINGS

- A. Description: Manufactured plastic, sleeve-type, waterstop assembly made for embedding in concrete slab or wall. Unit shall have plastic or rubber waterstop collar with center opening to match piping OD.

## 2.4 GROUT

- A. Description: Nonshrink; recommended for interior and exterior sealing openings in non-fire-rated walls or floors.
- B. Standard: ASTM C 1107/C 1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
- C. Design Mix: 5000-psi (34.5-MPa), 28-day compressive strength.
- D. Packaging: Premixed and factory packaged.

## 2.5 SILICONE SEALANTS

- A. Silicone Sealants: Single-component, silicone-based, neutral-curing elastomeric sealants of grade indicated below.
  - 1. Grade: Pourable (self-leveling) formulation for openings in floors and other horizontal surfaces that are not fire rated.
- B. Silicone Foams: Multicomponent, silicone-based liquid elastomers that, when mixed, expand and cure in place to produce a flexible, nonshrinking foam.

## PART 3 - EXECUTION

### 3.1 SLEEVE INSTALLATION FOR NON-FIRE-RATED ELECTRICAL PENETRATIONS

- A. Comply with NECA 1.
- B. Comply with NEMA VE 2 for cable tray and cable penetrations.
- C. Sleeves for Conduits Penetrating Above-Grade Non-Fire-Rated Concrete and Masonry-Unit Floors and Walls:
  - 1. Interior Penetrations of Non-Fire-Rated Walls and Floors:
    - a. Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint.
    - b. Seal space outside of sleeves with mortar or grout. Pack sealing material solidly between sleeve and wall so no voids remain. Tool exposed surfaces smooth; protect material while curing.
  - 2. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
  - 3. Size pipe sleeves to provide 1/4-inch (6.4-mm) annular clear space between sleeve and raceway or cable unless sleeve seal is to be installed.
  - 4. Install sleeves for wall penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of walls. Cut sleeves to length for mounting flush with both surfaces of walls. Deburr after cutting.
  - 5. Install sleeves for floor penetrations. Extend sleeves installed in floors 2 inches (50 mm) above finished floor level. Install sleeves during erection of floors.
- D. Sleeves for Conduits Penetrating Non-Fire-Rated Gypsum Board Assemblies:
  - 1. Use circular metal sleeves unless penetration arrangement requires rectangular sleeved opening.
  - 2. Seal space outside of sleeves with approved joint compound for gypsum board assemblies.

- E. Roof-Penetration Sleeves: Seal penetration of individual raceways and cables with flexible boot-type flashing units applied in coordination with roofing work.
- F. Aboveground, Exterior-Wall Penetrations: Seal penetrations using **steel** pipe sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- G. Underground, Exterior-Wall and Floor Penetrations: Install cast-iron pipe sleeves. Size sleeves to allow for 1-inch (25-mm) annular clear space between raceway or cable and sleeve for installing sleeve-seal system.

### 3.2 SLEEVE-SEAL-SYSTEM INSTALLATION

- A. Install sleeve-seal systems in sleeves in exterior concrete walls and slabs-on-grade at raceway entries into building.
- B. Install type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

### 3.3 SLEEVE-SEAL-FITTING INSTALLATION

- A. Install sleeve-seal fittings in new walls and slabs as they are constructed.
- B. Assemble fitting components of length to be flush with both surfaces of concrete slabs and walls. Position waterstop flange to be centered in concrete slab or wall.
- C. Secure nailing flanges to concrete forms.
- D. Using grout, seal the space around outside of sleeve-seal fittings.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.1 MEASUREMENT AND PAYMENT

- A. Full compensation for Section 26 05 44 – Sleeves and Sleeve Seals for Electrical Systems, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*END OF SECTION 26 05 44\*\***



## SECTION 26 05 53

### IDENTIFICATION FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

- A. Section Includes:
  - 1. Identification of power and control cables.
  - 2. Identification for conductors.
  - 3. Underground-line warning tape.
  - 4. Warning labels and signs.
  - 5. Instruction signs.
  - 6. Equipment identification labels, including arc-flash warning labels.
  - 7. Miscellaneous identification products.

##### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for electrical identification products.

#### PART 2 - PRODUCTS

##### 2.1 PERFORMANCE REQUIREMENTS

- A. Comply with ASME A13.1.
- B. Comply with NFPA 70.

- C. Comply with ANSI Z535.4 for safety signs and labels.
- D. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.

## 2.2 TAPES AND STENCILS:

- A. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.
- B. Self-Adhesive Vinyl Tape: Colored, heavy duty, waterproof, fade resistant; not less than 3 mils (0.08 mm) thick by 1 to 2 inches (25 to 50 mm) wide; compounded for outdoor use.
- C. Underground-Line Warning Tape
  - 1. Tape:
    - a. Recommended by manufacturer for the method of installation and suitable to identify and locate underground electrical and communications utility lines.
    - b. Printing on tape shall be permanent and shall not be damaged by burial operations.
    - c. Tape material and ink shall be chemically inert and not subject to degradation when exposed to acids, alkalis, and other destructive substances commonly found in soils.
  - 2. Color and Printing:
    - a. Comply with ANSI Z535.1, ANSI Z535.2, ANSI Z535.3, ANSI Z535.4, and ANSI Z535.5.
    - b. Inscriptions for Red-Colored Tapes: "ELECTRIC LINE, HIGH VOLTAGE".
    - c. Inscriptions for Orange-Colored Tapes: "TELEPHONE CABLE, CATV CABLE, COMMUNICATIONS CABLE, OPTICAL FIBER CABLE".

## 2.3 SIGNS

- A. Baked-Enamel Signs:
  - 1. Preprinted aluminum signs, punched or drilled for fasteners, with colors, legend, and size required for application.
  - 2. 1/4-inch (6.4-mm) grommets in corners for mounting.

3. Nominal Size: 7 by 10 inches (180 by 250 mm).

## 2.4 PHENOLIC TAGS

- A. Provide phenolic tags for all external and internal control panel components. The tags shall include but not limited to:
  - a. Enclosure ID
  - b. PLC and Input/ Output cards
  - c. Terminal Strips
  - d. Individual breakers and fuses
  - e. UPS/ Charger
  - f. Switches and routers
  - g. Display panels
  - h. Power supplies
  - i. Receptacles

## 2.5 MISCELLANEOUS IDENTIFICATION PRODUCTS

- A. Engraved, Laminated Acrylic or Melamine Label: Black letters on a white background. Minimum letter height shall be 3/8 inch (10 mm). Drilled for fasteners.
- B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

## **PART 3 - EXECUTION**

### 3.1 PREPARATION

- A. Self-Adhesive Identification Products: Before applying electrical identification products, clean substrates of substances that could impair bond, using materials and methods recommended by manufacturer of identification product.

### 3.2 INSTALLATION

- A. Verify and coordinate identification names, abbreviations, colors, and other features with requirements in other Sections requiring identification applications, Drawings, Shop Drawings, manufacturer's wiring diagrams, and operation and maintenance manual. Use consistent designations throughout Project.

- B. Verify identity of each item before installing identification products.
- C. Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment. Install access doors or panels to provide view of identifying devices.
- D. Apply identification devices to surfaces that require finish after completing finish work.
- E. Attach signs and plastic labels that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
- F. Attach plastic raceway and cable labels that are not self-adhesive type with clear vinyl tape, with adhesive appropriate to the location and substrate.
- G. During backfilling of trenches, install continuous underground-line warning tape directly above cable or raceway at 6 to 8 inches (150 to 200 mm) below finished grade. Use multiple tapes where width of multiple lines installed in a common trench exceeds 16 inches (400 mm) overall.

### 3.3 IDENTIFICATION SCHEDULE

- A. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use color-coding conductor tape to identify the phase.
  - 1. Color-Coding for Phase- and Voltage-Level Identification, 600 V or Less: Use colors listed below for ungrounded feeder and branch-circuit conductors.
    - a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG if authorities having jurisdiction permit.
    - b. Colors for 208/120-V Circuits:
      - 1) Phase A: Black.
      - 2) Phase B: Red.
      - 3) Phase C: Blue.
    - c. Colors for 480/277-V Circuits:
      - 1) Phase A: Brown.
      - 2) Phase B: Orange.
      - 3) Phase C: Yellow.
    - d. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches (150 mm) from terminal points and in

boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.

- B. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Baked-enamel warning signs.
  - 1. Comply with 29 CFR 1910.145.
  - 2. Identify system voltage with black letters on an orange background.
  - 3. Apply to exterior of door, cover, or other access.
- C. Arc Flash Warning Labeling: Self-adhesive thermal transfer vinyl labels.
  - 1. Comply with NFPA 70E and ANSI Z535.4.
- D. Operating Instruction Signs: Install instruction signs to facilitate proper operation and maintenance of electrical systems and items to which they connect. Install instruction signs with approved legend where instructions are needed for system or equipment operation.
- E. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and operation and maintenance manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm unless equipment is provided with its own identification.
  - 1. Labeling Instructions:
    - a. Indoor Equipment: Self-adhesive, engraved, laminated acrylic or melamine plastic label. Unless otherwise indicated, provide a single line of text with 1/2-inch- (13-mm-) high letters on 1-1/2-inch- (38-mm-) high label; where two lines of text are required, use labels 2 inches (50 mm) high.
    - b. Outdoor Equipment: Engraved, laminated acrylic or melamine label.
    - c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.
    - d. Unless labels are provided with self-adhesive means of attachment, fasten them with appropriate mechanical fasteners that do not change the NEMA or NRTL rating of the enclosure.
  - 2. Equipment To Be Labeled:
    - a. Panelboards: Typewritten directory of circuits in the location provided by panelboard manufacturer.

- b. Enclosures and electrical cabinets.
- c. Access doors and panels for concealed electrical items.
- d. Motor-control centers.
- e. Enclosed switches.
- f. Enclosed circuit breakers.
- g. Enclosed controllers.
- h. Push-button stations.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.1 MEASUREMENT AND PAYMENT**

- A. Full compensation for Section 26 05 53 – Identification for Electrical Systems, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 53\*\*\***

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## SECTION 26 05 63

### UNINTERRUPTIBLE POWER SUPPLY

#### PART 1 - GENERAL

##### 1.1 DESCRIPTION

- A. This section includes materials and installation of a complete uninterruptible power supply system for critical loads including but not limited to programmable logic controllers, instrumentation and telemetry systems.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Process Instrumentation and Control System: Specification Section 26 05 30.

##### 1.3 SUBMITTALS

- A. Submit ratings and characteristics including voltage, connection, enclosure type and dimensions, and conduit entry restrictions.

#### PART 2 - MATERIALS

##### 2.1 GENERAL REQUIREMENTS

- A. The UPS system shall be designed to protect the PLC, instruments, and telemetry system from line disturbance, sub-cycle power losses, and power outages. In normal operation the UPS shall supply filtered and regulated ac power to the load. Upon failure of the commercial ac power, the critical load shall continue to be supplied by the inverter, which shall obtain its power from the battery.
- B. The interruption to the critical load upon failure or restoration of the commercial ac source shall not exceed 4 milliseconds. Upon restoration of the commercial source, the inverter/charger shall recharge the battery.
- C. An external manually operated switch shall be provided to transfer the load to the bypass line with a safety interlock to prevent the load from being transferred back during servicing.

##### 2.2 UNINTERRUPTIBLE POWER SUPPLY UNIT

- A. The UPS shall be complete with power indication, common alarm dry contact and running status dry contacts from relay output cards, and inverter circuit breaker protection.



- B. External batteries shall be sealed leak proof and maintenance free, and mounted adjacent to the UPS main unit.
- C. The UPS unit shall be mounted in a freestanding cabinet provided by the manufacturer or in PLC cabinet as shown on drawings.
- D. The UPS system shall meet the following requirements:
  - 1. Input/output voltage: 120 volts ac, single phase, 60 Hz.
  - 2. Minimum output rating:
    - a. Panel: 500 VA. Sized with 50% spare capacity based on 24VDC load calculations provided by contractor.
    - b. Provide higher rating as required based on specified equipment and minimum operating time requirement (see below for time requirement).
  - 3. Output Harmonic Distortion: 5 percent maximum at full load.
  - 4. Frequency stability: +/- 0.5 percent.
  - 5. Voltage regulation for line and load: +/-2 percent.
  - 6. Overload capacity: 125 percent for 3 seconds.
  - 7. Full recharge time: 48 hours.
  - 8. Battery lifetime: 3 years at ambient temperature. Temperature Range: From 32F to 113F (Or better)
  - 9. A relay output card to enable monitoring via dry contacts the RUN and FAIL status of the unit
  - 10. The UPS system shall be capable of delivering power to the connected load for the minimum time duration of 8 hours.
  - 11. The UPS system shall be Phoenix Cat. 2320212, 2320908, 2905228 sized as needed.

## **PART 3 - EXECUTION**

### **3.1 GENERAL**

- A. Install the UPS system in the designated location according to manufacturer's instructions.

### 3.2 UPS STATUS MONITORING

- A. Status monitoring to PLC, including 24VDC digital inputs for:
  - a. On standby battery power.
  - b. Low Battery.
  - c. Charger fail.

### 3.3 TERMINAL BLOCKS

- A. Wiring for external circuits, including the alarm contact, shall be brought to grouped terminal blocks located for convenient connection. Provisions shall include suitable marked terminal blocks for connection of 12 AWG copper wire. Terminal designations shall agree with the manufacturer's wiring diagram.

### 3.4 FUNCTIONAL TESTS

- A. Upon installation of the UPS system, the supplier shall conduct on-site functional testing which shall include a minimum of 10 transfer-retransfer cycles. The UPS supplier shall inform the Owner and Engineer of the onsite test schedule so that the test may be witnessed by the Owner and Engineer.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.1 MEASUREMENT AND PAYMENT

- A. Full compensation for Section 26 05 63 – Uninterruptable Power Supply, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 05 63\*\*\***

## SECTION 26 28 16

### ENCLOSED SWITCHES AND CIRCUIT BREAKERS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

##### 1.2 SUMMARY

- A. Section Includes:
  - 1. Fusible switches.
  - 2. Enclosures.

##### 1.3 DEFINITIONS

- A. NC: Normally closed.
- B. NO: Normally open.
- C. SPDT: Single pole, double throw.
- D. DPDT: Double pole, double throw.

##### 1.4 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Enclosed switches and circuit breakers shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
  - 1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."

##### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of enclosed switch, circuit breaker, accessory, and component indicated. Include dimensioned elevations, sections, weights, and manufacturers' technical data on features, performance, electrical characteristics, ratings, accessories, and finishes.
  - 1. Enclosure types and details for types other than NEMA 250, Type 1.

2. Current and voltage ratings.
3. Short-circuit current ratings (interrupting and withstand, as appropriate).
4. Include evidence of NRTL listing for series rating of installed devices.
5. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices, accessories, and auxiliary components.

#### 1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Field quality-control reports.
  1. Test procedures used.
  2. Test results that comply with requirements.
  3. Results of failed tests and corrective action taken to achieve test results that comply with requirements.
- C. Manufacturer's field service report.

#### 1.7 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Member company of NETA or an NRTL.
  1. Testing Agency's Field Supervisor: Currently certified by NETA to supervise on-site testing.
- B. Source Limitations: Obtain enclosed switches and circuit breakers, overcurrent protective devices, components, and accessories, within same product category, from single source from single manufacturer.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. Comply with NFPA 70.

#### 1.8 PROJECT CONDITIONS

- A. Environmental Limitations: Rate equipment for continuous operation under the following conditions unless otherwise indicated:
  1. Ambient Temperature: Not less than minus 22 deg F (minus 30 deg C) and not exceeding 104 deg F (40 deg C).
  2. Altitude: Not exceeding 6600 feet (2010 m).

## 1.9 COORDINATION

- A. Coordinate layout and installation of switches, circuit breakers, and components with equipment served and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

## PART 2 - PRODUCTS

### 2.1 FUSIBLE SWITCHES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. Eaton.
  - 2. General Electric Company.
  - 3. Siemens Industry, Inc.
  - 4. Or Equal.
- B. Type HD, Heavy Duty, Single Throw, 600-V ac, 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, with clip or bolt pads to accommodate fuses, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.
- C. Accessories:
  - 1. Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
  - 2. Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
  - 3. Lugs: Mechanical type, suitable for number, size, and conductor material.
  - 4. Class R Fuse Kit: Provides rejection of other fuses when Class R fuses are specified.

### 2.2 ENCLOSURES

- A. Enclosed Switches and Circuit Breakers: NEMA AB 1, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location.
  - 1. Hazardous Areas Indicated on Drawings: NEMA 250.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine elements and surfaces to receive enclosed switches and circuit breakers for compliance with installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.2 INSTALLATION**

- A. Install individual wall-mounted switches and circuit breakers with tops at uniform height unless otherwise indicated.
- B. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from enclosures and components.
- C. Comply with NECA 1.

### **3.3 IDENTIFICATION**

- A. Comply with requirements in Section 26 05 53 "Identification for Electrical Systems."
  - 1. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.
  - 2. Label each enclosure with engraved metal or laminated-plastic nameplate.

### **3.4 FIELD QUALITY CONTROL**

- A. Acceptance Testing Preparation:
  - 1. Test insulation resistance for each enclosed switch and circuit breaker, component, connecting supply, feeder, and control circuit.
  - 2. Test continuity of each circuit.
- B. Tests and Inspections:
  - 1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
  - 2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
  - 3. Test and adjust controls, remote monitoring, and safeties. Replace damaged and malfunctioning controls and equipment.
- C. Enclosed switches and circuit breakers will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports, including a certified report that identifies enclosed switches and circuit breakers and that describes scanning results. Include

notation of deficiencies detected, remedial action taken, and observations after remedial action.

### 3.5 ADJUSTING

- A. Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.

## **PART 4 MEASUREMENT AND PAYMENT**

### 4.1 MEASUREMENT AND PAYMENT

- A. Full compensation for Section 26 28 16 – Enclosed Circuit Breakers and Switches, shall be considered as included in the Contract lump sum price paid as shown on bid schedule for Electrical Work shall include full compensation for furnishing all labor, materials, equipment, tools, and incidentals and for doing all the work complete and accepted in place as shown on the drawings and as specified in these special provisions. No additional compensation will be allowed therefor.

**\*\*\*END OF SECTION 26 28 16\*\*\***

**SECTION 33 05 16  
PRECAST CONCRETE UTILITY STRUCTURES**

**PART 1 - GENERAL**

1.1 WORK INCLUDED

- A. Materials, testing, and installation of precast concrete vaults.

1.2 RELATED WORK

- A. 2021 Greenbook, Section 206: Miscellaneous Metal Items
- B. 2021 Greenbook, Section 300: Earthwork

1.3 SYSTEM DESCRIPTION

- A. Furnish and install complete precast concrete vault including appurtenant structural, mechanical and/or electrical mountings or connections required for compliance with Manufacturer's installation requirements and compliance with applicable building codes and standards.
- B. Precast concrete vault dimensions shown on Plans are interior dimensions.

1.4 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen trained and experienced in necessary trades and crafts and completely familiar with specified requirements and methods for proper performance of Work of this section.
- B. Factory testing shall include:

ITEM	TEST FOR	TEST STANDARD (ASTM OR OTHER TEST STANDARD)	FREQUENCY	FIRST TEST PAID FOR BY	RETESTS PAID FOR BY
Concrete Vault	Concrete Strength	ASTM C31	Submit certified test record on request	Contractor	Contractor

1.5 REFERENCES

- A. ASCE 7 Building Code Requirements for Minimum Design Loads in Buildings and Other Structures
- B. ASTM A615 Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
- C. ASTM C31 Making and Curing Concrete Test Specimens in the Field
- D. ASTM C150 Portland Cement
- E. ASTM C913 Precast Concrete Water and Wastewater Structures
- F. ASTM D1557 Laboratory Compaction Characteristics of Soil Using Modified Effort
- G. California Building Code (CBC)
- H. CRSI Manual of Standard Practice

1.6 SUBMITTALS



A. Furnish the following submittals.

SUBMITTAL	DESCRIPTION	
Shop Drawings	Required per structural shop drawing requirements	
Catalog Data	Required per catalog data requirements.	
Installation Instructions	Required per installation instruction requirements	
Engineering Calculations	Required for rebar for vaults over 10' deep or with lateral footing loads per engineering calculations requirements sealed by licensed California Civil Engineer. Required to justify designs less than Class 700 specified.	
	Required for concrete mix design per engineering calculations requirements sealed by licensed California Civil Engineer.	
Test Record Transcripts	Submit for factory tests per test record transcript requirements	
Warranty	Furnish one-year warranty from date of final acceptance	

1.7 DELIVERY, STORAGE AND HANDLING

- A. Refer to contract documents for delivery, storage, and handling requirements.
- B. Manufacturer's instruction and warranty requirements for delivery, storage and handling of precast concrete vaults shall be strictly followed.

1.8 UNIT PRICES

- A. Payment for Work in this section shall be included as part of lump-sum or unit-price bid amount for which such Work is appurtenant.

**PART 2 - PRODUCTS**

2.1 ACCEPTABLE MANUFACTURERS

A. Acceptable Manufacturers include:

ITEM	MANUFACTURER	MANUFACTURER LOCATION
Electrical Pull Boxes	J & R Concrete Products	Perris, CA
	Oldcastle Precast (formerly Utility Vault)	Fontana, CA (800) 626-3860
	Accepted Equal	
Meter Boxes - Concrete	Brooks Products	Ontario, CA
	Eisel Enterprises, Inc.	Placentia, CA
	Jensen Precast	Sparks, NV
	J & R Concrete Products	Perris, CA
	Oldcastle Precast (formerly Utility Vault)	Fontana, CA (800) 626-3860
	Accepted Equal	
Meter Boxes - Composite	Armorcast 600 series	Ontario, CA
	J & R Concrete Products PW4 or PW5	Perris, CA
	Applied Engineering Products	Chino, CA
	Accepted Equal	
Utility Vaults		

ITEM	MANUFACTURER	MANUFACTURER LOCATION
	Brooks Products	Ontario, CA
	Eisel Enterprises, Inc.	Placentia, CA
	Jensen Precast	Sparks, NV
	J & R Concrete Products	Perris, CA
	Olson Precast Company	Rialto, CA
	Oldcastle Precast (formerly Utility Vault)	Fontana, CA (800) 626-3860
	Accepted Equal	

## 2.2 MATERIALS

A. The following product design criteria, options and accessories are required:

ITEM	DESCRIPTION	
Pre-Cast Concrete Vault Sections	Design Surcharge and Lateral Earth Pressure	AASHTO H-20 Loading
	Minimum 28-day Compressive Strength $f_c$	4000 psi
	Steel Reinforcing Yield Strength $f_y$	60 ksi
Rectangular Box Wall Design	Wall Design	Class 700, or submit sealed engineering calculations justifying a lesser design.
	Roof Design	Design for H-20
	Dimensions	per ASTM C913 Table X1.1
	Reinforcement	per ASTM C913 Table X1.2

## PART 3 - EXECUTION

### 3.1 PREPARATION

A. Make field measurements needed to install precast concrete vaults before submitting shop drawings or ordering. Make minor changes in dimensions and alignments as needed to avoid utilities or structural conflicts.

### 3.2 INSTALLATION

A. Furnish and install precast concrete vaults at locations shown on Plans and submittals.

B. The following installation standards shall be followed:

1. Manufacturer's installation and warranty requirements
2. Applicable OSHA and Cal OSHA regulations
3. Applicable building code requirements

C. Refer variances between above documents and Contract Documents to Owner's Representative.

- D. Install precast concrete vaults to tolerances recommended by Manufacturer. Unless otherwise shown, install precast concrete vaults true, plumb, and level using precision gauges and levels.

3.3 FIELD QUALITY CONTROL

A. Field testing shall include:

ITEM	TEST FOR	TEST STANDARD (ASTM OR OTHER TEST STANDARD)	FREQUENCY	FIRST TEST PAID FOR BY	RETESTS PAID FOR BY
Precast Concrete Vaults	Installation & Leakage	Visual inspection of finished installation	1 inspection	Owner	Owner
	Field Performance	Demonstrate compliance to Contract Documents and Manufacturer's printed Literature	1 test	Contractor	Contractor
	11-month Warranty Inspection	Demonstrate compliance to Contract Documents and Manufacturer's printed literature	1 test	Owner	Contractor

**\*\* END OF SECTION \*\***

**APPENDIX A**

**ADDENDUM TO A MITIGATED NEGATIVE DECLARATION**



THE CITY OF SAN DIEGO

# ADDENDUM TO A MITIGATED NEGATIVE DECLARATION

Project No. 527958  
Addendum to MND No. 255100  
SCH No. 2011091045

**SUBJECT: Water Group 952 Project**

## I. PROJECT DESCRIPTION

The Water Group 952 Project is a part of the City of San Diego’s on-going Water Main Replacement Program. The existing water lines are old, and are nearing the end of their service life. Construction of the project will reduce maintenance requirements, correct hydraulic deficiencies, improve reliability and accessibility, and bring the City’s water system up to current design standards. This project will be replacing mainly cast iron water mains due to their age, history of leaks, breaks or other problems. This is needed in order to meet current service need and comply with City design standards. Replacing aging water mains along these locations with modern materials will help ensure safe and reliable delivery of drinking water to the residents of the City of San Diego.

### Location of Improvements:

The Water and Sewer Group 952 project is located within the City right- of-way and City utility easements on and near the following streets within the Southeastern San Diego, Downtown-Center City, Greater Golden Hill and Barrio Logan Community Planning Areas and Council Districts 3 & 8. Specifically, the improvements would be located:

**Table 1 – Project Locations for Water Group 952 “Water Main Improvements”**

"A" Street (between 10 <sup>th</sup> Avenue and 11 <sup>th</sup> Avenue)
West "A" Street (between North Harbor Drive and Pacific Highway)
"F" Street (between Pacific Hwy. and Kettner Blvd.
3rd Avenue (small Segment North of "G" Street at Horton Plaza)
Harbor Drive (between 1 <sup>st</sup> Avenue and 2 <sup>nd</sup> Avenue)
10th Avenue (between "F" Street and W. Ash Street)
11th Avenue (small segment north of Russ Blvd.)
"B" Street (between 16 <sup>th</sup> Street and 19 <sup>th</sup> Street)
Broadway (between 17 <sup>th</sup> Street and 19 <sup>th</sup> Street, crossing Interstate 5)
19 <sup>th</sup> Street (between "B" Street and "E" Street)
Market Street (between 17 <sup>th</sup> Street and 19 <sup>th</sup> Street, crossing Interstate 5)
"L" Street (small segment west of 17 <sup>th</sup> Street)
Commercial Street (Intersection with 17 <sup>th</sup> Street and MTS Trolley tracks)

Marina Park Way (Small segment west of Convention Way)
Switzer Street (Small Segment parallel to railroad tracks, southeasterly of Harbor Dr.)
Cesar Chavez Pkwy. (between Water Street and San Diego Bay)

All work would occur within previously developed locations with existing right-of-way.

Other location elements of the project include:

California Coastal Commission Jurisdiction:

The following pipeline segments of the project are within the jurisdiction of the California Coastal Commission (C.C.C.) and will require separate coordination, project review and permitting:

At West "A" Street, between N. Harbor Drive and Pacific Highway, approximately 610 LF of existing 16 inch pipe will be replaced-in-place at same depth (approximately 5.5 feet) with new 16 inch pipe. Trenching will occur within the existing paved right-of-way and within the existing paved and developed easement.

At Cesar E. Chavez Parkway and Water Street, approximately 87 LF of existing 6 inch pipe will be "replaced-in-place" at same depth (approximately 5 ft.) with new 8 inch pipe. Trenching would occur within existing paved right-of-way.

As these areas fall within the Port of San Diego's jurisdiction, they will be processing the appropriate Coastal Development Permits as it relates to these locations.

Caltrans Jurisdiction:

The following pipeline segments of the project are within the jurisdiction of the Caltrans and will require separate coordination, project review and Encroachment Permit:

Broadway (between 17<sup>th</sup> Street and 19<sup>th</sup> Street, crossing Interstate 5)

Market Street (between 17<sup>th</sup> Street and 19<sup>th</sup> Street, crossing Interstate 5)

Historic District:

Additionally, a small portion of the project would occur within the Sherman Heights Historical District (Market Street – East of Interstate 5). Sidewalk, curb and gutter, and curb ramp improvements would be designed in a manner to match existing colors and scoring patterns. All improvements are required to be consistent with this district standards, City's Historical Resource Regulations, and U.S. Secretary of the Interior's Standards.

**Scope of Improvements:**

The project's scope is inclusive of providing approximately 1.54 Miles (8,118 linear feet (LF)) of water line improvements within existing trench alignments; providing 4,736 LF of improvements within new trench locations, and providing 114 LF of improvements utilizing trenchless technology. These improvements will be implemented in terms of providing 6-, 8-, 12-, 16-, 24-, 30- and 36 inch piping, consisting of AC (Asbestos Concrete), CI (Cast Iron), PVC (Polyvinyl Chloride), CICL (Cast Iron Cement Lined) and RCSC (Reinforced Concrete Steel Cylinder). Approximately 455 LF of pipeline will be located

within the same trench, but at a deeper depth; approximately 3,567 LF of pipeline will be installed using a “replaced-in-place” method; approximately 419 LF will be installed using a “tunneling” method; and finally, approximately 3,635 LF of improvements will be installed within a new trenches. All pipeline trenching widths are proposed to be 3 feet.

New trenching activities will occur at 1st Avenue and “J” Street parallel to the MTS trolley tracks, at Marina Parkway and N. Harbor Drive, along 10th Avenue, between “A” Street and “F” Street, along 19th Street between “B” Street and “E” Street, along Switzer Street, and along Commercial Street at 17th Street, 17th Street (crossing Market Street).

Tunneling activities are planned for being implemented underneath the MTS trolley tracks at 10th Avenue and “C” Street, at “F” Street, between Pacific Highway and Kettner Boulevard, and at Commercial Street and 17th Street. Launching and receiving pits will be excavated on either side of the trolley tracks to allow for tunneling activities.

Two segments of pipelines are planned to span Interstate 5, within the concrete box girders of the overpass bridges. One of these segments is proposed for Broadway (between 17<sup>th</sup> Street and 19<sup>th</sup> Street, crossing Interstate 5) and the other segment is Market Street (between 17<sup>th</sup> Street and 19<sup>th</sup> Street, crossing Interstate 5). Pits will be excavated to gain access to the overpass bridges on either end in order to replace the water main spanning under Interstate 5. It should be noted the City will be coordinating with Caltrans at these locations.

Furthermore, a Pressure Reducing Station, located on 17th Street at “L” Street, is proposed to be replaced inclusive of this project. Work includes the construction of a new vault (approximately 15 ft. x 10 ft. x 8 ft. in depth), new appurtenances, and new control panel with antenna (control panel and antenna will utilize existing utility pole). Other components of the project include the installation of curb ramps, sidewalks, restriping and replacement of fire hydrants, and resurfacing where applicable. As previously referenced, a small portion of the project would occur within the Sherman Heights Historical District (Market Street – East of Interstate 5). Sidewalk, curb and gutter, and curb ramp improvements would be designed in a manner to match existing colors and scoring patterns. All improvements are required to be consistent with this district standards, City’s Historical Resource Regulations, and U.S. Secretary of the Interior’s Standards.

Finally, the project proposes the abandonment of approximately 3,865 LF of pipeline. This abandonment would occur at 17<sup>th</sup> Street (Crossing Market Street), 1<sup>st</sup> Avenue and “J” Street, N. Harbor Drive and Marina Pkwy., 19<sup>th</sup> Street (at “B” Street to Station 7+00), 19<sup>th</sup> Street (Station 7+00 to “E” Street), Switzer Street, “F” Street (Pacific Hwy. to Kettner Blvd.), and 10<sup>th</sup> Street (Station 14+00 to “F” Street). Abandonment will involve plugging both ends of the existing pipe with concrete via concrete slurry.

## **II. ENVIRONMENTAL SETTING**

The Water and Sewer Group 952 project is located within developed City right- of-way and City utility easements within the Southeastern San Diego, Downtown-Center City, Greater Golden Hill and Barrio Logan Community Planning Areas and Council Districts 3 & 8. Surrounding land uses include existing single-family and multifamily residential, commercial, industrial, park/open-space, and public/semi-public land uses.

### III. PROJECT BACKGROUND

A Citywide Pipelines Projects Mitigated Negative Declaration (MND) No. 255100 was prepared by the City of San Diego's Development Services Department (DSD) and was certified by the City Council on November 30, 2011 (Resolution No. 307122). The Citywide Pipelines Projects MND provides for the inclusion of subsequent pipeline projects that are located within the public right-of-way and would not result in any direct impacts to sensitive biological resources.

Therefore, in accordance with Section 15164 of the State CEQA Guidelines this addendum has been prepared. Additionally, in accordance with requirements in Section 128.0306 of the San Diego Municipal Code, and State CEQA Guidelines Section 15064(c), no public review period is required for this addendum.

#### Historic Resources (Archaeological Resources)

The Citywide Pipelines Project MND No. 255100 concluded that pipeline projects located within the public right-of-way and city easements could result in significant environmental impacts relating to archaeological resources, which included mitigation to reduce impacts to archaeological resources to below a level of significance. The Water Group 952 project area includes the excavation of areas with a potential to contain sensitive archaeological resources.

To reduce potential archaeological resource impacts to below a level of significance, excavation within previously undisturbed soil, for either new trench alignments and/or for replacement of pipelines within the same trench alignment occurring at a deeper depth than the previously existing pipeline, would be monitored by a qualified archaeologist or archaeological monitor and Native American monitor. Any significant archaeological resources encountered would be recovered and curated in accordance with the mitigation monitoring and Reporting Program (MMRP) detailed in Section VI.

#### Historical Resources (Built Environment)

The Citywide Pipelines Project MND No. 255100 concluded that pipeline projects located within the public right-of-way and city easements could result in significant environmental impacts relating to historical resources within the built environment, which included mitigation to reduce impacts to historical resources to below a level of significance. As previously stated, the project would occur within the Sherman Heights Historical District (For the portion of Market Street – East of Interstate 5). As such, sidewalk, curb and gutter, and curb ramp improvements would be designed in a manner to match existing colors and scoring patterns. All improvements are required to be consistent with this district standards, City's Historical Resource Regulations, and U.S. Secretary of the Interior's Standards. It was determined the project is subject to the mitigation requirements inclusive of Historical Resources (Built Environment) mitigation language, specified in accordance with the Mitigation Monitoring and Reporting Program (MMRP) detailed in Section VI.

#### Burned Ash Sites

The City of San Diego Solid Waste Local Enforcement Agency (LEA) is certified by the Department of Resources Recycling and Recovery (Cal Recycle) to enforce state laws and regulations at solid waste facilities, including closed disposal sites and was a reviewer of this pipeline project. LEA has authority to review and approve land use changes on or within 1000 feet of closed disposal sites pursuant to Title 27, California Code of Regulations (27CCR), Section 21190 (c). As identified on Maps 7, 8 and 9



(see attached) are in the vicinity of known historical burn ash sites. It is likely that trenching and excavations in these areas may encounter burn ash waste which contains elevated levels of lead (Pb) and other heavy metals that exceed California hazardous waste standards in California Code of Regulations, Title 22. Should burn ash be encountered during excavations in the vicinity of Maps 7, 8 and 9, as a contingency the applicant should prepare and submit to the LEA for review and approval a project and site specific Community Health and Safety Plan (CHSP) will be required. Inclusion of an air-monitoring program for fugitive dust during the construction phase of any trenching or grading activities is a mandatory component and a public notification plan. As a contingency, the applicant will be required to prepare a Soil Management Plan to properly excavate, manage, characterize, and dispose of contaminated materials that may be encountered during the subject trenching activities. The Soil Management Plan shall be approved by the LEA for performing work in compliance with Title 27 of the California Code of Regulations, Section 21190(d). Should hazardous wastes other than, or in addition to, burn ash be encountered the San Diego County Department of Environmental Health, Hazardous Waste Site Mitigation Program shall be contacted to determine compliance with hazardous waste requirements.

The Citywide Pipelines Project MND No. 255100 anticipated that future trenching activities could result in interfacing with contaminated soils such as the burned ash site. All four issue areas under Hazards and Hazardous Materials concluded that this issue would be remain less than significant as long as it was addressed through compliance with the City's "Whitebook" standards in accordance with local, state, and federal regulations. As described above, LEA will be monitoring this issue and determine compliance would be met through consistency with "Whitebook" standards. A Condition of Approval will be provided to address compliance with these requirements.

#### IV. ENVIRONMENTAL DETERMINATION

The City previously prepared and certified the **Mitigated Negative Declaration (No. 255100 / SCH No. 2011091045)**. Based on all available information in light of the entire record, the analysis in this Addendum, and pursuant to Section 15162 of the State CEQA Guidelines, the City has determined the following:

- There are no substantial changes proposed in the project which will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes have not occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental document was certified as complete or was adopted, shows any of the following:
  - a. The project will have one or more significant effects not discussed in the previous environmental document;
  - b. Significant effects previously examined will be substantially more severe than shown in

the previous environmental document;

- c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous environmental would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Based upon a review of the current project, none of the situations described in Sections 15162 and 15164 of the State CEQA Guidelines apply. No changes in circumstances have occurred, and no new information of substantial importance has manifested, which would result in new significant or substantially increased adverse impacts as a result of the project. Therefore, this Addendum has been prepared in accordance with Section 15164 of the CEQA State Guidelines. Public review of this Addendum is not required per CEQA.

## **V. IMPACT ANALYSIS**

The subsequent impact analysis is to demonstrate that environmental impacts associated with the project are consistent with the previously certified MND. The following includes the project-specific environmental review pursuant to the CEQA. The analysis in this document evaluates the adequacy of the MND relative to the project.

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the mitigation requirements inclusive of Historical Resources (Built Environment) mitigation language, specified in accordance with the Mitigation Monitoring and Reporting Program (MMRP) detailed in Section VI.

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## **VI. MITIGATION, MONITORING AND REPORTING PROGRAM**

### **GENERAL REQUIREMENTS**

1. Prior to issuance of a Notice to Proceed (NTP), the Assistant Deputy Director (ADD) Environmental Designee of the Entitlements Division shall verify that Mitigation Measures for **ARCHEOLOGICAL RESOURCES** and **HISTORICAL RESOURCES (Built Environment)** have been included in entirety on the submitted construction documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Preconstruction Meeting shall be noted on all construction documents.
2. Prior to the commencement of work, a Preconstruction Meeting (Pre-con) shall be conducted and include the City of San Diego's Mitigation Monitoring Coordination (MMC) Section,

Resident Engineer, Building Inspector, Project Consultant (**Qualified Historic Consultant or Archeologist, Biologist**) Applicant and other parties of interest.

3. Evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

## **HISTORICAL RESOURCES (ARCHAEOLOGY)**

### **I. Prior to Permit Issuance or Bid Opening/Bid Award**

#### **A. Entitlements Plan Check**

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

#### **B. Letters of Qualification have been submitted to ADD**

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

### **II. Prior to Start of Construction**

#### **A. Verification of Records Search**

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

#### **B. PI Shall Attend Precon Meetings**

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.
  - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a

focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)  
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.
3. Identify Areas to be Monitored  
Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.  
The AME shall be based on the results of a site specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).  
MMC shall notify the PI that the AME has been approved.
4. When Monitoring Will Occur
  - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
  - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.
5. Approval of AME and Construction Schedule  
After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Construction Schedule from the CM.

### III. During Construction

- A. Monitor Shall be Present During Grading/Excavation/Trenching
  1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
  2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.
  3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.

4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVSR). The CSVSR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
  2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
  3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
  4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- C. Determination of Significance
1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
    - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
    - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.  
**Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
      - (1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
    - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.
      - (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
      - (2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance can not be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources - Pipeline Trenching and other Linear Projects

in the Public Right-of-Way

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:

1. Procedures for documentation, curation and reporting
  - a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
  - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
  - c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.
  - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

#### IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

- A. Notification
  1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
  2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.
- B. Isolate discovery site
  1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
  2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.
  3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.
- C. If Human Remains **ARE** determined to be Native American
  1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
  2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.

3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
  4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
  5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
    - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
    - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN
    - c. To protect these sites, the landowner shall do one or more of the following:
      - (1) Record the site with the NAHC;
      - (2) Record an open space or conservation easement; or
      - (3) Record a document with the County.
    - d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.
- D. If Human Remains are **NOT** Native American
1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
  2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
  3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

**V. Night and/or Weekend Work**

- A. If night and/or weekend work is included in the contract
1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
  2. The following procedures shall be followed.
    - a. No Discoveries  
In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8AM of the next business day.
    - b. Discoveries  
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.



- c. Potentially Significant Discoveries  
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.
  - d. The PI shall immediately contact the RE and MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
- 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
  - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

## VI. Post Construction

- A. Submittal of Draft Monitoring Report
- 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. **It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe as a result of delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.**
    - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
    - b. Recording Sites with State of California Department of Parks and Recreation  
The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.
  - 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
  - 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
  - 4. MMC shall provide written verification to the PI of the approved report.
  - 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
- 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
  - 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- C. Curation of artifacts: Accession Agreement and Acceptance Verification
- 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an

- appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection C.
  3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
  4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
  5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC of the approved report.
  2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

#### **HISTORICAL RESOURCES (BUILT ENVIRONMENT)**

The project is located within the Sherman Heights Historic District, bounded by Highway 94 to the north, Evans Street to the east, Imperial Avenue to the south, and Interstate 5 to the west. All work within the District boundary must be consistent with the City's Historical Resources Regulations, the U.S. Secretary of the Interior's Standards and the Sherman Heights Historic District Design Guidelines. The following mitigation measures are required within the District boundary and to ensure consistency with these regulations, standards and guidelines.

- A. Prior to beginning any work at the site, a Pre-Construction meeting that includes Historic Resources and MMC staff shall be held at the project site to review these mitigation measures and requirements within the District boundary.
- B. A Historic Sidewalk Stamp Inventory prepared by a qualified historic consultant or archaeologist and approved by HRB staff is required prior to the Pre-Construction (Pre- Con) meeting. The Inventory shall include photo documentation of all existing stamps within the project area keyed to a project site plan.
- C. Existing sidewalk stamps shall be preserved in place. Where existing sidewalk stamps must be impacted to accommodate right-of-way improvements, the following actions are required:
  1. A mold of the sidewalk stamp will be made to allow reconstruction of the stamp if destroyed during relocation.
  2. The sidewalk stamp shall be saw-cut to preserve the stamp in its entirety; relocated as near as possible to the original location and set in the same orientation.


3. If the sidewalk stamp is destroyed during relocation, a new sidewalk stamp shall be made from the mold taken and relocated as near as possible to the original location and set in the same orientation.
- D. No new sidewalk stamps shall be added by any contractor working on the project.
  - E. Existing historic sidewalk, parkway and street widths shall be maintained. Any work that requires alteration of these widths shall be approved by Historic Resources staff.
  - F. Existing historic curb heights and appearance shall be maintained. Any work that requires alteration of the existing height or appearance shall be approved by Historic Resources staff.
  - G. Sections of sidewalk which may be impacted by the project shall be replaced in-kind to match the historic color, texture and scoring pattern of the original sidewalks. If the original color, scoring pattern or texture is not present at the location of the impact, the historically appropriate color, texture and scoring pattern found throughout the district shall be used.
  - H. Truncated domes used at corner curb ramps shall be dark grey in color.
  - I. Existing historic lighting, such as acorn lighting shall remain. New lighting shall be consistent with existing lighting fixtures, or fixtures specified in any applicable District Design Guidelines.
  - J. Existing mature trees shall remain. New street trees shall be consistent with the prevalent mature species in the District and/or species specified in any applicable District Design Guidelines.
  - K. Any walls located within the right-of-way or on private property are considered historic and may not be impacted with prior review and approval by Historic Resources staff.

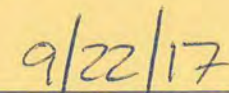
## VII. IMPACT SIGNIFICANCE

This Addendum also identifies that all significant project impacts would be mitigated to below a level of significance, consistent with the previously certified MND.

## VIII. CERTIFICATION

Copies of the addendum, the final MND, **the Mitigation Monitoring and Reporting Program** and associated project-specific technical appendices, if any, may be reviewed in the office of the Development Services Department, or purchased for the cost of reproduction.

  
Chris Tracy, AICP Senior Planner  
Development Services Department

  
Date of Final Report

Analyst: Chris Tracy, AICP, Senior Planner

### Attachments:

Figure 1: Location Map

Mitigated Negative Declaration No. 255100/SCH No. 2011091045

The Addendum to Mitigated Negative Declaration No. 255100 was not circulated for public review pursuant to San Diego Municipal Code (SDMC) Chapter 6, Article 9, Paragraph 69.0211 (Addendum to Environmental Reports). The final Addendum was distributed to the following City of San Diego staff members for informational purposes in accordance with CEQA Section 15164.

DISTRIBUTION:

City of San Diego

Development Services

Peter Kann, Development Project Manager  
Chris Tracy, Environmental Analyst  
Sam Johnson, MMC

Public Works

Carrie Purcell, Assistant Deputy Director  
James Arnhart, Project Officer II, Public Works, PI  
Sheila Bose, Senior Civil Engineer, ROW  
Mark Berlin, Associate Planner, Public Works, PI  
Casey Crown, Project Manager, Public Works, ROWD  
Nelila Bavaki, Assistant Engineer, Public Works, ROWD

Port of San Diego

Juliette Orozco, Associate Planner, Development Services

Civic San Diego

Nicole Pare, Administrative Assistant, Planning

Caltrans

Cristina Nunez, Encroachment Permits

Figure 1 - Location Map

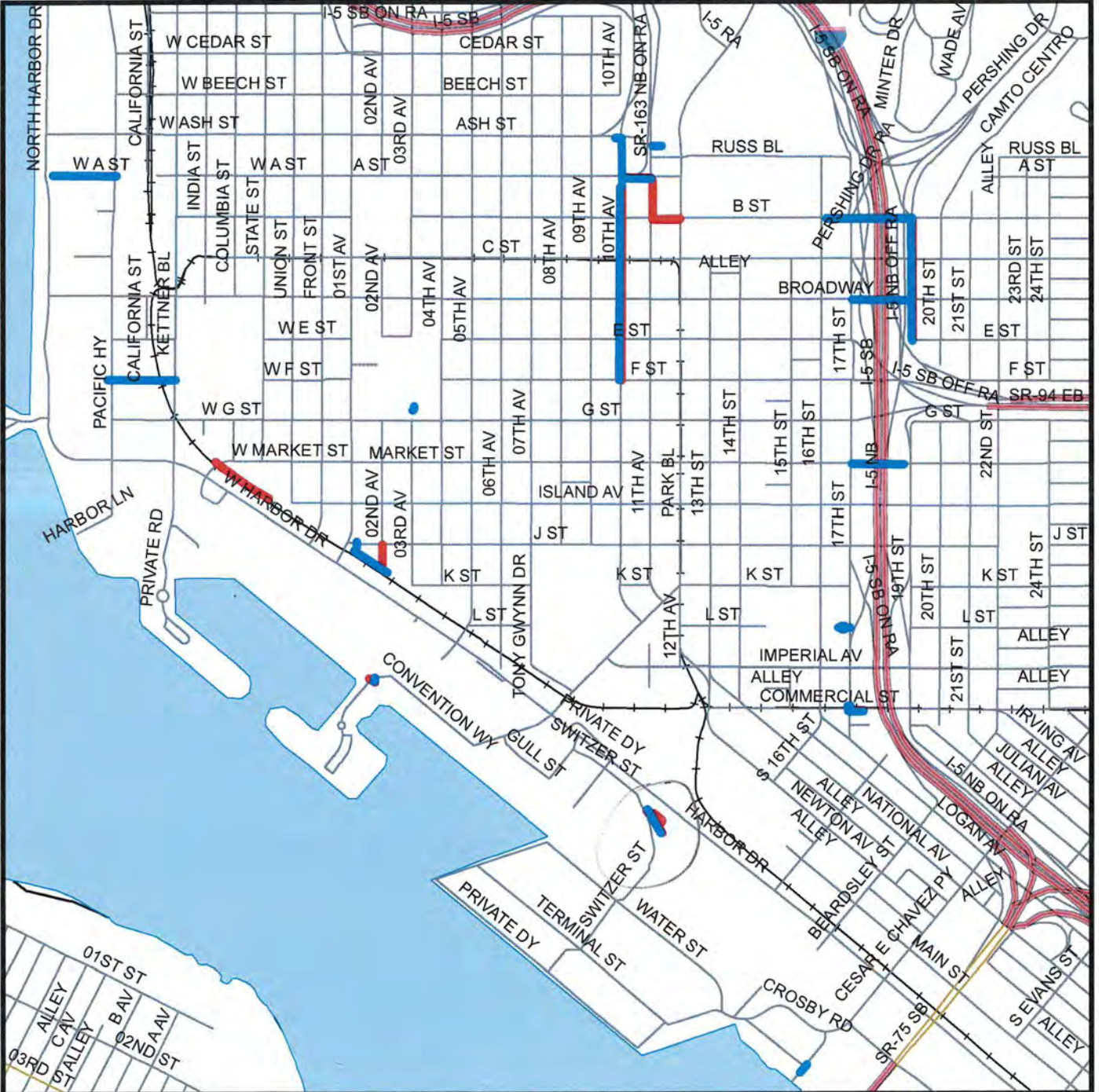
**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

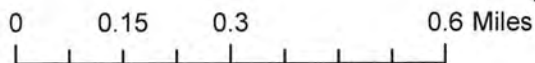
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

FOR QUESTIONS ABOUT THIS PROJECT  
Call: (619) 533-4207  
Email: [engineering@sandiego.gov](mailto:engineering@sandiego.gov)



**Legend**

- Water Group 952
- Abandoned Water Main



COMMUNITY NAME: DOWNTOWN,  
GREATER GOLDEN HILL, & BARRIO LOGAN

COUNCIL DISTRICT: 3, 8

SAP ID: B11048 (W)



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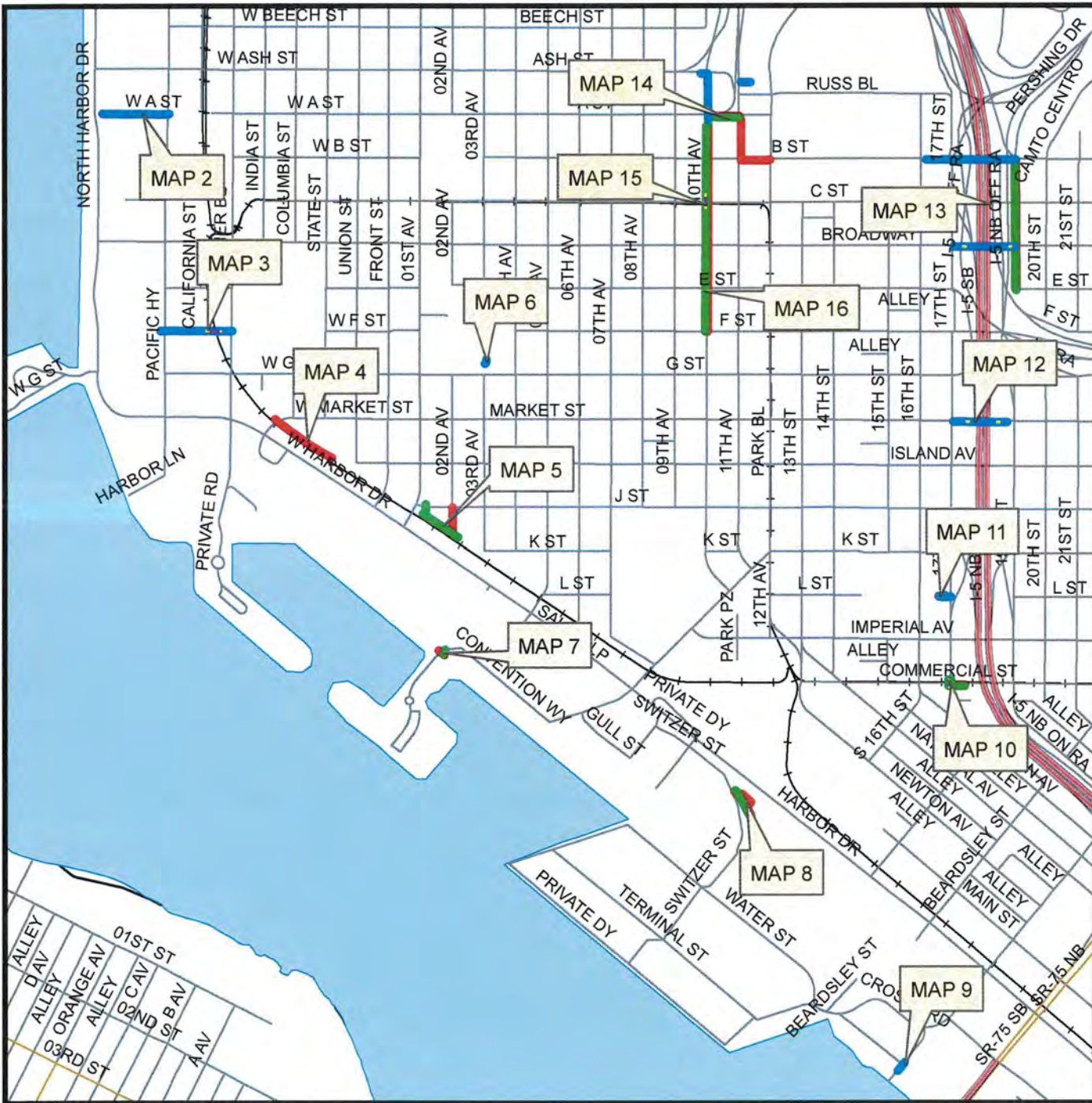
**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

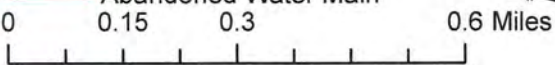
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

FOR QUESTIONS ABOUT THIS PROJECT  
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**Legend**

- Access Pits
- Replace-in-Place Water Main
- Abandoned Water Main
- New Trench Water Main
- Tunneling



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**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

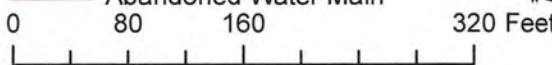
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

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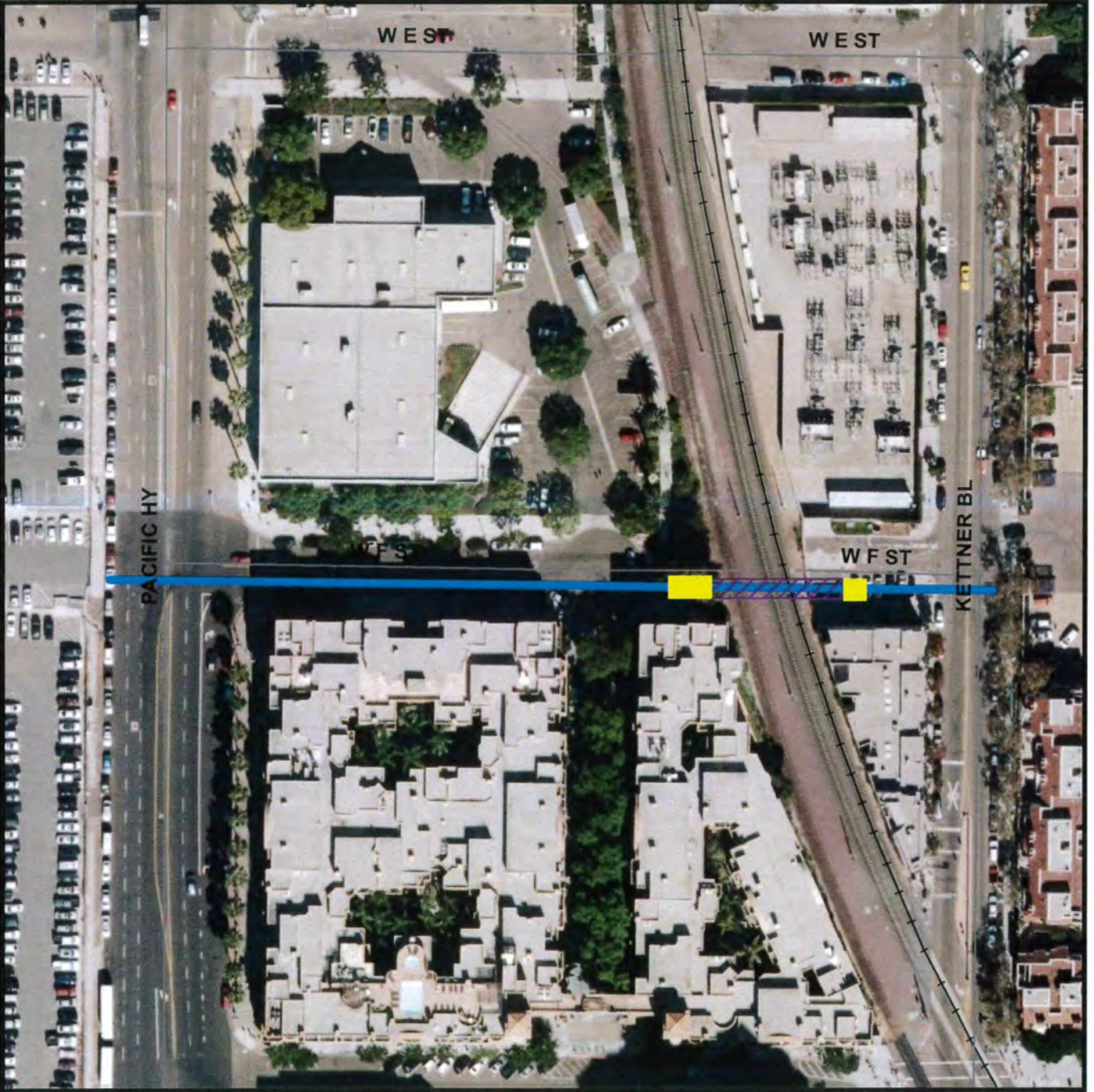
**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

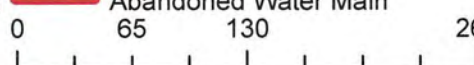
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

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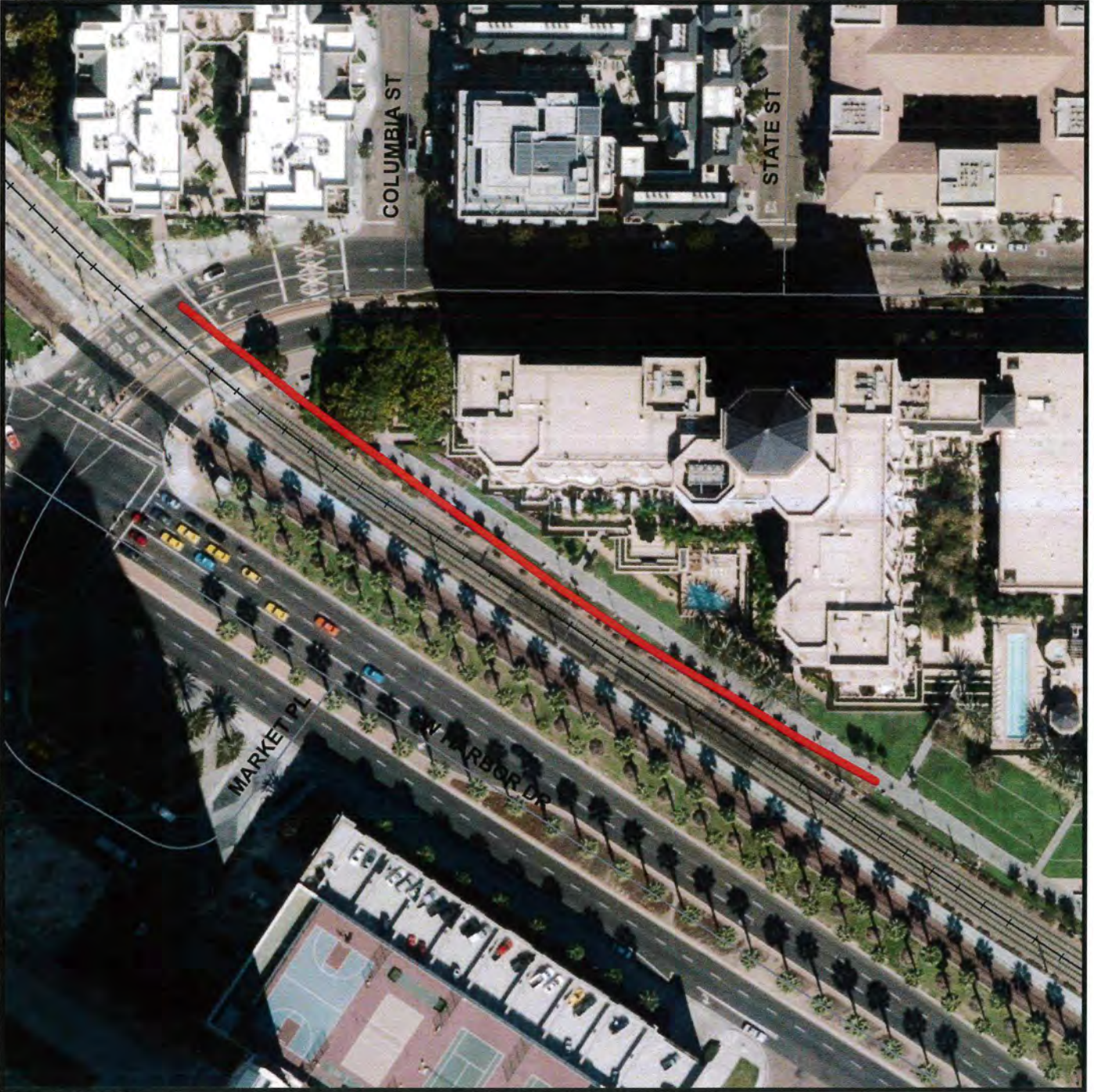
**WATER GROUP 952**

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SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

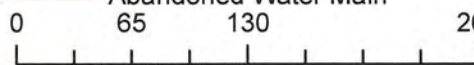
PROJECT ENGINEER  
JAMES PIEL  
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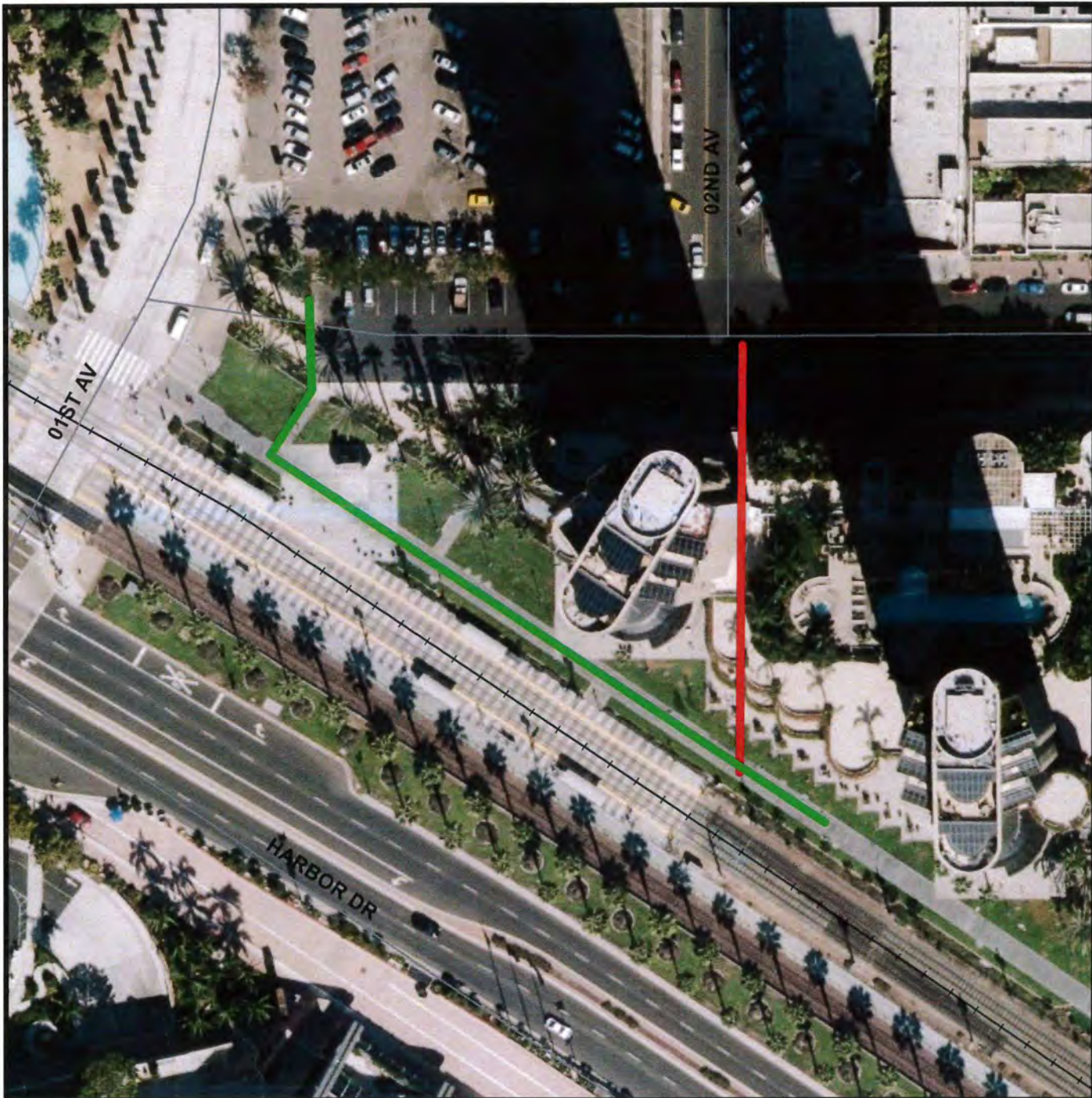
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(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

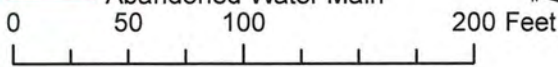
PROJECT ENGINEER  
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**Legend**

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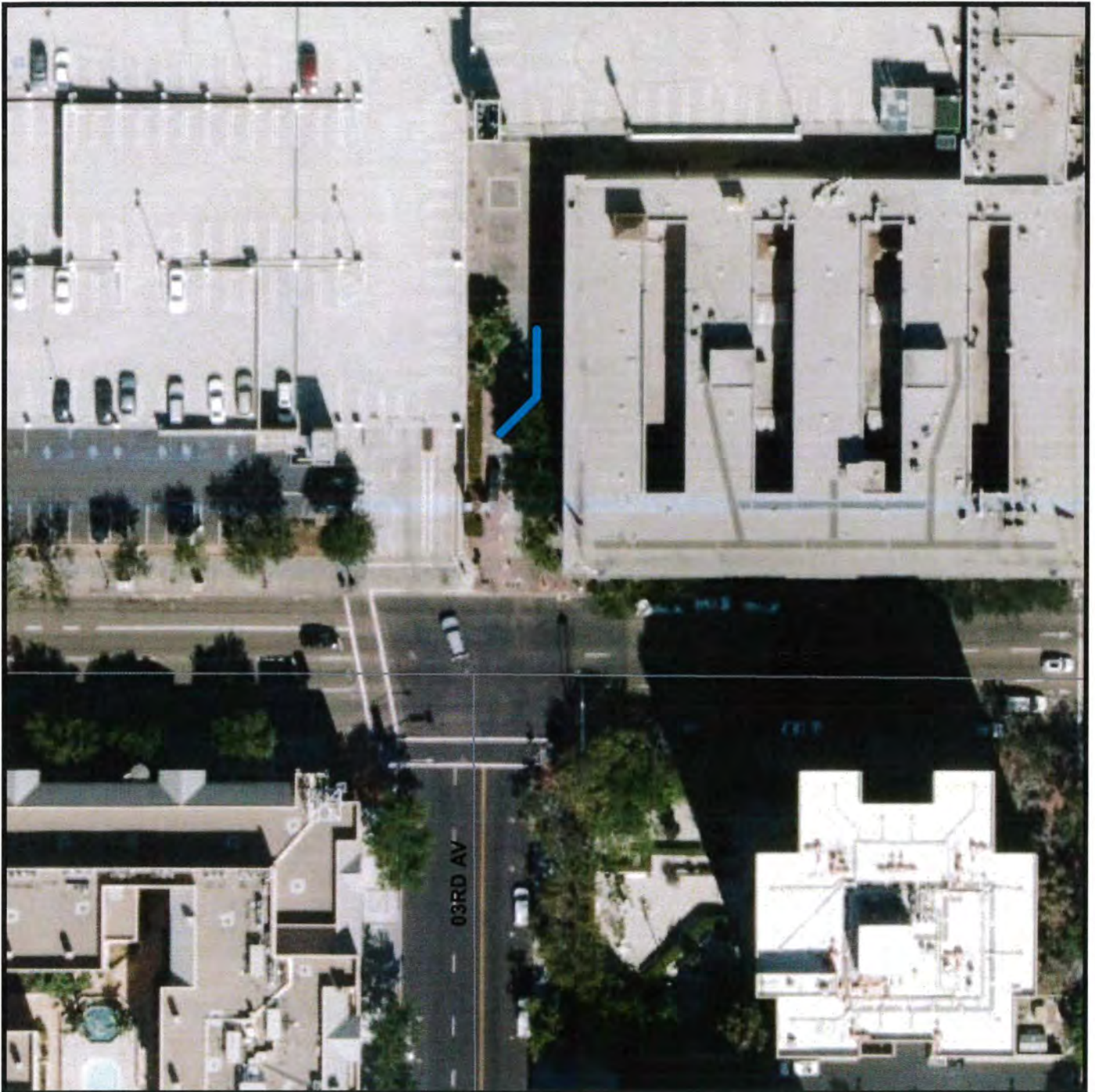
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SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
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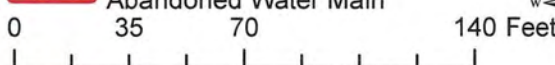
PROJECT ENGINEER  
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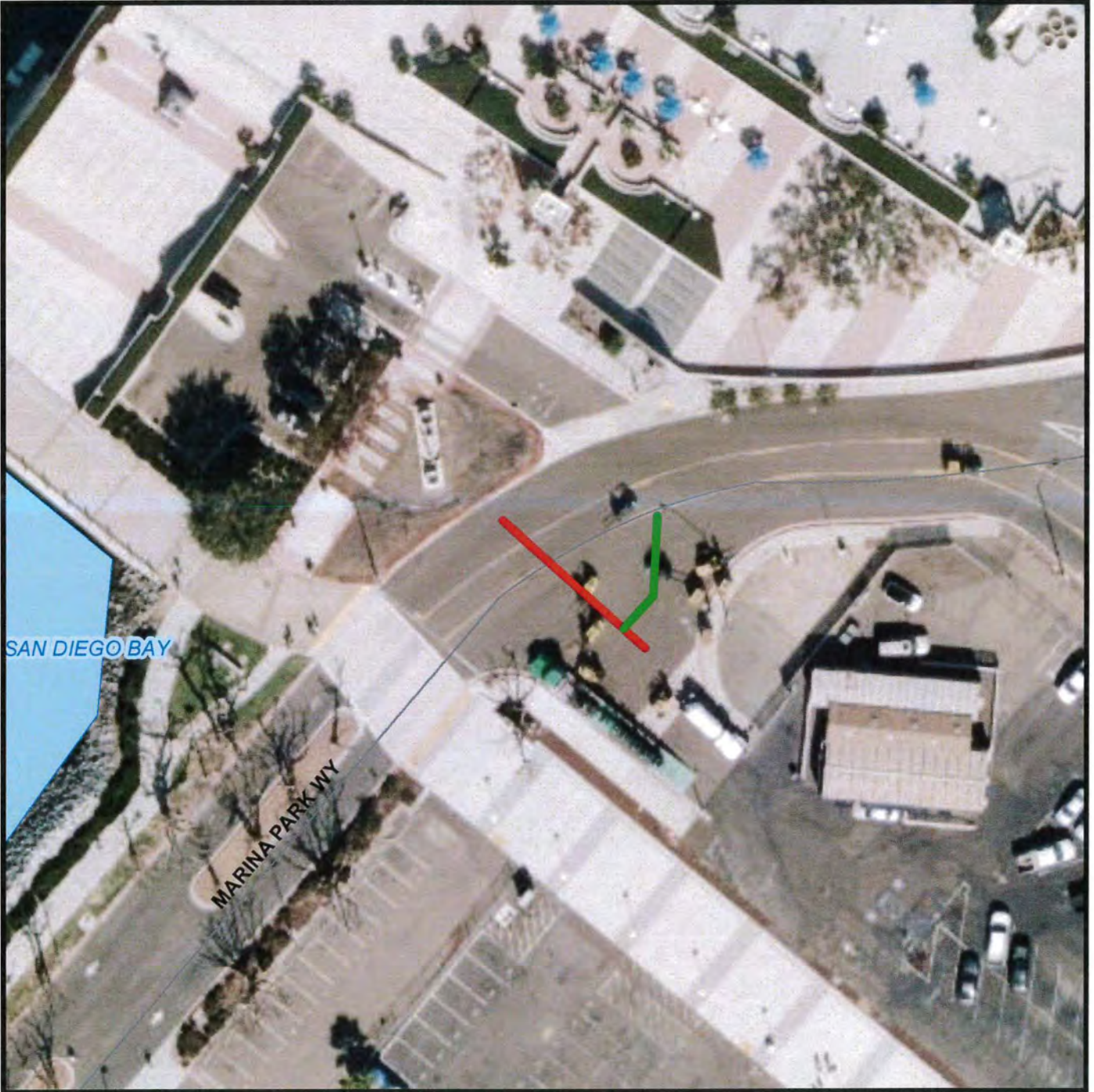
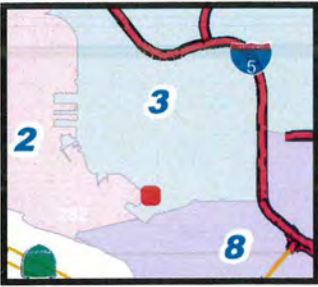
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SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

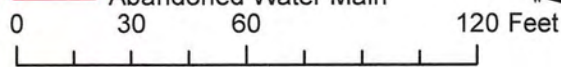
PROJECT ENGINEER  
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**Legend**

- Access Pits
- Replace-in-Place Water Main
- Abandoned Water Main
- New Trench Water Main
- Tunneling



COMMUNITY NAME: DOWNTOWN,  
GREATER GOLDEN HILL, & BARRIO LOGAN

COUNCIL DISTRICT: 3, 8

SAP ID: B11048 (W)



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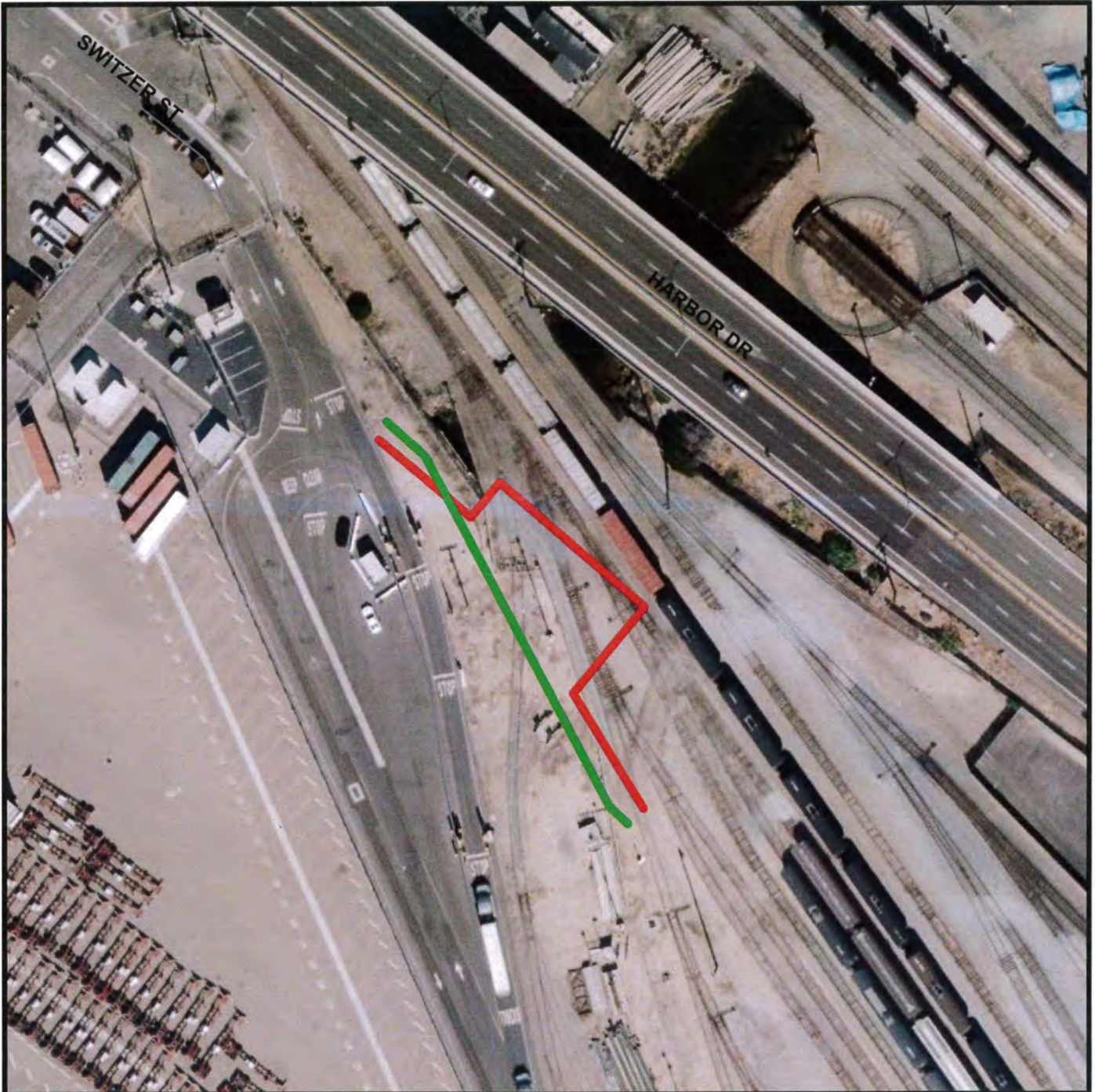
**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

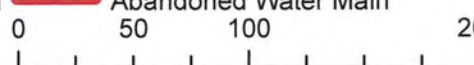
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

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**Legend**

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COMMUNITY NAME: DOWNTOWN,  
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COUNCIL DISTRICT: 3, 8

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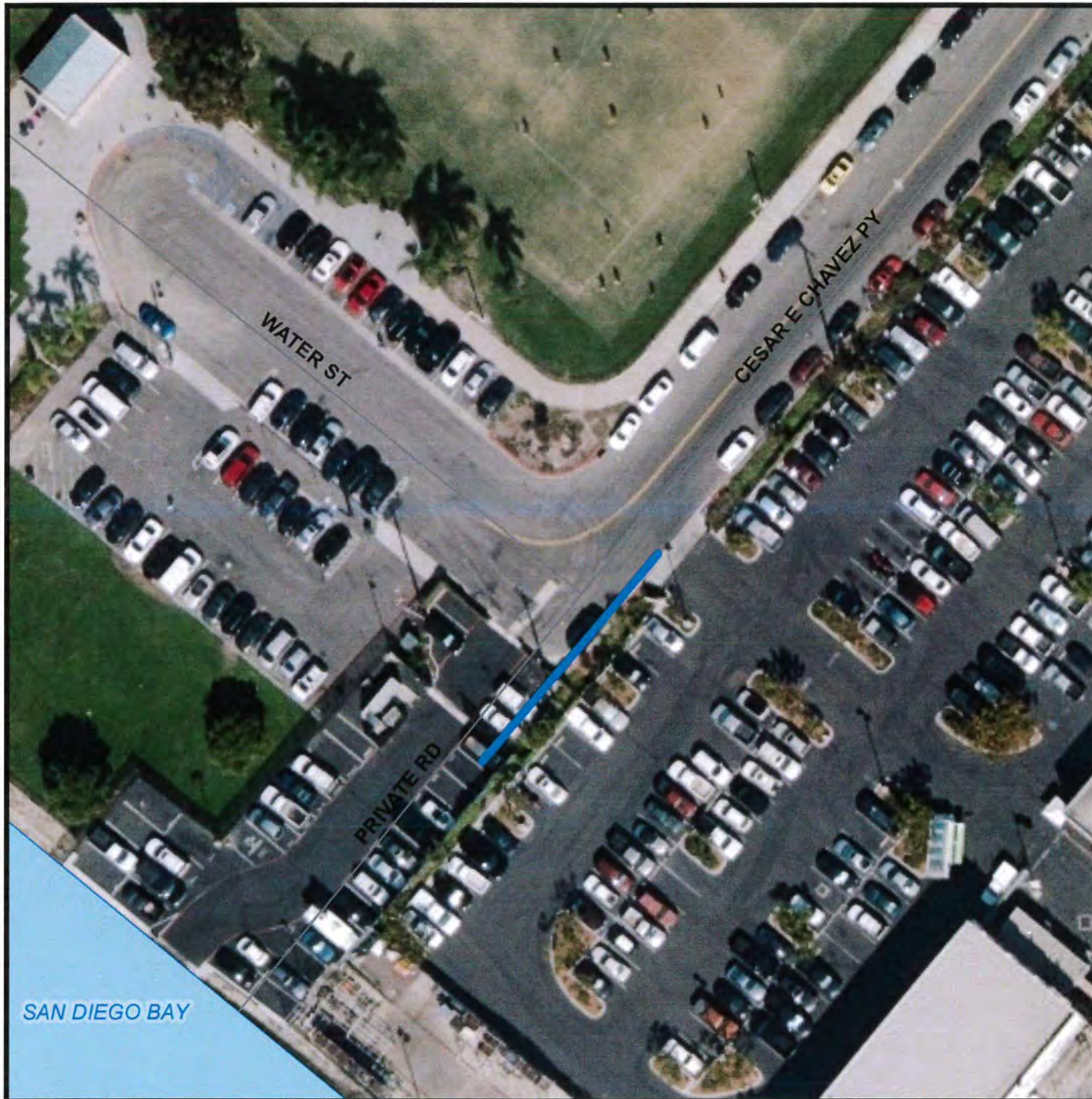
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SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

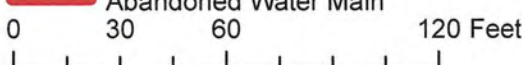
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

FOR QUESTIONS ABOUT THIS PROJECT  
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**Legend**

- Access Pits
- Replace-in-Place Water Main
- Abandoned Water Main
- Tunneling
- New Trench Water Main



COMMUNITY NAME: DOWNTOWN,  
GREATER GOLDEN HILL, & BARRIO LOGAN

COUNCIL DISTRICT: 3, 8

SAP ID: B11048 (W)

Date: October 28, 2016  
Water Group Job 952



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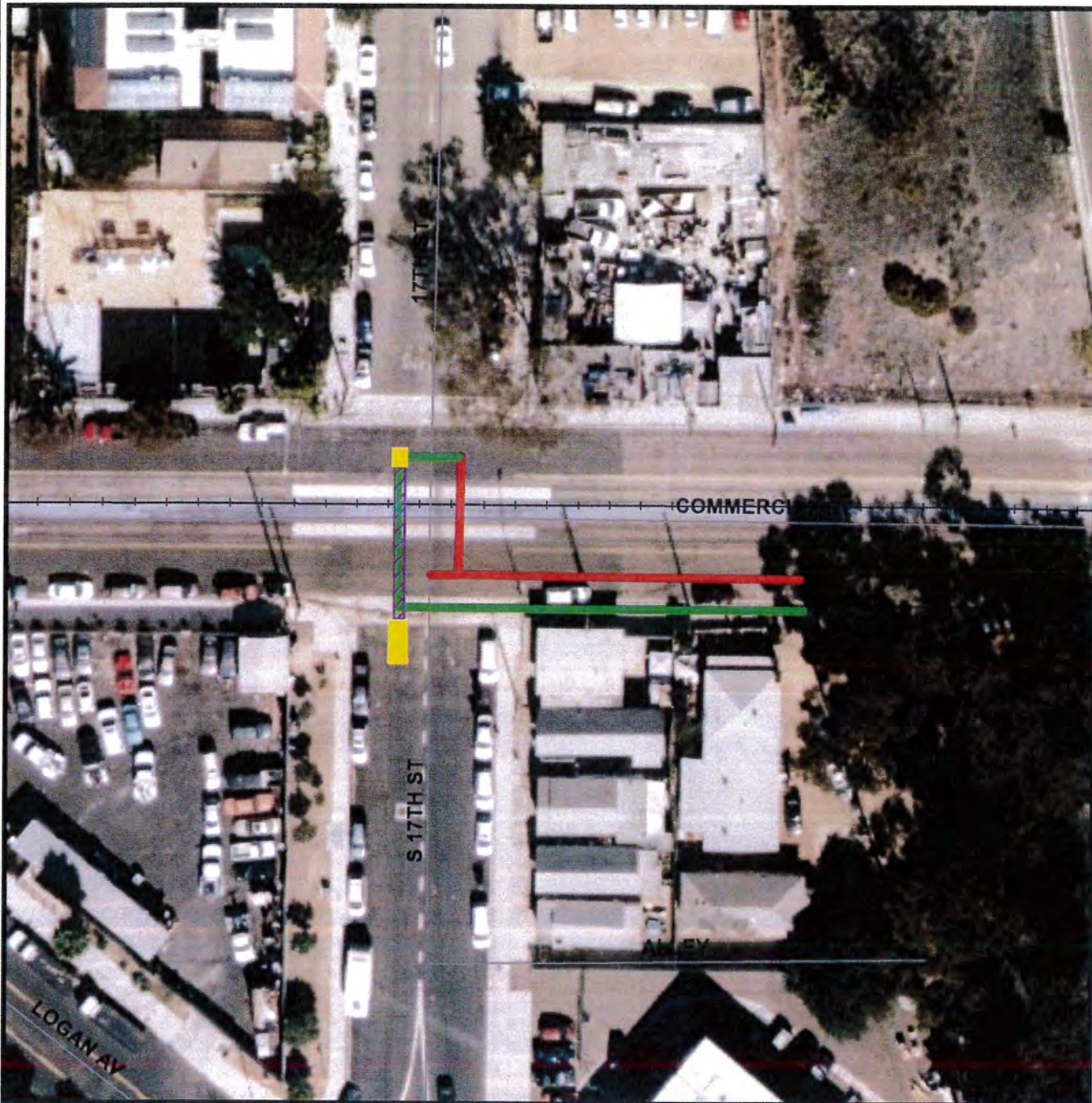
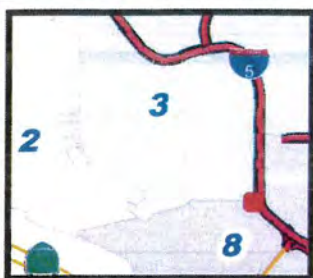
**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698






PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

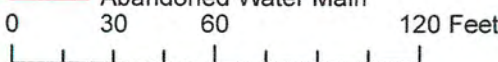
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

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**Legend**

-  Access Pits
-  Replace-in-Place Water Main
-  Abandoned Water Main
-  New Trench Water Main
-  Tunneling



COMMUNITY NAME: DOWNTOWN,  
GREATER GOLDEN HILL, & BARRIO LOGAN

COUNCIL DISTRICT: 3, 8

SAP ID: B11048 (W)



Date: October 28, 2016  
Water Group Job 952  
K-22-2065-DBB-3

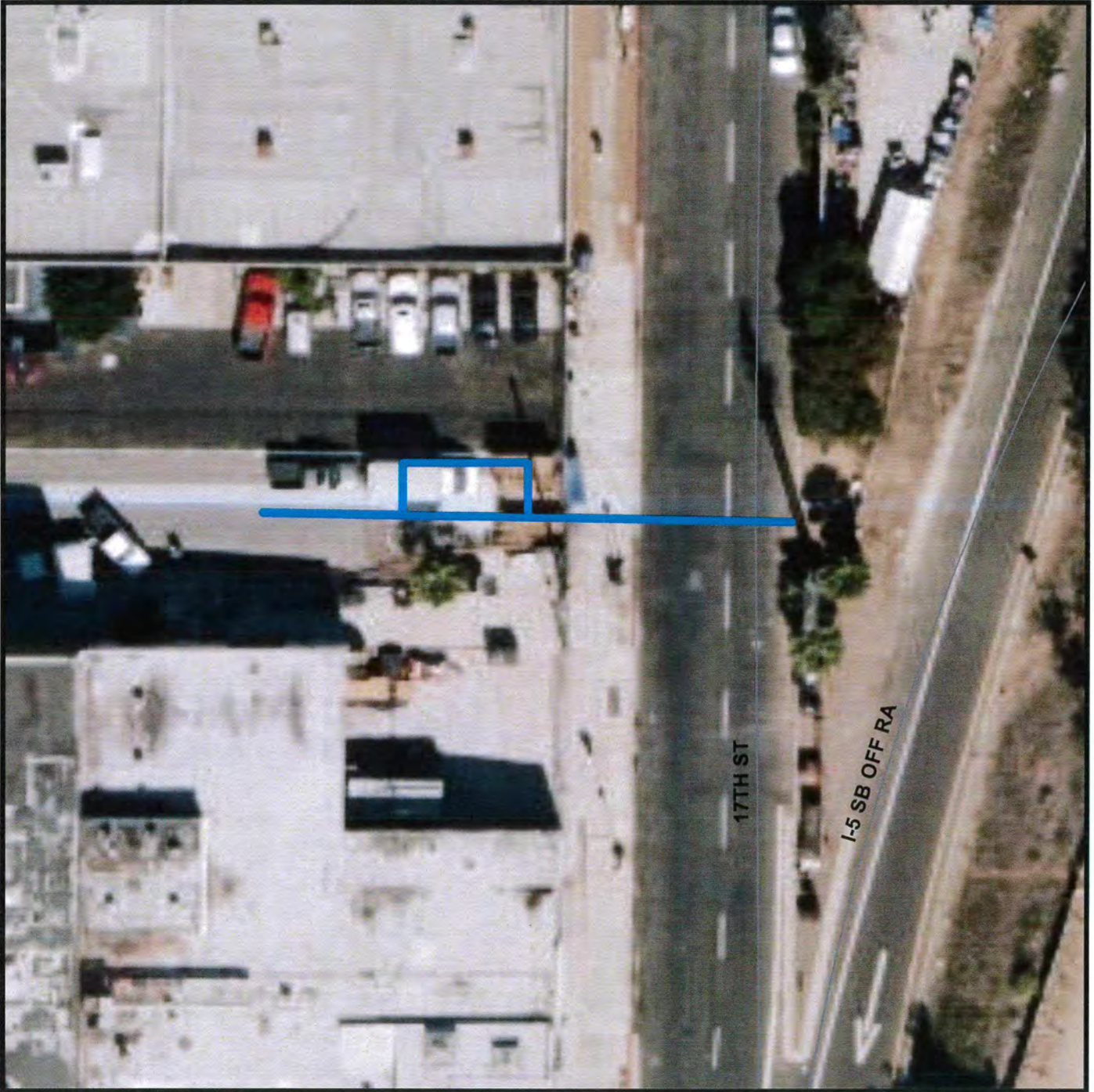
**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

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**Legend**

- Access Pits
  - Replace-in-Place Water Main
  - Abandoned Water Main
  - Tunneling
  - New Trench Water Main
- 0    15    30    60 Feet



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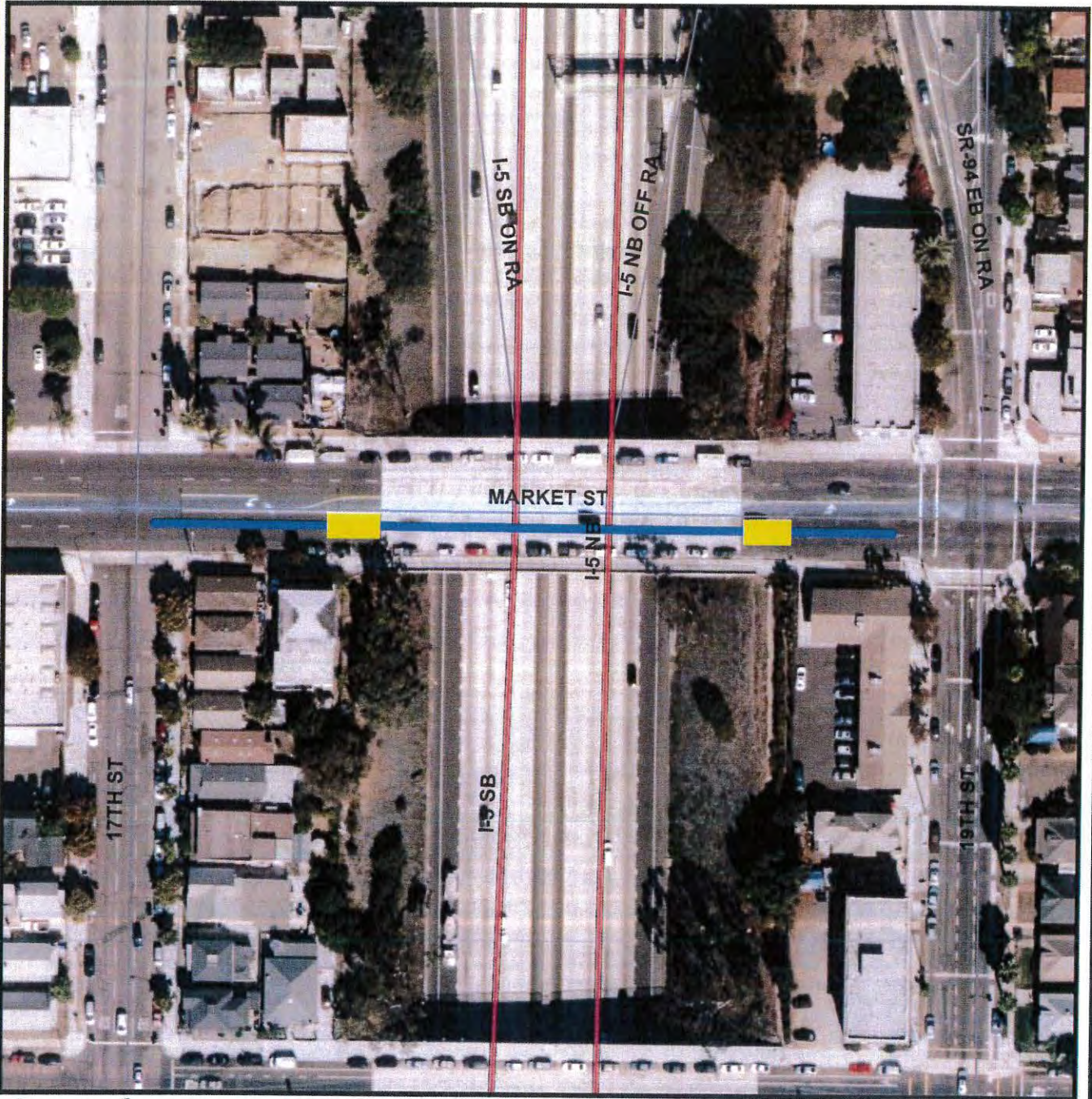
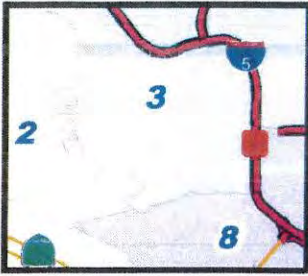
**WATER GROUP 952**

SENIOR ENGINEER  
SHEILA BOSE  
(619) 533-4698

PROJECT MANAGER  
CASEY CROWN  
(619) 533-5485

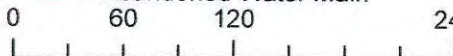
PROJECT ENGINEER  
JAMES PIEL  
(619) 533-6656

FOR QUESTIONS ABOUT THIS PROJECT  
Call: (619) 533-4207  
Email: [engineering@sandiego.gov](mailto:engineering@sandiego.gov)



**Legend**

- Access Pits
- Replace-in-Place Water Main
- Abandoned Water Main
- New Trench Water Main
- Tunneling



COMMUNITY NAME: DOWNTOWN,  
GREATER GOLDEN HILL, & BARRIO LOGAN

COUNCIL DISTRICT: 3, 8

SAP ID: B11048 (W)

Date: October 28, 2016



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The City of **SAN DIEGO** Public Works

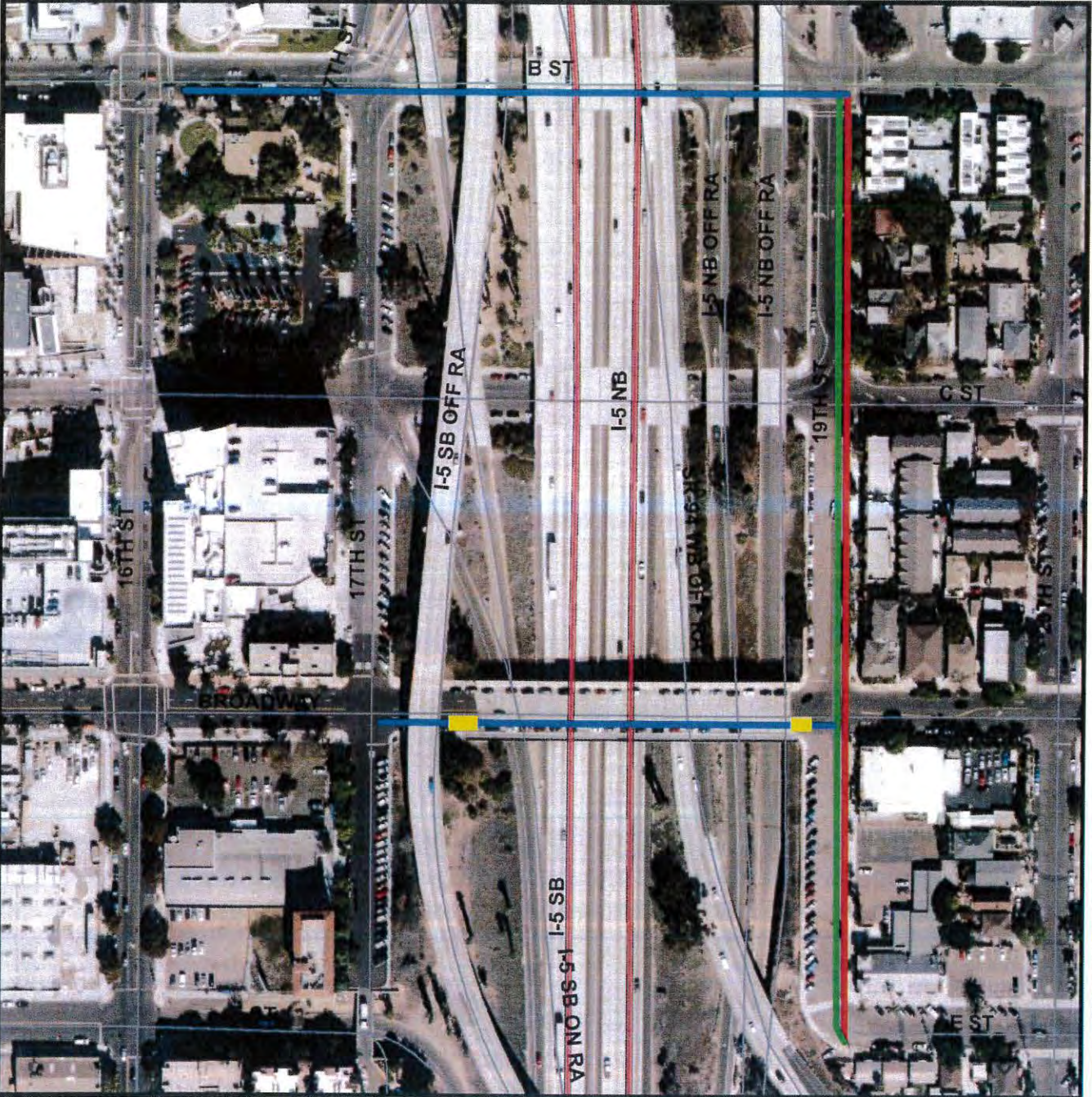
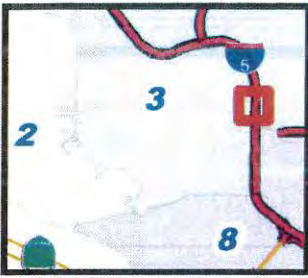
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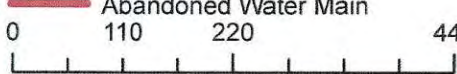
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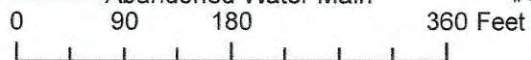
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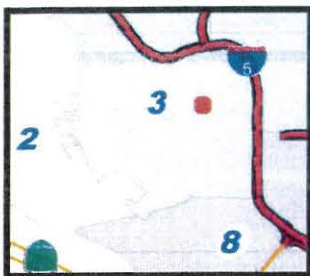
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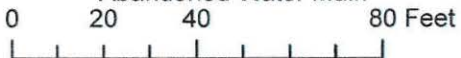
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JAMES PIEL  
(619) 533-6656

FOR QUESTIONS ABOUT THIS PROJECT  
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COMMUNITY NAME: DOWNTOWN,  
GREATER GOLDEN HILL, & BARRIO LOGAN  
Date: October 28, 2016

COUNCIL DISTRICT: 3, 8

SAP ID: B11048 (W)



The City of **SAN DIEGO** Public Works

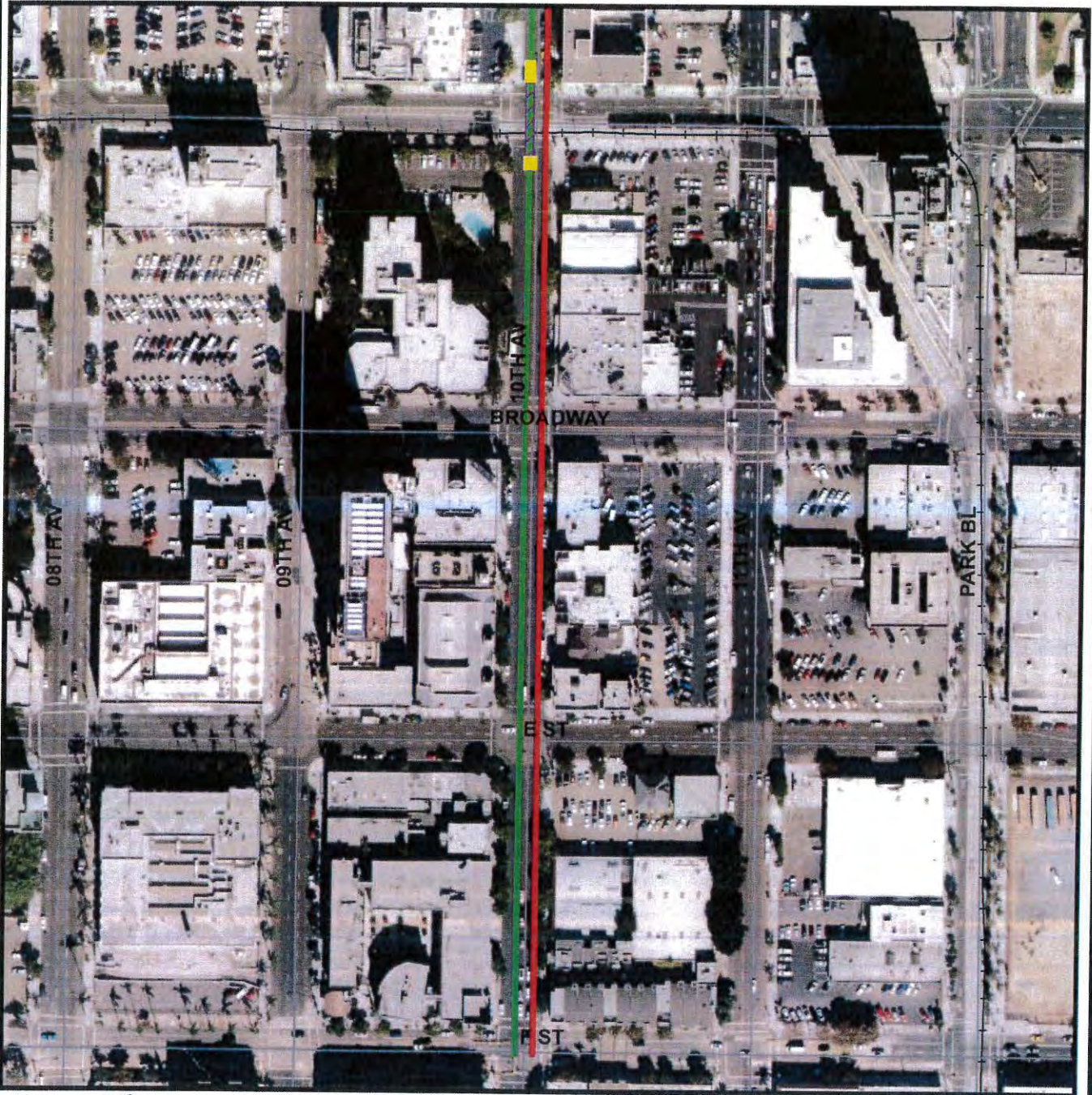
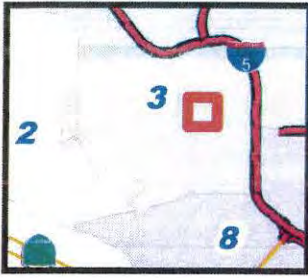
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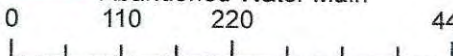
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COMMUNITY NAME: DOWNTOWN,  
GREATER GOLDEN HILL, & BARRIO LOGAN

COUNCIL DISTRICT: 3, 8

SAP ID: B11048 (W)

Date: October 28, 2016  
Water Group Job 952  
K-22-2065-DBB-3



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ENTITLEMENTS DIVISION  
(619) 446-5460

## MITIGATED NEGATIVE DECLARATION

Project No. 255100  
SCH No. 2011091045

**SUBJECT:** Citywide Pipeline Projects: COUNCIL APPROVAL to allow for the replacement, rehabilitation, relocation, point repair, new trenching, trenchless construction, and abandonment of water and/or sewer pipeline alignments and associated improvements such as curb ramps, sewer lateral connections, water service connections, manholes, new pavement/slurry, the removal and/or replacement of street trees and the removal and/or replacement of street lights. This environmental document covers the analysis for ~~five~~ four (~~5~~) (4) near-term pipeline projects (Harbor Drive Pipeline, Water Group 949, ~~Sewer Group 787~~, Water Group 914, and Sewer/Water Group 732), as well as any subsequent future pipeline projects. The construction footprint for a typical pipeline project, including staging areas and other areas (such as access) would be located within the City of San Diego Public Right-of-Way (PROW) and/or within public easements and may include planned pipeline construction within private easements from the PROW to the service connection. A signed agreement between the City and the property owner would be required for work conducted on private property. Project types that would be included in the analysis contained herein would consist of sewer and water group jobs, trunk sewers, large diameter water pipeline projects, new and/or replacement manholes, new/or replacement fire hydrants, and other necessary appurtenances. All associated equipment would be staged within the existing PROW adjacent to the work areas. The near-term and future projects covered in the document would not impact *Sensitive Biological Resources* or *Environmentally Sensitive Lands (ESL)* as defined in the Land Development Code and would not encroach into the City's Multi-Habitat Planning Area (MHPA). Applicant: The City of San Diego Engineering and Capital Projects Department AND Public Utilities Department.

**Update 10/20/2011**

**Revisions to this document have been made when compared to the Draft Mitigated Negative Declaration (DMND) dated September 9, 2011. In response to the Comment Letter received from The California Department of Fish and Game, further description and graphics of Water Group 949 as it relates to the MHPA has been added to the Final MND. Please note that Sewer Group 787, which is adjacent to the MHPA, has been removed from the project description and is no longer covered in this MND.**

**The modifications to the FMND are denoted by ~~strikeout~~ and underline format. In accordance with the California Environmental Quality Act, Section 15073.5 (c)(4), the addition of new information that clarifies, amplifies, or makes insignificant modification does not require recirculation as there are no new impacts and no new mitigation identified. An environmental document need only be recirculated when there is identification of new significant environmental impact or the addition of a new mitigation measure required to avoid a significant environmental impact. The addition**

**of corrected mitigation language within the environmental document does not affect the environmental analysis or conclusions of the MND.**

Construction for the near-term and any future projects is anticipated to occur during the daytime hours Monday through Friday, but may occur during the weekend, if necessary. The contractor would comply with all applicable requirements described in the latest edition of the *Standard Specifications for Public Works Construction* ("GREENBOOK") and the latest edition of the *City of San Diego Standard Specifications for Public Works Construction* ("WHITEBOOK"). The City's supplement addresses unique circumstances to the City of San Diego that are not addressed in the GREENBOOK and would therefore take precedence in the event of a conflict. The contractor would also comply with the California Department of Transportation *Manual of Traffic Controls for Construction and Maintenance Work Zones*. If the Average Daily Traffic (ADT) within a given project(s) vicinity is 10,000 ADT or greater, a traffic control plan would be prepared and implemented in accordance with the *City of San Diego Standard Drawings Manual of Traffic Control for Construction and Maintenance Work Zones*. For proposals subject to 10,000 ADT or less, traffic control may be managed through shop drawings during construction. Construction methods to be employed would consist of, but not be limited to:

**Open Trenching:** The open trench method of construction would be used for complete replacement and new alignment portions of the project. Trenches are typically four feet wide and are dug with excavations and similar large construction equipment.

**Rehabilitation:** Rehabilitation of alignment involves installing a new lining in old pipelines. The insertion is done through existing manhole access points and does not require removal of pavement or excavation of soils.

**Abandonment:** Pipeline abandonment activities would be similar to rehabilitation methods in that no surface/subsurface disturbance would occur. This process may involve slurry or grout material injected into the abandoned lines via manhole access. The top portion of the manhole is then typically removed and the remaining space backfilled and paved over.

**Potholing:** Potholing would be used to verify reconnection of laterals to main where lines would be raised or realigned (higher than existing depth, but still below ground) or to verify utility crossings. These "potholes" are made by using vacuum type equipment to open up small holes into the street of pavement.

**Point Repairs:** Point repairs include replacing a portion of a pipe segment by open trench excavation methods in which localized structural defects have been identified. Generally, point repairs are confined to an eight-foot section of pipe.

The following near term project(s) have been reviewed by the City of San Diego, Development Services Department (DSD) for compliance with the Land Development Code and have been determined to be exempt from a Site Development Permit (SDP) and/or a Coastal Development Permit (CDP). These projects would involve excavation in areas having a high resource sensitivity and potential for encountering archaeological and paleontological resources during construction related activities. Therefore, mitigation would be required to reduce potential significant impacts to archaeological and paleontological resources to below a level of significance. With respect to Storm Water, all projects would be reviewed for compliance with the City's Storm Water Standards

Manual. All projects that are not-exempt from the Standard Urban Storm Water Mitigation Plan (SUSMP) would incorporate appropriate Permanent Best Management Practices (BMPs) and construction BMPs into the project design(s) and during construction, as required. As such, all projects would comply with the requirement of the Municipal Storm Water Permit.

#### HARBOR DRIVE PIPELINE (PROJECT NO. 206100)

The Harbor Drive Pipeline includes the replacement of 4.4 miles of 16-inch cast iron (CI) and asbestos cement (AC) pipe that comprises the Harbor Drive 1<sup>st</sup> and 2<sup>nd</sup> Pipelines (HD-1 and HD-2) at a depth no greater than five (5) feet. Facility age and cast iron main replacement are the primary drivers for these projects, but due to the history of AC breaks in the area, approximately 1.0 mile of AC replacement is also included. The project is anticipated to be awarded in Fiscal Year 2013.

HD-1 and HD-2 were built primarily in the 1940's and 1950's and were made out of cast iron or asbestos cement and serve the western most part of the University Heights 390 Zone and the northern section of the Point Loma East 260 Zone. The pipelines also serve as redundancy to each other. Several segments were replaced by various City of San Diego Public Utilities Department projects throughout the years and those segments are not a part of the current scope. Previously replaced segments were 16 inch PVC, except for the bridge crossing which used 24-inch CMLC. The pipeline is located entirely within the PROW, will not require any easements, and is not adjacent to the MHPA or located within any designated historical districts. The following streets would be affected by this project: West Laurel, Pacific Highway, North Harbor Drive (within the roadway, under the bridge and within landscape areas), Nimitz Boulevard, Rosecrans Street, Evergreen Street, Hugo Street, Locust Street, Canon Street, Avenida De Portugal, and Point Loma Avenue.

#### **Mitigation for the Harbor Drive Pipeline: Historical Resources (Archaeological Monitoring)**

#### WATER GROUP 949 (PROJECT NO. 232719)

Water Group 949 would consist of the replacement and installation of 5.27 miles of water mains within the Skyline- Paradise Hills, University, Clairemont Mesa, Southeastern San Diego (Greater Golden Hills) community planning areas. 16,931 Linear Feet (LF) of 16-inch cast iron water mains would be replace-in-place with new 16-inch polyvinyl chloride (PVC) pipe within the existing trench. The remaining 10,913 LF of new 16-inch PVC would be installed in new trenches. All work within Regents Road, Site 2 (Figure 8), adjacent to the MHPA would only occur within the developed footprint such as the paved right of way, and concrete sidewalk or slab areas. In addition, all work within 100 feet of the MHPA would observe mitigation such as but not limited to, bird breeding season measures, avoidance of discharge into the MHPA, and avoidance of direct lighting towards the MHPA areas. As such, no impacts to MHPA and/or sensitive resources would occur. The project would also include replacement and reinstallation of valves, water services, fire hydrants, and other appurtenances and would also included the construction of curb ramps, and street resurfacing. Traffic control measures and Best Management Practices (BMPs) would be implemented during construction. Any street tree removal, relocation, and/or trimming would be done under the supervision of the City Arborist. All staging of construction equipment will be located outside of any potentially sensitive areas. The following streets and nearby alleyways would be affected by this project: Tuther Way, Cielo Drive, Woodman Street, Skyline Drive, Regents Road, Hidalgo Avenue, Clairemont Mesa Boulevard, Luna Avenue, B Street, F Street, Ash Street, 25<sup>th</sup> Street, and 27<sup>th</sup> Street.



**Mitigation Required for Water Group 949: This project would require the implementation of MHPA Land Use Adjacency Guidelines in the University and Clairemont Mesa Community Planning areas that are adjacent (within 100 feet) to the MHPA and Historical Resources (Built Environment) mitigation for the area of the project located within the Greater Golden Hill Historic District.**

SEWER GROUP 787 (PROJECT NO. 231928)

Sewer Group 787 would consist of the replacement of 26,436 lineal feet (LF) of existing 16-inch east iron sewer pipe with new 16-inch polyvinyl chloride (PVC) pipe within the existing trench. A total of 1,267 LF of new 16-inch PVC sewer alignment would be installed in new trenches. In addition, the project would abandon 1,606 LF of existing 16-inch east iron pipe. The proposed project would be installed by conventional excavation (open trench) in trenches from 3-5 feet deep. The project would affect the following streets and nearby alleyways: 42<sup>nd</sup> Street, Monroe Avenue, Edgware Road, Polk Avenue, Orange Avenue, Menlo Avenue, 47<sup>th</sup> Street, Dwight Street, Myrtle Avenue, Manzanita Place, Heather Street, Dahlia Street, Poplar Street, Columbine Street, Pepper Drive, Juniper Street, Marigold Street, Sumac Drive, 44<sup>th</sup> Street, Laurie Lane, and Roseview Place all within the City Heights and Kensington-Talmadge Community Planning Areas.

~~**Mitigation Required for Water Group 787: This project would require the implementation of MHPA Land Use Adjacency Guidelines in the City Heights and Kensington Talmadge Community Planning areas that are adjacent (within 100 feet) to the MHPA, Historical Resources (Archaeological and Paleontological Monitoring).**~~

WATER GROUP 914 (PROJECT NO. 233447)

Water Group 914 would consist of the replacement and installation of approximately 21,729 lineal feet (LF) of existing 6-inch, 8-inch and 12-inch cast iron pipes and 6-inch asphalt concrete pipes with new 8-inch, 12-inch and 16-inch polyvinyl chloride (PVC) pipe. Also included would be the construction of two underground pressure regulator stations that measure 54 square-feet and 6.5 feet deep each. 17,472 LF would be located in existing trenches and 4,257 LF would be located in new trench lines. The proposed project would be installed by conventional excavation (open trench) in trenches from 3-5 feet deep. However two 300 LF parallel line sections (600 LF total) of the water alignment would be installed by trenchless methodology utilizing two (2) 40 square foot launch and receiver pits. The trenchless installation would occur at the intersection of Coronado Avenue and Ebers Street and is designed to avoid a recorded archaeological resource at this intersection. The trenchless methodology would employ directional underground boring that would install the pipe at a depth deeper than the recorded resource. In addition, a 4-inch AC water segment of approximately 520 LF located along Point Loma Avenue between Guizot Street and Santa Barbara Street will be abandoned in place. The project would affect the following streets and nearby alleyways: Point Loma Avenue, Santa Barbara Street, Bermuda Avenue, Pescadero Avenue, Cable Street, Orchard Avenue, Froude Street, Sunset Cliffs Boulevard, Savoy Circle, and Del Monte Avenue all within the Ocean Beach and Peninsula Community Planning Areas.

**Mitigation for Water Group 914: Historical Resources (Archaeological Monitoring) and (Built Environment)**

SEWER AND WATER GROUP 732 (PROJECT NO. 206610)

Sewer and Water Group Job 732 would consist of the installation of approximately 5,500 total linear feet (LF) of 8 inch Polyvinyl Chloride (PVC) sewer pipe, and approximately 3,000 total linear feet (LF) of 12 inch PVC water pipe. Approximately, 1,035 LF of water pipe would be rehabilitated using trenchless technology in the same trench, with the remainder of the installation accomplished through open trenching. Related work would include construction of new manholes, replacement and re-plumbing of sewer laterals, installation of curb ramps, pavement restoration, traffic control, and storm water best management practices. Construction of the project would affect portions of the following streets and adjacent alleys in the Peninsula Community Plan area: Xenophon Street, Yonge Street, Zola Street, Alcott Street, Browning Street, Plum Street, Willow Street, Evergreen Street, Locust Street, and Rosecrans Street.

**Mitigation Required for Sewer and Water Group 732: Historical Resources (Archaeological and Paleontological Monitoring).****SUBSEQUENT PIPELINE PROJECT REVIEW (LONG TERM)**

Applications for the replacement, rehabilitation, relocation, point repair, open trenching and abandonment of water and/or sewer pipeline alignments within the City of San Diego PROW as indicated in the Subject block above and in the Project Description discussion of the Initial Study would be analyzed for potential environmental impacts to Historical Resources (Archaeology, Paleontology and the Built Environment) and Land Use (MSCP/MHPA), and reviewed for consistency with this Mitigated Negative Declaration (MND). Where it can be determined that the project is "consistent" with this MND and no additional potential significant impacts would occur pursuant to State CEQA Guideline § 15162 (i.e. the involvement of new significant environmental effects of a substantial increase in the severity of previously identified effects) or if the project would result in minor technical changes or additions, then an Addendum to this MND would be prepared pursuant to §15164. Where future projects are found not to be consistent with this MND, then a new Initial Study and project specific MND shall be prepared.

- I. PROJECT DESCRIPTION: See attached Initial Study.
- II. ENVIRONMENTAL SETTING: See attached Initial Study.
- III. DETERMINATION:

The City of San Diego conducted an Initial Study which determined that the near term projects and any future subsequent projects could have a significant environmental effect in the following areas(s): Land Use (MSCP/MHPA Land Use Adjacency), Historical Resources (Built Environment), Historical Resources (Archaeology) and Paleontology. When subsequent projects are submitted to DSD, the Environmental Analysis Section (EAS) will determine which of the project specific mitigation measures listed in Section V. would apply. Subsequent revisions in the project proposal create the specific mitigation identified in Section V of this Mitigated Negative Declaration. Projects as revised now avoid or mitigate the potentially significant environmental effects previously identified, and the preparation of an Environmental Impact Report will not be required.

IV. DOCUMENTATION:

The attached Initial Study documents the reasons to support the above Determination.

V. MITIGATION, MONITORING AND REPORTING PROGRAM (MMRP):

**A. GENERAL REQUIREMENTS – PART I**

Plan Check Phase (prior to permit issuance)

1. Prior to Bid Opening/Bid Award or beginning any construction related activity on-site, the Development Services Department (DSD) Director's Environmental Designee (ED) shall review and approve all Construction Documents (CD) (plans, specification, details, etc.) to ensure the MMRP requirements have been incorporated.
2. In addition, the ED shall verify that the MMRP Conditions/Notes that apply ONLY to the construction phases of this project are included VERBATIM, under the heading, "ENVIRONMENTAL/MITIGATION REQUIREMENTS."
3. These notes must be shown within the first three (3) sheets of the construction documents in the format specified for engineering construction document templates as shown on the City website:

<http://www.sandiego.gov/development-services/industry/standtemp.shtml>

4. The **TITLE INDEX SHEET** must also show on which pages the "Environmental/Mitigation Requirements" notes are provided.

**B. GENERAL REQUIREMENTS – PART II**

**Post Plan Check (After permit issuance/Prior to start of construction)**

1. **PRE CONSTRUCTION MEETING IS REQUIRED TEN (10) WORKING DAYS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.** The PERMIT HOLDER/OWNER is responsible to arrange and perform this meeting by contacting the CITY RESIDENT ENGINEER (RE) of the Field Engineering Division and City staff from MITIGATION MONITORING COORDINATION (MMC). Attendees must also include the Permit holder's Representative(s), Job Site Superintendent and the following consultants as necessary:

**Biologist, Archaeologist, Native American Monitor, Historian and Paleontologist**

Note: Failure of all responsible Permit Holder's representatives and consultants to attend shall require an additional meeting with all parties present.

CONTACT INFORMATION:

- a) The PRIMARY POINT OF CONTACT is the RE at the **Field Engineering Division 858-627-3200**
- b) For Clarification of ENVIRONMENTAL REQUIREMENTS, it is also required to call **RE and MMC at 858-627-3360**

**2. MMRP COMPLIANCE:** This Project, Project Tracking System (PTS) No. 255100, or for subsequent future projects the associated PTS No, shall conform to the mitigation requirements contained in the associated Environmental Document and implemented to the satisfaction of the DSD’s ED, MMC and the City Engineer (RE). The requirements may not be reduced or changed but may be annotated (i.e. to explain when and how compliance is being met and location of verifying proof, etc.). Additional clarifying information may also be added to other relevant plan sheets and/or specifications as appropriate (i.e., specific locations, times of monitoring, methodology, etc

Note:

Permit Holder’s Representatives must alert RE and MMC if there are any discrepancies in the plans or notes, or any changes due to field conditions. All conflicts must be approved by RE and MMC BEFORE the work is performed.

- 3. OTHER AGENCY REQUIREMENTS:** Evidence that any other agency requirements or permits have been obtained or are in process shall be submitted to the RE and MMC for review and acceptance prior to the beginning of work or within one week of the Permit Holder obtaining documentation of those permits or requirements. Evidence shall include copies of permits, letters of resolution or other documentation issued by the responsible agency as applicable.
- 4. MONITORING EXHIBITS:** All consultants are required to submit, to RE and MMC, a monitoring exhibit on a 11x17 reduction of the appropriate construction plan, such as site plan, grading, landscape, etc., marked to clearly show the specific areas including the **LIMIT OF WORK**, scope of that discipline’s work, and notes indicating when in the construction schedule that work will be performed. When necessary for clarification, a detailed methodology of how the work will be performed shall be included.
- 5. OTHER SUBMITTALS AND INSPECTIONS:** The Permit Holder/Owner’s representative shall submit all required documentation, verification letters, and requests for all associated inspections to the RE and MMC for approval per the following schedule:

**Document Submittal/Inspection Checklist**

<i><b>Issue Area</b></i>	<i><b>Document submittal</b></i>	<i><b>Associated Inspection/Approvals/Note</b></i>
General	Consultant Qualification Letters	Prior to Pre-construction Mtg.
General	Consultant Const. Monitoring	Prior to or at Pre-Construction Mtg.
Biology	Biology Reports	Limit of Work Verification
Historical	Historical Reports	Historical observation (built envirnmt)
Archaeology	Archaeology Reports	Archaeology observation
Paleontology	Paleontology Reports	Paleontology observation
Final MMRP		Final MMRP Inspection

## SPECIFIC MMRP ISSUE AREA CONDITIONS/REQUIREMENTS:

**A. LAND USE [MULTIPLE SPECIES CONSERVATION PROGRAM (MSCP) For PROJECTS WITHIN 100 FEET OF THE MHPA]**

**I. Prior to Permit Issuance**

- A. Prior to issuance of any construction permit, the DSD Environmental Designee (ED) shall verify the Applicant has accurately represented the project's design in the Construction Documents (CDs) that are in conformance with the associated discretionary permit conditions and Exhibit "A", and also the City's Multi-Species Conservation Program (MSCP) Land Use Adjacency Guidelines for the Multiple Habitat Planning Area (MHPA), including identifying adjacency as the potential for direct/indirect impacts where applicable. In addition, all CDs where applicable shall show the following:
- 1. Land Development / Grading / Boundaries** –MHPA boundaries on-site and adjacent properties shall be delineated on the CDs. The ED shall ensure that all grading is included within the development footprint, specifically manufactured slopes, disturbance, and development within or adjacent to the MHPA..
  - 2. Drainage / Toxins** –All new and proposed parking lots and developed area in and adjacent to the MHPA shall be designed so they do not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials prior to release by incorporating the use of filtration devices, planted swales and/or planted detention/desiltation basins, or other approved permanent methods that are designed to minimize negative impacts, such as excessive water and toxins into the ecosystems of the MHPA.
  - 3. Staging/storage, equipment maintenance, and trash** –All areas for staging, storage of equipment and materials, trash, equipment maintenance, and other construction related activities are within the development footprint. Provide a note on the plans that states: *"All construction related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owners Representative to ensure there is no impact to the MHPA."*
  - 4. Barriers** –All new development within or adjacent to the MHPA shall provide fencing or other City approved barriers along the MHPA boundaries to direct public access to appropriate locations, to reduce domestic animal predation, and to direct wildlife to appropriate corridor crossing. Permanent barriers may include, but are not limited to, fencing (6-foot black vinyl coated chain link or equivalent), walls, rocks/boulders, vegetated buffers, and signage for access, litter, and educational purposes.
  - 5. Lighting** – All building, site, and landscape lighting adjacent to the MHPA shall be directed away from the preserve using proper placement and adequate shielding to protect sensitive habitat. Where necessary, light from traffic or other incompatible uses, shall be shielded from the MHPA through the utilization of including, but not limited to, earth berms, fences, and/or plant material.
  - 6. Invasive Plants** – Plant species within 100 feet of the MHPA shall comply with the Landscape Regulations (LDC142.0400 and per table 142-04F, Revegetation and Irrigation Requirements) and be non invasive. Landscape plans shall include a note that states: *"The ongoing maintenance requirements of the property owner shall*

*prohibit the use of any planting that are invasive, per City Regulations, Standards, guidelines, etc., within 100 feet of the MHPA."*

7. **Brush Management** –All new development adjacent to the MHPA is set back from the MHPA to provide the required Brush Management Zone (BMZ) 1 area (LDC Sec. 142.0412) within the development area and outside of the MHPA. BMZ 2 may be located within the MHPA and the BMZ 2 management shall be the responsibility of a HOA or other private entity.
8. **Noise**- Due to the site's location adjacent to or within the MHPA, construction noise that exceeds the maximum levels allowed shall be avoided, during the breeding seasons for protected avian species such as: *California Gnatcatcher (3/1-8/15)*; *Least Bell's vireo (3/15-9/15)*; and *Southwestern Willow Flycatcher (5/1-8/30)*. If construction is proposed during the breeding season for the species, U.S. Fish and Wildlife Service protocol surveys shall be required in order to determine species presence/absence. When applicable, adequate noise reduction measures shall be incorporated. Upon project submittal EAS shall determine which of the following project specific avian protocol surveys shall be required.

#### COASTAL CALIFORNIA GNATCATCHER

NO CLEARING, GRUBBING, GRADING, OR OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR BETWEEN MARCH 1 AND AUGUST 15, THE BREEDING SEASON OF THE COASTAL CALIFORNIA GNATCATCHER, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE CITY MANAGER:

- a. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE HABITAT AREAS WITHIN ADJACENT TO THE MHPA THAT WOULD BE SUBJECT TO CONSTRUCTION NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE COASTAL CALIFORNIA GNATCATCHER. SURVEYS FOR THE COASTAL CALIFORNIA GNATCATCHER SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. IF GNATCATCHERS ARE PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

BETWEEN MARCH 1 AND AUGUST 15, NO CLEARING, GRUBBING, OR GRADING OF OCCUPIED GNATCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

1. BETWEEN MARCH 1 AND AUGUST 15, NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED GNATCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY CONSTRUCTION

ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR

2. AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM CONSTRUCTION ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE COASTAL CALIFORNIA GNATCATCHER. CONCURRENT WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND THE CONSTRUCTION OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING\* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (AUGUST 16).

\* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- b. IF COASTAL CALIFORNIA GNATCATCHERS ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 1 AND AUGUST 15 AS FOLLOWS:

1. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR COASTAL CALIFORNIA GNATCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
2. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

LEAST BELL'S VIREO (State Endangered/Federally Endangered)

NO CLEARING, GRUBBING, GRADING, OR OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR BETWEEN MARCH 15 AND SEPTEMBER 15, THE BREEDING SEASON OF THE LEAST BELL'S VIREO, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE CITY MANAGER:

- A. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE WETLAND AREAS THAT WOULD BE SUBJECT TO CONSTRUCTION NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE LEAST BELL'S VIREO. SURVEYS FOR THE THIS SPECIES SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF THE LEAST BELL'S VIREO IS PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

BETWEEN MARCH 15 AND SEPTEMBER 15, NO CLEARING, GRUBBING, OR GRADING OF OCCUPIED LEAST BELL'S VIREO HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

BETWEEN MARCH 15 AND SEPTEMBER 15, NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED LEAST BELL'S VIREO OR HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY CONSTRUCTION ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PRIOR TO THE COMMENCEMENT OF ANY OF CONSTRUCTION ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED



UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR

AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM CONSTRUCTION ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE LEAST BELL'S VIREO. CONCURRENT WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND THE CONSTRUCTION OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING\* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED

TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (SEPTEMBER 16).

\* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- B. IF LEAST BELL'S VIREO ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 15 AND SEPTEMBER 15 AS FOLLOWS:
- I. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR LEAST BELL'S VIREO TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
  - II. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

SOUTHWESTERN WILLOW FLYCATCHER (Federally Endangered)

1. Prior to the first reconstruction meeting, the City Manager (or appointed designee) shall verify that the following project requirements regarding the southwestern willow flycatcher are shown on the construction plans:

NO CLEARING, GRUBBING, GRADING, OR OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR BETWEEN MAY 1 AND SEPTEMBER 1, THE BREEDING SEASON OF THE SOUTHWESTERN WILLOW FLYCATCHER, UNTIL

THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE CITY MANAGER:

- A. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE WETLAND AREAS THAT WOULD BE SUBJECT TO CONSTRUCTION NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE SOUTHWESTERN WILLOW FLYCATCHER. SURVEYS FOR THIS SPECIES SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. IF THE SOUTHWESTERN WILLOW FLYCATCHER IS PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

BETWEEN MAY 1 AND SEPTEMBER 1, NO CLEARING, GRUBBING, OR GRADING OF OCCUPIED SOUTHWESTERN WILLOW FLYCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

BETWEEN MAY 1 AND SEPTEMBER 1, NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED SOUTHWESTERN WILLOW FLYCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY CONSTRUCTION ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN,

NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM CONSTRUCTION ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE SOUTHWESTERN WILLOW FLYCATCHER. CONCURRENT WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND THE CONSTRUCTION OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING\* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (SEPTEMBER 1).

\* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- B. IF SOUTHWESTERN WILLOW FLYCATCHER ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MAY 1 AND SEPTEMBER 1 AS FOLLOWS:
- I. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR SOUTHWESTERN WILLOW FLYCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
  - II. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

## **II. Prior to Start of Construction**

### **A. Preconstruction Meeting**

The Qualified Biologist/Owners Representative shall incorporate all MHPA construction related requirements, into the project's Biological Monitoring Exhibit (BME).

The Qualified Biologist/Owners Representative is responsible to arrange and perform a focused pre-con with all contractors, subcontractors, and all workers involved in grading or other construction activities that discusses the sensitive nature of the adjacent sensitive biological resources.

### III. During Construction

- A. The Qualified Biologist/Owners Representative, shall verify that all construction related activities taking place ~~within or~~ adjacent to the MHPA are consistent with the CDs, the MSCP/MHPA Land Use Adjacency Guidelines. The Qualified Biologist/Owners Representative shall monitor and ensure that:
1. **Land Development /Grading Boundaries** - The MHPA boundary and the limits of grading shall be clearly delineated by a survey crew prior to brushing, clearing, or grading. Limits shall be defined with orange construction fence and a siltation fence (can be combined) under the supervision of the Qualified Biologist/Owners Representative who shall provide a letter of verification to RE/MMC that all limits were marked as required. ~~Within or a~~ Adjacent to the MHPA, all manufactured slopes associated with site development shall be included within the development footprint.
  2. **Drainage/Toxics** - No Direct drainage into the MHPA shall occur during or after construction and that filtration devices, swales and/or detention/desiltation basins that drain into the MHPA are functioning properly during construction, and that permanent maintenance after construction is addressed. These systems should be maintained approximately once a year, or as often a needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g. clay compounds) when necessary and appropriate.
  3. **Staging/storage, equipment maintenance, and trash** - Identify all areas for staging, storage of equipment and materials, trash, equipment maintenance, and other construction related activities on the monitoring exhibits and verify that they are within the development footprint. Comply with the applicable notes on the plans
  - 4 **Barriers** - New development adjacent to the MHPA provides city approved barriers along the MHPA boundaries
  5. **Lighting** - Periodic night inspections are performed to verify that all lighting adjacent to the MHPA is directed away from preserve areas and appropriate placement and shielding is used.
  6. **Invasives** - No invasive plant species are used ~~in or~~ adjacent (within 100 feet) to the MHPA ~~and that within the MHPA, all plant species must be native.~~
  7. **Brush Management** - BMZ1 is within the development footprint and outside of the MHPA, and that maintenance responsibility for the BMZ 2 located within the MHPA is identified as the responsibility of an HOA or other private entity.
  8. **Noise** – For any area of the site that is adjacent to ~~or within~~ the MHPA, construction noise that exceeds the maximum levels allowed, shall be avoided, during the breeding seasons, for protected avian species such as: *California Gnatcatcher (3/1-8/15)*; *Least Bell's vireo (3/15-9/15)*; and *Southwestern Willow Flycatcher (5/1-8/30)*. If construction is proposed during the breeding season for the species, U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species presence/absence. When applicable, adequate noise reduction measures shall

be incorporated.

#### **IV. Post Construction**

##### **A. Preparation and Submittal of Monitoring Report**

The Qualified Biologist/Owners Representative shall submit a final biological monitoring report to the RE/MMC within 30 days of the completion of construction that requires monitoring. The report shall incorporate the results of the MMRP/MSCP requirements per the construction documents and the BME to the satisfaction of RE/MMC.

##### **B. HISTORICAL RESOURCES (ARCHAEOLOGY)**

###### **Prior to Permit Issuance or Bid Opening/Bid Award**

###### **A. Entitlements Plan Check**

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

###### **B. Letters of Qualification have been submitted to ADD**

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

#### **II. Prior to Start of Construction**

##### **A. Verification of Records Search**

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC requesting a reduction to the 1/4 mile radius.

##### **B. PI Shall Attend Precon Meetings**

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM)

and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.

- a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)  
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.
  3. Identify Areas to be Monitored
    - b. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
    - c. The AME shall be based on the results of a site specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).
    - d. MMC shall notify the PI that the AME has been approved.
  4. When Monitoring Will Occur
    - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
    - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.
  5. Approval of AME and Construction Schedule  
After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Construction Schedule from the CM.

### III. During Construction

- A. Monitor Shall be Present During Grading/Excavation/Trenching
  1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
  2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are

encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.

3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
  4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
  2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
  3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
  4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- C. Determination of Significance
1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
    - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
    - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
      - (1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
    - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

- (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
  - (2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources - Pipeline Trenching and other Linear Projects in the Public Right-of-Way
- The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:
1. Procedures for documentation, curation and reporting
    - a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
    - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
    - c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.
    - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

#### IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

##### A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

##### B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can



- be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.
  3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.
- C. If Human Remains **ARE** determined to be Native American
1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
  2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
  3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
  4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
  5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
    - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
    - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN
    - c. To protect these sites, the landowner shall do one or more of the following:
      - (1) Record the site with the NAHC;
      - (2) Record an open space or conservation easement; or
      - (3) Record a document with the County.
    - d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.
- D. If Human Remains are **NOT** Native American
1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
  2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
  3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

## V. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
  1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
  2. The following procedures shall be followed.
    - a. No Discoveries  
In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.
    - b. Discoveries  
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
    - c. Potentially Significant Discoveries  
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.
    - d. The PI shall immediately contact the RE and MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
  1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
  2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

## VI. Post Construction

- A. Submittal of Draft Monitoring Report
  1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. **It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe as a result of delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.**
    - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
    - b. Recording Sites with State of California Department of Parks and Recreation  
The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
  3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
  4. MMC shall provide written verification to the PI of the approved report.
  5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
  2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- C. Curation of artifacts: Accession Agreement and Acceptance Verification
1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
  2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection C.
  3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
  4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
  5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC of the approved report.
  2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

## C. PALEONTOLOGICAL RESOURCES

### I. **Prior to Permit Issuance or Bid Opening/Bid Award**

#### A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents.

#### B. Letters of Qualification have been submitted to ADD

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the

project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.

2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

## **II. Prior to Start of Construction**

### **A. Verification of Records Search**

1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

### **B. PI Shall Attend Precon Meetings**

1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.
  - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)  
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
3. Identify Areas to be Monitored
  - a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.
    - b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
    - c. MMC shall notify the PI that the PME has been approved.
4. When Monitoring Will Occur
  - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
  - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction

documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.

5. Approval of PME and Construction Schedule  
After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Construction Schedule from the CM.

### III. During Construction

#### A. Monitor Shall be Present During Grading/Excavation/Trenching

1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, jacking and receiving pits, services and all other appurtenances associated with underground utilities as identified on the PME that could result in impacts to formations with high and/or moderate resource sensitivity. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the PME.**
2. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.
3. The monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.

#### B. Discovery Notification Process

1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

#### C. Determination of Significance

1. The PI shall evaluate the significance of the resource.
  - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
  - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.

- (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
  - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
  - d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
    - (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.
    - (2). Note, for Pipeline Trenching Projects Only: If significance can not be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources - Pipeline Trenching Projects
- The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.
1. Procedures for documentation, curation and reporting
    - a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.
    - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
    - c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.
    - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

#### **IV. Night and/or Weekend Work**

- A. If night and/or weekend work is included in the contract
  1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
  2. The following procedures shall be followed.
    - a. No Discoveries  
In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVr and submit to MMC via the RE via fax by 8AM on the next business day.

- b. Discoveries  
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction.
  - c. Potentially Significant Discoveries  
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed.
  - d. The PI shall immediately contact the RE and MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
    - 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
    - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
  - C. All other procedures described above shall apply, as appropriate.

## V. Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
  - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring.
    - a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
    - b. Recording Sites with the San Diego Natural History Museum  
The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
  - 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
  - 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
  - 4. MMC shall provide written verification to the PI of the approved report.
  - 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Fossil Remains
  - 1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
- C. Curation of artifacts: Deed of Gift and Acceptance Verification
  - 1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
  - 2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
  - 3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall return to PI with copy submitted to MMC.

4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
  2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

**D. HISTORICAL RESOURCES (BUILT ENVIRONMENT)**

When a future project requires implementation of this mitigation measure, the following paragraph shall be included in the subsequent environmental document and applicable Historic District name, boundary and district guidelines, if applicable shall be inserted as noted below in [brackets]:

The project is located within the [[insert District name]] Historic District, bounded by [[enter District boundary]] All work within the District boundary must be consistent with the City's Historical Resources Regulations, the U.S. Secretary of the Interior's Standards and the [[enter district guidelines if applicable]] District Design Guidelines. The following mitigation measures are required within the District boundary and shall ensure consistency with these regulations, Standards and guidelines.

- A. Prior to beginning any work at the site, a Pre Construction meeting that includes Historic Resources and MMC staff shall be held at the project site to review these mitigation measures and requirements within the District boundary.
- B. A Historic Sidewalk Stamp Inventory prepared by a qualified historic consultant or archaeologist and approved by HRB staff is required prior to the Pre-Construction (Pre-Con) meeting. The Inventory shall include photo documentation of all existing stamps within the project area keyed to a project site plan.
- C. Existing sidewalk stamps shall be preserved in place. Where existing sidewalk stamps must be impacted to accommodate right-of-way improvements, the following actions are required:
  1. A mold of the sidewalk stamp will be made to allow reconstruction of the stamp if destroyed during relocation.
  2. The sidewalk stamp shall be saw-cut to preserve the stamp in its entirety; relocated as near as possible to the original location; and set in the same orientation.
  3. If the sidewalk stamp is destroyed during relocation, a new sidewalk stamp shall be made from the mold taken and relocated as near as possible to the original location and set in the same orientation.
- D. No new sidewalk stamps shall be added by any contactor working on the project.
- E. Existing historic sidewalk, parkway and street widths shall be maintained. Any work that requires alteration of these widths shall be approved by Historic Resources staff.
- F. Existing historic curb heights and appearance shall be maintained. Any work that requires alteration of the existing height or appearance shall be approved by Historic Resources staff.



- G. Sections of sidewalk which may be impacted by the project shall be replaced in-kind to match the historic color, texture and scoring pattern of the original sidewalks. If the original color, scoring pattern or texture is not present at the location of the impact, the historically appropriate color, texture and scoring pattern found throughout the district shall be used.
- H. Truncated domes used at corner curb ramps shall be dark gray in color.
- I. Existing historic lighting, such as acorn lighting shall remain. New lighting shall be consistent with existing lighting fixtures, or fixtures specified in any applicable District Design Guidelines.
- J. Existing mature street trees shall remain. New street trees shall be consistent with the prevalent mature species in the District and/or species specified in any applicable District Design Guidelines.
- K. Any walls located within the right-of-way or on private property are considered historic and may not be impacted without prior review and approval by Historic Resources staff.

VI. PUBLIC REVIEW DISTRIBUTION:

Draft copies or notice of this Mitigated Negative Declaration were distributed to:

United States Government

- Fish and Wildlife Service (23)
- MCAS Miramar (13)
- Naval Facilities Engineering Command Southwest (8)

State of California

- Department of Fish and Game (32A)
- State Clearing House (46)
- Resources Agency (43)
- Native American Heritage Commission (56)
- State Historic Preservation Officer (41)
- Regional Water Quality Control Board (44)
- Water Resources (45)
- Water Resources Control Board (55)
- Coastal Commission (48)
- Caltrans District 11 (31)

County of San Diego

- Department of Environmental Health (75)
- Planning and Land Use (68)
- Water Authority (73)

City of San Diego

- Office of the Mayor (91)
- Council President Young, District 4 (MS 10A)
- Councilmember Lightner, District 1 (MS 10A)
- Councilmember Faulconer, District 2 (MS 10A)
- Councilmember Gloria, District 3 (MS 10A)
- Councilmember DeMaio, District 5 (MS 10A)

Councilmember Zapf, District 6 (MS 10A)  
Councilmember Emerald, District 7 (MS 10A)  
Councilmember Alvarez, District 8 (MS 10A)  
Historical Resource Board (87)  
City Attorney (MS 56A)  
    Shannon Thomas (MS 93C)  
Engineering and Capital Projects  
    Marc Cass (MS 908A)  
    Allison Sherwood (MS 908A)  
    Matthew DeBeliso (MS 908A)  
    Akram Bassyouni (MS 908A)  
    Michael Ninh (MS 908A)  
    Roman Anissi (MS 908A)  
    Daniel Tittle (MS 908A)  
Development Services Department  
    Myra Herrmann (MS 501)  
    Kristen Forburger (MS 401)  
    Jeanne Krosch (MS 401)  
    Kelley Stanco (MS 501)  
Library Dept.-Gov. Documents MS 17 (81)  
    Balboa Branch Library (81B)  
    Beckwourth Branch Library (81C)  
    Benjamin Branch Library (81D)  
    Carmel Mountain Ranch Branch (81E)  
    Carmel Valley Branch Library (81F)  
    City Heights/Weingart Branch Library (81G)  
    Clairemont Branch Library (81H)  
    College-Rolando Branch Library (81I)  
    Kensington-Normal Heights Branch Library (81K)  
    La Jolla/Riford branch Library (81L)  
    Linda Vista Branch Library (81M)  
    Logan Heights Branch Library (81N)  
    Malcolm X Library & Performing Arts Center (81O)  
    Mira Mesa Branch Library (81P)  
    Mission Hills Branch Library (81Q)  
    Mission Valley Branch Library (81R)  
    North Clairemont Branch Library (81S)  
    North Park Branch Library (81T)  
    Oak Park Branch Library (81U)  
    Ocean Beach Branch Library (81V)  
    Otay Mesa-Nestor Branch Library (81W)  
    Pacific Beach/Taylor Branch Library (81X)  
    Paradise Hills Branch Library (81Y)  
    Point Loma/Hervey Branch Library (81Z)  
    Rancho Bernardo Branch Library (81AA)  
    Rancho Peñasquitos Branch Library (81BB)  
    San Carlos Branch Library (81DD)  
    San Ysidro Branch Library (81EE)  
    Scripps Miramar Ranch Branch Library (81FF)

Serra Mesa Branch Library (81GG)  
 Skyline Hills Branch Library (81HH)  
 Tierrasanta Branch Library (81II)  
 University Community Branch Library (81JJ)  
 University Heights Branch Library (81KK)  
 Malcolm A. Love Library (457)

### **Other Interested Individuals or Groups**

#### Community Planning Groups

Community Planners Committee (194)  
 Balboa Park Committee (226 + 226A)  
 Black Mountain Ranch – Subarea I (226C)  
 Otay Mesa - Nestor Planning Committee (228)  
 Otay Mesa Planning Committee (235)  
 Clairemont Mesa Planning Committee (248)  
 Greater Golden Hill Planning Committee (259)  
 Serra Mesa Planning Group (263A)  
 Kearny Mesa Community Planning Group (265)  
 Linda Vista Community Planning Committee (267)  
 La Jolla Community Planning Association (275)  
 City Heights Area Planning Committee (287)  
 Kensington-Talmadge Planning Committee (290)  
 Normal Heights Community Planning Committee (291)  
 Eastern Area Planning Committee (302)  
 North Bay Community Planning Group (307)  
 Mira Mesa Community Planning Group (310)  
 Mission Beach Precise Planning Board (325)  
 Mission Valley Unified Planning Organization (331)  
 Navajo Community Planners Inc. (336)  
 Carmel Valley Community Planning Board (350)  
 Del Mar Mesa Community Planning Board (361)  
 Greater North Park Planning Committee (363)  
 Ocean Beach Planning Board (367)  
 Old Town Community Planning Committee (368)  
 Pacific Beach Community Planning Committee (375)  
 Pacific Highlands Ranch – Subarea III (377A)  
 Rancho Peñasquitos Planning Board (380)  
 Peninsula Community Planning Board (390)  
 Rancho Bernardo Community Planning Board (400)  
 Sabre Springs Community Planning Group (406B)  
 Sabre Springs Community Planning Group (407)  
 San Pasqual - Lake Hodges Planning Group (426)  
 San Ysidro Planning and Development Group (433)  
 Scripps Ranch Community Planning Group (437)  
 Miramar Ranch North Planning Committee (439)  
 Skyline - Paradise Hills Planning Committee (443)  
 Torrey Hills Community Planning Board (444A)  
 Southeastern San Diego Planning Committee (449)  
 Encanto Neighborhoods Community Planning Group (449A)

College Area Community Council (456)  
Tierrasanta Community Council (462)  
Torrey Highlands – Subarea IV (467)  
Torrey Pines Community Planning Group (469)  
University City Community Planning Group (480)  
Uptown Planners (498)

Town/Community Councils - PUBLIC NOTICE ONLY

Town Council Presidents Association (197)  
Harborview Community Council (246)  
Carmel Mountain Ranch Community Council (344)  
Clairemont Town Council (257)  
Serra Mesa Community Council (264)  
Rolando Community Council (288)  
Oak Park Community Council (298)  
Webster Community Council (301)  
Darnell Community Council (306)  
La Jolla Town Council (273)  
Mission Beach Town Council (326)  
Mission Valley Community Council (328 C)  
San Carlos Area Council (338)  
Ocean Beach Town Council, Inc. (367 A)  
Pacific Beach Town Council (374)  
Rancho Penasquitos Community Council (378)  
Rancho Bernardo Community Council, Inc. (398)  
Rancho Penasquitos Town Council (383)  
United Border Community Town Council (434)  
San Dieguito Planning Group (412)  
Murphy Canyon Community Council (463)

**Other Interested Individuals or Groups**

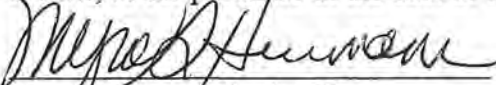
San Diego Unified Port District (109)  
San Diego County Regional Airport Authority (110)  
San Diego transit Corporation (112)  
San Diego Gas & Electric (114)  
Metropolitan Transit Systems (115)  
San Diego Unified School District (125/132)  
San Ysidro Unified School District (127)  
San Diego Community College District (133)  
The Beach and Bay Beacon News (137)  
Sierra Club (165)  
San Diego Canyonlands (165A)  
San Diego Natural History Museum (166)  
San Diego Audubon Society (167)  
Jim Peugh (167A)  
California Native Plant Society (170)  
San Diego Coastkeeper (173)  
Endangered Habitat League (182 and 182A)  
South Coastal Information Center @ San Diego State University (210)

San Diego Historical Society (211)  
Carmen Lucas (206)  
Clint Linton (215b)  
San Diego Archaeological Center (212)  
Save Our Heritage Organization (214)  
Ron Christman (215)  
Louie Guassac (215A)  
San Diego County Archaeological Society (218)  
Kumeyaay Cultural Heritage Preservation (223)  
Kumeyaay Cultural Repatriation Committee (225)  
Native American Distribution (NOTICE ONLY 225A-T)  
San Diego Historical Society (211)  
Theresa Acerro (230)  
Unified Port of San Diego (240)  
Centre City Development Corporation (242)  
Centre City Advisory Committee (243)  
Balboa Avenue CAC (246)  
Theresa Quiros (294)  
Fairmount Park Neighborhood Association (303)  
John Stump (304)  
San Diego Baykeeper (319)  
Debbie Knight (320)  
Mission Hills Heritage (497)

VII. RESULTS OF PUBLIC REVIEW:

- ( ) No comments were received during the public input period.
- ( ) Comments were received but did not address the draft Mitigated Negative Declaration finding or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.
- (x) Comments addressing the findings of the draft Mitigated Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public input period. The letters and responses follow.

Copies of the draft Mitigated Negative Declaration, the Mitigation, Monitoring and Reporting Program and any Initial Study material are available in the office of the Entitlements Division for review, or for purchase at the cost of reproduction.

  
Myra Herrmann, Senior Planner  
Development Services Department

September 14, 2011  
Date of Draft Report

October 24, 2011  
Date of Final Report

Analysts: J. Szymanski/M. Herrmann

Attachments:

- Figure 1 - Harbor Drive Pipeline Location Map
  - Figure 2 - Water Group 949 Site 1 Location Map
  - Figure 3- Water Group 949 Site 2 Location Map
  - Figure 4- Water Group 949 Site 3 Location Map
  - Figure 5- Sewer Group 787 Location Map
  - Figure 6- Water Group 914 Location Map
  - Figure 7- Sewer and Water Group 732 Location Map
  - Figure 8- Water Group 949-Site 2 with the MHPA
- Initial Study Checklist

WATER GROUP 952 PROJECT  
ADDENDUM TO MITIGATED NEGATIVE DECLARATION NO. 255100  
(Project No. 527958)  
AND  
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

ADOPTED ON SEPTEMBER 22, 2017

WHEREAS, on December 14, 2016, The City of San Diego Public Works Department submitted an application to the Development Services Department of a Public Project Assessment (PPA) for the Water Group 952 (Project), for approval of minor technical changes or additions to the Citywide Pipeline Projects scope that was analyzed by adopted Mitigated Negative Declaration No. 255100; and

WHEREAS, the matter was considered without a public hearing by the Deputy Director of the Development Services Department as designated by the City Manager of the City of San Diego on September 22, 2017; and

WHEREAS, on September 22, 2017, the Deputy Director of the Development Services considered the issues discussed in Addendum to Mitigated Negative Declaration No. 255100 (Declaration), a copy of which is on file in the Development Services Department, in accordance with the California Environmental Quality Act of 1970 (CEQA) (Public Resources Code Section 21000 et seq.), as amended, and the State CEQA Guidelines thereto (California Code of Regulations, Title 14, Chapter 3, Section 15000 et seq.); and

WHEREAS, State CEQA Guidelines section 15164(a) allows a lead agency to prepare an Addendum to a final Mitigated Negative Declaration if such Addendum meets the requirements of CEQA; NOW, THEREFORE,

BE IT RESOLVED, by the Deputy Director of the Development Services Department of the City of San Diego as follows:

1. That the information contained in the final Mitigated Negative Declaration No. 255100 along with the Addendum thereto, including any comments received during the public review process, has been reviewed and considered by this Deputy Director of the Development Services Department prior to making a decision on the Project.
2. That there are no substantial changes proposed to the Project and no substantial changes with respect to the circumstances under which the Project is to be undertaken that would require major revisions in the Mitigated Negative Declaration for the Project.
3. That no new information of substantial importance has become available showing that the Project would have any significant effects not discussed previously in Mitigated Negative Declaration or that any significant effects previously examined will be substantially more severe than shown in the Mitigated Negative Declaration.

4. That no new information of substantial importance has become available showing that mitigation measures or alternatives previously found not to be feasible are in fact feasible which would substantially reduce any significant effects, but that the Project proponents decline to adopt, or that there are any considerably different mitigation measures or alternatives not previously considered which would substantially reduce any significant effects, but that the Project proponents decline to adopt.
5. That pursuant to State CEQA Guidelines Section 15164, only minor technical changes or additions are necessary, and therefore, the Deputy Director of the Development Services Department adopts Addendum to Mitigated Negative Declaration No. 255100 with respect to the Project, a copy of which is on file in the office of the Development Services Department.
6. That pursuant to CEQA Section 21081.6, the Deputy Director of the Development Services Department adopts the Mitigation Monitoring and Reporting Program, or alterations to implement the changes to the project as required by this Deputy Director of the Development Services Department in order to mitigate or avoid significant effects on the environment, which is attached hereto as Exhibit A.
7. That DEVELOPMENT SERVICES STAFF is directed to file a Notice of Determination with the Clerk of the Board of Supervisors for the County of San Diego regarding the Project.

APPROVED: Kerry Santoro, Deputy Director, Development Services Department

By: 

Date: 9/22/17

ATTACHMENT: EXHIBIT A - MITIGATION MONITORING AND REPORTING PROGRAM



## EXHIBIT A

### MITIGATION MONITORING AND REPORTING PROGRAM WATER GROUP 952 PROJECT PROJECT NO. 527958

This Mitigation Monitoring and Reporting Program is designed to ensure compliance with Public Resources Code Section 21081.6 during implementation of mitigation measures. This program identifies at a minimum: the department responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, the monitoring and reporting schedule, and completion requirements. A record of the Mitigation Monitoring and Reporting Program will be maintained at the offices of the Entitlements Division, 1222 First Avenue, Fifth Floor, San Diego, CA, 92101.

#### **GENERAL REQUIREMENTS**

1. Prior to issuance of a Notice to Proceed (NTP), the Assistant Deputy Director (ADD) Environmental Designee of the Entitlements Division shall verify that Mitigation Measures for **HISTORICAL RESOURCES (ARCHAEOLOGY)** and **(BUILT ENVIRONMENT)** have been included in entirety on the submitted construction documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Preconstruction Meeting shall be noted on all construction documents.
2. Prior to the commencement of work, a Preconstruction Meeting (Pre-con) shall be conducted and include the City of San Diego's Mitigation Monitoring Coordination (MMC) Section, Resident Engineer, Building Inspector, Project Consultant (**Qualified Historic Consultant or Archeologist, Native American Monitor**) Applicant and other parties of interest.
3. Evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

#### **HISTORICAL RESOURCES (ARCHAEOLOGY)**

##### **I. Prior to Permit Issuance or Bid Opening/Bid Award**

###### **A. Entitlements Plan Check**

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

###### **B. Letters of Qualification have been submitted to ADD**

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have

- completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
  3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

## **II. Prior to Start of Construction**

### **A. Verification of Records Search**

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.

### **B. PI Shall Attend Precon Meetings**

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.
  - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)  
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.
3. Identify Areas to be Monitored  
Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.  
The AME shall be based on the results of a site specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).  
MMC shall notify the PI that the AME has been approved.
4. When Monitoring Will Occur
  - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.

- b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.
5. Approval of AME and Construction Schedule  
After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Construction Schedule from the CM.

### III. During Construction

- A. Monitor Shall be Present During Grading/Excavation/Trenching
  1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
  2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.
  3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
  4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly **(Notification of Monitoring Completion)**, and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
  1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
  2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
  3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
  4. No soil shall be exported off-site until a determination can be made regarding the

significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.

- a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
- b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.

**Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**

(1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."

c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

(1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.

(2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching and other Linear Projects in the Public Right-of-Way

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:

1. Procedures for documentation, curation and reporting

- a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
- b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
- c. The PI shall be responsible for recording (on the appropriate State of California

Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.

- d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

#### IV. **Discovery of Human Remains**

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

##### A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

##### B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.
3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

##### C. If Human Remains **ARE** determined to be Native American

1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
  - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
  - b. The landowner or authorized representative rejects the recommendation of the

MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN

- c. To protect these sites, the landowner shall do one or more of the following:
    - (1) Record the site with the NAHC;
    - (2) Record an open space or conservation easement; or
    - (3) Record a document with the County.
  - d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.
- D. If Human Remains are **NOT** Native American
- 1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
  - 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
  - 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

**V. Night and/or Weekend Work**

- A. If night and/or weekend work is included in the contract
- 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
  - 2. The following procedures shall be followed.
    - a. No Discoveries  
In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8AM of the next business day.
    - b. Discoveries  
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV - Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
    - c. Potentially Significant Discoveries  
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.
    - d. The PI shall immediately contact the RE and MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction

1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

## VI. Post Construction

### A. Submittal of Draft Monitoring Report

1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. **It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe as a result of delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.**
  - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
  - b. Recording Sites with State of California Department of Parks and Recreation  
The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.
2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
4. MMC shall provide written verification to the PI of the approved report.
5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

### B. Handling of Artifacts

1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.

### C. Curation of artifacts: Accession Agreement and Acceptance Verification

1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources

were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection C.

3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
  4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
  5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC of the approved report.
  2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

### **HISTORICAL RESOURCES (BUILT ENVIRONMENT)**

The project is located within the Sherman Historic District, bounded by Highway 94 to the north, Evans Street to the east, Imperial Avenue to the south, and Interstate 5 to the west. All work within the District boundary must be consistent with the City's Historical Resources Regulations, the U.S. Secretary of the Interior's Standards and the Sherman Heights Historic District Design Guidelines. The following mitigation measures are required within the District boundary and to ensure consistency with these regulations, standards and guidelines.

- A. Prior to beginning any work at the site, a Pre-Construction meeting that includes Historic Resources and MMC staff shall be held at the project site to review these mitigation measures and requirements within the District boundary.
- B. A Historic Sidewalk Stamp Inventory prepared by a qualified historic consultant or archaeologist and approved by HRB staff is required prior to the Pre-Construction (Pre- Con) meeting. The Inventory shall include photo documentation of all existing stamps within the project area keyed to a project site plan.
- C. Existing sidewalk stamps shall be preserved in place. Where existing sidewalk stamps must be impacted to accommodate right-of-way improvements, the following actions are required:
  1. A mold of the sidewalk stamp will be made to allow reconstruction of the stamp if destroyed during relocation.
  2. The sidewalk stamp shall be saw-cut to preserve the stamp in its entirety; relocated as near as possible to the original location and set in the same orientation.
  3. If the sidewalk stamp is destroyed during relocation, a new sidewalk stamp shall be made from the mold taken and relocated as near as possible to the original location and set in the same orientation.



- D. No new sidewalk stamps shall be added by any contactor working on the project.
- E. Existing historic sidewalk, parkway and street widths shall be maintained. Any work that requires alteration of these widths shall be approved by Historic Resources staff.
- F. Existing historic curb heights and appearance shall be maintained. Any work that requires alteration of the existing height or appearance shall be approved by Historic Resources staff.
- G. Sections of sidewalk which may be impacted by the project shall be replaced in-kind to match the historic color, texture and scoring pattern of the original sidewalks. If the original color, scoring pattern or texture is not present at the location of the impact, the historically appropriate color, texture and scoring pattern found throughout the district shall be used.
- H. Truncated domes used at corner curb ramps shall be dark grey in color.
- I. Existing historic lighting, such as acorn lighting shall remain. New lighting shall be consistent with existing lighting fixtures, or fixtures specified in any applicable District Design Guidelines.
- J. Existing mature trees shall remain. New street trees shall be consistent with the prevalent mature species in the District and/or species specified in any applicable District Design Guidelines.
- K. Any walls located within the right-of-way or on private property are considered historic and may not be impacted without prior review and approval by Historic Resources staff.

**APPENDIX B**  
**FIRE HYDRANT METER PROGRAM**

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 1 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

1. **PURPOSE**

- 1.1 To establish a Departmental policy and procedure for issuance, proper usage and charges for fire hydrant meters.

2. **AUTHORITY**

- 2.1 All authorities and references shall be current versions and revisions.
- 2.2 San Diego Municipal Code (NC) Chapter VI, Article 7, Sections 67.14 and 67.15
- 2.3 Code of Federal Regulations, Safe Drinking Water Act of 1986
- 2.4 California Code of Regulations, Titles 17 and 22
- 2.5 California State Penal Code, Section 498B.0
- 2.6 State of California Water Code, Section 110, 500-6, and 520-23
- 2.7 Water Department Director

**Reference**

- 2.8 State of California Guidance Manual for Cross Connection Programs
- 2.9 American Water Works Association Manual M-14, Recommended Practice for Backflow Prevention
- 2.10 American Water Works Association Standards for Water Meters
- 2.11 U.S.C. Foundation for Cross Connection Control and Hydraulic Research Manual

3. **DEFINITIONS**

- 3.1 **Fire Hydrant Meter:** A portable water meter which is connected to a fire hydrant for the purpose of temporary use. (These meters are sometimes referred to as Construction Meters.)

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 2 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

- 3.2 **Temporary Water Use:** Water provided to the customer for no longer than twelve (12) months.
- 3.3 **Backflow Preventor:** A Reduced Pressure Principal Assembly connected to the outlet side of a Fire Hydrant Meter.

4. **POLICY**

- 4.1 The Water Department shall collect a deposit from every customer requiring a fire hydrant meter and appurtenances prior to providing the meter and appurtenances (see Section 7.1 regarding the Fees and Deposit Schedule). The deposit is refundable upon the termination of use and return of equipment and appurtenances in good working condition.
- 4.2 Fire hydrant meters will have a 2 ½" swivel connection between the meter and fire hydrant. The meter shall not be connected to the 4" port on the hydrant. All Fire Hydrant Meters issued shall have a Reduced Pressure Principle Assembly (RP) as part of the installation. Spanner wrenches are the only tool allowed to turn on water at the fire hydrant.
- 4.3 The use of private hydrant meters on City hydrants is prohibited, with exceptions as noted below. All private fire hydrant meters are to be phased out of the City of San Diego. All customers who wish to continue to use their own fire hydrant meters must adhere to the following conditions:
- a. Meters shall meet all City specifications and American Water Works Association (AWWA) standards.
  - b. Customers currently using private fire hydrant meters in the City of San Diego water system will be allowed to continue using the meter under the following conditions:
    1. The customer must submit a current certificate of accuracy and calibration results for private meters and private backflows annually to the City of San Diego, Water Department, Meter Shop.

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2. The meter must be properly identifiable with a clearly labeled serial number on the body of the fire hydrant meter. The serial number shall be plainly stamped on the register lid and the main casing. Serial numbers shall be visible from the top of the meter casing and the numbers shall be stamped on the top of the inlet casing flange.
3. All meters shall be locked to the fire hydrant by the Water Department, Meter Section (see Section 4.7).
4. All meters shall be read by the Water Department, Meter Section (see Section 4.7).
5. All meters shall be relocated by the Water Department, Meter Section (see Section 4.7).
6. These meters shall be tested on the anniversary of the original test date and proof of testing will be submitted to the Water Department, Meter Shop, on a yearly basis. If not tested, the meter will not be allowed for use in the City of San Diego.
7. All private fire hydrant meters shall have backflow devices attached when installed.
8. The customer must maintain and repair their own private meters and private backflows.
9. The customer must provide current test and calibration results to the Water Department, Meter Shop after any repairs.
10. When private meters are damaged beyond repair, these private meters will be replaced by City owned fire hydrant meters.

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11. When a private meter malfunctions, the customer will be notified and the meter will be removed by the City and returned to the customer for repairs. Testing and calibration results shall be given to the City prior to any re-installation.
  12. The register shall be hermetically sealed straight reading and shall be readable from the inlet side. Registration shall be in hundred cubic feet.
  13. The outlet shall have a 2 ½ “National Standards Tested (NST) fire hydrant male coupling.
  14. Private fire hydrant meters shall not be transferable from one contracting company to another (i.e. if a company goes out of business or is bought out by another company).
- 4.4 All fire hydrant meters and appurtenances shall be installed, relocated and removed by the City of San Diego, Water Department. All City owned fire hydrant meters and appurtenances shall be maintained by the City of San Diego, Water Department, Meter Services.
- 4.5 If any fire hydrant meter is used in violation of this Department Instruction, the violation will be reported to the Code Compliance Section for investigation and appropriate action. Any customer using a fire hydrant meter in violation of the requirements set forth above is subject to fines or penalties pursuant to the Municipal Code, Section 67.15 and Section 67.37.
- 4.6 Conditions and Processes for Issuance of a Fire Hydrant Meter**
- Process for Issuance
- a. Fire hydrant meters shall only be used for the following purposes:
    1. Temporary irrigation purposes not to exceed one year.

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2. Construction and maintenance related activities (see Tab 2).
  - b. No customer inside or outside the boundaries of the City of San Diego Water Department shall resell any portion of the water delivered through a fire hydrant by the City of San Diego Water Department.
  - c. The City of San Diego allows for the issuance of a temporary fire hydrant meter for a period not to exceed 12 months (365 days). An extension can only be granted in writing from the Water Department Director for up to 90 additional days. A written request for an extension by the consumer must be submitted at least 30 days prior to the 12 month period ending. No extension shall be granted to any customer with a delinquent account with the Water Department. No further extensions shall be granted.
  - d. Any customer requesting the issuance of a fire hydrant meter shall file an application with the Meter Section. The customer must complete a "Fire Hydrant Meter Application" (Tab 1) which includes the name of the company, the party responsible for payment, Social Security number and/or California ID, requested location of the meter (a detailed map signifying an exact location), local contact person, local phone number, a contractor's license (or a business license), description of specific water use, duration of use at the site and full name and address of the person responsible for payment.
  - e. At the time of the application the customer will pay their fees according to the schedule set forth in the Rate Book of Fees and Charges, located in the City Clerk's Office. All fees must be paid by check, money order or cashiers check, made payable to the City Treasurer. Cash will not be accepted.
  - f. No fire hydrant meters shall be furnished or relocated for any customer with a delinquent account with the Water Department.
  - g. After the fees have been paid and an account has been created, the

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meter shall be installed within 48 hours (by the second business day). For an additional fee, at overtime rates, meters can be installed within 24 hours (within one business day).

#### 4.7 Relocation of Existing Fire Hydrant Meters

- a. The customer shall call the Fire Hydrant Meter Hotline (herein referred to as "Hotline"), a minimum of 24 hours in advance, to request the relocation of a meter. A fee will be charged to the existing account, which must be current before a work order is generated for the meter's relocation.
- b. The customer will supply in writing the address where the meter is to be relocated (map page, cross street, etc). The customer must update the original Fire Hydrant Meter Application with any changes as it applies to the new location.
- c. Fire hydrant meters shall be read on a monthly basis. While fire hydrant meters and backflow devices are in service, commodity, base fee and damage charges, if applicable, will be billed to the customer on a monthly basis. If the account becomes delinquent, the meter will be removed.

#### 4.8 Disconnection of Fire Hydrant Meter

- a. After ten (10) months a "Notice of Discontinuation of Service" (Tab 3) will be issued to the site and the address of record to notify the customer of the date of discontinuance of service. An extension can only be granted in writing from the Water Department Director for up to 90 additional days (as stated in Section 4.6C) and a copy of the extension shall be forwarded to the Meter Shop Supervisor. If an extension has not been approved, the meter will be removed after twelve (12) months of use.
- b. Upon completion of the project the customer will notify the Meter Services office via the Hotline to request the removal of the fire hydrant meter and appurtenances. A work order will be generated



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for removal of the meter.

- c. Meter Section staff will remove the meter and backflow prevention assembly and return it to the Meter Shop. Once returned to the Meter Shop the meter and backflow will be tested for accuracy and functionality.
- d. Meter Section Staff will contact and notify Customer Services of the final read and any charges resulting from damages to the meter and backflow or its appurtenance. These charges will be added on the customer's final bill and will be sent to the address of record. Any customer who has an outstanding balance will not receive additional meters.
- e. Outstanding balances due may be deducted from deposits and any balances refunded to the customer. Any outstanding balances will be turned over to the City Treasurer for collection. Outstanding balances may also be transferred to any other existing accounts.

5. **EXCEPTIONS**

- 5.1 Any request for exceptions to this policy shall be presented, in writing, to the Customer Support Deputy Director, or his/her designee for consideration.

6. **MOBILE METER**

- 6.1 Mobile meters will be allowed on a case by case basis. All mobile meters will be protected by an approved backflow assembly and the minimum requirement will be a Reduced Pressure Principal Assembly. The two types of Mobile Meters are vehicle mounted and floating meters. Each style of meters has separate guidelines that shall be followed for the customer to retain service and are described below:
  - a) **Vehicle Mounted Meters:** Customer applies for and receives a City owned Fire Hydrant Meter from the Meter Shop. The customer mounts the meter on the vehicle and brings it to the Meter Shop for

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inspection. After installation is approved by the Meter Shop the vehicle and meter shall be brought to the Meter Shop on a monthly basis for meter reading and on a quarterly basis for testing of the backflow assembly. Meters mounted at the owner's expense shall have the one year contract expiration waived and shall have meter or backflow changed if either fails.

b) **Floating Meters:** Floating Meters are meters that are not mounted to a vehicle. **(Note: All floating meters shall have an approved backflow assembly attached.)** The customer shall submit an application and a letter explaining the need for a floating meter to the Meter Shop. The Fire Hydrant Meter Administrator, after a thorough review of the needs of the customer, (i.e. number of jobsites per day, City contract work, lack of mounting area on work vehicle, etc.), may issue a floating meter. At the time of issue, it will be necessary for the customer to complete and sign the "Floating Fire Hydrant Meter Agreement" which states the following:

- 1) The meter will be brought to the Meter Shop at 2797 Caminito Chollas, San Diego on the third week of each month for the monthly read by Meter Shop personnel.
- 2) Every other month the meter will be read and the backflow will be tested. This date will be determined by the start date of the agreement.

If any of the conditions stated above are not met the Meter Shop has the right to cancel the contract for floating meter use and close the account associated with the meter. The Meter Shop will also exercise the right to refuse the issuance of another floating meter to the company in question.

Any Fire Hydrant Meter using reclaimed water shall not be allowed use again with any potable water supply. The customer shall incur the cost of replacing the meter and backflow device in this instance.

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7. **FEE AND DEPOSIT SCHEDULES**

7.1 **Fees and Deposit Schedules:** The fees and deposits, as listed in the Rate Book of Fees and Charges, on file with the Office of the City Clerk, are based on actual reimbursement of costs of services performed, equipment and materials. These deposits and fees will be amended, as needed, based on actual costs. Deposits, will be refunded at the end of the use of the fire hydrant meter, upon return of equipment in good working condition and all outstanding balances on account are paid. Deposits can also be used to cover outstanding balances.

All fees for equipment, installation, testing, relocation and other costs related to this program are subject to change without prior notification. The Mayor and Council will be notified of any future changes.

8. **UNAUTHORIZED USE OF WATER FROM A HYDRANT**

8.1 Use of water from any fire hydrant without a properly issued and installed fire hydrant meter is theft of City property. Customers who use water for unauthorized purposes or without a City of San Diego issued meter will be prosecuted.

8.2 If any unauthorized connection, disconnection or relocation of a fire hydrant meter, or other connection device is made by anyone other than authorized Water Department personnel, the person making the connection will be prosecuted for a violation of San Diego Municipal Code, Section 67.15. In the case of a second offense, the customer's fire hydrant meter shall be confiscated and/or the deposit will be forfeited.

8.3 Unauthorized water use shall be billed to the responsible party. Water use charges shall be based on meter readings, or estimates when meter readings are not available.

8.4 In case of unauthorized water use, the customer shall be billed for all applicable charges as if proper authorization for the water use had been obtained, including but not limited to bi-monthly service charges, installation charges and removal charges.

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- 8.5 If damage occurs to Water Department property (i.e. fire hydrant meter, backflow, various appurtenances), the cost of repairs or replacements will be charged to the customer of record (applicant).

**Water Department Director**

- Tabs: 1. Fire Hydrant Meter Application  
2. Construction & Maintenance Related Activities With No Return To Sewer  
3. Notice of Discontinuation of Service

#### APPENDIX

**Administering Division:** Customer Support Division

**Subject Index:** Construction Meters  
Fire Hydrant  
Fire Hydrant Meter Program  
Meters, Floating or Vehicle Mounted  
Mobile Meter  
Program, Fire Hydrant Meter

**Distribution:** DI Manual Holders



# Application for Fire Hydrant Meter (EXHIBIT A)

(For Office Use Only)

NS REQ	FAC#
DATE	BY

METER SHOP (619) 527-7449

## Meter Information

Application Date	Requested Install Date:
------------------	-------------------------

Fire Hydrant Location: (Attach Detailed Map//Thomas Bros. Map Location or Construction drawing.) <u>Zip:</u>	T.B.	G.B. (CITY USE)
Specific Use of Water:		
Any Return to Sewer or Storm Drain, if so, explain:		
Estimated Duration of Meter Use: <input type="text"/>	<input type="checkbox"/>	Check Box if Reclaimed Water

## Company Information

Company Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ( )
*Business license#		*Contractor license#	
A Copy of the Contractor's license OR Business License is required at the time of meter issuance.			
Name and Title of Billing Agent: <small>(PERSON IN ACCOUNTS PAYABLE)</small>			Phone: ( )
Site Contact Name and Title:			Phone: ( )
Responsible Party Name:			Title:
Cal ID#			Phone: ( )
Signature:		Date:	
<small>Guarantees Payment of all Charges Resulting from the use of this Meter. Insures that employees of this Organization understand the proper use of Fire Hydrant Meter</small>			

<b>Fire Hydrant Meter Removal Request</b>	Requested Removal Date:
Provide Current Meter Location if Different from Above:	
Signature:	Title:      Date:
Phone: ( )	Pager: ( )

<input type="checkbox"/> City Meter	<input type="checkbox"/> Private Meter	
Contract Acct #:	Deposit Amount: <b>\$ 936.00</b>	Fees Amount: <b>\$ 62.00</b>
Meter Serial #	Meter Size: <b>05</b>	Meter Make and Style: <b>6-7</b>
Backflow #	Backflow Size:	Backflow Make and Style:
Name:	Signature:	Date:

**WATER USES WITHOUT ANTICIPATED CHARGES FOR RETURN TO SEWER**

Auto Detailing  
Backfilling  
Combination Cleaners (Vactors)  
Compaction  
Concrete Cutters  
Construction Trailers  
Cross Connection Testing  
Dust Control  
Flushing Water Mains  
Hydro Blasting  
Hydro Seeing  
Irrigation (for establishing irrigation only; not continuing irrigation)  
Mixing Concrete  
Mobile Car Washing  
Special Events  
Street Sweeping  
Water Tanks  
Water Trucks  
Window Washing

**Note:**

1. If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charges.

Date

Name of Responsible Party  
Company Name and Address  
Account Number: \_\_\_\_\_

Subject:           Discontinuation of Fire Hydrant Meter Service

Dear Water Department Customer:

The authorization for use of Fire Hydrant Meter # \_\_\_\_\_, located at (*Meter Location Address*) ends in 60 days and will be removed on or after (*Date Authorization Expires*). Extension requests for an additional 90 days must be submitted in writing for consideration 30 days prior to the discontinuation date. If you require an extension, please contact the Water Department, or mail your request for an extension to:

City of San Diego  
Water Department  
Attention: Meter Services  
2797 Caminito Chollas  
San Diego, CA 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant Hotline at (619) \_\_\_\_\_ - \_\_\_\_\_.

Sincerely,

Water Department

## **APPENDIX C**

### **MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE**



## **MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE**

1. Soil amendment
2. Fiber mulch
3. PVC or PE pipe up to 16 inch diameter
4. Stabilizing emulsion
5. Lime
6. Preformed elastomeric joint seal
7. Plain and fabric reinforced elastomeric bearing pads
8. Steel reinforced elastomeric bearing pads
9. Waterstops (Special Condition)
10. Epoxy coated bar reinforcement
11. Plain and reinforcing steel
12. Structural steel
13. Structural timber and lumber
14. Treated timber and lumber
15. Lumber and timber
16. Aluminum pipe and aluminum pipe arch
17. Corrugated steel pipe and corrugated steel pipe arch
18. Structural metal plate pipe arches and pipe arches
19. Perforated steel pipe
20. Aluminum underdrain pipe
21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
22. Metal target plates
23. Paint (traffic striping)
24. Conductors
25. Painting of electrical equipment
26. Electrical components
27. Engineering fabric
28. Portland Cement
29. PCC admixtures
30. Minor concrete, asphalt
31. Asphalt (oil)
32. Liquid asphalt emulsion
33. Epoxy

**APPENDIX D**

**SAMPLE CITY INVOICE WITH CASH FLOW FORECAST**



WBS #:	B18108
Date Submitted:	10/10/2018
NTP Date:	3/23/2018
Final Statement of WD Date:	5/23/2020
Contract #:	K-XX-XXXX-XXX-X
Contract Amount:	\$5,617,000

## Construction Cash Flow Forecast

"Sewer and Water Group Job 965 (W)"

Year	January	February	March	April	May	June	July	August	September	October	November	December
2018				15,000	25,000	52,000	52,000	100,000	10,000	100,000	100,000	100,000
2019	10,000	10,000	85,000	58,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000	1,000,000
2020	100,000	100,000	100,000	1,000,000	1,000,000							
2021												
2022												
2023												
2024												
2025												

SAMPLE REFERENCE

**APPENDIX E**  
**LOCATION MAP**



**APPENDIX F**

**CONTRACTOR'S DAILY QUALITY CONTROL INSPECTION REPORT**

**Appendix F**

City of San Diego  
Asphalt Concrete Overlay

**Contractor's Daily Quality Control Inspection Report**

Project Title: \_\_\_\_\_ Date: \_\_\_\_\_

Locations: 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

Asphalt Mix Specification: Attached Supplier: \_\_\_\_\_

Dig out Locations: 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

Tack Coat Application Rate @ Locations:  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

Asphalt Temperature at Placement @ Locations:  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

Asphalt Depth @Locations:  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

Compaction Test Result @Locations:  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_



Location and nature of defects:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Remedial and Corrective Actions taken or proposed for Engineer's approval:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Date's City Laboratory representative was present:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Verified the following:

1. Proper Storage of Materials & Equipment
2. Proper Operation of Equipment
3. Adherence to Plans and Specs
4. Review of QC Tests
5. Safety Inspection

Initials:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Deviations from QCP \_\_\_\_\_ (see attached)

Quality Control Plan Administrator's Signature:

Date Signed:

\_\_\_\_\_

\_\_\_\_\_

City of San Diego  
Rubber Polymer Modified Slurry  
**Contractor's Daily Quality Control Inspection Report**

Project Title: \_\_\_\_\_ Date: \_\_\_\_\_

Ambient Temperature (Start of Work): \_\_\_\_\_ Time: \_\_\_\_\_

Environmental Considerations: \_\_\_\_\_

Locations (Address Range/Cross Streets):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Approved Mix Design: \_\_\_\_\_

Material Suppliers: \_\_\_\_\_

RPMS Type(s): \_\_\_\_\_

Slurry Machine #'s: \_\_\_\_\_

Estimated Cure Time (Break) of Slurry: \_\_\_\_\_

Pre-Mix (Per 100 Counts)

Gate Setting/Emulsion %: \_\_\_\_\_

Aggregate Weight: \_\_\_\_\_

Cement % (by weight of aggregate): \_\_\_\_\_

Crumb Rubber % (by volume of cement): \_\_\_\_\_

Machine Inspection

Leaks: \_\_\_\_\_

Sprayers: \_\_\_\_\_

Emulsion Filter: \_\_\_\_\_

Carbon Black: \_\_\_\_\_

Spreader Box Inspection

Cleanliness: \_\_\_\_\_

Augers: \_\_\_\_\_

Rubbers: \_\_\_\_\_

Fabric: \_\_\_\_\_

Runners: \_\_\_\_\_

City of San Diego  
Rubber Polymer Modified Slurry  
**Contractor's Daily Quality Control Inspection Report**

Project Conditions

Crack Fill: \_\_\_\_\_

Asphalt Deficiencies: \_\_\_\_\_

Cleanliness: \_\_\_\_\_

Impediments/Other: \_\_\_\_\_

Communication to Client/ Resident Engineer

Crack Fill: \_\_\_\_\_

Asphalt Deficiencies: \_\_\_\_\_

Cleanliness: \_\_\_\_\_

Impediments/Other: \_\_\_\_\_

Test Lab

Tech: \_\_\_\_\_ Time on Site: \_\_\_\_\_

Notes

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

QCP Administrator Signature:

Date Signed:

\_\_\_\_\_

\_\_\_\_\_

**APPENDIX G**

**MONTHLY DRINKING WATER DISCHARGE MONITORING FORM**

# DRINKING WATER DISCHARGE MONITORING FORM

(Use for All Discharges to the Storm Drain)

All discharge activities related to this project comply with the State Water Resources Control Board ORDER WQ 2014-0194-DWQ, STATEWIDE GENERAL NPDES PERMIT FOR DRINKING WATER SYSTEMS DISCHARGES as referenced by ([http://www.waterboards.ca.gov/water\\_issues/programs/npdes/docs/drinkingwater/final\\_statewide\\_wqo2014\\_0194\\_dwq.pdf](http://www.waterboards.ca.gov/water_issues/programs/npdes/docs/drinkingwater/final_statewide_wqo2014_0194_dwq.pdf)), and as follows:

<b>Project Name:</b>		<b>WBS No.:</b>		<b>Watershed No.</b>	
<b>Qualified Person Conducting Tests:</b>		<b>signature</b>			

BMPs MUST BE IN PLACE PRIOR TO ANY SCHEDULED DISCHARGE

By signing, I certify that all of the statements and conditions for drinking water discharge events are correct.

Event #1												
Discharge Location <sup>1</sup>	Category <sup>2</sup> (Select one)	Notification <sup>3</sup> (Select all that apply)	BMPs in Place <sup>4</sup> (Select all that apply)	Volume <sup>5</sup> (gal)	Sampling <sup>6</sup> (take samples at 10 mins, 50-60 mins & last 10 mins)				Exceedence <sup>7</sup>			Notes Report exceedence to RE & complete page 2 of 2
					Measure	Unit	Time	Result	Limit	No	Yes	
<b>Inlet Location</b>  <b>Start</b>  <b>End</b>	<b>Superchlorinated</b> <small>(Chlorine added for disinfection)</small>	<b>TSW</b> <small>(All Categories)</small>	<b>Sweep flow path</b> <small>(gutter, street, etc.)</small>	<b>Total</b>	<b>Chlorine</b>	mg/L			0.1 mg/L= Exceedence			
	<b>Large Volume</b> <small>(≥ 325,850 gal)</small>	<b>PUD</b> <small>(All Categories)</small>	<b>Dechlorination</b> <small>(diffusers, chemicals, etc.)</small>	<b>Reused</b> <small>(if any)</small>								
	<b>Well Dev/Rehab</b> <small>(Not Typical)</small>	<b>Water Board</b> <small>(Large Volume Only)</small>	<b>Inlet Protection</b>		<b>Turbidity</b>	NTU			20 NTU= Exceedence 225 NTU= Exceedence for Ocean			
	<b>Small Volume/Other</b> <small>(No Sampling Required)</small>	<b>County</b> <small>(≥100,000 gal &amp; within ¼ mile of ocean/bay; or if enters the County's MS4)</small>	<b>Erosion Controls</b>									
<b>End</b>			<b>Sediment Controls</b>		<b>pH</b>	Unit			Range 6.5 to 8.5			

Event #2												
Discharge Location <sup>1</sup>	Category <sup>2</sup> (Select one)	Notification <sup>3</sup> (Select all that apply)	BMPs in Place <sup>4</sup> (Select all that apply)	Volume <sup>5</sup> (gal)	Sampling <sup>6</sup> (take samples at 10 mins, 50-60 mins & last 10 mins)				Exceedence <sup>7</sup>			Notes Report exceedence to RE & complete page 2 of 2
					Measure	Unit	Time	Result	Limit	No	Yes	
<b>Inlet Location</b>  <b>Start</b>  <b>End</b>	<b>Superchlorinated</b> <small>(Chlorine added for disinfection)</small>	<b>TSW</b> <small>(All Categories)</small>	<b>Sweep flow path</b> <small>(gutter, street, etc.)</small>	<b>Total</b>	<b>Chlorine</b>	mg/L			0.1 mg/L= Exceedence			
	<b>Large Volume</b> <small>(≥ 325,850 gal)</small>	<b>PUD</b> <small>(All Categories)</small>	<b>Dechlorination</b> <small>(diffusers, chemicals, etc.)</small>	<b>Reused</b> <small>(if any)</small>								
	<b>Well Dev/Rehab</b> <small>(Not Typical)</small>	<b>Water Board</b> <small>(Large Volume Only)</small>	<b>Inlet Protection</b>		<b>Turbidity</b>	NTU			20 NTU= Exceedence 225 NTU= Exceedence for Ocean			
	<b>Small Volume/Other</b> <small>(No Sampling Required)</small>	<b>County</b> <small>(≥100,000 gal &amp; within ¼ mile of ocean/bay; or if enters the County's MS4)</small>	<b>Erosion Controls</b>									
<b>End</b>			<b>Sediment Controls</b>		<b>pH</b>	Unit			Range 6.5 to 8.5			

Instructional Notes found on the Page 2 of 2

Submit completed Form to RE

## Receiving Water Monitoring

(Complete only if limits exceed on Page 1 of 2)

<b>Event #1</b>	
1) Go to the location where the discharge enters the receiving water.	
<input type="checkbox"/> Accessible <input type="checkbox"/> Unable to Determine <input type="checkbox"/> No Safe Access	
2) If accessible, take photos and complete the visual monitoring below. If unable to determine, stop here. If no safe access, stop here.	
3) Visual Monitoring: Is the discharge into the receiving water...	
...causing erosion	<input type="checkbox"/> Yes <input type="checkbox"/> No
...carrying floating or suspended matter	<input type="checkbox"/> Yes <input type="checkbox"/> No
...causing discoloration	<input type="checkbox"/> Yes <input type="checkbox"/> No
...causing and impact to the aquatic life present	<input type="checkbox"/> Yes <input type="checkbox"/> No
...observed with visible film	<input type="checkbox"/> Yes <input type="checkbox"/> No
...observed with an sheen or coating	<input type="checkbox"/> Yes <input type="checkbox"/> No
...causing potential nuisance conditions	<input type="checkbox"/> Yes <input type="checkbox"/> No
3) If all answers are NO, stop here.	
<b>4) If any answers are YES, Notify the RE immediately for further action</b>	

<b>Event #2</b>	
1) Go to the location where the discharge enters the receiving water.	
<input type="checkbox"/> Accessible <input type="checkbox"/> Unable to Determine <input type="checkbox"/> No Safe Access	
2) If accessible, take photos and complete the visual monitoring below. If unable to determine, stop here. If no safe access, stop here.	
3) Visual Monitoring: Is the discharge into the receiving water...	
...causing erosion	<input type="checkbox"/> Yes <input type="checkbox"/> No
...carrying floating or suspended matter	<input type="checkbox"/> Yes <input type="checkbox"/> No
...causing discoloration	<input type="checkbox"/> Yes <input type="checkbox"/> No
...causing and impact to the aquatic life present	<input type="checkbox"/> Yes <input type="checkbox"/> No
...observed with visible film	<input type="checkbox"/> Yes <input type="checkbox"/> No
...observed with an sheen or coating	<input type="checkbox"/> Yes <input type="checkbox"/> No
...causing potential nuisance conditions	<input type="checkbox"/> Yes <input type="checkbox"/> No
3) If all answers are NO, stop here.	
<b>4) If any answers are YES, Notify the RE immediately for further action</b>	

## Instructional Notes

- 1) Log the location of the inlet or discharge point. For example: Albatross St & 5th Av. Log the start date and time and the end date and time of the discharge.
- 2) Log the discharge category. "Superchlorinated" are discharges where additional chlorine is added in order to adequately disinfect and sanitize drinking water system facilities. This does NOT include potable water containing residual chlorine from the water treatment process. "Large Volume" discharges are greater than 325,850 gallons of total volume for one event. "Well Dev/Rehab" are discharges of potable ground water from a well. This is not typical. If none of these categories apply, then select "Small Volume/Other."
- 3) Notifications of the location, date, time, category, and estimated volume of discharge must be made to the contacts and per the requirements below:

Contact	When to Notify	Email
TSW	3 days prior to all discharges	<a href="mailto:SWPPP@SanDiego.gov">SWPPP@SanDiego.gov</a>
PUD	3 days prior to all discharges	<a href="mailto:CompReports@SanDiego.gov">CompReports@SanDiego.gov</a> <a href="mailto:Rdavenport@SanDiego.gov">Rdavenport@SanDiego.gov</a>
San Diego Water Board	3 days prior to Large Volume discharges	<a href="mailto:SanDiego@WaterBoards.ca.gov">SanDiego@WaterBoards.ca.gov</a> <a href="mailto:Ben.Neill@WaterBoards.ca.gov">Ben.Neill@WaterBoards.ca.gov</a>
County of San Diego	3 days prior if 100,000 gal and within 1/4 mile of ocean/bay	DEH: <a href="mailto:Joseph.Palmer@SDCounty.ca.gov">Joseph.Palmer@SDCounty.ca.gov</a> <a href="mailto:Dominique.Edwards@SDCounty.ca.gov">Dominique.Edwards@SDCounty.ca.gov</a>
	3 days prior if enter county MS4 or unincorporated County	WPP: <a href="mailto:Nicholas.DeValle@SDCounty.ca.gov">Nicholas.DeValle@SDCounty.ca.gov</a> <a href="mailto:LUEG.Watersheds@sdcounty.ca.gov">LUEG.Watersheds@sdcounty.ca.gov</a>

- 4) At a minimum, sweep gutters prior to starting discharge and use dechlorination BMPs. The contractor and RE must monitor and determine if BMPs need to be removed or modified. For example if inlet protection is causing flooding at a storm drain inlet, contractor may elect to remove BMPs. Document any modification to BMPs in the notes
- 5) Total volume must be logged for all discharges. If discharge water is reused for other purposes such as watering a golf course, log that volume under "Reused"
- 6) Sampling is required for categories per the following table:

Category	Measure	Sample Frequency
Superchlorinated	Chlorine, Turbidity, pH	first 10 min, 50-60 min, last 10 min
Large Volume	Chlorine Turbidity	first 10 min, 50-60 min, last 10 min
Well Dev/Rehab	Chlorine Turbidity	first 10 min, 50-60 min, last 10 min
Small Volume/Other	None required	N/A

- 7) Effluent limitations must be monitored not to exceed per the following table:

Measure	Method	Limit
Chlorine	Field Measure	0.10 mg/L-Cl
Turbidity	Visual Estimate	20 NTU for inland waters
		225 NTU for ocean 100 NTU for wells
pH	Field Measure	6.5 - 8.5

## **APPENDIX H**

### **PERMITS**

Refer to the following link for the following permits

<https://drive.google.com/drive/folders/1VYnKJdYQgkcxT-ojInI-VPuckAD80zD?usp=sharing>

1. Caltrans Encroachment Permit
2. Port of San Diego Permit
3. MTS Right of Way Permit

**APPENDIX I**  
**HAZARDOUS WASTE LABEL/FORMS**



# HAZARDOUS WASTE

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL  
IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY  
AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY  
OR THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES

GENERATOR NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_ 24 HR. PHONE ( ) \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
EPA ID NO. \_\_\_\_\_ MANIFEST DOCUMENT NO. \_\_\_\_\_  
EPA WASTE NO. \_\_\_\_\_ CA WASTE NO. \_\_\_\_\_ ACCUMULATION START DATE \_\_\_\_\_ / /

CONTENTS, COMPOSITION \_\_\_\_\_  
PROPER DOT SHIPPING NAME \_\_\_\_\_  
TECHNICAL NAME (S) \_\_\_\_\_  
UNNA NO. WITH PREFIX \_\_\_\_\_

PHYSICAL STATE | HAZARDOUS PROPERTIES     FLAMMABLE     TOXIC  
 SOLID    LIQUID    CORROSIVE     REACTIVE     OTHER \_\_\_\_\_

**HANDLE WITH CARE!**  
CONTAINS HAZARDOUS OR TOXIC WASTES

# INCIDENT/RELEASE ASSESSMENT FORM <sup>1</sup>

## If you have an emergency, Call 911

*Handlers of hazardous materials are required to report releases. The following is a tool to be used for assessing if a release is reportable. Additionally, a non-reportable release incident form is provided to document why a release is not reported (see back).*

### Questions for Incident Assessment:

	YES	NO
1. Was anyone killed or injured, or did they require medical care or admitted to a hospital for observation?	<input type="checkbox"/>	<input type="checkbox"/>
2. Did anyone, other than employees in the immediate area of the release, evacuate?	<input type="checkbox"/>	<input type="checkbox"/>
3. Did the release cause off-site damage to public or private property?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the release greater than or equal to a reportable quantity (RQ)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Was there an uncontrolled or unpermitted release to the air?	<input type="checkbox"/>	<input type="checkbox"/>
6. Did an uncontrolled or unpermitted release escape secondary containment, or extend into any sewers, storm water conveyance systems, utility vaults and conduits, wetlands, waterways, public roads, or off site?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will control, containment, decontamination, and/or clean up require the assistance of federal, state, county, or municipal response elements?	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the release or threatened release involving an unknown material or contains an unknown hazardous constituent?	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the incident a threatened release (a condition creating a substantial probability of harm that requires immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment)?	<input type="checkbox"/>	<input type="checkbox"/>
10. Is there an increased potential for secondary effects including fire, explosion, line rupture, equipment failure, or other outcomes that may endanger or cause exposure to employees, the general public, or the environment?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer is YES to any of the above questions – report the release to the California Office of Emergency Services at 800-852-7550 and the local CUPA daytime: (619) 338-2284, after hours: (858) 565-5255. Note: other state and federal agencies may require notification depending on the circumstances.

\*Call 911 in an emergency\*

If all answers are NO, complete a Non Reportable Release Incident Form (page 2 of 2) and keep readily available. Documenting why a “no” response was made to each question will serve useful in the event questions are asked in the future, and to justify not reporting to an outside regulatory agency.

If in doubt, report the release.

---

<sup>1</sup> This document is a guide for accessing when hazardous materials release reporting is required by Chapter 6.95 of the California Health and Safety Code. It does not replace good judgment, Chapter 6.95, or other state or federal release reporting requirements.

# NON REPORTABLE RELEASE INCIDENT FORM

## 1. RELEASE AND RESPONSE DESCRIPTION

Incident # \_\_\_\_\_

Date/Time Discovered	Date/Time Discharge	Discharge Stopped <input type="checkbox"/> Yes <input type="checkbox"/> No
Incident Date / Time:		
Incident Business / Site Name:		
Incident Address:		
Other Locators (Bldg, Room, Oil Field, Lease, Well #, GIS)		
Please describe the incident and indicate specific causes and area affected. Photos Attached?: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Indicate actions to be taken to prevent similar releases from occurring in the future.		

## 2. ADMINISTRATIVE INFORMATION

Supervisor in charge at time of incident:	Phone:
Contact Person:	Phone:

## 3. CHEMICAL INFORMATION

Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT <sup>3</sup>
Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT <sup>3</sup>
Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT <sup>3</sup>
Clean-Up Procedures & Timeline:	
Completed By:	Phone:
Print Name:	Title:

## EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A	BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER ( ) -					
B	INCIDENT DATE	MO	DAY	YR	TIME OES NOTIFIED	(use 24 hr time)	OES CONTROL NO.
C	INCIDENT ADDRESS LOCATION			CITY / COMMUNITY	COUNTY	ZIP	
D	CHEMICAL OR TRADE NAME (print or type)				CAS Number		
D	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>				CHECK IF RELEASE REQUIRES NOTIFICATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>		
D	PHYSICAL STATE CONTAINED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS		PHYSICAL STATE RELEASED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS		QUANTITY RELEASED		
D	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER			TIME OF RELEASE	DURATION OF RELEASE — DAYS — HOURS — MINUTES		
E	ACTIONS TAKEN						
F	KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information)						
<input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____							
<input type="checkbox"/> CHRONIC OR DELAYED (explain) _____							
<input type="checkbox"/> NOTKNOWN (explain) _____							
G	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS						
H	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)						
I	CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete. REPORTING FACILITY REPRESENTATIVE (print or type) _____ SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____ DATE: _____						

## **EMERGENCY RELEASE FOLLOW-UP NOTICE REPORTING FORM INSTRUCTIONS**

### **GENERAL INFORMATION:**

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 30 days, following a release. The written follow-up report is required in addition to the verbal notification.

### **BASIC INSTRUCTIONS:**

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

### **SPECIFIC INSTRUCTIONS:**

**Block A:** Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

**Block B:** Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

**Block C:** Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

**Block D:** Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

**Block E:** Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

**Block F:** Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information if necessary to meet requirements specified in 42 U.S.C. § 11004(c).

**Block G:** Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was made available to individuals exposed and to medical personnel, if appropriate for the incident, as specified in 42 U.S.C. § 11004(c).

**Block H:** List any additional pertinent information.

**Block I:** Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

### **MAIL THE COMPLETED REPORT TO:**

**State Emergency Response Commission (SERC)  
Attn: Section 304 Reports  
Hazardous Materials Unit  
3650 Schriever Avenue  
Mather, CA 95655**

NOTE: Authority cited: Sections 25503, 25503.1 and 25507.1, Health and Safety Code. Reference: Sections 25503(b)(4), 25503.1, 25507.1, 25518 and 25520, Health and Safety Code.

**APPENDIX J**

**SAMPLE ARCHAEOLOGY INVOICE**

**(FOR ARCHAEOLOGY ONLY)**

**Company Name**

**Address, telephone, fax**

**Date:** Insert Date

**To:** Name of Resident Engineer  
City of San Diego  
Construction Management and  
Field Services Division  
9573 Chesapeake Drive  
San Diego, CA 92123-1304

**Project Name:** Insert Project Name

**SAP Number (WBS/IO/CC):** Insert SAP Number

**Drawing Number:** Insert Drawing Number

**Invoice period:** Insert Date to Insert Date

**Work Completed:** Bid item Number – Description of Bid Item – Quantity – Unit Price– Amount

**Detailed summary of work completed under this bid item:** Insert detailed description of Work related to Archaeology Monitoring Bid item. See Note 1 below.

Summary of charges:

Description of Services	Name	Start Date	End Date	Total Hours	Hourly Rate	Amount
Field Archaeologist	Joe Smith	8/29/2011	9/2/2011	40	\$84	\$3,360
Laboratory Assistant	Jane Doe	8/29/2011	9/2/2011	2	\$30	\$60
Subtotal						\$3,420

**Work Completed:** Bid item Number – Description of Bid Item – Quantity – Unit Price– Amount

**Detailed summary of work completed under this bid item:** Insert detailed description of Work related to Archaeology Curation/Discovery Bid item. See Note 2 below.

Summary of charges:

Description of Services	Where work occurred (onsite vs offsite/lab)	Name	Start Date	End Date	Total Hours	Hourly Rate	Amount
Field Archaeologist		Joe Smith	8/29/2011	9/2/2011	40	\$84	\$3,360
Laboratory Assistant		Jane Doe	8/29/2011	9/2/2011	2	\$30	\$60
Subtotal							\$3,420

**Total this invoice:** \$ \_\_\_\_\_

**Total invoiced to date:** \$ \_\_\_\_\_

Note 1:

For monitoring related bid items or work please include summary of construction work that was monitored from Station to Station, Native American monitors present, MMC coordination, status and nature of monitoring and if any discoveries were made.

Note 2:

For curation/discovery related bid items or work completed as part of a discovery and curation process, the PI must provide a response to the following questions along with the invoice:

1. Preliminary results of testing including tentative recommendations regarding eligibility for listing in the California Register of Historical Resources (California Register).
  - a. Please briefly describe your application (consideration) of all four California Register criteria.
  - b. If the resource is eligible under Criterion D, please define the important information that may be present.
  - c. Were specialized studies performed? How many personnel were required? How many Native American monitors were present?
  - d. What is the age of the resource?
  - e. Please define types of artifacts to be collected and curated, including quantity of boxes to be submitted to the San Diego Archaeological Center (SDAC). How many personnel were required? How many Native American monitors were present?
2. Preliminary results of data recovery and a definition of the size of the representative sample.
  - a. Were specialized studies performed? Please define types of artifacts to be collected and curated, including quantity of boxes to be submitted to the SDAC. How many personnel were required? How many Native American monitors were present?
3. What resources were discovered during monitoring?
4. What is the landform context and what is the integrity of the resources?
5. What additional studies are necessary?
6. Based on application of the California Register criteria, what is the significance of the resources?
  - a. If the resource is eligible for the California Register, can the resource be avoided by construction?
  - b. If not, what treatment (mitigation) measures are proposed? Please define data to be recovered (if necessary) and what material will be submitted to the SDAC for curation. Are any specialized studies proposed?

(After the first invoice, not all the above information needs to be re-stated, just revise as applicable).



**APPENDIX K**

**ADVANCED METERING INFRASTRUCTURE (AMI) DEVICE PROTECTION**

## Protecting AMI Devices in Meter Boxes and on Street Lights

The Public Utilities Department (PUD) has begun the installation of the Advanced Metering Infrastructure (AMI) technology as a new tool to enhance water meter reading accuracy and efficiency, customer service and billing, and to be used by individual accounts to better manage the efficient use of water. **All AMI devices shall be protected per Section 402-2, "Protection", of the 2021 Whitebook.**

AMI technology allows water meters to be read electronically rather than through direct visual inspection by PUD field staff. This will assist PUD staff and customers in managing unusual consumption patterns which could indicate leaks or meter tampering on a customer's property.

Three of the main components of an AMI system are the:

- A. Endpoints, see Photo 1:

**Photo 1**



B. AMI Antenna attached to Endpoint (antenna not always required), see Photo 2:



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Network Devices, see Photo 3:

**Photo 3**



AMI endpoints transmit meter information to the AMI system and will soon be on the vast majority of meters in San Diego. These AMI devices provide interval consumption data to the PUD's Customer Support Division. If these devices are damaged or communication is interrupted, this Division will be alerted of the situation. The endpoints are installed in water meter boxes, coffins, and vaults adjacent to the meter. A separate flat round antenna may also be installed through the meter box lid. This antenna is connected to the endpoint via cable. The following proper installation shall be implemented when removing the lid to avoid damaging the antenna, cable, and/or endpoint. Photo 4 below demonstrates a diagram of the connection:

**Photo 4**



The AMI device ERT/Endpoint/Transmitter shall be positioned and installed as discussed in this Appendix. If the ERT/Endpoint/Transmitter is disturbed, it shall be re-installed and returned to its original installation with the end points pointed upwards as shown below in Photo 5.

**The PUD's code compliance staff will issue citations and invoices to you for any damaged AMI devices that are not re-installed as discussed in the Contract Document**

Photo 5 below shows a typical installation of an AMI endpoint on a water meter.

**Photo 5**

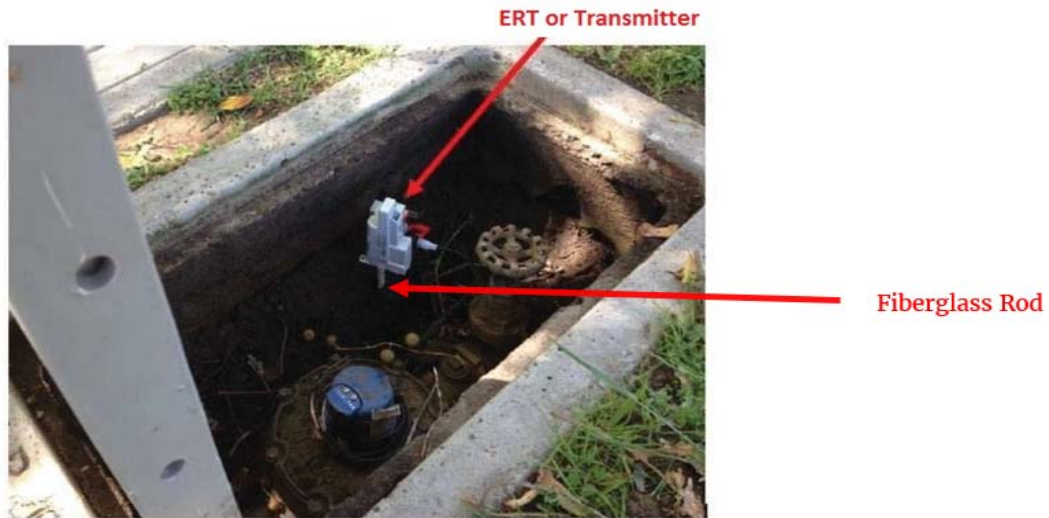


Photo 6 below is an example of disturbance that shall be avoided:

**Photo 6**



**You are responsible when working in and around meter boxes.** If you encounter these endpoints, use proper care and do not disconnect them from the registers on top of the water meter. If the lid has an antenna drilled through, do not change or tamper with the lid and inform the Resident Engineer immediately about the location of that lid. Refer to Photo 7 below:

**Photo 7**



Another component of the AMI system are the Network Devices. The Network Devices are strategically placed units (mainly on street light poles) that collect interval meter reading data from multiple meters for transmission to the Department Control Computer. **If you come across any of these devices on street lights that will be removed or replaced (refer to Photos 8 and 9 below), notify AMI Project Manager Arwa Sayed at (619) 362-0121 immediately.**

Photo 8 shows an installed network device on a street light. On the back of each Network Device is a sticker with contact information. See Photo 9. **Call PUD Water Emergency Repairs at 619-515-3525 if your work will impact these street lights.** These are assets that belong to the City of San Diego and you shall be responsible for any costs of disruption of this network.

**Photo 8**



**Network Device**

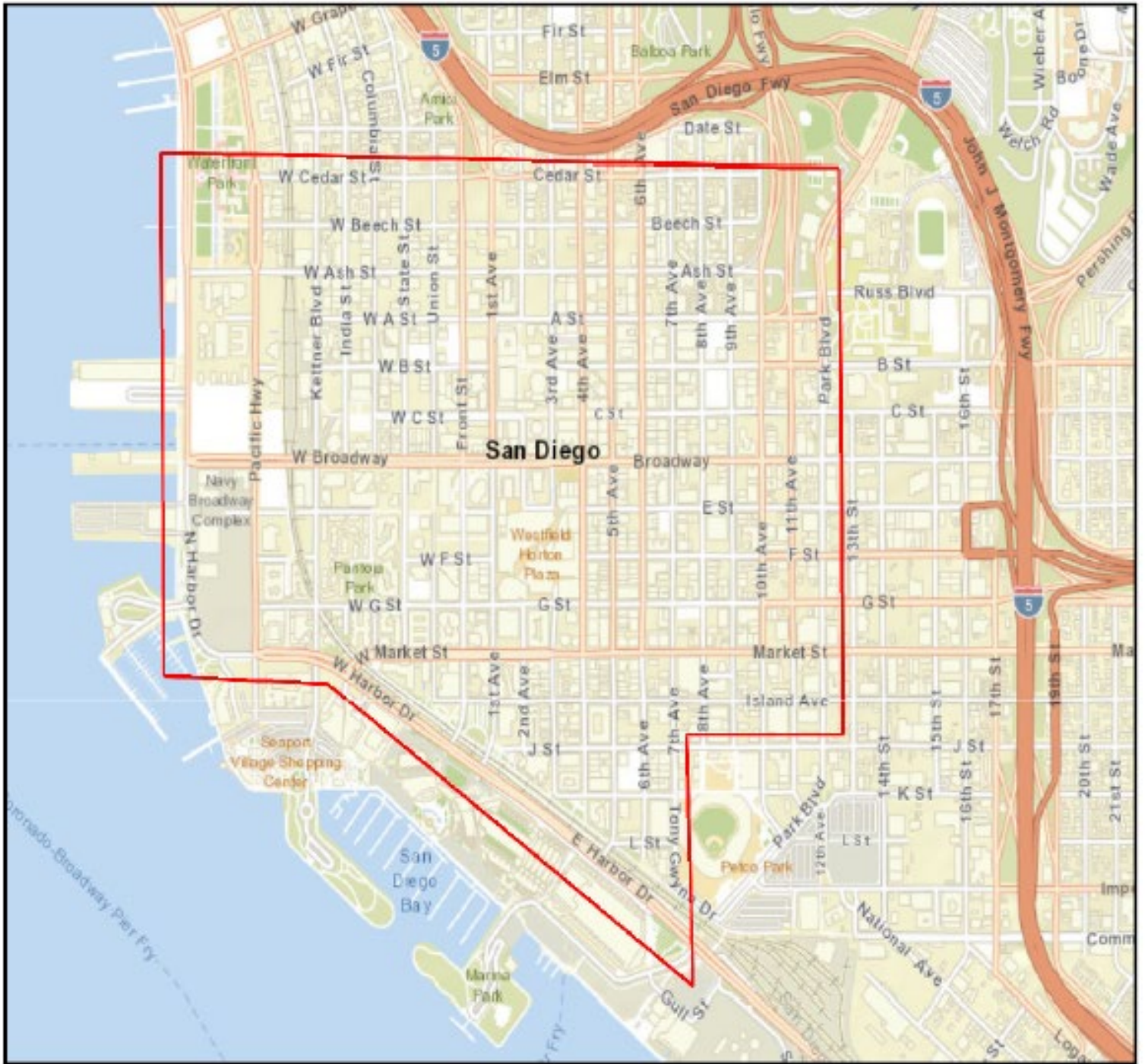
**Photo 9**



**If you encounter any bad installations, disconnected/broken/buried endpoints, or inadvertently damage any AMI devices or cables, notify the Resident Engineer immediately. The Resident Engineer will then immediately contact the AMI Project Manager, Arwa Sayed, at (619) 362-0121.**

**APPENDIX L**  
**HOLIDAY MORATORIUM**





— LIMITS OF DOWNTOWN HOLIDAY  
CONSTRUCTION RESTRICTION

**ATTACHMENT F**

**RESERVED**

**ATTACHMENT G**  
**CONTRACT AGREEMENT**

**ATTACHMENT G**  
**CONTRACT AGREEMENT**

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**CONSTRUCTION CONTRACT**

This Phase-Funded contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and **S.C. Valley Engineering, Inc**, herein called "Contractor" for construction of **Water Group Job 952**; Bid No. **K-22-2065-DBB-3**; in the total amount **Thirteen Million One Hundred Sixty Three Thousand Six Hundred Ninety Six Dollars and Ten Cents (\$13,163,696.10)**, which is comprised of the Base Bid plus Additive Alternates A, B, C, D, E and F, consisting of an amount not to exceed **\$8,000,000.00** for **Phase 1** and **\$5,163,696.10** for **Phase 2**.

IN CONSIDERATION of the payments to be made hereunder and the mutual undertakings of the parties hereto, City and Contractor agree as follows:

1. The following are incorporated into this contract as though fully set forth herein:
  - (a) The attached Faithful Performance and Payment Bonds.
  - (b) The attached Proposal included in the Bid documents by the Contractor.
  - (c) Reference Standards listed in the Instruction to Bidders and the Supplementary Special Provisions (SSP).
  - (d) Phased Funding Schedule Agreement.
  - (e) That certain documents entitled **Water Group Job 952**, on file in the office of the Purchasing & Contracting Department as Document No. **K-22-2065-DBB-3**, as well as all matters referenced therein.
2. The City wishes to construct this Project on a Phase-Funded basis. In accordance with Whitebook section 7-3.10, the City is only obligated to pay for Phase I; Contractor cannot begin, nor is the City financially liable for any additional Phases, unless and until Contractor is issued a Notice to Proceed for each additional Phase by the City.
3. The Contractor shall perform and be bound by all the terms and conditions of this contract and in strict conformity therewith shall perform and complete in a good and workmanlike manner **Water Group Job 952**, Bid Number **K-22-2065-DBB-3**, San Diego, California.
4. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and the Contractor shall accept such payment in full satisfaction of all claim's incident to such performances. (See WHITEBOOK, Section 7-3.10, Phased Funding Compensation).

**CONTRACT AGREEMENT (continued)**


- 5. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- 6. This contract is effective as of the date that the Mayor or designee signs the agreement and is approved by the City Attorney in accordance with San Diego Charter Section 40.

**IN WITNESS WHEREOF**, this Agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to Municipal Code §22.3102 authorizing such execution.

**THE CITY OF SAN DIEGO**

**APPROVED AS TO FORM**

By 

Mara W. Elliott, City Attorney  
By 

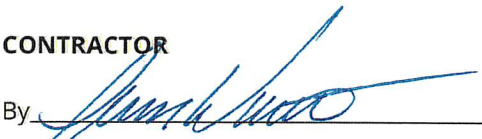
Print Name: Claudia C. Abarca  
Director  
Purchasing & Contracting Department

Print Name: ~~9/28/22~~ Ray Palmucci  
Deputy City Attorney

Date: September 28, 2022

Date: 9/28/22

**CONTRACTOR**

By 

Print Name: SAM WATHEN

Title: President

Date: 8/4/22

City of San Diego License No.: B2001006583

State Contractor's License No.: 624559-A

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000020727

## **CERTIFICATIONS AND FORMS**

The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms, and affidavits submitted as part of this bid are true and correct.

## **BIDDER'S GENERAL INFORMATION**

To the City of San Diego:

Pursuant to "Notice Inviting Bids", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that 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, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that 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, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

The undersigned bidder(s) further warrants that bidder(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Bidding Documents therefore, and that by submitting said Bidding Documents as its bid proposal, bidder(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Bidding Documents.

Caltrans funded contracts or Tasks, the Project shall be constructed in accordance with the Caltrans Special Provisions (including the payment of not less than the minimum wages set forth therein) and the Contract annexed hereto and in accordance with the Caltrans Standard Specifications dated May 2006, Standard Plans dated May 2006, Traffic Signal Control Equipment Specifications dated January, 1989, Labor Surcharge and Equipment Rental Rates in effect on the date the Work is accomplished, and General Prevailing Wage Rates of the State of California, Department of Transportation.

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23  
UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106**

State of California

County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that 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, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that 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, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.



## CONTRACTOR CERTIFICATION

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### COVID-19 VACCINATION ORDINANCE

#### CERTIFICATION OF COMPLIANCE

I hereby certify that I am familiar with the requirements of San Diego Ordinance No. O-21398 implementing the City's Mandatory COVID-19 Vaccination Policy.

#### TERMS OF COMPLIANCE

The City's Mandatory COVID-19 Vaccination Policy, outlined in San Diego Ordinance O-21398 (Nov. 29, 2021), requires ALL City contractors, who interact in close contact with City employees while providing contracted services indoors in City facilities or while performing bargaining unit work while indoors, to be fully vaccinated against COVID-19, effective January 3, 2022, as a condition for provision or continued provision of contracted services.

1. "City contractor" means a person who has contracted with the City of San Diego to provide public works, goods, services, franchise, or consultant services for or on behalf of the City, and includes a subcontractor, vendor, franchisee, consultant, or any of their respective officers, directors, shareholders, partners, managers, employees, or other individuals associated with the contractor, subcontractor, consultant, or vendor. "Person" means any natural person, firm, joint venture, joint stock company, partnership, association, club, company, corporation business trust or organization.
2. "Fully vaccinated" means a person has received, at least 14 days prior, either the second dose in a two-dose COVID-19 vaccine series or a single-dose COVID-19 vaccine, or otherwise meets the criteria for full vaccination against COVID-19 as stated in applicable public health guidance, orders, or law. Acceptable COVID-19 vaccines must be approved by the U.S. Food and Drug Administration (FDA) or authorized for emergency use by the FDA or the World Health Organization.
3. "Close contact" means a City contractor is **within 6 feet** of a City employee for a **cumulative total of 15 minutes or more over a 24-hour period** (for example, three individual 5-minute exposures for a total of 15 minutes).
4. City contractors who interact in close contact with City employees must fully comply with the City's Mandatory COVID-19 Vaccination Policy, which may include a reporting program that tracks employee vaccination status.
5. City contractors with employees or subcontractors who interact in close contact with City employees must certify that those members of their workforce, and subcontractors regardless of tier, who work indoors at a City facility, are fully vaccinated and that the City contractor has a program to track employee compliance.
6. City contractors that have an Occupational Safety and Health Administration compliant testing program for members of their workforce, as a reasonable accommodation, may be considered for compliance.

Non-compliance with the City's Mandatory COVID-19 Vaccination Policy may result in termination of a contract for cause, pursuant to the City's General Terms and Provisions, Reference Standards, and the San Diego Municipal Code.

## **CONTRACTOR CERTIFICATION**

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### **DRUG-FREE WORKPLACE**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 5-1.3, "Drug-Free Workplace", of the project specifications, and that;

This company has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

## **CONTRACTOR CERTIFICATION**

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### **AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the Americans With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 5-1.2, "California Building Code, California Code of Regulations Title 24 and Americans with Disabilities Act". of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

## **CONTRACTOR CERTIFICATION**

---

### **CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE**

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 5-1.4, ("Contractor Standards and Pledge of Compliance"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

**CONTRACTOR CERTIFICATION**

---

**EQUAL BENEFITS ORDINANCE CERTIFICATION**

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

## **CONTRACTOR CERTIFICATION**

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### **EQUAL PAY ORDINANCE CERTIFICATION**

Contractor shall comply with the Equal Pay Ordinance (EPO) codified in the San Diego Municipal Code (SDMC) at section 22.4801 through 22.4809, unless compliance is not required based on an exception listed in SDMC section 22.4804.

Contractor shall require all of its subcontractors to certify compliance with the EPO in their written subcontracts.

Contractor must post a notice informing its employees of their rights under the EPO in the workplace or job site.

By signing this Contract with the City of San Diego, Contractor acknowledges the EPO requirements and pledges ongoing compliance with the requirements of SDMC Division 48, section 22.4801 et seq., throughout the duration of this Contract.

## **CONTRACTOR CERTIFICATION**

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### **PRODUCT ENDORSEMENT**

I declare under penalty of perjury that I acknowledge and agree to comply with the provisions of City of San Diego Administrative Regulation 95.65, concerning product endorsement. Any advertisement identifying or referring to the City as the user of a product or service requires the prior written approval of the City.

**AFFIDAVIT OF DISPOSAL**

(To be submitted upon completion of Construction pursuant to the contracts Certificate of Completion)

**WHEREAS**, on the \_\_\_\_\_ DAY OF \_\_\_\_\_, 2\_\_\_\_ the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

**Water Group Job 952**

(Project Title)

as particularly described in said contract and identified as Bid No. **K-22-2065-DBB**; SAP No. WBS **B-11048.0**, and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

**NOW, THEREFORE**, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

and that they have been disposed of according to all applicable laws and regulations.

Dated this \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_.

By: \_\_\_\_\_  
Contractor

**ATTEST:**

State of \_\_\_\_\_ County of \_\_\_\_\_

On this \_\_\_\_\_ DAY OF \_\_\_\_\_, 2\_\_\_\_, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared \_\_\_\_\_ known to me to be the \_\_\_\_\_ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State



**BID BOND**

**See Instructions to Bidders, Bidder Guarantee of Good Faith  
(Bid Security)**

KNOW ALL MEN BY THESE PRESENTS,

That \_\_\_\_\_ as Principal,  
and \_\_\_\_\_ as Surety, are held  
and firmly bound unto The City of San Diego hereinafter called "OWNER," in the sum  
of **10% OF THE TOTAL BID AMOUNT** 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 bidding schedule(s) of the 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" 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 a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

\_\_\_\_\_  
(Principal) (SEAL)

\_\_\_\_\_  
(Surety) (SEAL)

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

**LIST OF SUBCONTRACTORS**

**\*\*\* PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY \*\*\* TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY\*\*\* SEE INSTRUCTIONS TO BIDDERS, FOR FURTHER INFORMATION**

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the California Public Contract Code (PCC), the Bidder is to list below the name, address and license number of each Subcontractor who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement, in an amount of or in excess of 0.5% of the Contractor's total Bid. Failure to comply with this requirement may result in the Bid being rejected as non-responsive. The Contractor is to list only one Subcontractor for each portion of the Work. The Bidder's attention is directed to the Special Provisions – General; Paragraph 2-3 Subcontracts, which stipulates the percentage of the Work to be performed with the Bidder's own forces. The Bidder is to also list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which the Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB®	WHERE CERTIFIED®	CHECK IF JOINT VENTURE PARTNERSHIP
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							

- ① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |   |        |  |         |
|---|--------|--|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |  |         |
- ② As appropriate, Bidder shall indicate if Subcontractor is certified by:
- |  |        |  |          |
|--|--------|--|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   |  |          |
| State of California's Department of General Services | CADoGS | City of Los Angeles                              | LA       |
| State of California                                  | CA     | U.S. Small Business Administration               | SBA      |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

**NAMED EQUIPMENT/MATERIAL SUPPLIER LIST**

**\*\*\* PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY \*\*\* TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY \*\*\* SEE INSTRUCTIONS TO BIDDERS FOR FURTHER INFORMATION**

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB <sup>①</sup>	WHERE CERTIFIED <sup>②</sup>
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____						
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____						

- ① As appropriate, Bidder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |   |        |  |         |
|---|--------|--|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |  |         |

- ② As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:
- |  |        |  |          |
|--|--------|--|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   |  |          |
| State of California's Department of General Services | CADoGS | City of Los Angeles                              | LA       |
| State of California                                  | CA     | U.S. Small Business Administration               | SBA      |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

## **ELECTRONICALLY SUBMITTED FORMS**

**FAILURE TO FULLY COMPLETE AND SUBMIT ANY OF THE FOLLOWING FORMS WILL DEEM YOUR BID NON-RESPONSIVE.**

**PLANETBIDS WILL NOT ALLOW FOR BID SUBMISSIONS WITHOUT THE ATTACHMENT OF THESE FORMS**

The following forms are to be completed by the bidder and submitted (uploaded) electronically with the bid in PlanetBids.

- A. BID BOND – See Instructions to Bidders, Bidders Guarantee of Good Faith (Bid Security) for further instructions**
- B. CONTRACTOR’S CERTIFICATION OF PENDING ACTIONS**
- C. SUBCONTRACTOR LISTING FOR ALTERNATE ITEMS**
- D. MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM**
- E. DEBARMENT AND SUSPENSION CERTIFICATION FOR PRIME CONTRACTOR**
- F. DEBARMENT AND SUSPENSION CERTIFICATION FOR SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS**

**BID BOND**

**See Instructions to Bidders, Bidder Guarantee of Good Faith  
(Bid Security)**

KNOW ALL MEN BY THESE PRESENTS,

That S.C. Valley Engineering, Inc. as Principal,  
and Western Surety Company as Surety, are held  
and firmly bound unto The City of San Diego hereinafter called "OWNER," in the sum  
of **10% OF THE TOTAL BID AMOUNT** 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 bidding schedule(s) of the OWNER's Contract Documents entitled

Water Group Job 952 / K-22-2065-DBB-3

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" 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 a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this 25 day of May, 2022

S.C. Valley Engineering, Inc. (SEAL)

Western Surety Company (SEAL)

(Principal)

(Surety)

By: 

By: 

(Signature)

(Signature)

Robert P. Dole, Attorney-in-Fact

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

# Western Surety Company

## POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Daniel P Dole, John T Dole, Robert P Dole, Michael Dole, Adam Dole, Patti Ewert, Individually**

of Bonita, CA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

**- In Unlimited Amounts -**

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 22nd day of June, 2021.



WESTERN SURETY COMPANY

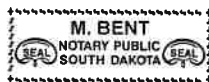
Paul T. Bruflat  
Paul T. Bruflat, Vice President

State of South Dakota }  
County of Minnehaha } ss

On this 22nd day of June, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026



M. Bent  
M. Bent, Notary Public

### CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 25 day of May, 2022.



WESTERN SURETY COMPANY

L. Nelson  
L. Nelson, Assistant Secretary

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

County of San Diego }

On May 25, 2022 before me, Patti Ewert, Notary Public,  
Date Insert Name of Notary exactly as it appears on the official seal

personally appeared Robert P. Dole  
Name(s) of Signer(s)



Place Notary Seal Above

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature Patti Ewert  
Signature of Notary Public, Patti Ewert

## OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer(s)

Signer's Name: Robert P. Dole

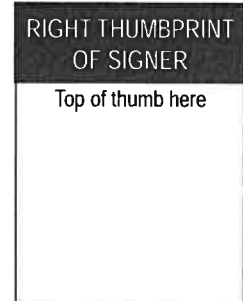
- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer is Representing:  
Western Surety Company

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer is Representing:  
\_\_\_\_\_  
\_\_\_\_\_

**CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS**

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.


CHECK ONE BOX ONLY.

- The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.
  
- The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN

Contractor Name: S.C. Valley Engineering, Inc.

Certified By Samuel H. Wathen Title President  
Name

  
Signature Date 06/03/2022

**USE ADDITIONAL FORMS AS NECESSARY**



**SUBCONTRACTORS ADDITIVE/DEDUCTIVE ALTERNATE**

**\*\*\* FOR USE WHEN LISTING SUBCONTRACTORS ON ALTERNATES \*\*\***

**(Use Additional Sheets As Needed)**

ADDITIVE/DEDUCTIVE ALTERNATE	SUBCONTRACTOR NAME, LOCATION, PHONE & EMAIL	CONSTRUCTOR OR DESIGNER	DIR REGISTRATION NUMBER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB <sup>①</sup>	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
Additive Alternate C, E, & F	Name: <u>Brino Builders</u> Address: <u>1490 Kostner Dr</u> City: <u>San Diego</u> State: <u>CA</u> Zip: <u>92154</u> Phone: <u>619-806-2363</u> Email: <u>falvarez@brinobuilders.com</u>	Constructor	1000550020	1021086	Concrete Work	\$58,300.00	SLBE	City of San Diego	N/A
Additive Alternate G	Name: <u>Kirk Paving</u> Address: <u>8722 Winter Gardens Blvd</u> City: <u>Lakeside</u> State: <u>CA</u> Zip: <u>92040</u> Phone: <u>619-938-9958</u> Email: <u>info@kirkpaving.us</u>	Constructor	1000002341	749206	Paving Work	\$486,884.35	SLBE, SBE,	City of San Diego, State of CA	N/A
Deductive E	Name: <u>Payco Specialties, Inc.</u> Address: <u>120 North Second Ave</u> City: <u>Chula Vista</u> State: <u>CA</u> Zip: <u>91910</u> Phone: <u>619-442-9204</u> Email: <u>glenn@payco.biz</u>	Constructor	1000003515	298637	Striping	\$3,100	SLBE, SBE, WBE	State of Ca Caltrans	N/A

- ① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |   |        |  |         |
|---|--------|--|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |  |         |
- ② As appropriate, Bidder shall indicate if Subcontractor is certified by:
- |  |        |  |          |
|--|--------|--|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   |  |          |
| State of California's Department of General Services | CADoGS | City of Los Angeles                              | LA       |
| State of California                                  | CA     | U.S. Small Business Administration               | SBA      |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

**SUBCONTRACTORS ADDITIVE/DEDUCTIVE ALTERNATE**

\*\*\* FOR USE WHEN LISTING SUBCONTRACTORS ON ALTERNATES \*\*\*

(Use Additional Sheets As Needed)

ADDITIVE/DEDUCTIVE ALTERNATE	SUBCONTRACTOR NAME, LOCATION, PHONE & EMAIL	CONSTRUCTOR OR DESIGNER	DIR REGISTRATION NUMBER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
Deductive A+ H	Name: <u>Pavement Coatings</u> Address: <u>10240 San Serrano Way</u> City: <u>Jorupa Valley</u> State: <u>CA</u> Zip: <u>91752</u> Phone: <u>714-826-3011</u> Email: <u>mail@pavementrecycling.com</u>	Contractor	100000332	303607	Slurry Seal	\$2,533	N/A	N/A	N/A
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								

- ① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |   |        |  |         |
|---|--------|--|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |  |         |
- ② As appropriate, Bidder shall indicate if Subcontractor is certified by:
- |  |        |  |          |
|--|--------|--|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   |  |          |
| State of California's Department of General Services | CADoGS | City of Los Angeles                              | LA       |
| State of California                                  | CA     | U.S. Small Business Administration               | SBA      |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

## Mandatory Disclosure of Business Interests Form

### BIDDER/PROPOSER INFORMATION

<b>Legal Name</b>		<b>DBA</b>	
S.C. Valley Engineering, Inc.			
<b>Street Address</b>	<b>City</b>	<b>State</b>	<b>Zip</b>
656 Front Street	El Cajon	CA	92020
<b>Contact Person, Title</b>		<b>Phone</b>	<b>Fax</b>
Samuel H. Wathen-President		619-444-2366	619-444-2333

Provide the name, identity, and precise nature of the interest\* of all persons who are directly or indirectly involved\*\* in this proposed transaction (SDMC § 21.0103).

\* The precise nature of the interest includes:

- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the transaction, the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and any philanthropic, scientific, artistic, or property interest in the transaction.

\*\* Directly or indirectly involved means pursuing the transaction by:

- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City,
- or directing or supervising the actions of persons engaged in the above activity.

<b>Name</b>	<b>Title/Position</b>
Samuel H. Wathen	President
<b>City and State of Residence</b>	<b>Employer (if different than Bidder/Proposer)</b>
El Cajon, CA	
<b>Interest in the transaction</b>	
51% Ownership of SC Valley	

<b>Name</b>	<b>Title/Position</b>
Colleen Wathen	CFO
<b>City and State of Residence</b>	<b>Employer (if different than Bidder/Proposer)</b>
El Cajon, CA	
<b>Interest in the transaction</b>	
49% Ownership of SC Valley	

### \* Use Additional Pages if Necessary \*

Under penalty of perjury under the laws of the State of California, I certify that I am responsible for the completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Mayor or Designee within five (5) business days if, at any time, I learn that any portion of this Mandatory Disclosure of Business Interests Form requires an updated response. Failure to timely provide the Mayor or Designee with written notice is grounds for Contract termination.

Samuel H. Wathen-President



06/03/2022

Print Name, Title

Signature

Date

**Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed Mandatory Disclosure of Business Interests Form is submitted.**

**DEBARMENT AND SUSPENSION CERTIFICATION  
PRIME CONTRACTOR  
FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE**

<b>EFFECT OF DEBARMENT OR SUSPENSION</b>
To promote integrity in the City's contracting processes and to protect the public interest, the City shall only enter into contracts with responsible- bidders and contractors. In accordance with San Diego Municipal Code §22.0814 (a): <i>Bidders and contractors</i> who have been <i>debarred</i> or <i>suspended</i> are excluded from submitting bids, submitting responses to requests for proposal or qualifications, receiving <i>contract awards</i> , executing <i>contracts</i> , participating as a <i>subcontractor</i> , employee, agent or representative of another <i>person</i> contracting with the City.

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s).

The names of all persons interested in the foregoing proposal as Principals are as follows:

<b>NAME</b>	<b>TITLE</b>
Samuel H. Wathen	President
Colleen Wathen	CFO

**IMPORTANT NOTICE:** If Bidder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Bidder or other interested person is an individual, state first and last names in full.

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal, State or local agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal, State or local agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Contractor Name: S.C. Valley Engineering, Inc.

Certified By Samuel H. Wathen Title President

Name



Signature

Date 06/03/2022

**NOTE:** Providing false information may result in criminal prosecution or administrative sanctions.

**DEBARMENT AND SUSPENSION CERTIFICATION  
SUBCONTRACTORS, SUPPLIERS AND MANUFACTURERS  
\*TO BE COMPLETED BY BIDDER\***

**FAILURE TO COMPLETE AND SUBMIT AT TIME OF BID SHALL RENDER BID NON-RESPONSIVE**

Names of the Principal individual owner(s)

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s) for their subcontractor/supplier/manufacturers.

Please indicate if principal owner is serving in the capacity of **subcontractor**, **supplier**, and/or **manufacturer**:

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Southwest Signal Service - Ryan Clark	President
Fernando Alvarez-Brino Builders	President
John Kirk-Kirk Paving	President
Greg Vasilieff- Western Gardens	President

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Robert Vasilieff-Western Gardens	VP
Marie Vasilieff-Western Gardens	CFO
Sonny Rosenal-Soclaris	President
Rebecca Llewellyn-Payco	President

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Ron E. Lacey-Lacey Consulting	President
Rebekah Loveless-Loveless Linton	President
Pavement Coatings Co. - Nathan Beyler	CFO
Pavement Coatings Co. - Tom Mucenski	Secretary

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Pavement Coatings Co.- Doug Ford	President
Pavement Coatings Co.-James Wu	VP
Southern Contracting-Phillip Waterman	President
Pipe Jacking Trenchless, Inc.- Scott Summers	President

Contractor Name: S.C. Valley Engineering, Inc.

Certified By Samuel H. Wathen Title President

Name



Signature

Date 06/03/2022

**\*USE ADDITIONAL FORMS AS NECESSARY\*\***

# City of San Diego

CITY CONTACT: Rosa Riego, Senior Contract Specialist, Email: [RRiego@sandiego.gov](mailto:RRiego@sandiego.gov)  
Phone No. (619) 533-3426

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## ADDENDUM A



## FOR

## WATER GROUP JOB 952

BID NO.:	K-22-2065-DBB-3
SAP NO. (WBS/IO/CC):	B-11048
CLIENT DEPARTMENT:	2000
COUNCIL DISTRICT:	3, 8
PROJECT TYPE:	KB

---

### **BID DUE DATE:**


**2:00 PM  
June 3, 2022**

**CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS**


<http://www.sandiego.gov/cip/bidopps/index.shtml>

## ENGINEER OF WORK


The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:

<u>Sheila Bose</u> City Engineer	<u>5/4/21</u> Date	Seal:	
-------------------------------------	-----------------------	-------	---

**Water Group Job 952 Plans numbered 38235-D (Sheets C-6 through C-7, C-12 through C-30, C-51, M-1 through M-3)**

<u>Marc Weinberger</u> Registered Engineer	<u>05/04/2022</u> Date	Seal:	
---	---------------------------	-------	--

**Water Group Job 952 Plans numbered 38235-D (Sheets S-1 through S-3)**

<u>Douglas M. Fredericks</u> Registered Engineer	<u>05/04/2022</u> Date	Seal:	
---	---------------------------	-------	---

**A. CHANGES TO CONTRACT DOCUMENTS**

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

THE SUBMITTAL DATE FOR THIS PROJECT **HAS BEEN EXTENDED AS STATED ON THE COVER PAGE.**

**B. PLANS**

1. To Drawing Numbers **38235-01-D, 38235-15-D, 38235-22-D to 38235-25-D, 38235-51-D, 38235-62-D to 38235-64-D, DELETE** in their entirety and **REPLACE** with pages 4 through 13 of this Addendum.

Rania Amen, Director  
Engineering & Capital Projects Department

Dated: *May 11, 2022*  
San Diego, California

RA/DH/la



CONTRACTOR'S RESPONSIBILITIES

- 1. PURSUANT TO SECTION 4216 OF THE GOVERNMENT CODE, AT LEAST 2 WORKING DAYS PRIOR TO EXCAVATION, YOU MUST CONTACT THE REGIONAL NOTIFICATION CENTER (E.G. UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA) AND OBTAIN AN INQUIRY IDENTIFICATION NUMBER.

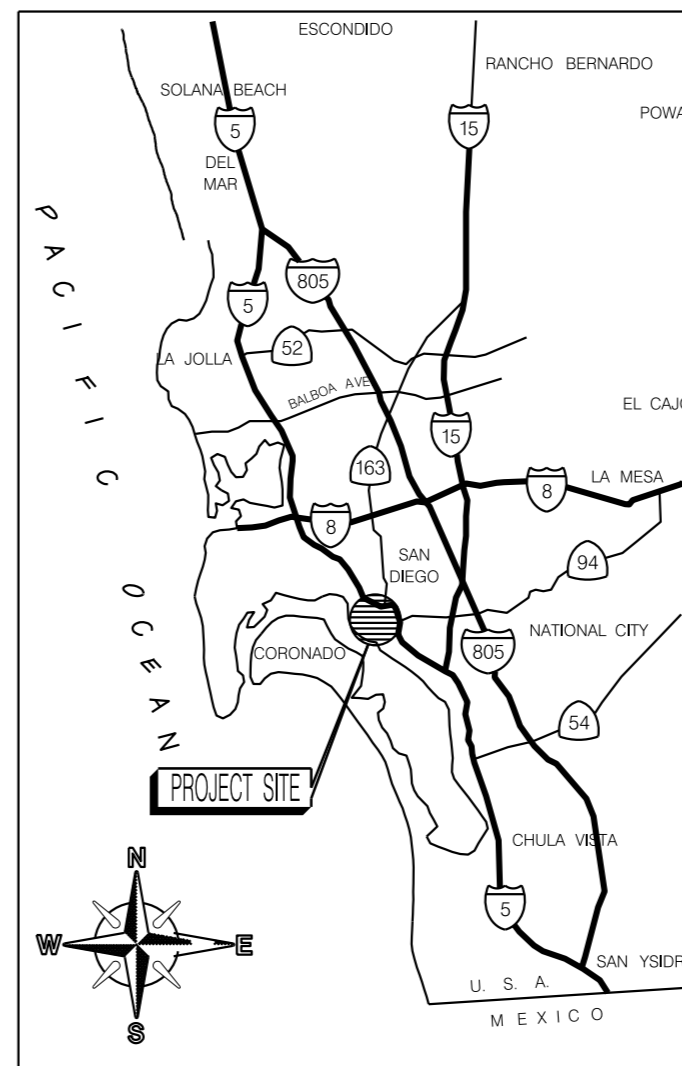
WATER GROUP JOB 952

SHEET INDEX

Table with columns: SHEET NO., DISCIPLINE CODE, TITLE, LIMITS, PIPE SIZE (IN), PIPE MATERIAL, LENGTH (FT).

WORK TO BE DONE

CONSTRUCTION OF WATER GROUP 952 CONSISTS OF THE INSTALLATION OF APPROXIMATELY 7470 LINEAL FEET OF 8", 12" AND 16" WATER MAINS, WATER SERVICES, VALVES, FIRE HYDRANTS & MARKERS, RESURFACING, CURB RAMP, AND ALL OTHER WORK AND APPURTENANCES IN ACCORDANCE WITH THESE SPECIFICATIONS AND DRAWINGS NUMBERED 38235-01-D THROUGH 38235-64-D.

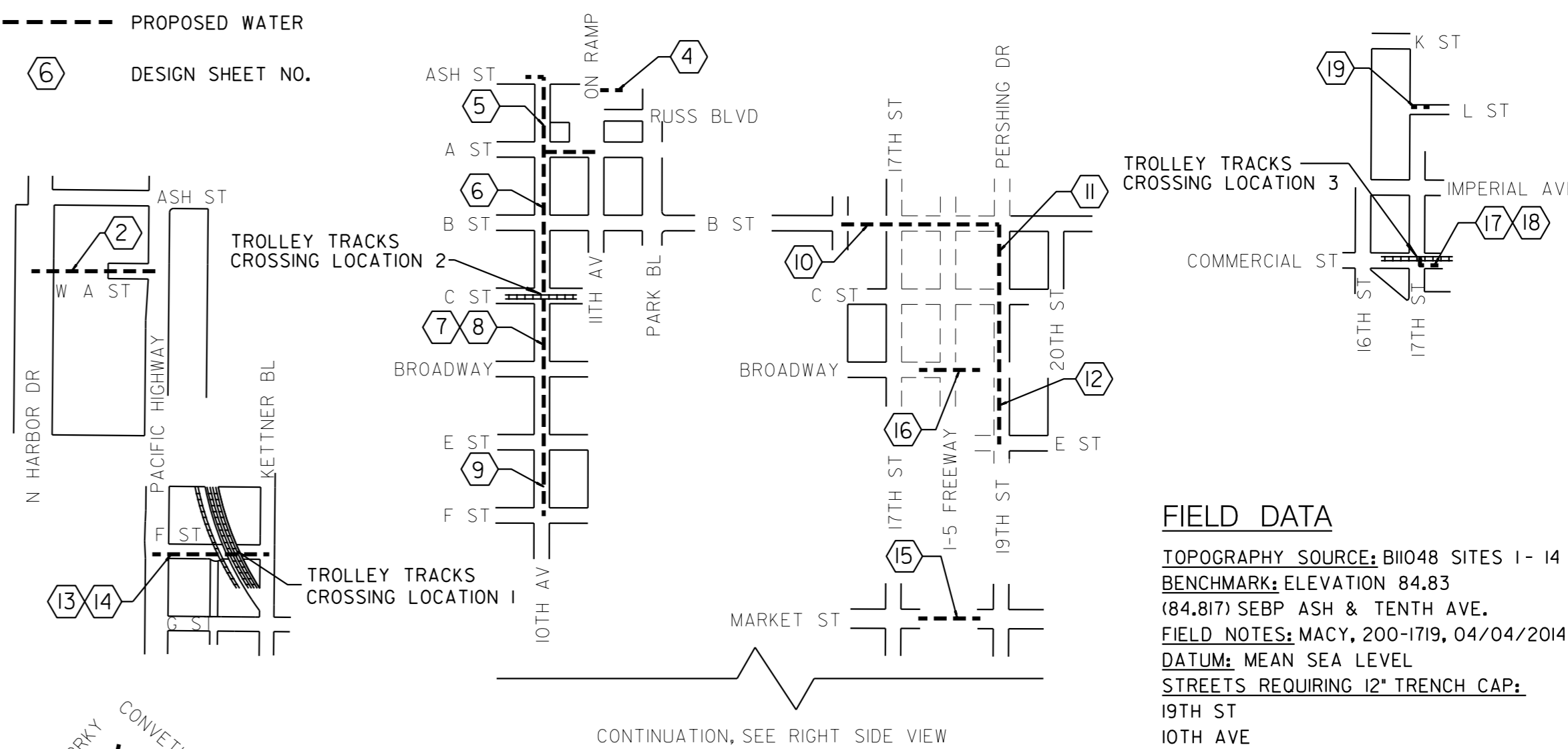


DISCIPLINE CODE

- G GENERAL
C CIVIL
E ELECTRICAL
M MECHANICAL
T TRAFFIC CONTROL
S STRUCTURAL

LEGEND

- PROPOSED WATER
DESIGN SHEET NO.



GEOTECHNICAL SPECIFICATIONS

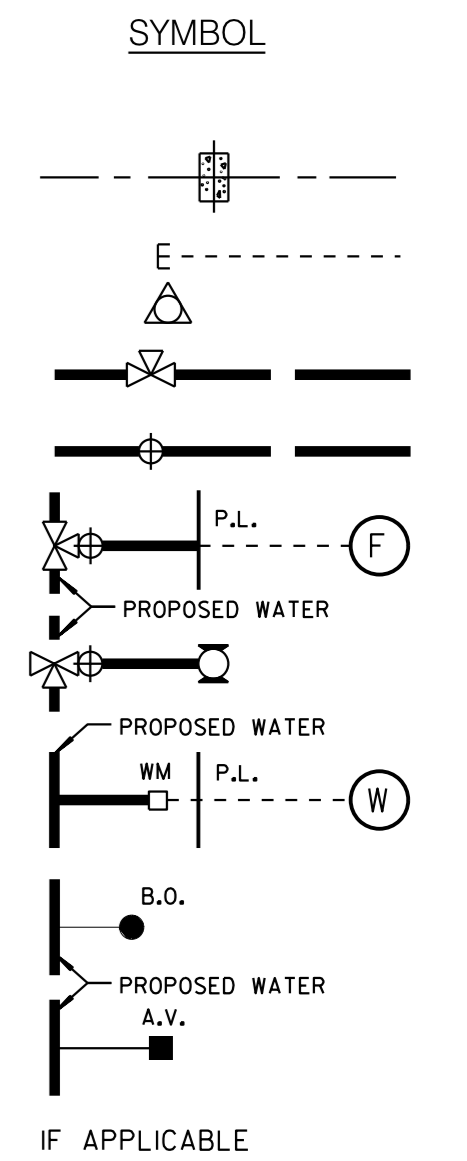
\* SHEETS 7, 8, 13, 14, 15, 16, 17, 18, AND 19 HAVE BEEN REVIEWED BY THE UNDERSIGNED AND FOUND IN CONFORMANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE GEOTECHNICAL REPORT TITLED 'REPORT OF GEOTECHNICAL INVESTIGATION WATER GROUP 952 CITY OF SAN DIEGO' DATED APRIL 27, 2016.

Signatures and dates for Nicholas E. Barnes and Marc Weinberger.



LEGEND

Table with columns: IMPROVEMENTS, REFERENCE, SYMBOL. Lists various construction items like trench resurfacing, pipe support, valves, etc.



CONSTRUCTION STORM WATER PROTECTION NOTES

- 1. TOTAL SITE DISTURBANCE AREA (ACRES) 0.72
HYDROLOGIC UNIT & WATERSHED PUEBLO SAN DIEGO / SAN DIEGO BAY
HYDROLOGIC SUBAREA NAME & NO. LINDBERGH 908.21 / CHOLLAS 908.22

ABBREVIATIONS

Table of abbreviations for materials, structures, and equipment used in the project.

EXISTING STRUCTURES

Table showing symbols for existing structures like water mains, meters, hydrants, etc.

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR SHEETS 7, 8, 13 TO 31, AND 52 TO 63, 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...

Signatures and dates for Marc Weinberger and Nicholas E. Barnes.

Table with columns: COMPANY NAME, ADDRESS, PHONE NUMBER, EMAIL, DATE OF SIGNING.

Table with columns: MATERIALS, MANUFACTURER. Lists items like pipe, valves, hydrants.

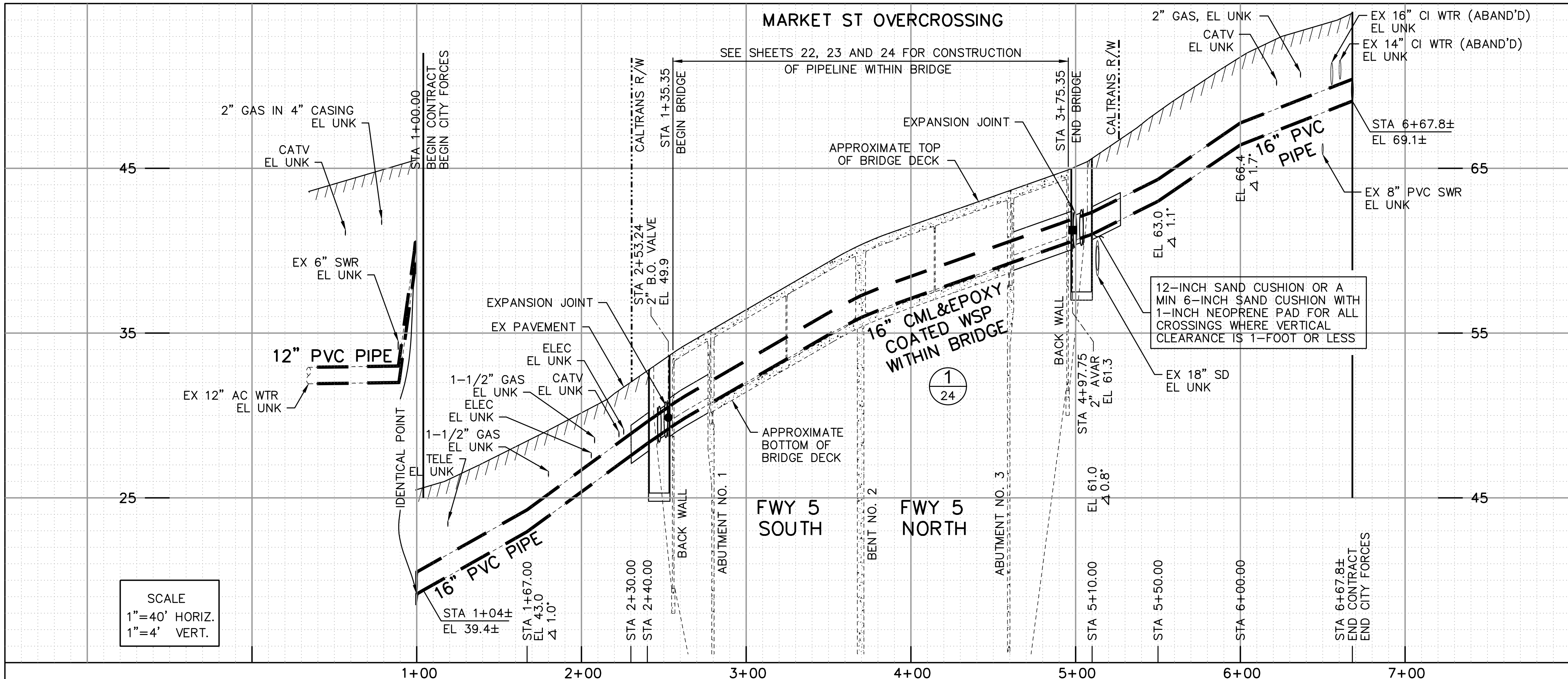
PLANS FOR THE CONSTRUCTION OF WATER GROUP 952 COVER SHEET

Project information including permit numbers, city of San Diego details, engineer information, and sheet identification.



WARNING: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

WATER GROUP JOB 952



PERMIT NUMBER \_\_\_\_\_  
 CO SD RTE 5 PM R14.89  
 AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES  
 STATE REPRESENTATIVE \_\_\_\_\_ DATE \_\_\_\_\_

- NOTES TO CONTRACTOR:**
- ALL WELDED JOINTS MUST BE COMPLETE JOINT PENETRATION (CJP) PER AWS D1.1
  - DRAWING HAS BEEN PREPARED BASED ON AVAILABLE AS BUILT PLANS, AND FIELD CONDITIONS OF THE EXISTING PIPELINE INSTALLATION AND BRIDGE OPENINGS HAVE NOT BEEN VERIFIED. CONTRACTOR SHALL FIELD VERIFY ALIGNMENT OF EXISTING WATERLINE AND WALL OPENINGS WITHIN BRIDGE PRIOR TO NEW PIPE FABRICATION.
  - THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

**Report Results**

\*Horizontal Alignment Report  
 \*Project Name: B-11048  
 \*Alignment: Market

Tangent=			
Pt#	Station	Northing	Easting
	0+40.34	1839849.23	6285226.81
	1+00.00	1839849.03	6285286.47
Length=	59.66'	Bearing= S 89° 48' 19.14" E	
Tangent=			
Pt#	Station	Northing	Easting
	1+00.00	1839849.03	6285286.47
	2+53.24	1839848.51	6285439.71
Length=	153.24'	Bearing= S 89° 48' 19.14" E	
Tangent=			
Pt#	Station	Northing	Easting
	2+53.24	1839848.51	6285439.71
	4+97.75	1839847.68	6285684.22
Length=	244.51'	Bearing= S 89° 48' 19.14" E	
Tangent=			
Pt#	Station	Northing	Easting
	4+97.75	1839847.68	6285684.22
	6+67.8±	1839847.1±	6285854.2±
Length=	170.0±	Bearing= S 89° 52' 54.14" E	

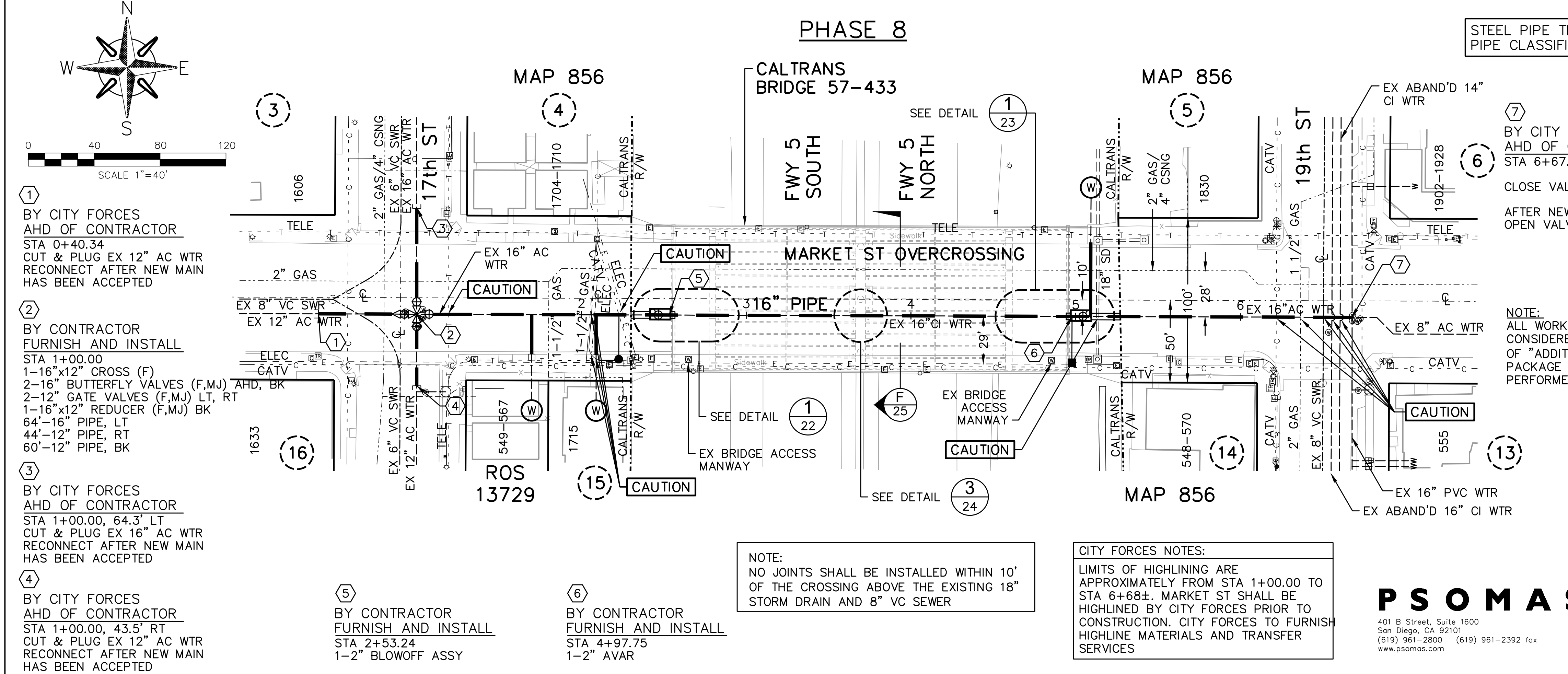
**REFERENCE:**

WATER: 6400-L, 9447-D, 9916-7-D, 9916-9-D  
 12361-5-D, 34696-6-D  
 SEWER: 14031-3-D  
 STORM DRAIN: N/A  
 GAS: SDG&E 15945-118740, 15952-118740  
 ELECTRIC: SDG&E 15945-118740, 15952-118740  
 CABLE TV: N/A  
 TELEPHONE: AT&T BMA1983, BMA1984  
 IMPROVEMENTS: N/A  
 100' SCALE/FIELD BOOK: G22S  
 THOMAS BROS: 1289-C3  
 HGL: 390

**RETIREMENTS:**

16" - AC - 337' - UNK  
 16" - CI - 231' - UNK  
 1" SERVICE - 6 - UNK - UNK

STEEL PIPE THICKNESS= 5/16"  
 PIPE CLASSIFICATION= 250 psi



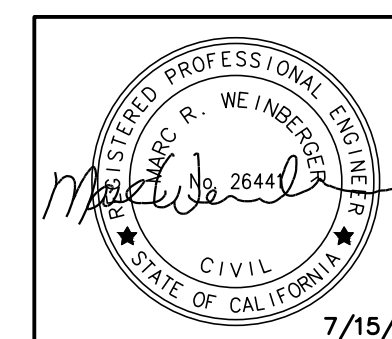
- 1** BY CITY FORCES AHD OF CONTRACTOR  
 STA 0+40.34  
 CUT & PLUG EX 12" AC WTR  
 RECONNECT AFTER NEW MAIN HAS BEEN ACCEPTED
- 2** BY CONTRACTOR FURNISH AND INSTALL  
 STA 1+00.00  
 1-16"x12" CROSS (F)  
 2-16" BUTTERFLY VALVES (F,MJ) AHD, BK  
 2-12" GATE VALVES (F,MJ) LT, RT  
 1-16"x12" REDUCER (F,MJ) BK  
 64'-16" PIPE, LT  
 44'-12" PIPE, RT  
 60'-12" PIPE, BK
- 3** BY CITY FORCES AHD OF CONTRACTOR  
 STA 1+00.00, 64.3' LT  
 CUT & PLUG EX 16" AC WTR  
 RECONNECT AFTER NEW MAIN HAS BEEN ACCEPTED
- 4** BY CITY FORCES AHD OF CONTRACTOR  
 STA 1+00.00, 43.5' RT  
 CUT & PLUG EX 12" AC WTR  
 RECONNECT AFTER NEW MAIN HAS BEEN ACCEPTED
- 5** BY CONTRACTOR FURNISH AND INSTALL  
 STA 2+53.24  
 1-2" BLOWOFF ASSY
- 6** BY CONTRACTOR FURNISH AND INSTALL  
 STA 4+97.75  
 1-2" AVAR

**NOTE:**  
 NO JOINTS SHALL BE INSTALLED WITHIN 10' OF THE CROSSING ABOVE THE EXISTING 18" STORM DRAIN AND 8" VC SEWER

**CITY FORCES NOTES:**  
 LIMITS OF HIGHLIGHTING ARE APPROXIMATELY FROM STA 1+00.00 TO STA 6+68±. MARKET ST SHALL BE HIGHLIGHTED BY CITY FORCES PRIOR TO CONSTRUCTION. CITY FORCES TO FURNISH HIGHLIGHTING MATERIALS AND TRANSFER SERVICES

- 7** BY CITY FORCES AHD OF CONTRACTOR  
 STA 6+67.8±  
 CLOSE VALVE, BK  
 AFTER NEW MAIN HAS BEEN ACCEPTED, OPEN VALVE, BK
- NOTE:**  
 ALL WORK SHOWN IN C-14 IS TO BE CONSIDERED TO BE INCLUDED AS PART OF "ADDITIVE ALTERNATE F" BID PACKAGE AND IS ONLY TO BE PERFORMED IF AWARDED.

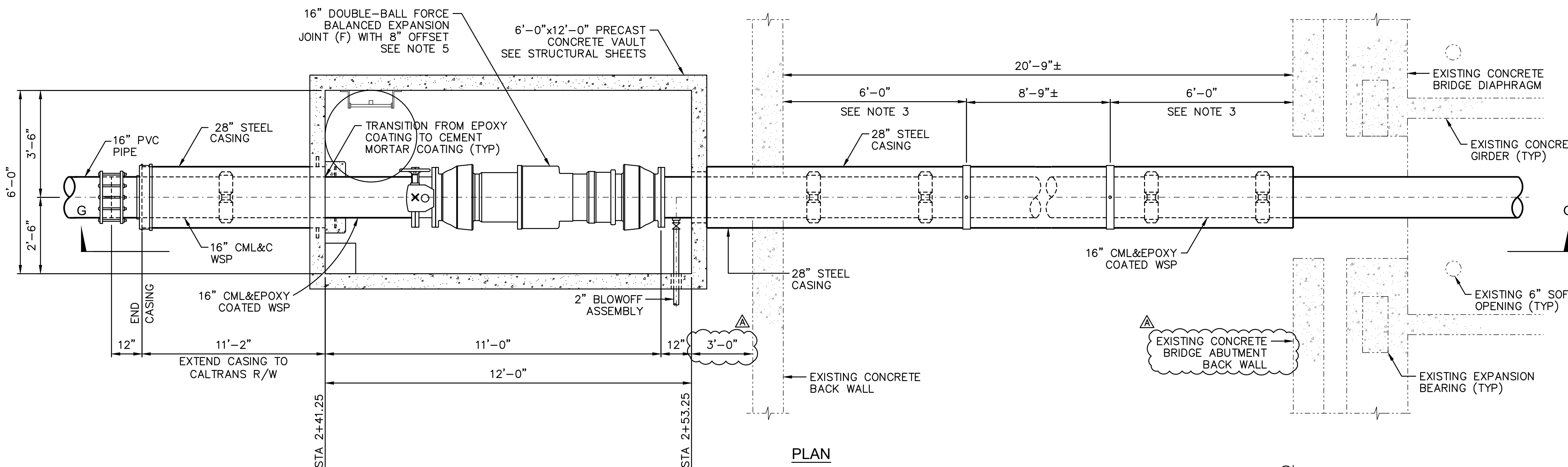
**PSOMAS**  
 401 B Street, Suite 1600  
 San Diego, CA 92101  
 (619) 961-2800 (619) 961-2392 fax  
 www.psomas.com



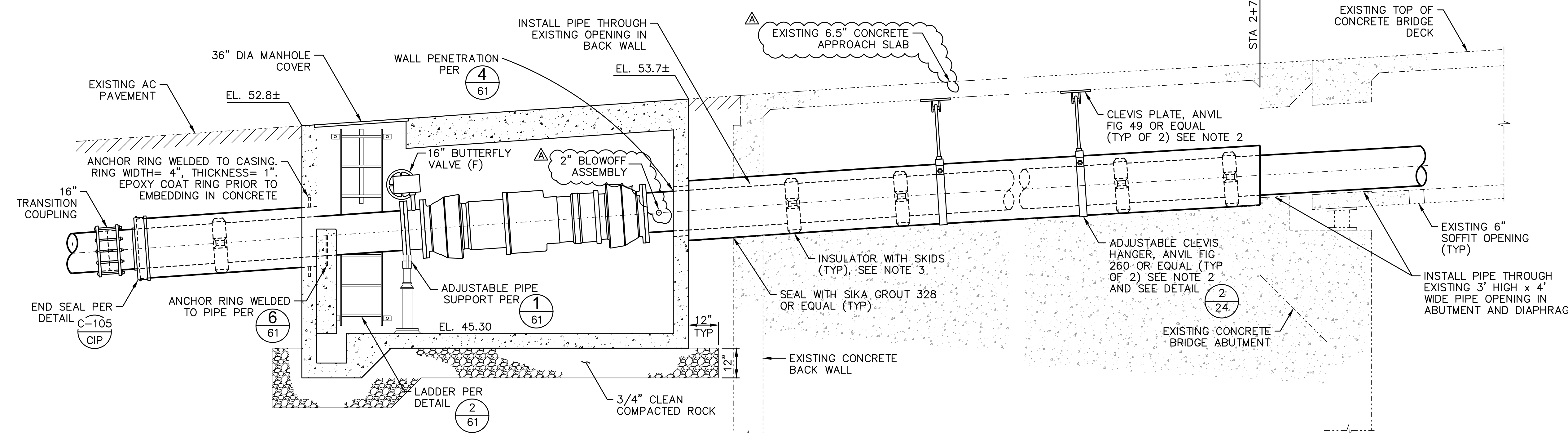
<b>WATER GROUP 952</b>			
<b>ADDITIVE ALTERNATE F: MARKET ST OVERCROSSING 17th ST TO 19th ST</b>			
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 15 OF 64 SHEETS			WBS B-11048
APPROVED FOR CITY ENGINEER SHEILA BOSE PRINT DC# NAME	DATE 05/04/2022 03/15/2022	SUBMITTED BY JERICHO GALLARDO PROJECT MANAGER	
DESCRIPTION ORIGINAL	BY PSO	APPROVED DATE 05/04/22	FILMED DATE 05/04/22
ADDENDUM A	PSO		
CONTRACTOR INSPECTOR	DATE STARTED DATE COMPLETED	PROJECT ENGINEER SCOTT SANFILIPPO	198-1719 CCS27 COORDINATE 1838444,6280407 CCS83 COORDINATE 38235-15-D

**ADDITIVE ALTERNATE F: MARKET ST OVERCROSSING**

**C-14**



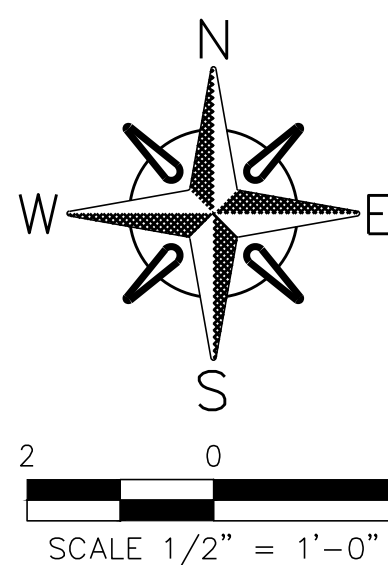
PLAN



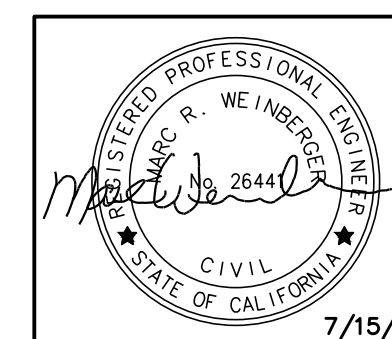
SECTION G-G

ABUTMENT NO. 1 & BACK WALL

1  
22



**PSOMAS**  
 401 B Street, Suite 1600  
 San Diego, CA 92101  
 (619) 961-2800 (619) 961-2392 fax  
 www.psomas.com



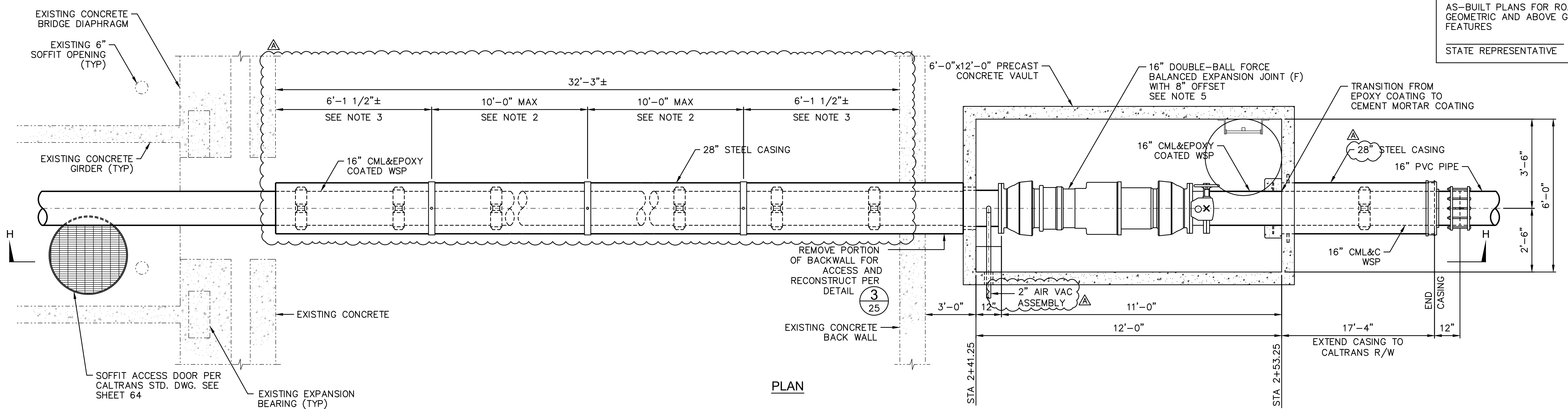
- NOTES TO CONTRACTOR:**
1. ALL WELDED JOINTS MUST BE COMPLETE JOINT PENETRATION (CJP) PER AWS D1.1
  2. NEW PIPE HANGER ASSEMBLIES SHALL BE INSTALLED IF EXISTING HANGERS ARE SUPPORTING EXISTING PIPE. HANGER SPACING SHALL BE 10' MAXIMUM.
  3. SPACING BETWEEN THE CASING INSULATORS SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS. ADDITIONALLY, ONE INSULATOR SHALL BE INSTALLED 12" FROM EACH END OF THE CASING.
  4. DRAWING HAS BEEN PREPARED BASED ON AVAILABLE AS BUILT PLANS, AND FIELD CONDITIONS OF THE EXISTING PIPELINE INSTALLATION AND BRIDGE OPENINGS HAVE NOT BEEN VERIFIED. CONTRACTOR SHALL FIELD VERIFY ALIGNMENT OF EXISTING WATERLINE AND WALL OPENINGS WITHIN BRIDGE PRIOR TO NEW PIPE FABRICATION.
  5. EXPANSION JOINT SHALL BE EBAA IRON FLEX-TEND SERIES ASSEMBLY NUMBER 416F20 OR APPROVED EQUAL.
  6. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

STEEL PIPE THICKNESS= 5/16"  
 PIPE CLASSIFICATION= 250 psi

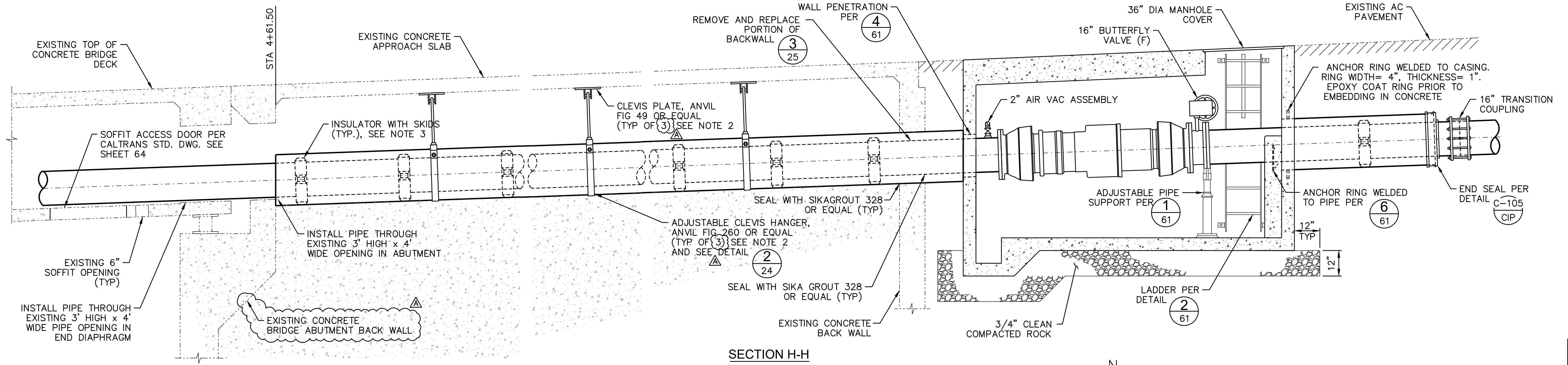
C-21

<b>WATER GROUP 952</b> ADDITIVE ALTERNATE F: MARKET ST OVERCROSSING ABUTMENT DETAILS 1			
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 22 OF 64 SHEETS		WBS <u>B-11048</u>	
APPROVED: <i>Sheila B</i> FOR CITY ENGINEER SHEILA BOSE PRINT DCE NAME	05/04/2022 DATE	SUBMITTED BY: JERICO GALLARDO PROJECT MANAGER CHECKED BY: SCOTT SANFILIPPO PROJECT ENGINEER	
DESCRIPTION ORIGINAL ADDENDUM A	BY PSO PSO	APPROVED DATE 03/15/2022 05/04/22	FILMED SEE SHEETS CCS27 COORDINATE SEE SHEETS CCS83 COORDINATE
CONTRACTOR INSPECTOR	DATE STARTED DATE COMPLETED	38235-22-D	

ADDITIVE ALTERNATE F: MARKET ST OVERCROSSING



PLAN

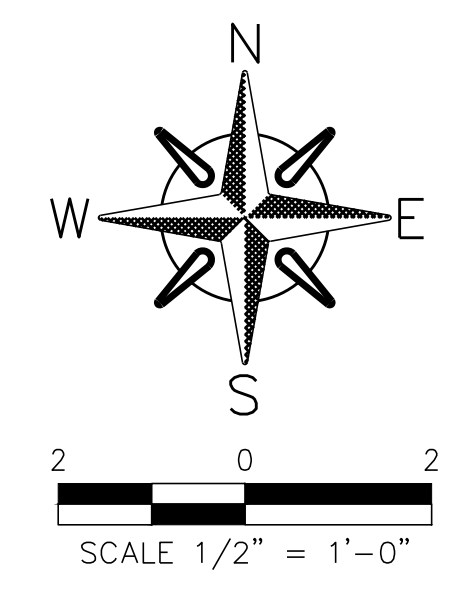


SECTION H-H

ABUTMENT NO. 3 & BACKWALL

1  
23

STEEL PIPE THICKNESS= 5/16"  
 PIPE CLASSIFICATION= 250 psi

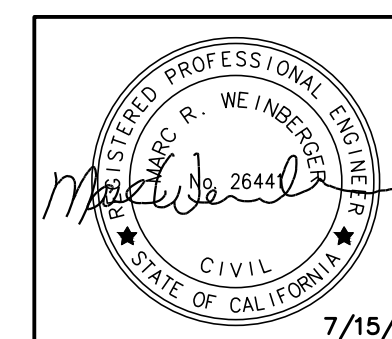


- NOTES TO CONTRACTOR:**
- ALL WELDED JOINTS MUST BE COMPLETE JOINT PENETRATION (CJP) PER AWS D1.1
  - NEW PIPE HANGER ASSEMBLIES SHALL BE INSTALLED IF EXISTING HANGERS ARE SUPPORTING EXISTING PIPE. HANGER SPACING SHALL BE 10' MAXIMUM.
  - SPACING BETWEEN THE CASING INSULATORS SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS. ADDITIONALLY, ONE INSULATOR SHALL BE INSTALLED 12" FROM EACH END OF THE CASING.
  - DRAWING HAS BEEN PREPARED BASED ON AVAILABLE AS BUILT PLANS, AND FIELD CONDITIONS OF THE EXISTING PIPELINE INSTALLATION AND BRIDGE OPENINGS HAVE NOT BEEN VERIFIED. CONTRACTOR SHALL FIELD VERIFY ALIGNMENT OF EXISTING WATERLINE AND WALL OPENINGS WITHIN BRIDGE PRIOR TO NEW PIPE FABRICATION.
  - EXPANSION JOINT SHALL BE EBAA IRON FLEX-TEND SERIES ASSEMBLY NUMBER 416F20 OR APPROVED EQUAL.
  - THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

C-22

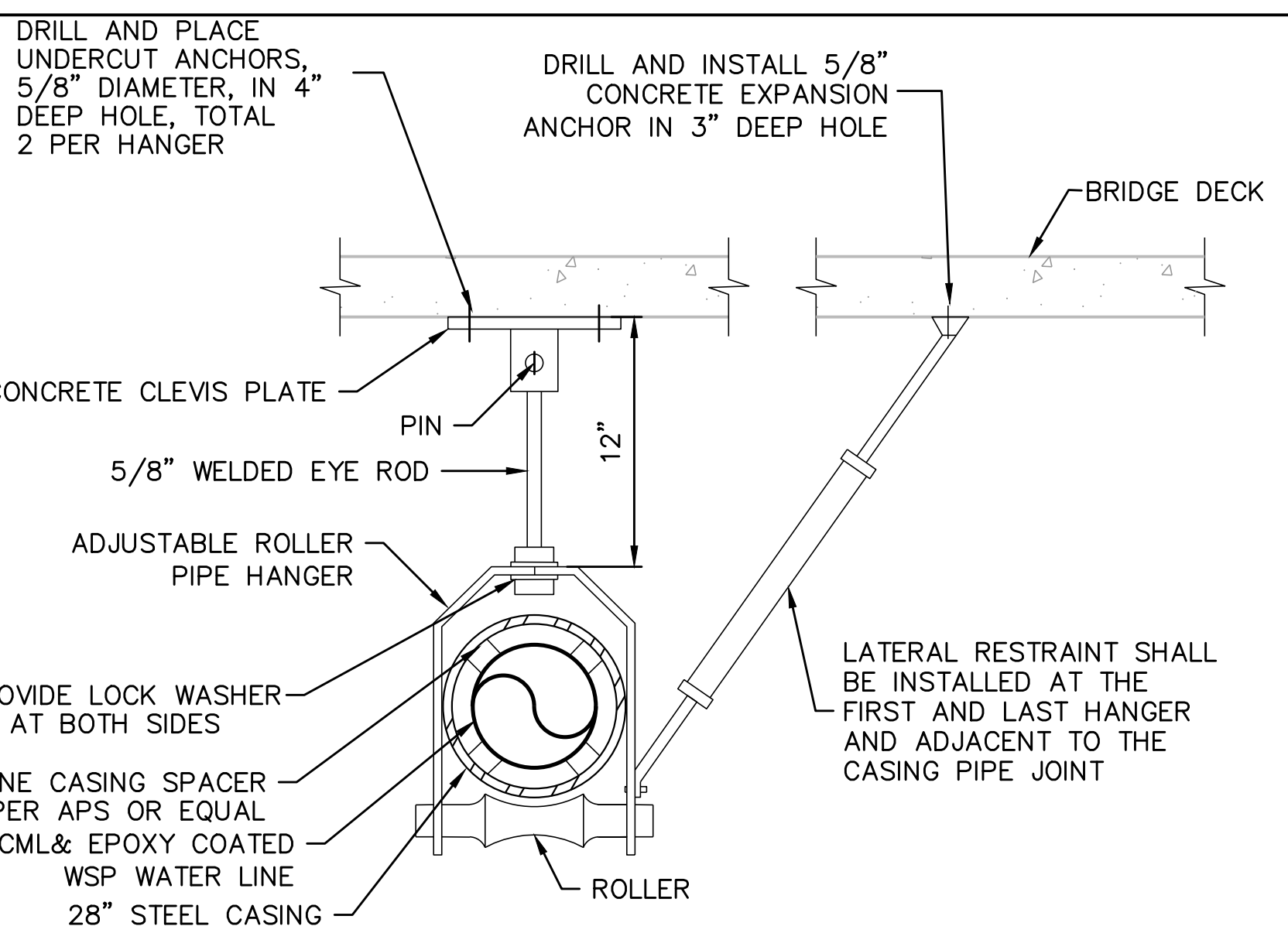
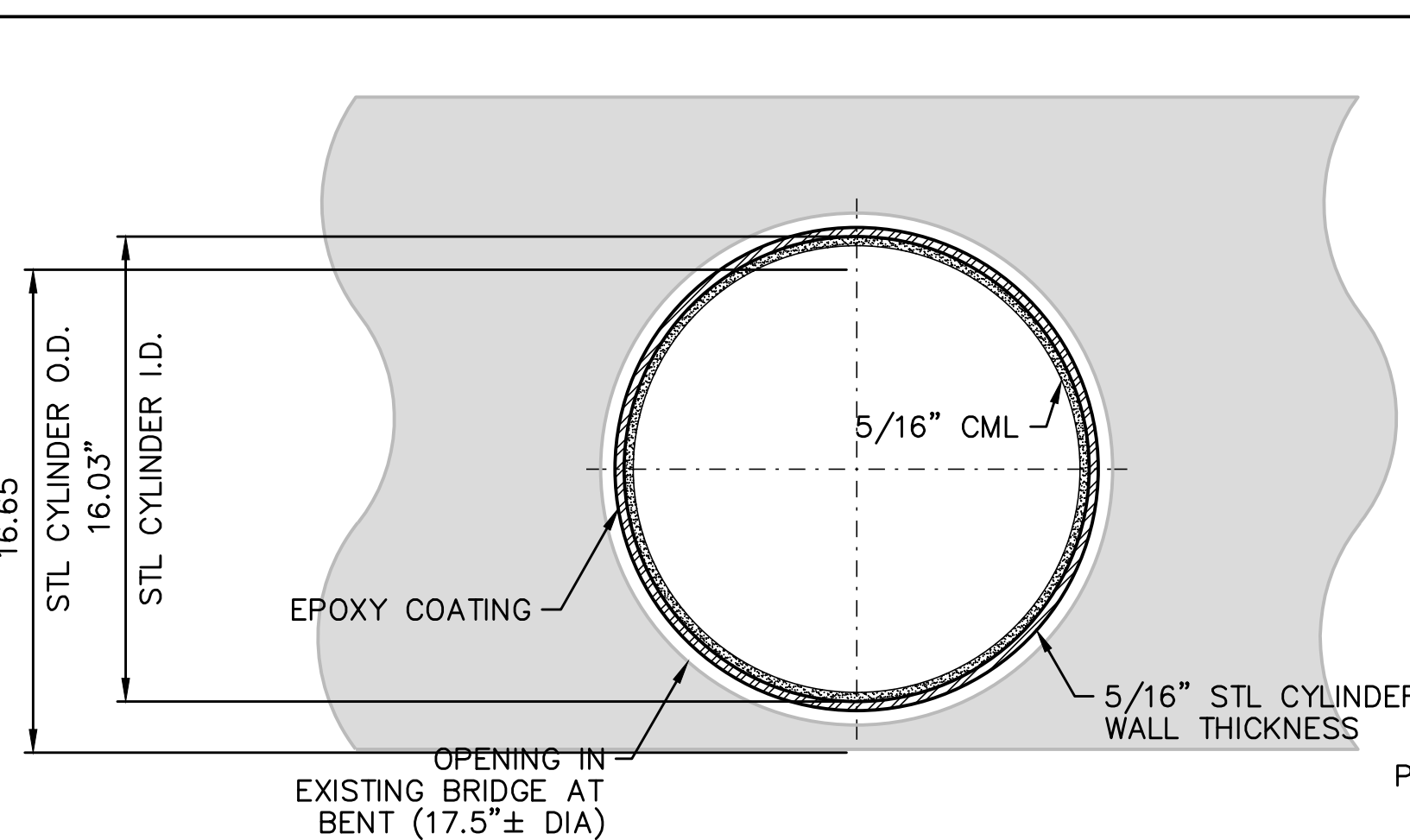
WATER GROUP 952  
 ADDITIVE ALTERNATE F:  
 MARKET ST OVERCROSSING  
 ABUTMENT DETAILS 2

CITY OF SAN DIEGO, CALIFORNIA ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 23 OF 64 SHEETS		WBS B-11048	
APPROVED FOR CITY ENGINEER SHEILA BOSE PRINT DCE NAME	DATE 05/04/2022	SUBMITTED BY JERICHO GALLARDO PROJECT MANAGER	
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL	PSO	[Signature]	03/15/2022
ADDENDUM A	PSO	[Signature]	05/04/22
CONTRACTOR INSPECTOR		DATE STARTED	DATE COMPLETED
		7/15/21	



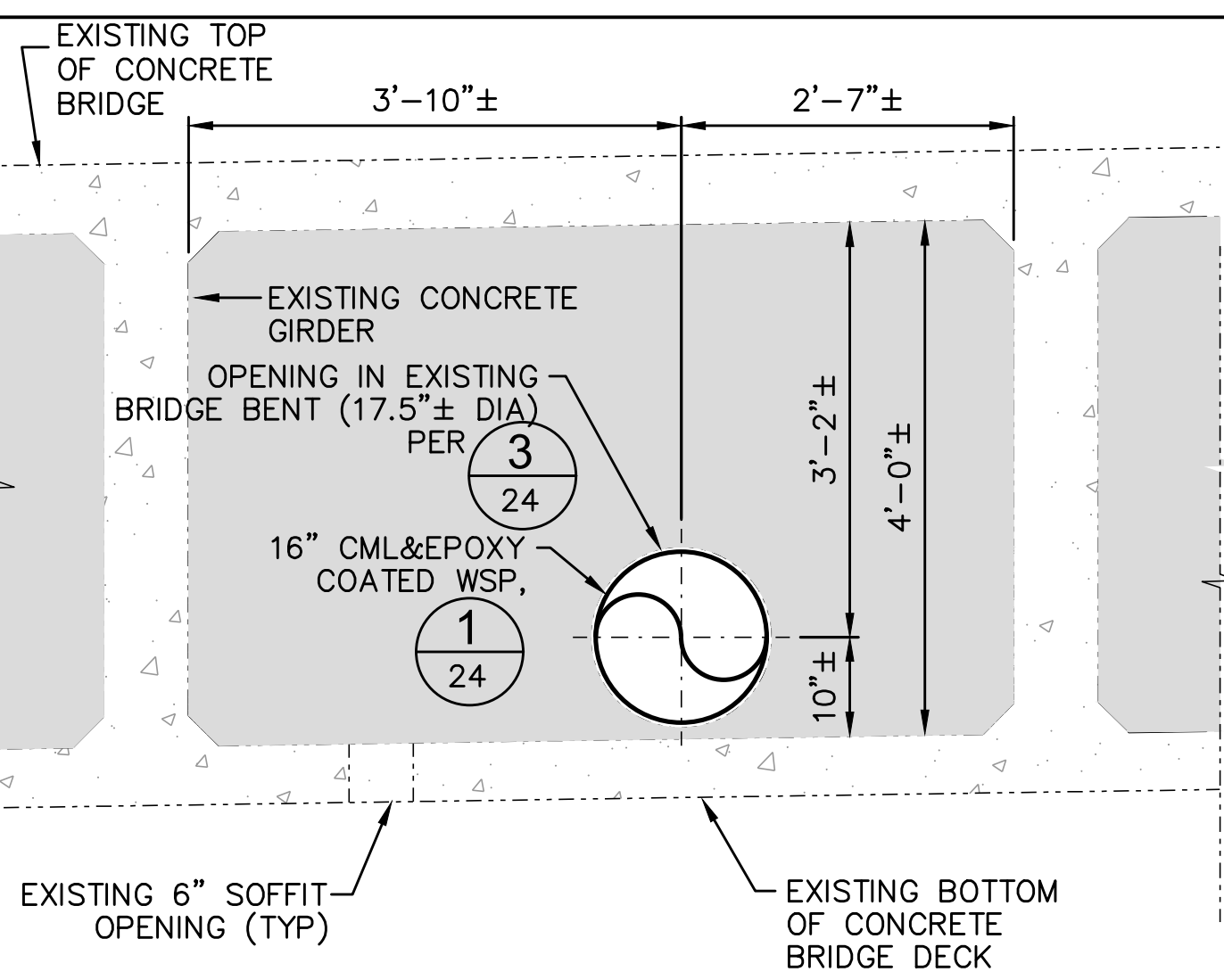
**PSOMAS**  
 401 B Street, Suite 1600  
 San Diego, CA 92101  
 (619) 961-2800 (619) 961-2392 fax  
 www.psomas.com

ADDITIVE ALTERNATE F: MARKET ST OVERCROSSING



**UNDERCUT ANCHOR NOTES:**

- HOLES FOR UNDERCUT ANCHORS MUST BE DRILLED WITH A BIT APPROVED FOR USE WITH THE ANCHOR SYSTEM WHICH CREATES A NOTCHED OPENING AT THE END OF THE HOLE. THE ANCHOR MAY BE SELF DRILLING.
- UNDERCUT ANCHOR MUST NOT INTERFERE WITH EXISTING REINFORCEMENT. IF EXISTING REINFORCEMENT IS IN CONFLICT WITH HOLE, REPAIR HOLE WITH GROUT AND RE-DRILL AT ADJACENT LOCATION.
- DO NOT CORE DRILL ANCHOR HOLES.
- UNDERCUT ANCHORS ARE SUBJECT TO APPROVAL OF ENGINEER. INSTALLATION PROCEDURES MUST COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
- INSTALL UNDERCUT ANCHORS IN SOUND CONCRETE FREE OF CRACKS OR DELAMINATIONS. THE ANCHOR EMBEDMENT DEPTH MUST COMPLY WITH MANUFACTURER'S INSTRUCTIONS.

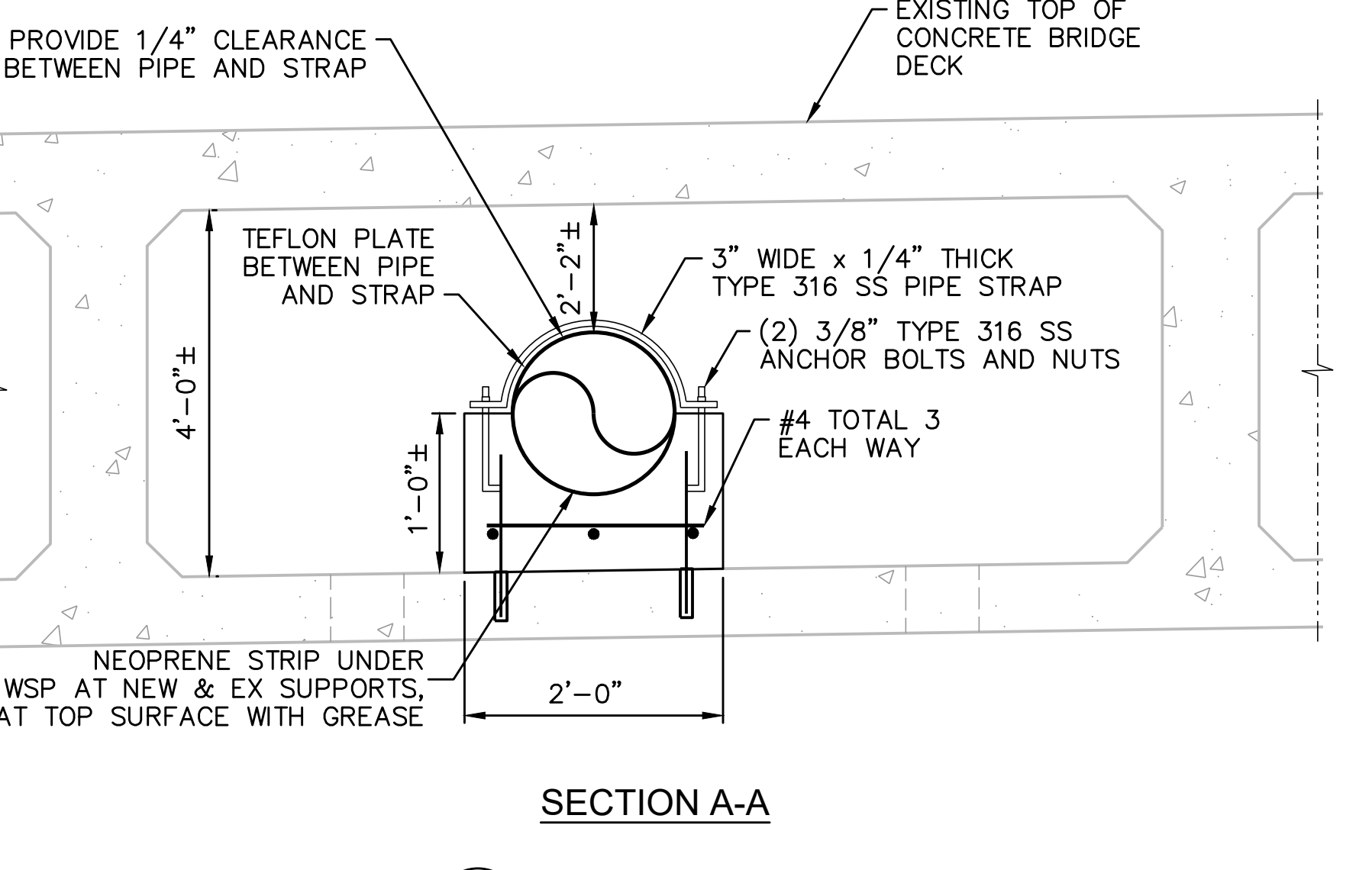
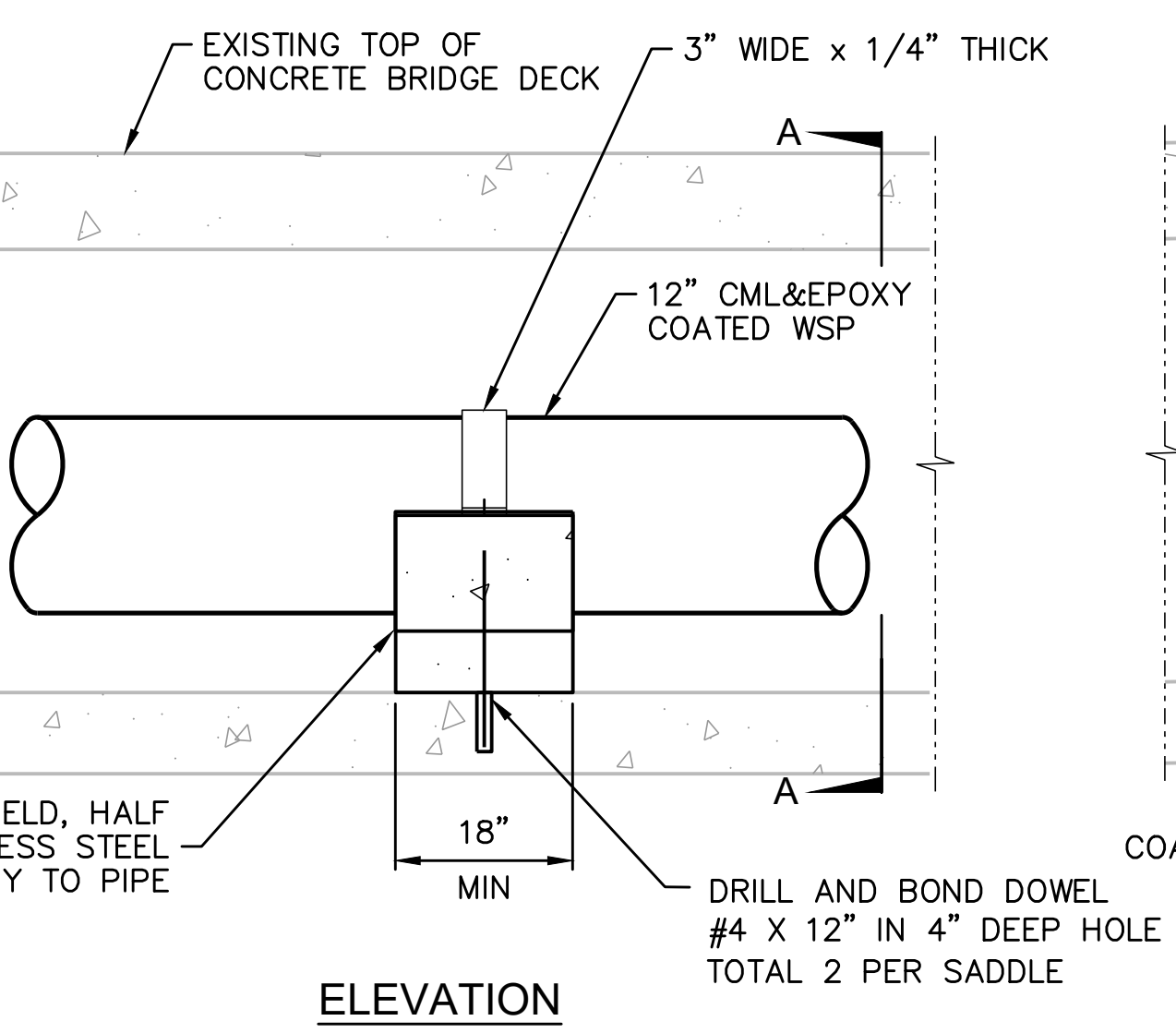
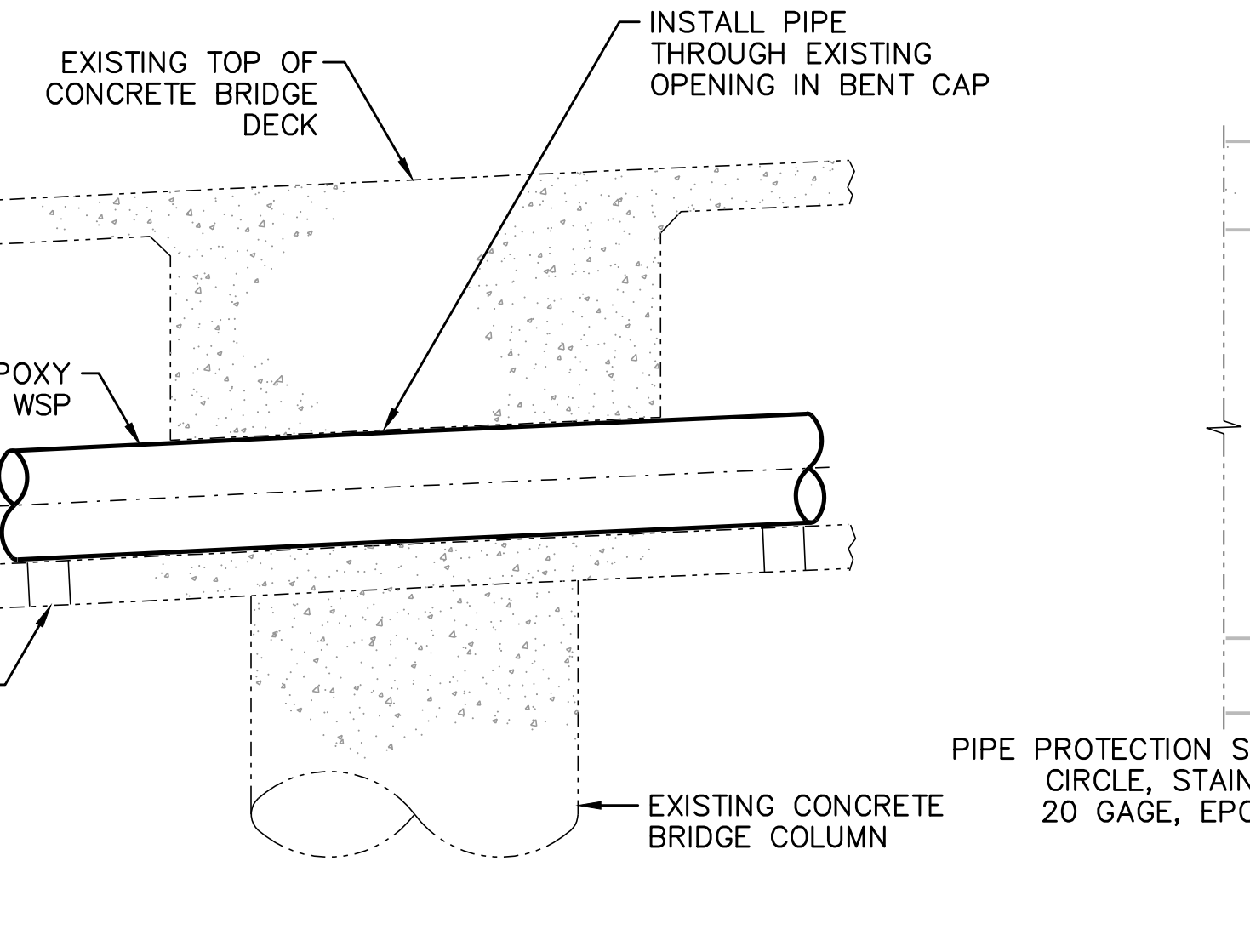
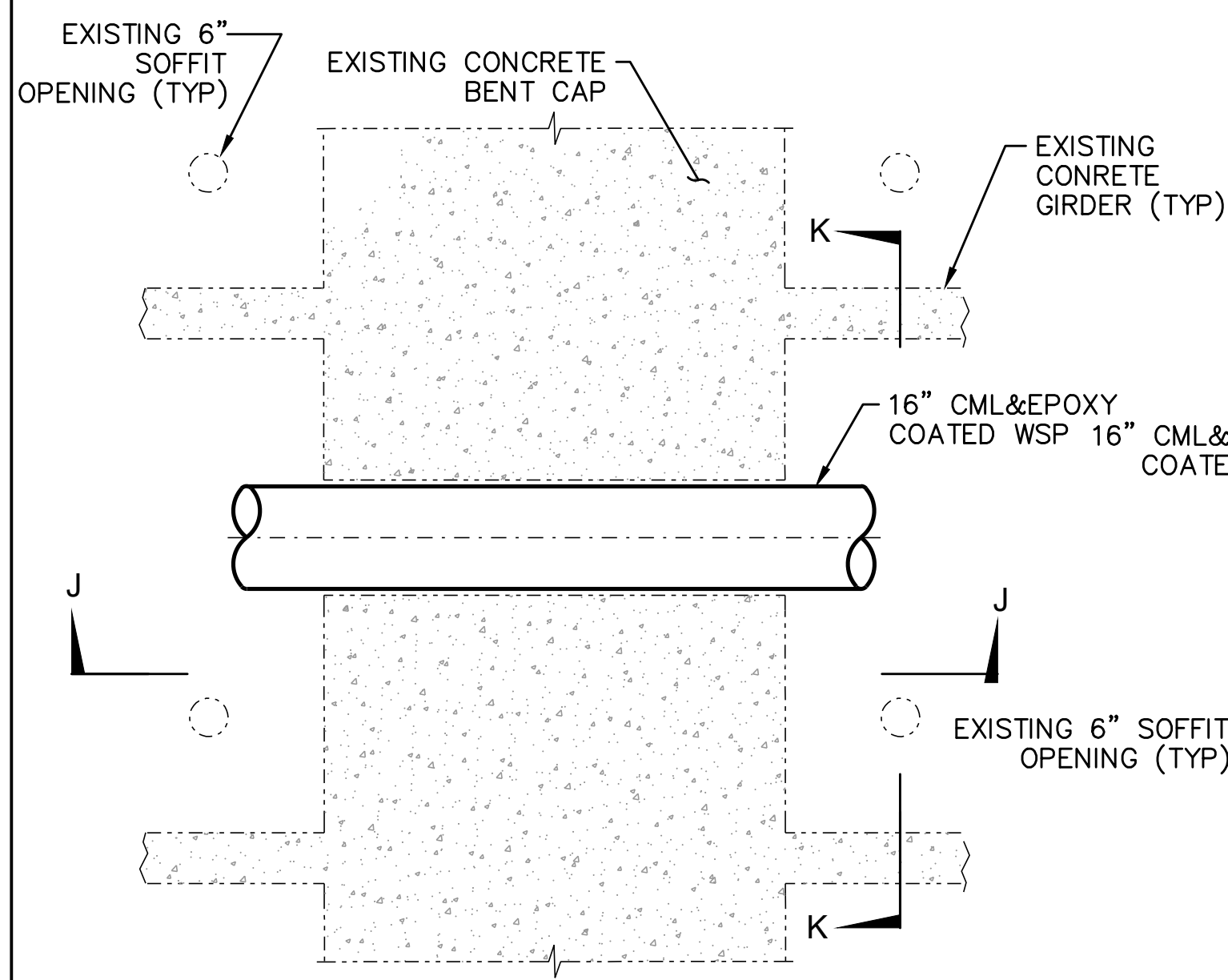


PERMIT NUMBER \_\_\_\_\_  
 CO SD RTE 5 PM R14.89  
 AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES  
 STATE REPRESENTATIVE \_\_\_\_\_ DATE \_\_\_\_\_

**CML & EPOXY COATED WSP** 1/24  
 NOT TO SCALE

**ROLLER PIPE HANGER ASSEMBLY W/ LATERAL RESTRAINT** 2/24  
 NOT TO SCALE

**SECTION K-K SECTION THROUGH BRIDGE BENT** K/24  
 NOT TO SCALE



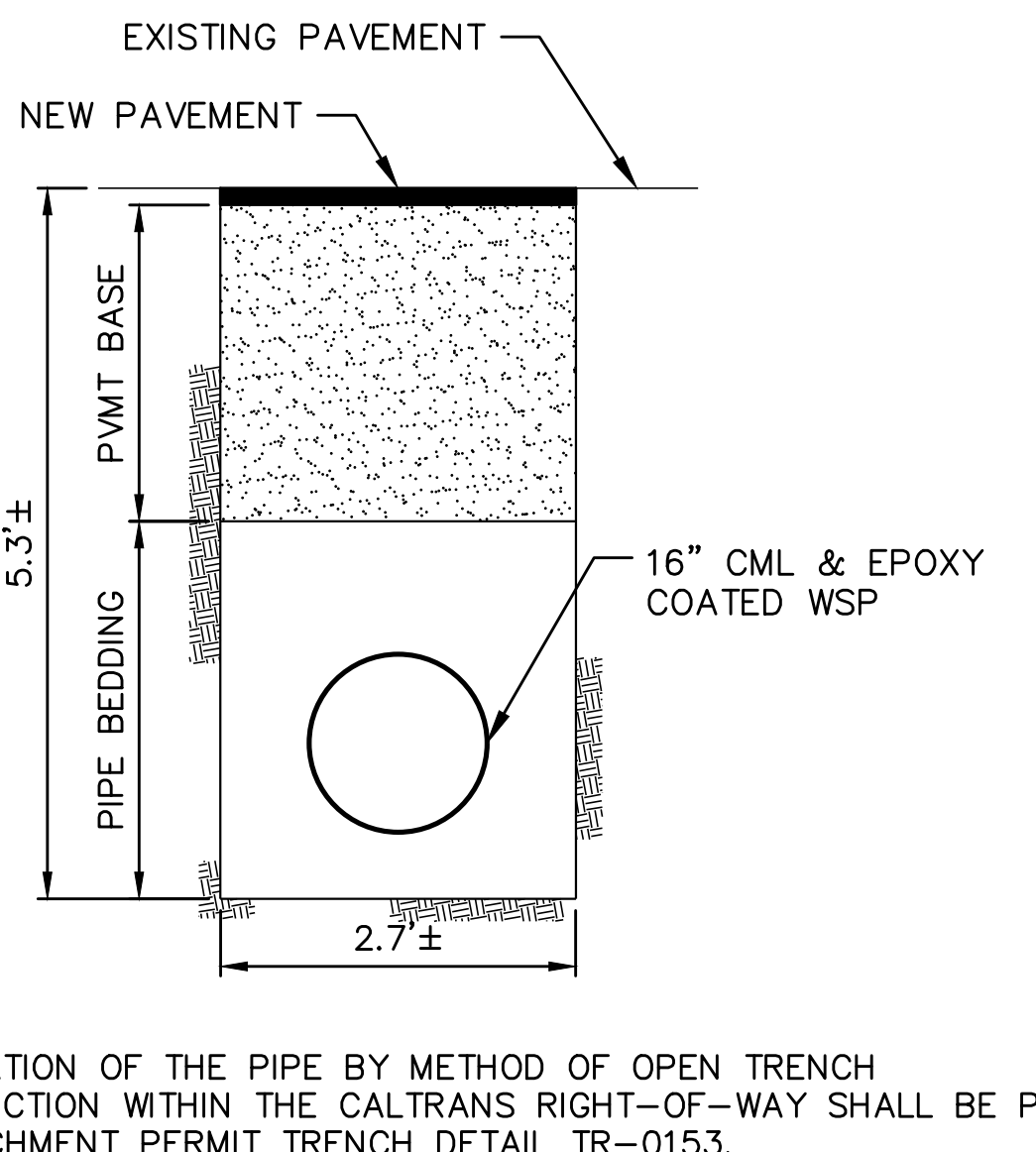
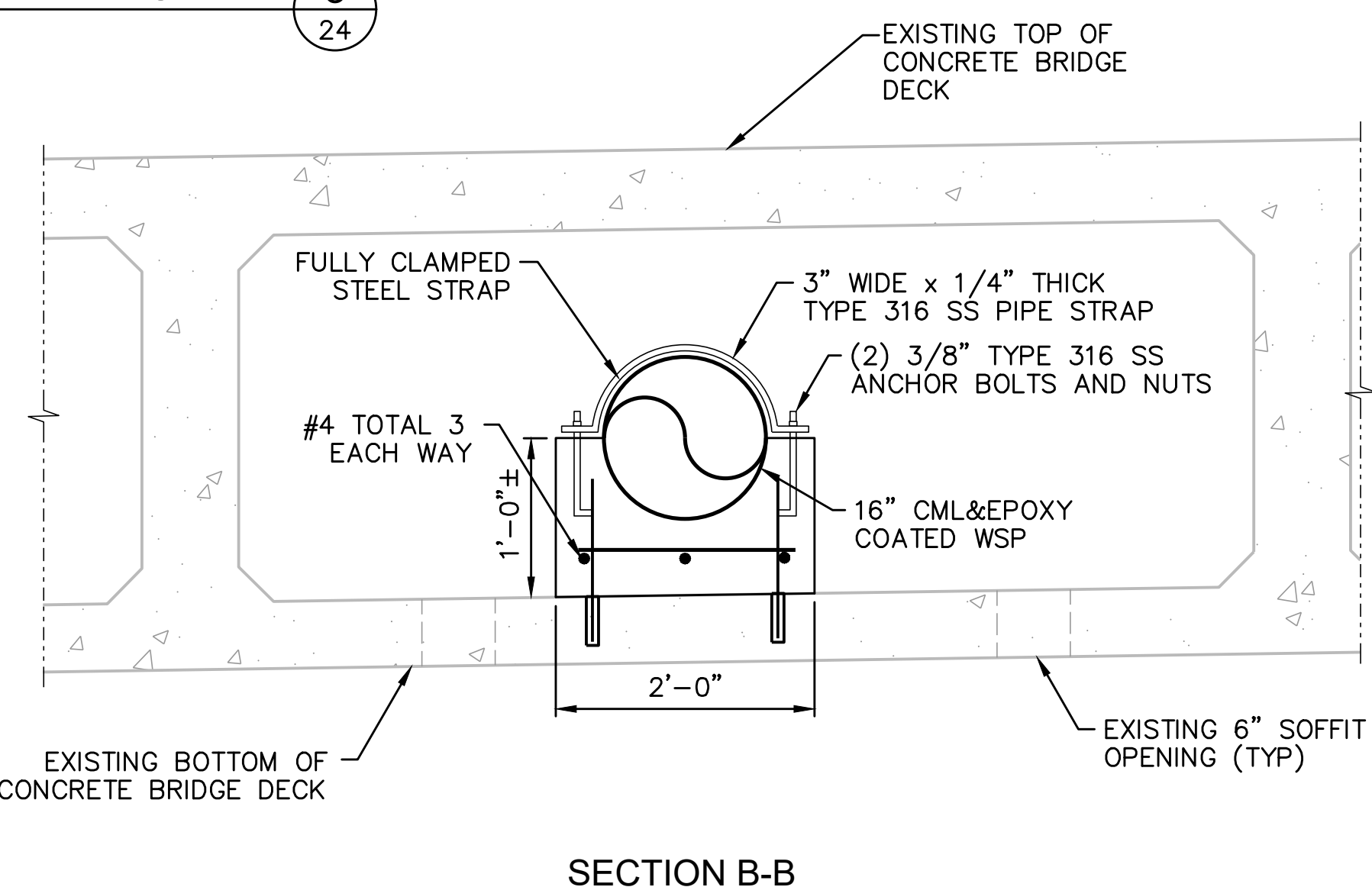
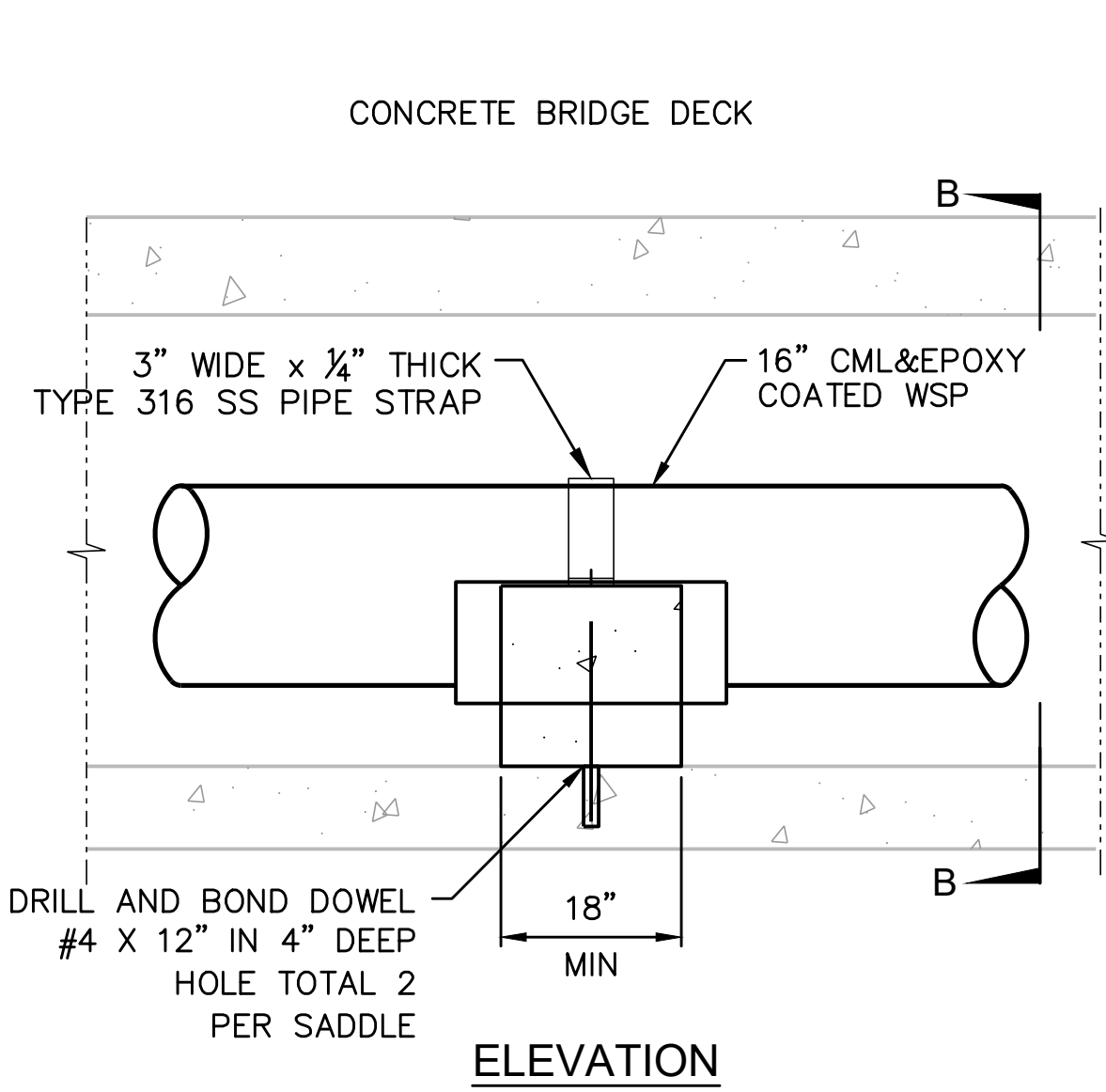
**TYPICAL BENT No. 2 - PLAN**  
**BENT NO. 2** 3/24

**SECTION J-J**

**ELEVATION**  
**SLIDING PIPE SUPPORT DETAIL** 4/24  
 NOT TO SCALE

**NOTES TO CONTRACTOR:**

- ALL WELDED JOINTS MUST BE COMPLETE JOINT PENETRATION (CJP) PER AWS D1.1
- DRAWING HAS BEEN PREPARED BASED ON AVAILABLE AS BUILT PLANS, AND FIELD CONDITIONS OF THE EXISTING PIPELINE INSTALLATION AND BRIDGE OPENINGS HAVE NOT BEEN VERIFIED. CONTRACTOR SHALL FIELD VERIFY ALIGNMENT OF EXISTING WATERLINE AND WALL OPENINGS WITHIN BRIDGE PRIOR TO NEW PIPE FABRICATION.
- THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

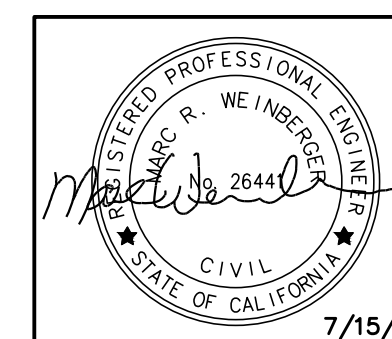


**NOTES:**

- INSTALLATION OF THE PIPE BY METHOD OF OPEN TRENCH CONSTRUCTION WITHIN THE CALTRANS RIGHT-OF-WAY SHALL BE PER ENCROACHMENT PERMIT TRENCH DETAIL TR-0153.

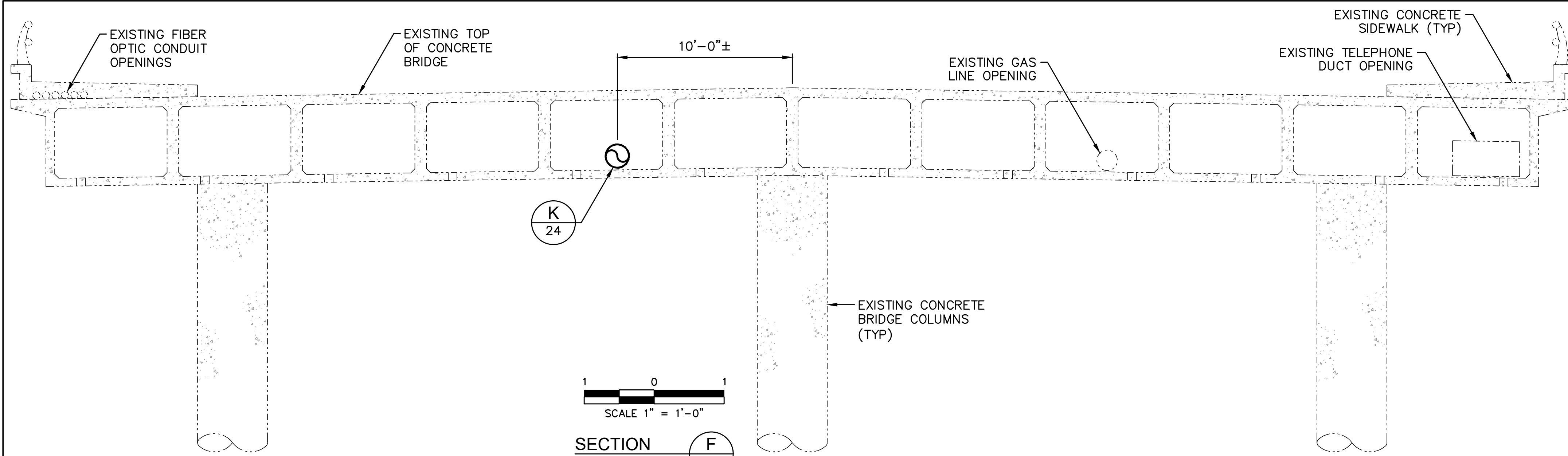
STEEL PIPE THICKNESS= 5/16"  
 PIPE CLASSIFICATION= 250 psi

**PSOMAS**  
 401 B Street, Suite 1600  
 San Diego, CA 92101  
 (619) 951-2800 (619) 961-2392 fax  
 www.psomas.com



**WATER GROUP 952**  
**ADDITIVE ALTERNATE F:**  
**MARKET ST OVERCROSSING**  
**BRIDGE SECTION & BENT DETAILS**

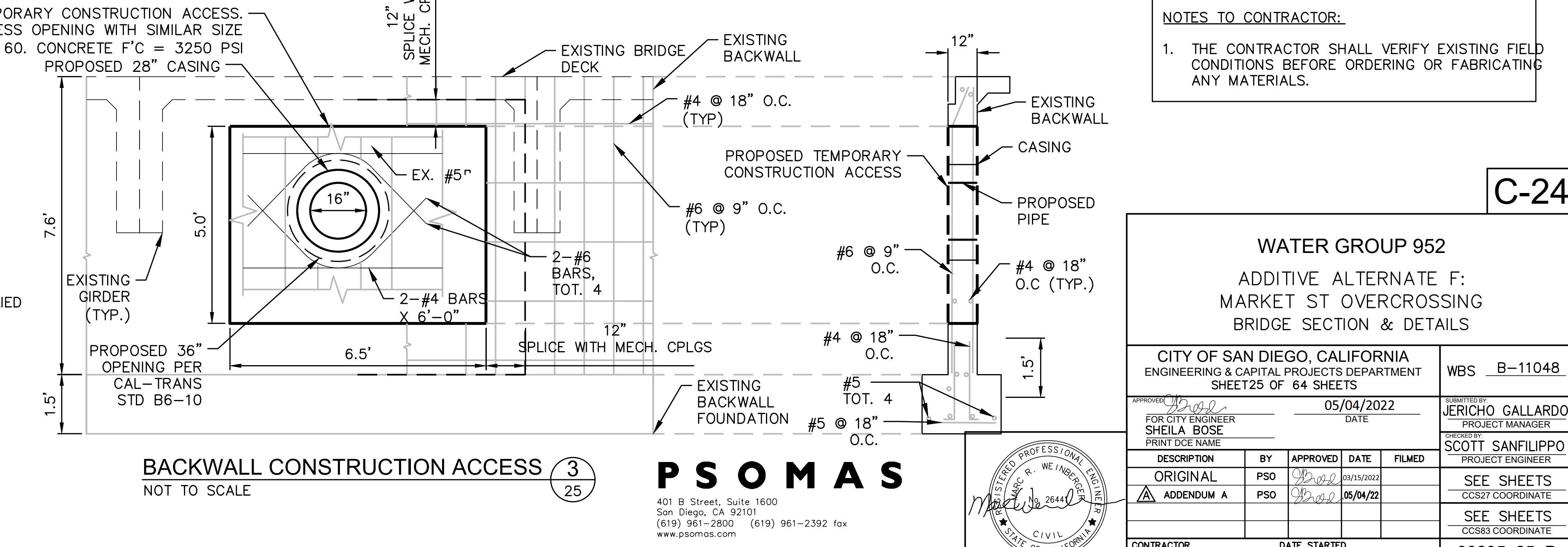
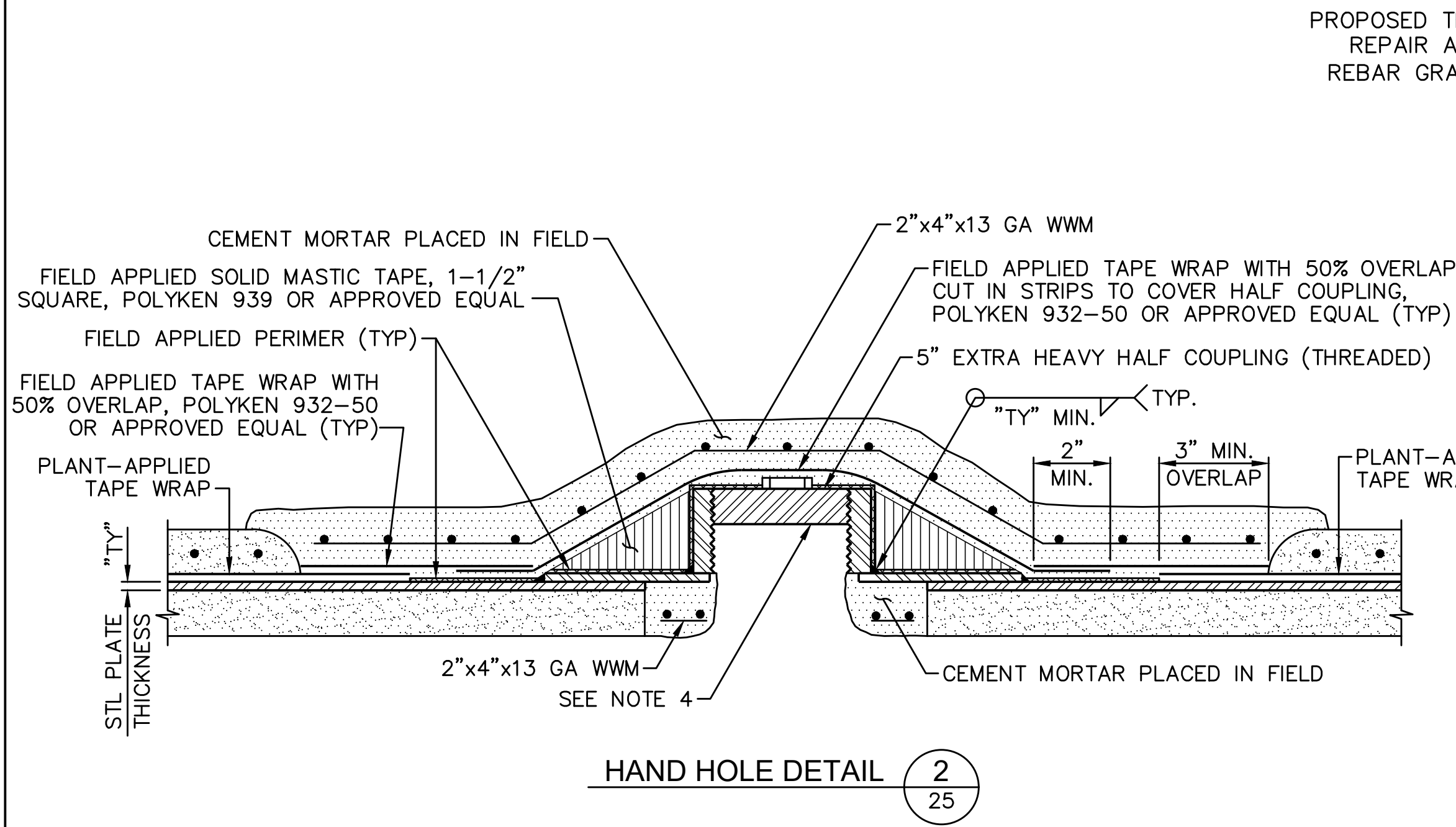
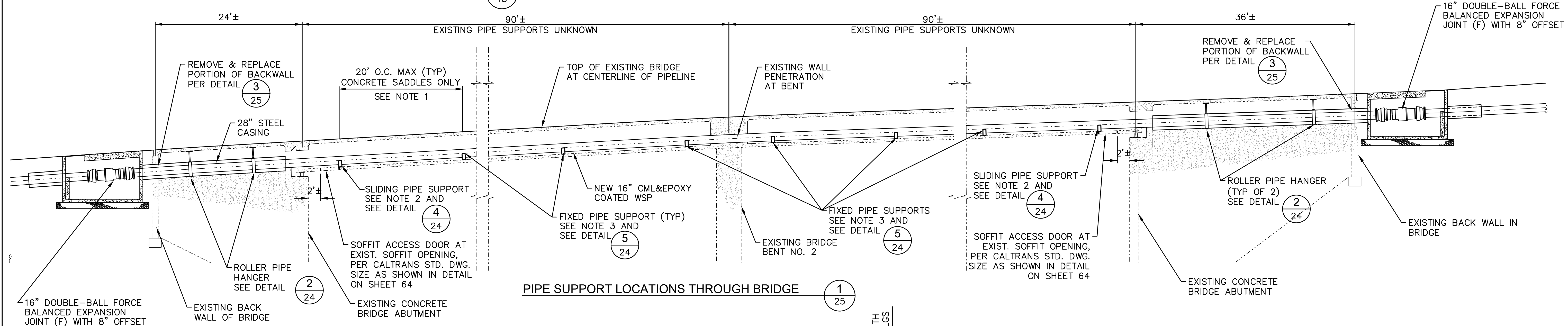
APPROVED: SHEILA BOSE FOR CITY ENGINEER PRINT DCE NAME	DATE: 05/04/2022	PROJECT MANAGER: JERICO GALLARDO	PROJECT ENGINEER: SCOTT SANFILIPPO
DESCRIPTION: ORIGINAL	BY: PSO	APPROVED: [Signature]	DATE: 03/15/2022
DESCRIPTION: ADDENDUM A	BY: PSO	APPROVED: [Signature]	DATE: 05/04/22
CONTRACTOR: [Blank]	DATE STARTED: [Blank]	INSPECTOR: [Blank]	DATE COMPLETED: [Blank]



NOTES:

- ONLY USE HAND HOLES IF AN ACCESS MANWAY IS NOT WITHIN A REASONABLE DISTANCE.
- BUTT STRAPS TO BE FURNISHED IN TWO PIECES AND SHIPPED LOOSE FOR FIELD JOINING. (BACKING PLATE SHALL BE 1/4" THICK X 1" WIDE).
- 14" MAXIMUM LENGTH OF BUTT STRAP FOR FIELD CLOSING SECTION.
- FOR PIPING 36" AND LARGER, FOUR HAND HOLES ARE REQUIRED FOR EACH BUTT STRAP JOINT AND SHALL BE LOCATED 90° APART.
- WELD PLUG TO COUPLING AND CEMENT MORTAR LINE OR COAT EXPOSED INTERIOR METAL SURFACES WITH 11 MILS (MIN) EPOXY COATING IN FIELD.
- THE ABOVE DETAIL IS SCHEMATIC IN NATURE AND IS PRESENTED HERE TO CLARIFY INSTALLATION OF FIELD APPLIED TAPE WRAP. THERE SHALL BE NO AIR POCKETS UNDER FIELD APPLIED TAPE WRAPS.

PERMIT NUMBER \_\_\_\_\_  
CO SD RTE 5 PM R14.89  
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES  
STATE REPRESENTATIVE \_\_\_\_\_ DATE \_\_\_\_\_



NOTES TO CONTRACTOR:

- THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

WATER GROUP 952  
ADDITIVE ALTERNATE F:  
MARKET ST OVERCROSSING  
BRIDGE SECTION & DETAILS

CITY OF SAN DIEGO, CALIFORNIA ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 25 OF 64 SHEETS		WBS B-11048
APPROVED FOR CITY ENGINEER SHEILA BOSE PRINT DC NAME	05/04/2022 DATE	SUBMITTED BY JERICHO GALLARDO PROJECT MANAGER CREATED BY SCOTT SANFILIPPO PROJECT ENGINEER
DESCRIPTION ORIGINAL	BY PSO	APPROVED [Signature]
DATE 03/15/2022	FILED [Signature]	SEE SHEETS CCS27 COORDINATE
ADDENDUM A	PSO	05/04/22
CONTRACTOR INSPECTOR	DATE STARTED DATE COMPLETED	SEE SHEETS CCS83 COORDINATE 38235-25-D

**PSOMAS**  
401 B Street, Suite 1600  
San Diego, CA 92101  
(619) 961-2800 (619) 961-2392 fax  
www.psomas.com



ADDENDUM A

ADDITIVE ALTERNATE F: MARKET ST OVERCROSSING

C-24

THRUST/ANCHOR TABLE FOR 16" AND LARGER WATER MAINS, CLASS 235							
SHEET NO.	PIPE STATIONING	TYPE OF BLOCK	TYPE OF APPURTENANCE	DESIGN PRESSURE	TOTAL THRUST (lb)	ASSUMED SOIL CAPACITY	MINIMUM BEARING AREA (sq. ft.), SEE NOTE 3 BELOW OR VOLUME OF BLOCK (cu. ft.)
2	1+35.74	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
2	1+35.74	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
2	2+89.56	THRUST	16" X 4" TEE	150 LB/SQ. IN.	2,714	2000 LB/SQ. FT.	8 CU. FT.
2	4+55.24	THRUST	16" X 4" TEE	150 LB/SQ. IN.	2,714	2000 LB/SQ. FT.	8 CU. FT.
2	4+57.84	THRUST	16" X 4" TEE	150 LB/SQ. IN.	2,714	2000 LB/SQ. FT.	8 CU. FT.
2	5+16.72	THRUST	16" X 4" TEE	150 LB/SQ. IN.	2,714	2000 LB/SQ. FT.	8 CU. FT.
2	6+55.95	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.
2	7+30.90	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
2	7+39.56	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
3	1+60.64	THRUST	20" X 12" TEE	150 LB/SQ. IN.	20,527	2000 LB/SQ. FT.	62 CU. FT.
4R	1+00.00	THRUST	16" X 16" CROSS	150 LB/SQ. IN.	50,442	2000 LB/SQ. FT.	151 CU. FT.
4R	1+00.00	THRUST	24" X 16" REDUCER	150 LB/SQ. IN.	42,751	2000 LB/SQ. FT.	128 CU. FT.
5	0+89.93	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.
5	0+89.93	THRUST	16" X 8" REDUCER	150 LB/SQ. IN.	26,019	2000 LB/SQ. FT.	78 CU. FT.
5	2+00.00	THRUST	16" X 6" REDUCER	150 LB/SQ. IN.	30,059	2000 LB/SQ. FT.	90 CU. FT.
5	5+29.78	THRUST	16" X 12" TEE	150 LB/SQ. IN.	20,527	2000 LB/SQ. FT.	62 CU. FT.
5	5+66.61	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.
5	5+72.20	THRUST	16" X 12" REDUCER	150 LB/SQ. IN.	15,141	2000 LB/SQ. FT.	45 CU. FT.
5	5+94.39	THRUST	16" X 12" REDUCER	150 LB/SQ. IN.	15,141	2000 LB/SQ. FT.	45 CU. FT.
6	8+37.35	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.
6	9+10.23	THRUST	16" X 12" CROSS	150 LB/SQ. IN.	29,030	2000 LB/SQ. FT.	87 CU. FT.
9	19+02.11	THRUST	16" X 4" TEE	150 LB/SQ. IN.	2,714	2000 LB/SQ. FT.	8 CU. FT.
9	20+16.25	THRUST	16" X 8" TEE	150 LB/SQ. IN.	9,649	2000 LB/SQ. FT.	29 CU. FT.
9	20+84.43	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.
9	24+03.85	THRUST	16" X 8" TEE	150 LB/SQ. IN.	9,649	2000 LB/SQ. FT.	29 CU. FT.
10	1+20.00	THRUST	16" X 12" REDUCER	150 LB/SQ. IN.	15,141	2000 LB/SQ. FT.	45 CU. FT.
10	3+32.30	THRUST	16" X 12" CROSS	150 LB/SQ. IN.	29,030	2000 LB/SQ. FT.	87 CU. FT.
10	9+37.94	THRUST	16" X 12" REDUCER	150 LB/SQ. IN.	15,141	2000 LB/SQ. FT.	45 CU. FT.
10	10+09.33	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
10	10+09.33	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.
10	10+49.82	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
10	10+84.15	THRUST	16" 90° BEND	150 LB/SQ. IN.	50,442	2000 LB/SQ. FT.	151 CU. FT.
10	11+12.69	THRUST	16" 90° BEND	150 LB/SQ. IN.	50,442	2000 LB/SQ. FT.	151 CU. FT.
11	1+44.96	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
11	4+87.50	THRUST	16" X 8" TEE	150 LB/SQ. IN.	9,649	2000 LB/SQ. FT.	29 CU. FT.
11	5+32.51	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.
11	8+65.94	THRUST	16" X 12" TEE	150 LB/SQ. IN.	15,141	2000 LB/SQ. FT.	45 CU. FT.
12	12+16.40	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
12	12+61.21	THRUST	16" 45° BEND	150 LB/SQ. IN.	27,299	2000 LB/SQ. FT.	82 CU. FT.
12	12+83.13	THRUST	16" X 6" TEE	150 LB/SQ. IN.	5,609	2000 LB/SQ. FT.	17 CU. FT.

THRUST/ANCHOR TABLE FOR 16" AND LARGER WATER MAINS, CLASS 305							
SHEET NO.	PIPE STATIONING	TYPE OF BLOCK	TYPE OF APPURTENANCE	DESIGN PRESSURE	TOTAL THRUST (lb)	ASSUMED SOIL CAPACITY	MINIMUM BEARING AREA (sq. ft.), SEE NOTE 3 BELOW OR VOLUME OF BLOCK (cu. ft.)
4L	1+00.00	THRUST	24" X 8" TEE	200 LB/SQ. IN.	12,865	2000 LB/SQ. FT.	39 CU. FT.
4R	3+76.23	THRUST	16" X 16" CROSS	200 LB/SQ. IN.	47,557	2000 LB/SQ. FT.	143 CU. FT.
4R	3+76.23	THRUST	16" X 12" REDUCER	200 LB/SQ. IN.	20,188	2000 LB/SQ. FT.	61 CU. FT.
4R	3+76.23	THRUST	16" X 12" REDUCER	200 LB/SQ. IN.	20,188	2000 LB/SQ. FT.	61 CU. FT.
4R	3+84.03	THRUST	24" X 16" REDUCER	200 LB/SQ. IN.	47,557	2000 LB/SQ. FT.	143 CU. FT.

NOTES:

1. THE SPECIFIC WEIGHT OF CONCRETE IS 140LB/CU.FT. SAFETY FACTOR = 2.0
2. FOR ADDITIONAL THRUST BLOCK, ANCHOR BLOCKS DETAILS AND NOTES SEE SDW-151.
3. REFER TO SPECIFICATIONS SECTION 306-1.2.14 FOR ADDITIONAL REQUIREMENTS.
4. FOR ESTIMATING THE CY QUANTITY FOR THRUST BLOCKS, DEPTH OF THE THRUST BLOCKS SHALL BE HALF OF THE TRENCH WIDTH PLUS 12" EMBEDMENT.



MINIMUM RESTRAINED PIPE LENGTHS SHALL BE AS FOLLOWS

- 16" - 45° BEND - 33 FEET
- 16" - 90° BEND - 58 FEET
- 16" X 4" TEE - 1 FOOT ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 16" X 6" TEE - 1 FOOT ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 16" X 8" TEE - 1 FOOT ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 16" X 12" TEE - 1 FOOT ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 16" X 16" TEE - 8 FEET ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 20" X 12" TEE - 1 FOOT ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 24" X 8" TEE - 1 FOOT ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 20" X 16" TEE - 1 FOOT ALONG BRANCH (LR = 20 FEET - NO JOINTS ON EACH RUN SIDE OF TEE)
- 16" X 16" CROSS - 80 FEET
- 20" X 12" REDUCER - 81 FEET
- 20" X 16" REDUCER - 81 FEET

THE ABOVE IS BASED ON A TEST PRESSURE OF 200 PSI, 2" SAFETY FACTOR, 3' COVER DEPTH & TYPE SW SOIL. PROVIDE THE RESTRAINT LENGTH AS INDICATED OR TO THE NEAREST JOINT, WHICHEVER IS GREATER. ALL JOINTS WITHIN THE CALCULATED LENGTHS MUST BE RESTRAINED. IF THE DISTANCE BETWEEN FITTINGS IS LESS THAN OR EQUAL TO THE CALCULATED RESTRAINT LENGTH, RETRAIN ALL JOINTS BETWEEN THOSE FITTINGS. THE USE OF CONCRETE THRUST BLOCK IS PREFERRED. WHERE FIELD CONDITIONS IMPEDE THE USE OF CONCRETE THRUST BLOCKS, RESTRAINT JOINTS CAN BE USED WITH THE APPROVAL OF THE RESIDENT ENGINEER.

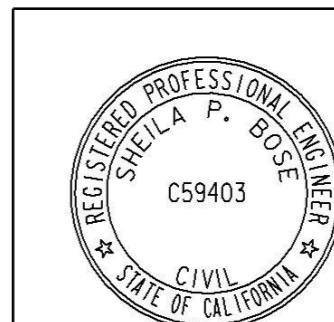
C-50

NOTE:  
ALL WORK FOR THRUST BLOCKS INCLUDED ON SHEET 4 IS CONSIDERED TO BE INCLUDED AS PART OF "ADDITIVE ALTERNATE C" BID PACKAGE AND IS ONLY TO BE CONSTRUCTED IF AWARDED.

NOTE:  
ALL WORK FOR THRUST BLOCKS INCLUDED ON SHEET 5 FROM STA 0+90.00 TO STA 2+00.00 IS CONSIDERED TO BE INCLUDED AS PART OF "ADDITIVE ALTERNATE D" BID PACKAGE AND IS ONLY TO BE CONSTRUCTED IF AWARDED.

NOTE:  
ALL WORK FOR THRUST BLOCKS INCLUDED ON SHEET 10 IS CONSIDERED TO BE INCLUDED AS PART OF "ADDITIVE ALTERNATE E" BID PACKAGE AND IS ONLY TO BE CONSTRUCTED IF AWARDED.

WATER GROUP 952  
THRUST BLOCK TABLE



CITY OF SAN DIEGO, CALIFORNIA  
ENGINEERING & CAPITAL PROJECTS DEPARTMENT  
SHEET 51 OF 64 SHEETS

APPROVED BY: <i>Sheila P. Bose</i>	DATE: 05/04/2022	FOR CITY ENGINEER: SHEILA BOSE	PROJECT MANAGER: JERICHO GALLARDO
PRINT DCE NAME: SHEILA BOSE	RCE#: C59403	PROJECT ENGINEER: SCOTT SANFILIPPO	REVISIONS:
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL	SS	<i>Sheila P. Bose</i>	03/15/2022
ADDENDUM A	SS	<i>Sheila P. Bose</i>	05/04/2022
SEE SHEETS			SEE SHEETS
			CCS27 COORDINATE
			SEE SHEETS
			CCS83 COORDINATE

CONTRACTOR: \_\_\_\_\_ DATE STARTED: \_\_\_\_\_  
INSPECTOR: \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
38235-51-D

THRUST BLOCK TABLE

**DESIGN NOTES:**

Design Specifications:  
 AASHTO LRFD Bridge Design Specifications, 8th Edition with California  
 Amendments.

Loading:  
 Live load: AASHTO LRFD 3.6.1.2  
 HL-93 consists of design truck or design tandem and design lane load.  
 Distribution per AASHTO LRFD 4.6.2.10 and 4.6.2.1  
 No soil cover.

Impact Factor: (Applied to roof slab only)  
 IM = 1.33 (No soil cover)

Earth load:  
 Earth pressure for two conditions:  
 140 pcf vertical, 36 pcf horizontal  
 140 pcf vertical, 120 pcf horizontal

Load Factors: AASHTO LRFD Table 3.4.1.1 & Table 3.4.1.2  
 Resistance Factors: AASHTO LRFD Table 12.5.5-1  
 Flexure = 0.90  
 Shear = 0.85

Unit stresses:  
 f'c = 3600 psi  
 fy = 60,000 psi

Exclusion: Compressive reinforcement and negative moment reduction (for  
 continuity) do not apply. Axial loading on members has not been considered.

**CONSTRUCTION NOTES**

Construction loads:  
 Strutting required as shown on Caltrans Standard Plan D88.

Earthwork: See Caltrans Standard Plan A62E.

Backfill: See Caltrans Standard Specifications

**GENERAL NOTES**

Stagger splices not shown.

Hooks may be rotated or tilted, as necessary, for clearance.

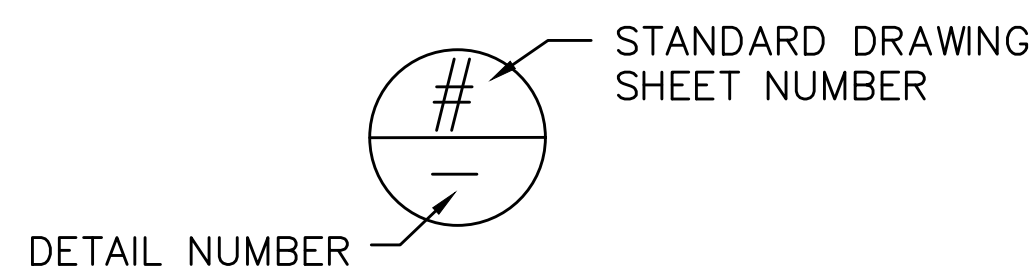
For mechanical, electrical, and other disciplines, see other sheets.

**CALTRANS STANDARD DRAWINGS DATED 2018**

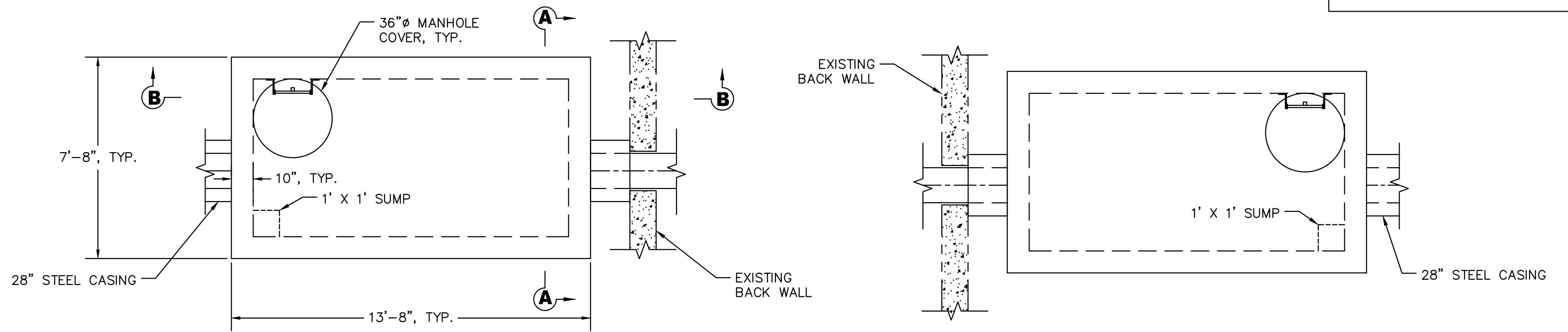
- A3A ABBREVIATIONS (SHEET 1 OF 3)
- A3B ABBREVIATIONS (SHEET 2 OF 3)
- A3C ABBREVIATIONS (SHEET 3 OF 3)
- A10A LINES AND SYMBOLS (SHEET 1 OF 5)
- RSP A10B LINES AND SYMBOLS (SHEET 2 OF 5)
- A10C LINES AND SYMBOLS (SHEET 3 OF 5)
- A10D LINES AND SYMBOLS (SHEET 4 OF 5)
- A10E LINES AND SYMBOLS (SHEET 5 OF 5)
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- RSP D82 CAST-IN-PLACE REINFORCED CONCRETE BOX CULVERT  
 MISCELLANEOUS DETAILS

**LEGEND**

**STANDARD DETAIL CALLOUT**

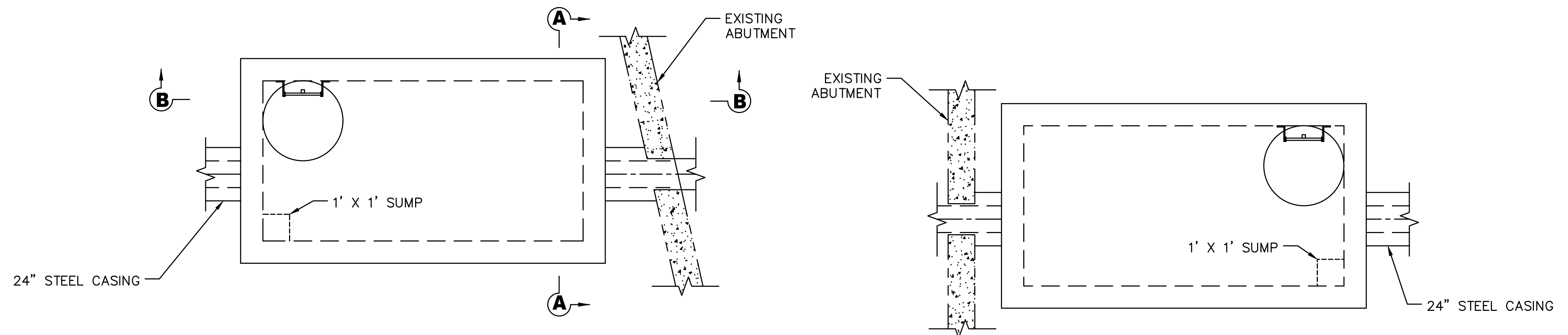


NOTE:  
 THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS BEFORE ORDERING  
 OR FABRICATING ANY MATERIALS.



1 MARKET ST WEST BR NO.57-0433 ABUTMENT PLAN  
 3/8" = 1'

2 MARKET ST EAST BR NO.57-0433 ABUTMENT PLAN  
 3/8" = 1'



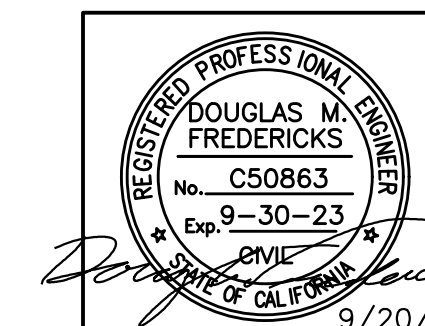
3 BROADWAY WEST BR NO.57-0423 ABUTMENT PLAN  
 3/8" = 1'

4 BROADWAY EAST BR NO.57-0423 ABUTMENT PLAN  
 3/8" = 1'

**NOTES**

For section A-A and section B-B see Sheet "S-2".

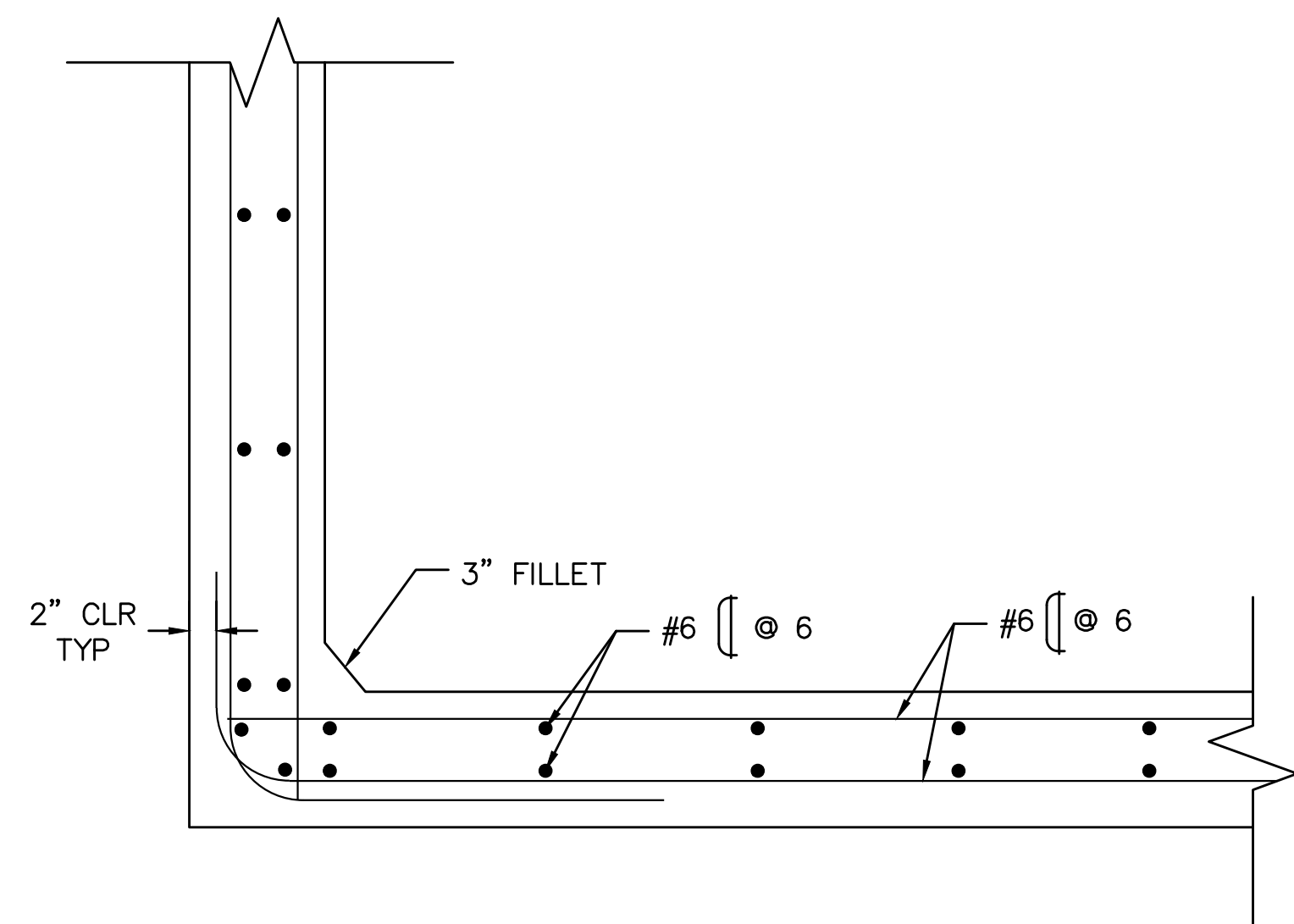
**PSOMAS**  
 401 B Street, Suite 1600  
 San Diego, CA 92101  
 (619) 961-2800 (619) 961-2392 fax  
 www.psomas.com



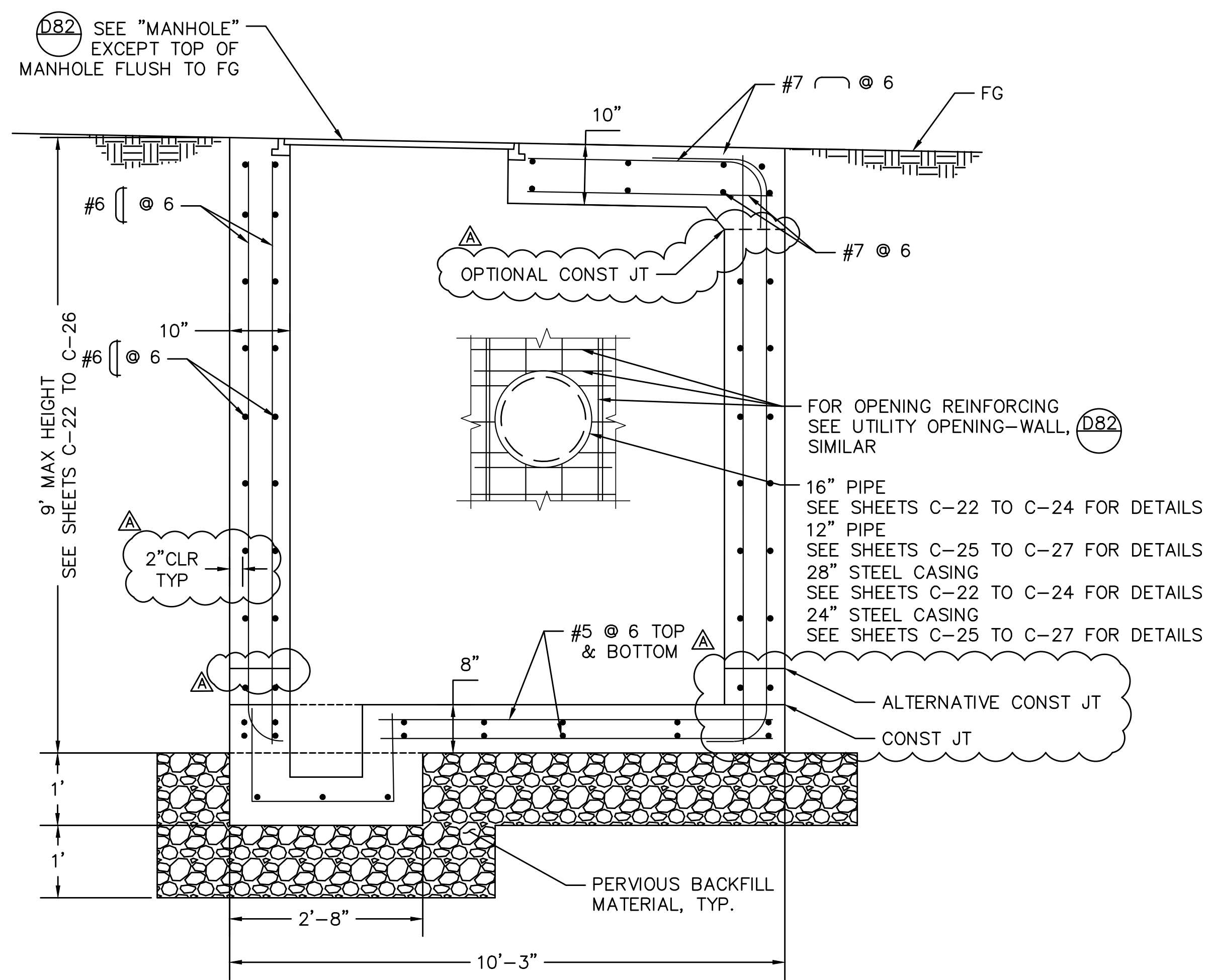
S-1

<b>WATER GROUP 952</b>			
<b>PIPE VAULT STRUCTURAL PLANS &amp; NOTES</b>			
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 62 OF 64 SHEETS			WBS <u>B-11048</u>
APPROVED BY <i>Sheila Bose</i> FOR CITY ENGINEER SHEILA BOSE PRINT DCE NAME	DATE 05/04/2022		SUBMITTED BY JERICO GALLARDO PROJECT MANAGER
DESCRIPTION ORIGINAL	BY PSO	APPROVED <i>Sheila Bose</i>	DATE 03/15/2022
DESCRIPTION ADDENDUM A	BY PSO	APPROVED <i>Sheila Bose</i>	DATE 05/04/22
CONTRACTOR INSPECTOR			DATE STARTED DATE COMPLETED
			38235- 62-D

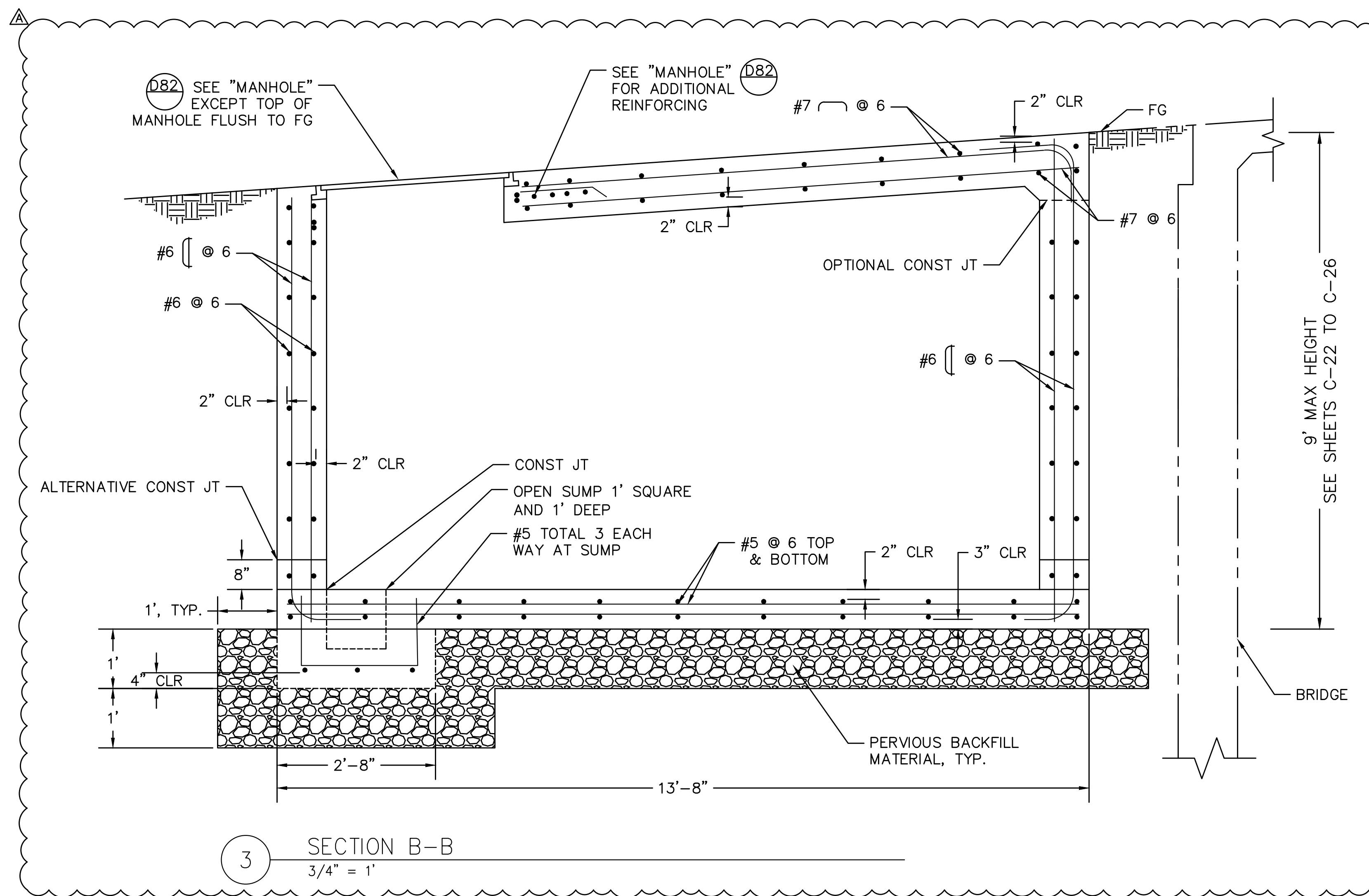




1 CORNER PLAN  
1" = 1'



2 SECTION A-A  
3/4" = 1'



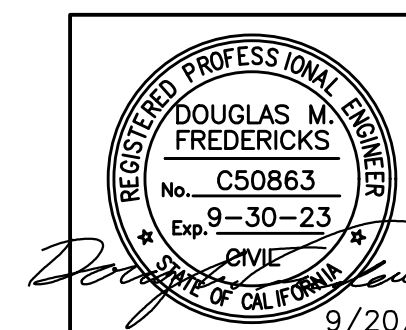
3 SECTION B-B  
3/4" = 1'

PIPE VAULT STRUCTURAL DETAILS

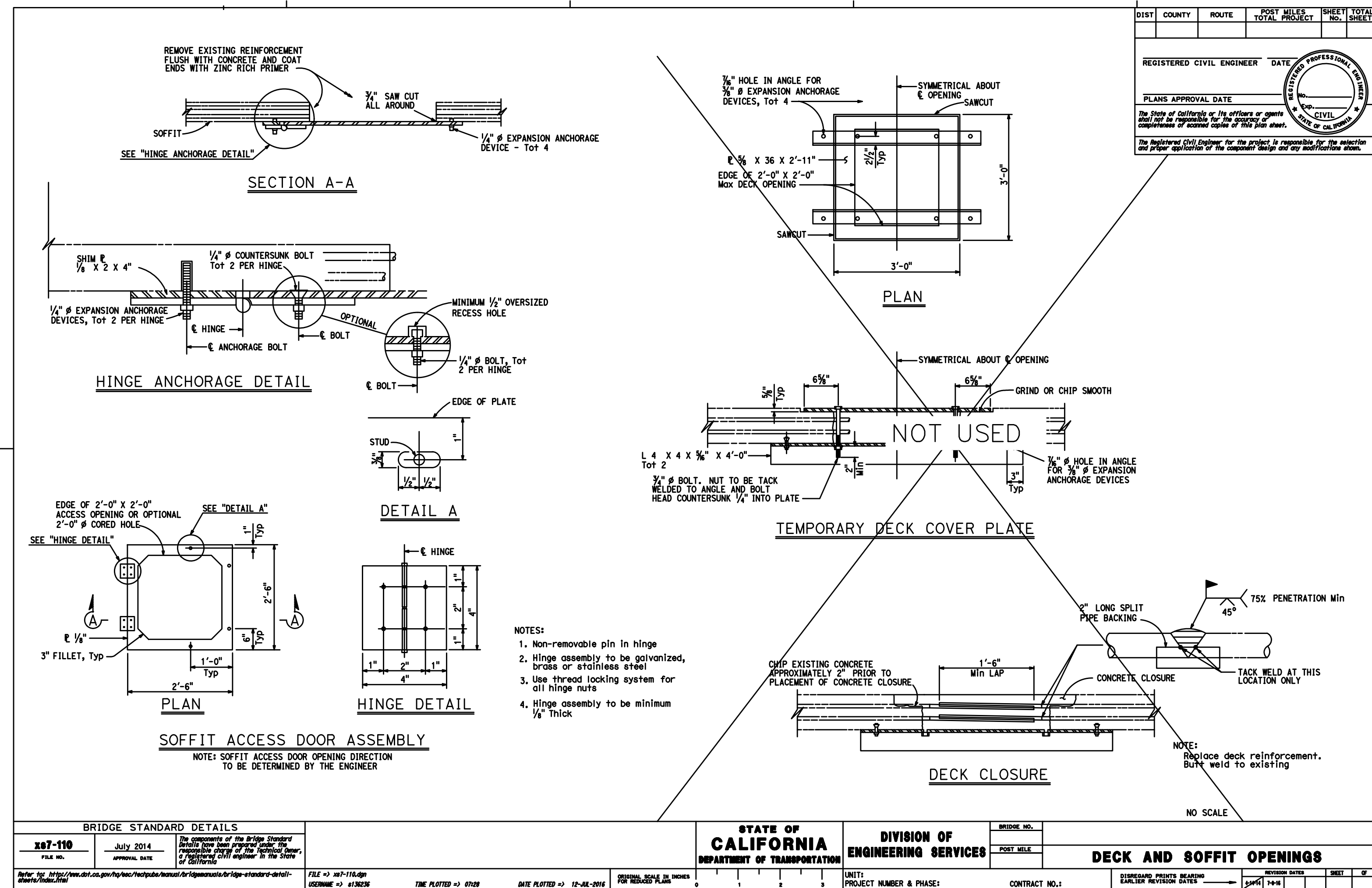
S-2

<b>WATER GROUP 952</b>			
<b>PIPE VAULT STRUCTURAL DETAILS</b>			
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 63 OF 64 SHEETS		WBS B-11048	
APPROVED BY FOR CITY ENGINEER SHEILA BOSE PRINT DCE NAME	DATE 05/04/2022	SUBMITTED BY JERICHO GALLARDO PROJECT MANAGER	
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL	PSO	<i>[Signature]</i>	03/15/2022
ADDENDUM A	PSO	<i>[Signature]</i>	05/04/22
CONTRACTOR		DATE STARTED	
INSPECTOR		DATE COMPLETED	
		38235-63-D	

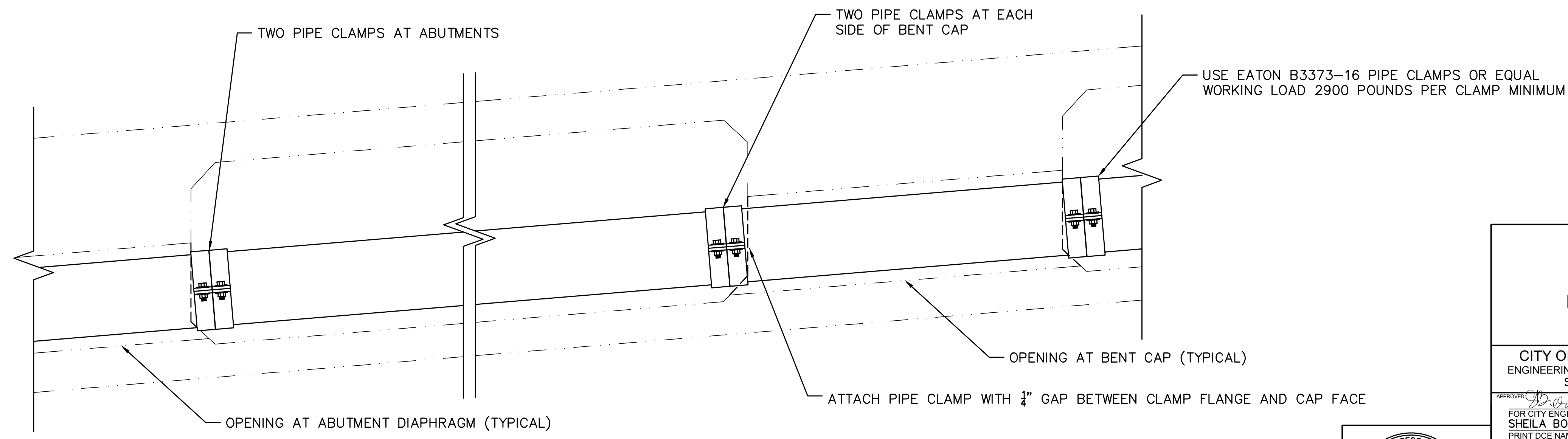
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 San Diego, CA 92101  
 (619) 961-2800 (619) 961-2392 fax  
 www.psomas.com



PERMIT NUMBER 11-21-NUB-0903  
 CO SD RTE 5 PM R15.18  
 AS-BUILT PLANS FOR ROADWAY  
 GEOMETRIC AND ABOVE GROUND  
 FEATURES  
 STATE REPRESENTATIVE DATE



SOFFIT ACCESS DOOR 1/23

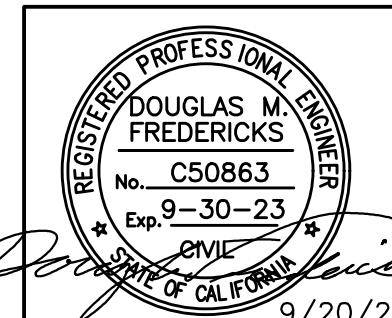


PIPE CLAMP SECTION 2/23

S-3

WATER GROUP 952 ADDITIVE ALTERNATE F: MARKET ST OVERCROSSING STRUCTURAL DETAILS			
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING & CAPITAL PROJECTS DEPARTMENT SHEET 64 OF 64 SHEETS		WBS B-11048	
APPROVED FOR CITY ENGINEER SHEILA BOSE PRINT DCE NAME	DATE 05/04/2022	SUBMITTED BY JERICHO GALLARDO PROJECT MANAGER	
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL	PSO	PSO	03/15/2022
ADDENDUM A	PSO	PSO	05/04/22
CONTRACTOR		DATE STARTED	
INSPECTOR		DATE COMPLETED	
		38235- 64 -D	

**PSOMAS**  
 401 B Street, Suite 1600  
 San Diego, CA 92101  
 (619) 961-2800 (619) 961-2392 fax  
 www.psomas.com



ADDITIVE ALT. F: MARKET ST OVERCROSSING STRUCTURAL DETAILS

# City of San Diego

CITY CONTACT: Rosa Riego, Senior Contract Specialist, Email: [RRiego@sandiego.gov](mailto:RRiego@sandiego.gov)

Phone No. (619) 533-3426

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## ADDENDUM B



## FOR

## WATER GROUP JOB 952

BID NO.: K-22-2065-DBB-3

SAP NO. (WBS/IO/CC): B-11048

CLIENT DEPARTMENT: 2000

COUNCIL DISTRICT: 3, 8

PROJECT TYPE: KB

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### BID DUE DATE:

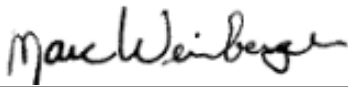
**2:00 PM  
June 3, 2022**

**CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS**

<http://www.sandiego.gov/cip/bidopps/index.shtml>

## ENGINEER OF WORK

The Engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:

  
\_\_\_\_\_  
1) Registered Engineer

05/19/2022  
\_\_\_\_\_  
Date

Seal:



  
\_\_\_\_\_  
2) For City Engineer

5/19/22  
\_\_\_\_\_  
Date

Seal:



## **A. CHANGES TO CONTRACT DOCUMENTS**

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

## **B. BIDDER'S QUESTIONS**

- Q1. Item 41 color concrete 1000 CY. I cannot find where this is on the plans. Can you please help?
- A1. Refer to Sheet C-1.
- Q2. Refer to Note No. 4 on Sheet C-12. Please clarify the locations for the installation of (2) 36" box CUPANIOPSIS ANACARDIOIDES and (2) 36" box FRANXINUS ANGUSTIFOLIA.
- A2. Refer to Sheet C-12. Trees to be installed at approximately STA 5+00. Placement of trees to be approved by Resident Engineer.
- Q3. Refer to Note No. 6 on Sheet C-12. Please provide the planting and irrigation as-built plan regarding repair of existing irrigation system and disturbed mulch surface.
- A3. No As-builts available, contractor to visit site and confirm work required for replacement of system if disturbed.
- Q4. Refer to Sheet C-12, there is a callout at Kettner Blvd shows "All surface improvements including landscape and hardscape to be replaced in kind. Irrigation system to be restored." However, no bid item is provided on bid form for this work, please clarify what bid item on the bid schedule supposed to cover the related costs. Also, please provide an as-built plan or more information regarding landscape area need to be replace and irrigation system needs to be restored.
- A4. Use Item 84 – Remove and Replace Miscellaneous Hardscape with Topsoil for "All surface improvements including landscape and hardscape to be replaced in kind." No As-builts available. Contractor to visit site and confirm work required for replacement of system if disturbed.

Q5. There is no information on the plans for tree removal Line Item 85, Tree Trimming Line Item 99, Root Pruning Line Item 100 and Root Barrier Line Item 101. Can you please tell me where those can be found?

A5. Refer to Sheet C-12

**C. SUPPLEMENTARY SPECIAL PROVISIONS**

1. To Section **401, REMOVAL**, page 76, **ADD** the following:

**401-7 Payment.** To the “WHITEBOOK”, ADD the following:

7. For work around Kettner Blvd, all work related to all surface improvements including landscape and hardscape to be replaced in kind shall be included in the Bid item for “Remove and Replace Miscellaneous Hardscape with Topsoil”.

**D. ADDITIONAL CHANGES**

1. The following are additional changes to the Line Items in the PlanetBids Tab:

For clarity where applicable, **ADDITIONS**, if any, have been **Underlined** and **DELETIONS**, if any, have been **Stricken out**.

Section	Item Code	Description	UoM	Quantity	Payment Reference
Main Bid	238910	Remove and Replace Miscellaneous Hardscape with Topsoil	SF	<del>100</del> <u>1000</u>	401-7
Main Bid	237310	Colored Concrete	CY	<del>1000</del> <u>8</u>	303-6.1.2

Rania Amen, Director  
Engineering & Capital Projects Department

Dated: *May 19, 2022*  
San Diego, California

RA/DH/la

## Bid Results

### Bidder Details

**Vendor Name** S.C. Valley Engineering, Inc.  
**Address** 656 Front St.  
El Cajon, California 92020  
United States  
**Respondee** Julio Cabrera  
**Respondee Title** Estimator  
**Phone** 619-444-2366  
**Email** julio@scvalleyinc.com  
**Vendor Type** MBE, CADIR  
**License #** 624559  
**CADIR** 1000020727

### Bid Detail

**Bid Format** Electronic  
**Submitted** 06/03/2022 1:51 PM (PDT)  
**Delivery Method**  
**Bid Responsive**  
**Bid Status** Submitted  
**Confirmation #** 294319

### Respondee Comment

### Buyer Comment

### Attachments

File Title	File Name	File Type
Pending Actions.pdf	Pending Actions.pdf	Contractor's Certification of Pending Actions
Alternates.pdf	Alternates.pdf	Subcontractor Listing for Alternate Items
Business Interest.pdf	Business Interest.pdf	Mandatory Disclosure of Business Interests Form
Debarment Prime.pdf	Debarment Prime.pdf	Prime - Debarment and Suspension Certification
Debarment Subs.pdf	Debarment Subs.pdf	Subcontractor - Debarment and Suspension Certification
Bid Bond Signed.pdf	Bid Bond Signed.pdf	Bid Bond

## Subcontractors

Showing 11 Subcontractors

Name & Address	Desc	License Num	CADIR	Amount	Type
<b>BRINO BUILDERS INC</b> 1490 KOSTNER DRIVE SAN DIEGO, California 92154	Constructor- Concrete Work includes Alternate Items C, E, F	1021086	1000550020	\$418,695.00	ELBE, DBE, CADIR, MALE, LAT
<b>Kirk Paving, Inc.</b> 8722 Winter Gardens Blvd. Lakeside, California 92040	Constructor- Paving Work Incl. Alternate G	749206	1000002341	\$554,634.35	CADIR, Local
<b>Lacey Consulting</b> 6202 Amesbury Street, San Diego, CA San Diego, California 92114	Community Liaison- Constructor	00000	N/A	\$55,000.00	AFR, MALE, ELBE, Local
<b>Loveless Linton, Inc.</b> 1421 W Lewis St. San Diego, California 92103	Constructor- Archeo/Native American Work	0000	1000047263	\$35,814.00	Local
<b>Pavement Coatings Co.</b> 10240 San Sevaine Way Jurupa Valley, California 91752	Slurry Seal including deductive H- Constructor	303609	1000003382	\$521,588.30	
<b>Payneco Specialties Inc</b> 120 North Second Ave Chula Vista, California 91910	Constructor- Striping	298637	1000003515	\$157,200.00	CAU, FEM, DBE, CADIR, SDB, WBE, WOSB, Local
<b>Pipe Jacking Trenchless, Inc.</b> 26000 Commercentre Drive Lake Forest, California 92630	Constructor-Jack and Bore	1018405	1000042926	\$713,720.00	
<b>Soclaris Contracting</b> 7437 Lowell Ct. La Mesa, California 91942	Hazardous Material Handling/Disposal- Constructor	793838	1000011964	\$68,000.00	CADIR, DVBE, SDVSB, SLBE, MALE, CAU, Local
<b>Southern Contracting Co.</b> 559 N. Twin Oaks Valley Rd. San Marcos, California 92069	Electrical Work- Constructor	222252	1000002172	\$135,000.00	CADIR, Local
<b>Southwest Signal Services</b> 397 Raleigh Ave El Cajon, California 92020	Constructor-Traffic Loops/Electrical	451115	1000004265	\$63,400.00	Local
<b>Western Gardens Landscaping, Inc.</b> 4616 Pannonia Rd. Carlsbad, California 92008	Landscaping Work	662550	1000004289	\$80,500.00	SLBE, CADIR, Local



## Line Items

Discount Terms No Discount

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
Main Bid							\$9,929,843.10		
1	524126		Bonds (Payment and Performance)	LS	1	\$90,000.00	\$90,000.00	Yes	
2	237310		Caltrans Encroachment Permit Submittal (EOC Type I)	AL	1	\$20,000.00	\$20,000.00	Yes	
3	237110		Dewatering Permit and Discharge Fees (EOC Type I)	AL	1	\$20,000.00	\$20,000.00	Yes	
4	237110		Dewatering Hazardous Contaminated Water	LS	1	\$550,000.00	\$550,000.00	Yes	
5	237110		Dewatering Non-Hazardous Contaminated Water	LS	1	\$275,000.00	\$275,000.00	Yes	
6	541330		Specialty Inspection Paid For By the Contractor (EOC Type I)	LS	1	\$150,000.00	\$150,000.00	Yes	
7	541820		Exclusive Community Liaison Services	LS	1	\$60,500.00	\$60,500.00	Yes	
8	238990		Community Health and Safety Plan (CHSP)	LS	1	\$6,600.00	\$6,600.00	Yes	
9	238990		Preparation of Hazardous Waste Management Plan and Reporting	LS	1	\$12,650.00	\$12,650.00	Yes	
10	541690		Monitoring of Contaminated Soil	HR	100	\$110.00	\$11,000.00	Yes	
11	238990		Testing, Sampling, Site Storage, and Handling of Soils Containing RCRA Hazardous Waste	TON	100	\$22.00	\$2,200.00	Yes	
12	238990		Loading, Transportation, and Disposal of soils containing RCRA Hazardous Waste	TON	100	\$160.00	\$16,000.00	Yes	
13	238990		Testing, Sampling, Site Storage, and Handling of Petroleum Contaminated Soil	TON	100	\$28.00	\$2,800.00	Yes	
14	238990		Loading, Transportation, and Disposal of Petroleum Contaminated Soil	TON	100	\$94.00	\$9,400.00	Yes	
15	238990		Testing, Sampling, Site Storage, and Handling of Soils Containing Non-RCRA Hazardous Waste	TON	100	\$17.00	\$1,700.00	Yes	
16	238990		Loading, Transportation, and Disposal of Soils Containing Non-RCRA Hazardous Waste	TON	100	\$127.00	\$12,700.00	Yes	
17	562910		Hazardous Waste Operations and Emergency Response (HAZWOPER) Certification (EOC Type I)	AL	1	\$5,000.00	\$5,000.00	Yes	
18	541690		Archaeological and Native American Monitoring Program	LF	1700	\$13.00	\$22,100.00	Yes	
19	541690		Suspension of Work - Resources	DAY	5	\$100.00	\$500.00	Yes	
20	541690		Archaeological and Native American Mitigation and Curation (EOC Type I)	AL	1	\$12,000.00	\$12,000.00	Yes	
21	237110		Mobilization	LS	1	\$340,000.00	\$340,000.00	Yes	
22			Field Orders (EOC Type II)	AL	1	\$157,682.00	\$157,682.00	Yes	
23	237110		Removal and Installation of Pressure Reducing Station (PRS)	LS	1	\$375,000.00	\$375,000.00	Yes	
24	237110		Electrical Work	LS	1	\$148,500.00	\$148,500.00	Yes	
25	237310		Asphalt Pavement Repair	TON	50	\$721.00	\$36,050.00	Yes	
26	237310		Subgrade Imported Backfill	TON	100	\$20.00	\$2,000.00	Yes	
27	237310		Class 2 Aggregate Base	TON	100	\$18.00	\$1,800.00	Yes	
28	237310		Rubber Polymer Modified Slurry (RPMS) Type I	SF	107007	\$1.10	\$117,707.70	Yes	
29	237310		Rubber Polymer Modified Slurry (RPMS) Type II	SF	223310	\$1.30	\$290,303.00	Yes	
30	237310		Rubber Polymer Modified Slurry (RPMS) Type III	SF	116303	\$1.80	\$209,345.40	Yes	
31	237310		Pavement Restoration Adjacent to Trench	SF	7550	\$6.00	\$45,300.00	Yes	
32	238910		Concrete Pavement (6-Inch thick)	CY	15	\$1,302.00	\$19,530.00	Yes	
33	237310		Crack Seal	LB	900	\$19.00	\$17,100.00	Yes	
34	237310		Historical and Contractor Date Stamps and Impressions	EA	2	\$222.00	\$444.00	Yes	
35	237310		Additional Curb and Gutter Removal and Replacement	LF	212	\$87.00	\$18,444.00	Yes	
36	237310		Cross Gutter	SF	1998	\$24.00	\$47,952.00	Yes	
37	237310		Commercial Concrete Driveway	SF	450	\$27.00	\$12,150.00	Yes	
38	237310		Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	EA	47	\$6,324.00	\$297,228.00	Yes	
39	237310		Curb Ramp (Type C1) with Stainless Steel Detectable Warning Tiles	EA	1	\$4,597.00	\$4,597.00	Yes	
40	237310		Curb Ramp (Type D) with Stainless Steel Detectable Warning Tiles	EA	2	\$4,571.00	\$9,142.00	Yes	
41	237310		Colored Concrete	CY	8	\$4,565.00	\$36,520.00	Yes	
42	237110		Phased Paving	EA	10	\$6,600.00	\$66,000.00	Yes	
43	237110		Removal or Abandonment of Existing Water Facilities	LF	4175	\$21.00	\$87,675.00	Yes	
44	237110		Abandon and Fill Existing Water Main Outside of the Trench Limit	LF	3127	\$25.00	\$78,175.00	Yes	
45	237110		Removal of Abandoned Water Meter Box	EA	5	\$63.00	\$315.00	Yes	
46	237110		Handling and Disposal of Non-friable Asbestos Material	LF	690	\$15.00	\$10,350.00	Yes	
47	237110		4-Inch or Larger Meter for Construction Flushing (EOC Type I)	AL	1	\$15,500.00	\$15,500.00	Yes	
48	237110		Water Main (8-Inch)	LF	310	\$188.00	\$58,280.00	Yes	
49	237110		Water Main (12-Inch)	LF	966	\$237.00	\$228,942.00	Yes	

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
50	237110		Water Main (12-Inch CML & WSP)	LF	386	\$1,019.00	\$393,334.00	Yes	
51	237110		Water Main (16-Inch)	LF	3487	\$329.00	\$1,147,223.00	Yes	
52	237110		Water Main (16-Inch, Class 305)	LF	107	\$606.00	\$64,842.00	Yes	
53	237110		Water Main (16-Inch, Fusible)	LF	488	\$530.00	\$258,640.00	Yes	
54	237110		Water Main (16-Inch, Steel)	LF	253	\$910.00	\$230,230.00	Yes	
55	237110		Engineered Trench Shoring	LS	1	\$150,000.00	\$150,000.00	Yes	
56	237110		Butterfly Valve (16-Inch, Class 150B)	EA	21	\$8,277.00	\$173,817.00	Yes	
57	237110		Butterfly Valve (20-Inch, Class 150B)	EA	4	\$11,554.00	\$46,216.00	Yes	
58	237110		Gate Valve (8-Inch)	EA	6	\$3,647.00	\$21,882.00	Yes	
59	237110		Gate Valve (12-Inch)	EA	14	\$5,532.00	\$77,448.00	Yes	
60	237110		Fire Hydrant Assembly and Marker (6-Inch)	EA	12	\$15,884.00	\$190,608.00	Yes	
61	237110		Fire Service Connection and Assembly (2-Inch)	EA	1	\$8,945.00	\$8,945.00	Yes	
62	237110		Fire Service Connection and Assembly (4-Inch)	EA	9	\$9,416.00	\$84,744.00	Yes	
63	237110		Fire Service Connection and Assembly (6-Inch)	EA	1	\$10,176.00	\$10,176.00	Yes	
64	237110		Fire Service Connection and Assembly (8-Inch)	EA	1	\$14,934.00	\$14,934.00	Yes	
65	237110		Water Service (1-Inch)	EA	39	\$6,507.00	\$253,773.00	Yes	
66	237110		Water Service (2-Inch)	EA	19	\$9,269.00	\$176,111.00	Yes	
67	237110		Water Service (4-Inch)	EA	4	\$9,564.00	\$38,256.00	Yes	
68	237110		Meter Boxes	EA	10	\$770.00	\$7,700.00	Yes	
69	237110		Blow-Off Valve Assembly (2-Inch)	EA	4	\$10,202.00	\$40,808.00	Yes	
70	237110		Blow-Off Valve Assembly (4-Inch)	EA	3	\$11,911.00	\$35,733.00	Yes	
71	237110		Air and Vacuum (Air Release) Valve Assembly (1- Inch, Class 150)	EA	6	\$8,192.00	\$49,152.00	Yes	
72	237110		Air and Vacuum (Air Release) Valve Assembly (2- Inch, Class 150)	EA	1	\$11,254.00	\$11,254.00	Yes	
73	237310		Temporary Resurfacing	TON	450	\$145.00	\$65,250.00	Yes	
74	237110		Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	EA	67	\$1,500.00	\$100,500.00	Yes	
75	237110		Imported Trench Backfill	TON	1000	\$31.00	\$31,000.00	Yes	
76	237990		Trenchless Crossing (Sheet C-1) (16-Inch Pipe)	LF	113	\$3,125.00	\$353,125.00	Yes	
77	237990		Trenchless Crossing (Sheet C-6) (16-Inch Pipe, 24-Inch Casing)	LF	110	\$3,087.00	\$339,570.00	Yes	
78	237990		Trenchless Crossing (Sheet C-12) (16-Inch Pipe, 24-Inch Casing)	LF	118	\$2,970.00	\$350,460.00	Yes	
79	237990		Trenchless Crossing (Sheet C-16) (8-Inch Pipe, 14-Inch Casing)	LF	56	\$2,897.00	\$162,232.00	Yes	
80	237310		Removal and Replacement of Existing Paint Striping	LS	1	\$24,200.00	\$24,200.00	Yes	
81	237310		Removal and Replacement of Existing Thermoplastic Striping and Markings	LS	1	\$143,000.00	\$143,000.00	Yes	
82	238990		Video Recording of Existing Conditions	LS	1	\$5,500.00	\$5,500.00	Yes	
83	238910		Removal and Disposal of Railroad Tracks	LF	20	\$275.00	\$5,500.00	Yes	
84	238910		Remove and Replace Miscellaneous Hardscape with Topsoil	SF	1000	\$12.00	\$12,000.00	Yes	
85	238910		Tree Removal and Disposal (24-Inch Trunk Diameter and Greater)	EA	1	\$1,000.00	\$1,000.00	Yes	
86	237110		Abandon Water Services (Stiffs)	EA	5	\$605.00	\$3,025.00	Yes	
87	237110		MTS Right of Entry Permit (EOC Type I)	AL	1	\$10,000.00	\$10,000.00	Yes	
88	541330		Traffic Control and Engineered Traffic Control Plans	LS	1	\$275,000.00	\$275,000.00	Yes	
89	238210		SDG&E Service Orders	LS	1	\$28,750.00	\$28,750.00	Yes	
90	238210		SDG&E Fee Allowance (EOC Type I)	AL	1	\$25,000.00	\$25,000.00	Yes	
91	238210		Pull Box	EA	8	\$1,045.00	\$8,360.00	Yes	
92	238210		Remove and Reinstall Traffic Signs	EA	1	\$25,740.00	\$25,740.00	Yes	
93	238210		Remove and Reinstall Existing Post Top Street Light Pole	EA	1	\$25,740.00	\$25,740.00	Yes	
94	238210		Remove and Reinstall Existing Light Pole	EA	1	\$16,500.00	\$16,500.00	Yes	
95	237310		Pedestrian Barricade (Type A)	EA	2	\$1,100.00	\$2,200.00	Yes	
96	561730		36-inch box tree - Carrotwood	EA	2	\$5,500.00	\$11,000.00	Yes	
97	561730		36-inch box tree - Raywood Ash	EA	2	\$5,500.00	\$11,000.00	Yes	
98	561730		Irrigation System	LS	1	\$35,750.00	\$35,750.00	Yes	
99	561730		Tree Trimming	EA	2	\$5,500.00	\$11,000.00	Yes	

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
100	561730		Root Pruning	EA	2	\$3,300.00	\$6,600.00	Yes	
101	561730		Root Barrier	EA	4	\$3,300.00	\$13,200.00	Yes	
102	237110		Pavement Restoration for Final Connection	SF	500	\$23.00	\$11,500.00	Yes	
103	541330		WPCP Development	LS	1	\$633.00	\$633.00	Yes	
104	237310		WPCP Implementation	LS	1	\$120,000.00	\$120,000.00	Yes	
105	238120		Precast Concrete Vault	EA	3	\$57,500.00	\$172,500.00	Yes	
106	237310		Port of San Diego Permit (EOC Type I)	AL	1	\$25,000.00	\$25,000.00	Yes	
<b>ADDITIVE ALTERNATE A CONTRACTOR HIGHLINING</b>							<b>\$46,050.00</b>		
107	237110		Furnished Materials for Contractor High-line Work	LF	3070	\$3.00	\$9,210.00	Yes	
108	237110		High-lining Installation by the Contractor	LF	3070	\$7.00	\$21,490.00	Yes	
109	237110		High-lining Removed by the Contractor	LF	3070	\$5.00	\$15,350.00	Yes	
<b>ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT &amp; PLUGS / CONNECTIONS</b>							<b>\$505,288.00</b>		
110	237110		Cut-in Reducer by Contractor (12 Inch x 10 Inch)	EA	1	\$12,940.00	\$12,940.00	Yes	
111	237110		Cut-in 90 Degree Bend by Contractor (16 Inch)	EA	1	\$19,382.00	\$19,382.00	Yes	
112	237110		Cut-in Tee by Contractor (8 Inch through 12 Inch)	EA	1	\$27,179.00	\$27,179.00	Yes	
113	237110		Cut-in Tee by Contractor (16 x 6 Inch)	EA	1	\$29,528.00	\$29,528.00	Yes	
114	237110		Cut-in Tee by Contractor (16 x 8 Inch)	EA	1	\$26,794.00	\$26,794.00	Yes	
115	237110		Cut-in Tee by Contractor (16 x 16 Inch)	EA	1	\$37,926.00	\$37,926.00	Yes	
116	237110		Cut-in Tee by Contractor (20 x 12 Inch)	EA	1	\$25,028.00	\$25,028.00	Yes	
117	237110		Cut-in Cross by Contractor (16 x 12 Inch)	EA	4	\$40,246.00	\$160,984.00	Yes	
118	237110		Cut-in Cross by Contractor (16 x 16 Inch)	EA	1	\$46,463.00	\$46,463.00	Yes	
119	237110		Cut-in Cross by Contractor (20 x 12 Inch)	EA	1	\$53,764.00	\$53,764.00	Yes	
120	237110		Cut and Plug by Contractor	EA	9	\$5,376.00	\$48,384.00	Yes	
121	237110		Connections to The Existing System by Contractor (16-Inch)	EA	2	\$8,458.00	\$16,916.00	Yes	
<b>ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)</b>							<b>\$470,207.00</b>		
122	237310		Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	EA	1	\$5,157.00	\$5,157.00	Yes	
123	237110		Abandon and Fill Existing Water Main Outside of the Trench Limit	LF	256	\$34.00	\$8,704.00	Yes	
124	237110		Water Main (8 Inch, Class 305)	LF	26	\$380.00	\$9,880.00	Yes	
125	237110		Water Main (12 Inch)	LF	20	\$418.00	\$8,360.00	Yes	
126	237110		Water Main (16 Inch)	LF	227	\$358.00	\$81,266.00	Yes	
127	237110		Water Main (16 Inch, Class 305)	LF	80	\$572.00	\$45,760.00	Yes	
128	237110		Water Service (1 Inch)	EA	3	\$6,397.00	\$19,191.00	Yes	
129	237110		Gate Valve (8 Inch)	EA	1	\$3,593.00	\$3,593.00	Yes	
130	237110		Butterfly Valve (16 Inch, Class 150B)	EA	7	\$8,373.00	\$58,611.00	Yes	
131	237110		Butterfly Valve (24 Inch, Class 150B)	EA	1	\$16,303.00	\$16,303.00	Yes	
132	237110		Blow-Off Valve Assembly (2 Inch)	EA	1	\$11,964.00	\$11,964.00	Yes	
133	237110		Air and Vacuum (Air Release) Valve Assembly (1 Inch, Class 150)	EA	1	\$8,457.00	\$8,457.00	Yes	
134	237110		Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	EA	5	\$1,775.00	\$8,875.00	Yes	
135	237110		Cut-in Tee by Contractor (24 x 8 Inch)	EA	1	\$35,733.00	\$35,733.00	Yes	
136	237110		Cut-in Cross by Contractor (16 x 16 Inch)	EA	2	\$54,869.00	\$109,738.00	Yes	
137	237110		Pavement Restoration for Final Connection	SF	500	\$23.00	\$11,500.00	Yes	
138	237110		Cut and Plug by Contractor	EA	5	\$5,423.00	\$27,115.00	Yes	
<b>ADDITIVE ALTERNATE D TENTH AVE (SHEET 5)</b>							<b>\$327,298.00</b>		
139	237110		Water Main (16 Inch)	LF	61	\$520.00	\$31,720.00	Yes	
140	237110		Water Main (36 Inch, Steel)	LF	81	\$3,627.00	\$293,787.00	Yes	
141	237110		Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	EA	1	\$1,791.00	\$1,791.00	Yes	
<b>ADDITIVE ALTERNATE E B ST (SHEET 10)</b>							<b>\$941,716.00</b>		
142	237310		Historical and Contractor Date Stamps and Impressions	EA	1	\$296.00	\$296.00	Yes	
143	237310		Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	EA	3	\$5,126.00	\$15,378.00	Yes	
144	237310		Curb Ramp (Type C1) with Stainless Steel Detectable Warning Tiles	EA	1	\$5,187.00	\$5,187.00	Yes	

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
145	238110		Type A Island Passageway	EA	2	\$5,885.00	\$11,770.00	Yes	
146	237110		Abandon and Fill Existing Water Main Outside of the Trench Limit	LF	743	\$27.00	\$20,061.00	Yes	
147	237110		Water Main (12 Inch)	LF	838	\$243.00	\$203,634.00	Yes	
148	237110		Water Main (24 Inch, Steel)	LF	554	\$1,038.00	\$575,052.00	Yes	
149	237110		Water Service (2 Inch)	EA	1	\$9,188.00	\$9,188.00	Yes	
150	237110		Water Service (4 Inch)	EA	2	\$8,234.00	\$16,468.00	Yes	
151	237110		Gate Valve (12 Inch)	EA	5	\$5,815.00	\$29,075.00	Yes	
152	237110		Butterfly Valve (16 Inch, Class 150B)	EA	2	\$8,316.00	\$16,632.00	Yes	
153	237110		Air and Vacuum (Air Release) Valve Assembly (1 Inch, Class 150)	EA	1	\$8,047.00	\$8,047.00	Yes	
154	237110		Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	EA	8	\$1,500.00	\$12,000.00	Yes	
155	237310		Pedestrian Barricade (Type A)	EA	2	\$1,100.00	\$2,200.00	Yes	
156	238210		Remove and Reinstall Traffic Signs	EA	3	\$184.00	\$552.00	Yes	
157	237110		Cut and Plug by Contractor	EA	3	\$5,392.00	\$16,176.00	Yes	
ADDITIVE ALTERNATE F MARKET ST (SHEET 15)							\$943,294.00		
158	237310		Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	EA	4	\$5,218.00	\$20,872.00	Yes	
159	237110		Water Main (12 Inch)	LF	60	\$287.00	\$17,220.00	Yes	
160	237110		Water Main (16 Inch)	LF	388	\$340.00	\$131,920.00	Yes	
161	237110		Water Main (16 Inch, CML)	LF	280	\$594.00	\$166,320.00	Yes	
162	237110		Water Main (28 Inch, Steel)	LF	273	\$1,371.00	\$374,283.00	Yes	
163	237110		Butterfly Valve (16 Inch, Class 150B)	EA	2	\$8,492.00	\$16,984.00	Yes	
164	237110		Water Service (1 Inch)	EA	3	\$6,748.00	\$20,244.00	Yes	
165	237110		Blow-Off Valve Assembly (2 Inch)	EA	1	\$9,478.00	\$9,478.00	Yes	
166	237110		Air and Vacuum (Air Release) Valve Assembly (2 Inch, Class 150)	EA	1	\$10,481.00	\$10,481.00	Yes	
167	237110		Cut-in Cross by Contractor (16 x 12 Inch)	EA	1	\$40,585.00	\$40,585.00	Yes	
168	237110		Pavement Restoration for Final Connection	SF	100	\$23.00	\$2,300.00	Yes	
169	237110		Cut and Plug by Contractor	EA	3	\$5,869.00	\$17,607.00	Yes	
170	238120		Precast Concrete Vault	EA	2	\$57,500.00	\$115,000.00	Yes	
ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)							\$558,597.10		
171	237310		Excavate and Export (Unclassified)	CY	55	\$70.00	\$3,850.00	Yes	
172	237310		Class 2 Aggregate Base	TON	112.5	\$18.00	\$2,025.00	Yes	
173	237310		Asphalt Concrete Overlay	TON	2037	\$167.00	\$340,179.00	Yes	
174	237310		Cold Mill AC Pavement (2 Inch)	SF	67918	\$1.10	\$74,709.80	Yes	
175	237310		Cold Mill AC Pavement (3 Inch)	SF	116303	\$1.10	\$127,933.30	Yes	
176	237310		Traffic Signal Loop and Appurtenance Replacement (Type E)	EA	15	\$660.00	\$9,900.00	Yes	
DEDUCTIVE ALTERNATE H STREET RESURFACING							(\$99,644.70)		
177	237310		Rubber Polymer Modified Slurry (RPMS) Type I [(Deductive) Enter Unit Price as Negative (-)]	SF	67918	(\$0.20)	(\$13,583.60)	Yes	
178	237310		Rubber Polymer Modified Slurry (RPMS) Type II [(Deductive) Enter Unit Price as Negative (-)]	SF	184221	(\$0.20)	(\$36,844.20)	Yes	
179	237310		Rubber Polymer Modified Slurry (RPMS) Type III [(Deductive) Enter Unit Price as Negative (-)]	SF	116303	(\$0.30)	(\$34,890.90)	Yes	
180	237310		Crack Seal [(Deductive) Enter Unit Price as Negative (-)]	LB	754	(\$19.00)	(\$14,326.00)	Yes	

## Line Item Subtotals

Section Title	Line Total
Main Bid	\$9,929,843.10
ADDITIVE ALTERNATE A CONTRACTOR HIGHLINING	\$46,050.00
ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	\$505,288.00
ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	\$470,207.00
ADDITIVE ALTERNATE D TENTH AVE (SHEET 5)	\$327,298.00
ADDITIVE ALTERNATE E B ST (SHEET 10)	\$941,716.00
ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	\$943,294.00
ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)	\$558,597.10
DEDUCTIVE ALTERNATE H STREET RESURFACING	(\$99,644.70)
<b>Grand Total</b>	<b>\$13,622,648.50</b>

**Line Totals (Unit Price \* Quantity)**

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
1	Main Bid	524126	Bonds (Payment and Performance)	1-7.2.1	LS	1	\$90,000.00	\$90,000.00
2	Main Bid	237310	Caltrans Encroachment Permit Submittal (EOC Type I)	2-2.3	AL	1	\$20,000.00	\$20,000.00
3	Main Bid	237110	Dewatering Permit and Discharge Fees (EOC Type I)	3-12.8.8	AL	1	\$20,000.00	\$20,000.00
4	Main Bid	237110	Dewatering Hazardous Contaminated Water	3-12.8.8	LS	1	\$550,000.00	\$550,000.00
5	Main Bid	237110	Dewatering Non-Hazardous Contaminated Water	3-12.8.8	LS	1	\$275,000.00	\$275,000.00
6	Main Bid	541330	Specialty Inspection Paid For By the Contractor (EOC Type I)	4-3.4.1	LS	1	\$150,000.00	\$150,000.00
7	Main Bid	541820	Exclusive Community Liaison Services	5-10.4	LS	1	\$60,500.00	\$60,500.00
8	Main Bid	238990	Community Health and Safety Plan (CHSP)	5-15.17	LS	1	\$6,600.00	\$6,600.00
9	Main Bid	238990	Preparation of Hazardous Waste Management Plan and Reporting	5-15.17	LS	1	\$12,650.00	\$12,650.00
10	Main Bid	541690	Monitoring of Contaminated Soil	5-15.17	HR	100	\$110.00	\$11,000.00
11	Main Bid	238990	Testing, Sampling, Site Storage, and Handling of Soils Containing RCRA Hazardous Waste	5-15.17	TON	100	\$22.00	\$2,200.00
12	Main Bid	238990	Loading, Transportation, and Disposal of soils containing RCRA Hazardous Waste	5-15.17	TON	100	\$160.00	\$16,000.00
13	Main Bid	238990	Testing, Sampling, Site Storage, and Handling of Petroleum Contaminated Soil	5-15.17	TON	100	\$28.00	\$2,800.00
14	Main Bid	238990	Loading, Transportation, and Disposal of Petroleum Contaminated Soil	5-15.17	TON	100	\$94.00	\$9,400.00
15	Main Bid	238990	Testing, Sampling, Site Storage, and Handling of Soils Containing Non-RCRA Hazardous Waste	5-15.17	TON	100	\$17.00	\$1,700.00
16	Main Bid	238990	Loading, Transportation, and Disposal of Soils Containing Non-RCRA Hazardous Waste	5-15.17	TON	100	\$127.00	\$12,700.00
17	Main Bid	562910	Hazardous Waste Operations and Emergency Response (HAZWOPER) Certification (EOC Type I)	5-15.17	AL	1	\$5,000.00	\$5,000.00
18	Main Bid	541690	Archaeological and Native American Monitoring Program	6-6.2.1.1	LF	1700	\$13.00	\$22,100.00
19	Main Bid	541690	Suspension of Work - Resources	6-6.2.1.1 OR 6-6.2.2.1	DAY	5	\$100.00	\$500.00
20	Main Bid	541690	Archaeological and Native American Mitigation and Curation (EOC Type I)	6-6.2.3.1	AL	1	\$12,000.00	\$12,000.00
21	Main Bid	237110	Mobilization	7-3.4.1	LS	1	\$340,000.00	\$340,000.00
22	Main Bid		Field Orders (EOC Type II)	7-3.9	AL	1	\$157,682.00	\$157,682.00
23	Main Bid	237110	Removal and Installatioin of Pressure Reducing Station (PRS)	306.3.3.4	LS	1	\$375,000.00	\$375,000.00
24	Main Bid	237110	Electrical Work	Various	LS	1	\$148,500.00	\$148,500.00
25	Main Bid	237310	Asphalt Pavement Repair	301-1.7	TON	50	\$721.00	\$36,050.00
26	Main Bid	237310	Subgrade Imported Backfill	301-1.7	TON	100	\$20.00	\$2,000.00
27	Main Bid	237310	Class 2 Aggregate Base	301-2.4	TON	100	\$18.00	\$1,800.00
28	Main Bid	237310	Rubber Polymer Modified Slurry (RPMS) Type I	302-4.12.4	SF	107007	\$1.10	\$117,707.70
29	Main Bid	237310	Rubber Polymer Modified Slurry (RPMS) Type II	302-4.12.4	SF	223310	\$1.30	\$290,303.00
30	Main Bid	237310	Rubber Polymer Modified Slurry (RPMS) Type III	302-4.12.4	SF	116303	\$1.80	\$209,345.40
31	Main Bid	237310	Pavement Restoration Adjacent to Trench	302-5.2.1	SF	7550	\$6.00	\$45,300.00
32	Main Bid	238910	Concrete Pavement (6-Inch thick)	302-6.8	CY	15	\$1,302.00	\$19,530.00
33	Main Bid	237310	Crack Seal	302-15.5	LB	900	\$19.00	\$17,100.00
34	Main Bid	237310	Historical and Contractor Date Stamps and Impressions	303-5.9	EA	2	\$222.00	\$444.00
35	Main Bid	237310	Additional Curb and Gutter Removal and Replacement	303-5.9	LF	212	\$87.00	\$18,444.00
36	Main Bid	237310	Cross Gutter	303-5.9	SF	1998	\$24.00	\$47,952.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
37	Main Bid	237310	Commercial Concrete Driveway	303-5.9	SF	450	\$27.00	\$12,150.00
38	Main Bid	237310	Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	303-5.10.2	EA	47	\$6,324.00	\$297,228.00
39	Main Bid	237310	Curb Ramp (Type C1) with Stainless Steel Detectable Warning Tiles	303-5.10.2	EA	1	\$4,597.00	\$4,597.00
40	Main Bid	237310	Curb Ramp (Type D) with Stainless Steel Detectable Warning Tiles	303-5.10.2	EA	2	\$4,571.00	\$9,142.00
41	Main Bid	237310	Colored Concrete	303-6.1.2	CY	8	\$4,565.00	\$36,520.00
42	Main Bid	237110	Phased Paving	306-1.2.1	EA	10	\$6,600.00	\$66,000.00
43	Main Bid	237110	Removal or Abandonment of Existing Water Facilities	306-3.3.4	LF	4175	\$21.00	\$87,675.00
44	Main Bid	237110	Abandon and Fill Existing Water Main Outside of the Trench Limit	306-3.3.4	LF	3127	\$25.00	\$78,175.00
45	Main Bid	237110	Removal of Abandoned Water Meter Box	306-3.3.4	EA	5	\$63.00	\$315.00
46	Main Bid	237110	Handling and Disposal of Non-friable Asbestos Material	306-3.3.5.5	LF	690	\$15.00	\$10,350.00
47	Main Bid	237110	4-Inch or Larger Meter for Construction Flushing (EOC Type I)	306-8.9.4.5	AL	1	\$15,500.00	\$15,500.00
48	Main Bid	237110	Water Main (8-Inch)	306-15.1	LF	310	\$188.00	\$58,280.00
49	Main Bid	237110	Water Main (12-Inch)	306-15.1	LF	966	\$237.00	\$228,942.00
50	Main Bid	237110	Water Main (12-Inch CML & WSP)	306-15.1	LF	386	\$1,019.00	\$393,334.00
51	Main Bid	237110	Water Main (16-Inch)	306-15.1	LF	3487	\$329.00	\$1,147,223.00
52	Main Bid	237110	Water Main (16-Inch, Class 305)	306-15.1	LF	107	\$606.00	\$64,842.00
53	Main Bid	237110	Water Main (16-Inch, Fusible)	306-15.1	LF	488	\$530.00	\$258,640.00
54	Main Bid	237110	Water Main (16-Inch, Steel)	306-15.1	LF	253	\$910.00	\$230,230.00
55	Main Bid	237110	Engineered Trench Shoring	306-15.2	LS	1	\$150,000.00	\$150,000.00
56	Main Bid	237110	Butterfly Valve (16-Inch, Class 150B)	306-15.5	EA	21	\$8,277.00	\$173,817.00
57	Main Bid	237110	Butterfly Valve (20-Inch, Class 150B)	306-15.5	EA	4	\$11,554.00	\$46,216.00
58	Main Bid	237110	Gate Valve (8-Inch)	306-15.5	EA	6	\$3,647.00	\$21,882.00
59	Main Bid	237110	Gate Valve (12-Inch)	306-15.5	EA	14	\$5,532.00	\$77,448.00
60	Main Bid	237110	Fire Hydrant Assembly and Marker (6-Inch)	306-15.6	EA	12	\$15,884.00	\$190,608.00
61	Main Bid	237110	Fire Service Connection and Assembly (2-Inch)	306-15.6	EA	1	\$8,945.00	\$8,945.00
62	Main Bid	237110	Fire Service Connection and Assembly (4-Inch)	306-15.6	EA	9	\$9,416.00	\$84,744.00
63	Main Bid	237110	Fire Service Connection and Assembly (6-Inch)	306-15.6	EA	1	\$10,176.00	\$10,176.00
64	Main Bid	237110	Fire Service Connection and Assembly (8-Inch)	306-15.6	EA	1	\$14,934.00	\$14,934.00
65	Main Bid	237110	Water Service (1-Inch)	306-15.8	EA	39	\$6,507.00	\$253,773.00
66	Main Bid	237110	Water Service (2-Inch)	306-15.8	EA	19	\$9,269.00	\$176,111.00
67	Main Bid	237110	Water Service (4-Inch)	306-15.8	EA	4	\$9,564.00	\$38,256.00
68	Main Bid	237110	Meter Boxes	306-15.8	EA	10	\$770.00	\$7,700.00
69	Main Bid	237110	Blow-Off Valve Assembly (2-Inch)	306-15.8	EA	4	\$10,202.00	\$40,808.00
70	Main Bid	237110	Blow-Off Valve Assembly (4-Inch)	306-15.8	EA	3	\$11,911.00	\$35,733.00
71	Main Bid	237110	Air and Vacuum (Air Release) Valve Assembly (1- Inch, Class 150)	306-15.8	EA	6	\$8,192.00	\$49,152.00
72	Main Bid	237110	Air and Vacuum (Air Release) Valve Assembly (2- Inch, Class 150)	306-15.8	EA	1	\$11,254.00	\$11,254.00
73	Main Bid	237310	Temporary Resurfacing	306-15.9	TON	450	\$145.00	\$65,250.00
74	Main Bid	237110	Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	306-15.10	EA	67	\$1,500.00	\$100,500.00



Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
75	Main Bid	237110	Imported Trench Backfill	306-15.11	TON	1000	\$31.00	\$31,000.00
76	Main Bid	237990	Trenchless Crossing (Sheet C-1) (16-Inch Pipe)	307-1.7	LF	113	\$3,125.00	\$353,125.00
77	Main Bid	237990	Trenchless Crossing (Sheet C-6) (16-Inch Pipe, 24-Inch Casing)	307-1.7	LF	110	\$3,087.00	\$339,570.00
78	Main Bid	237990	Trenchless Crossing (Sheet C-12) (16-Inch Pipe, 24-Inch Casing)	307-1.7	LF	118	\$2,970.00	\$350,460.00
79	Main Bid	237990	Trenchless Crossing (Sheet C-16) (8-Inch Pipe, 14-Inch Casing)	307-1.7	LF	56	\$2,897.00	\$162,232.00
80	Main Bid	237310	Removal and Replacement of Existing Paint Striping	314-4.3.7	LS	1	\$24,200.00	\$24,200.00
81	Main Bid	237310	Removal and Replacement of Existing Thermoplastic Striping and Markings	314-4.4.6	LS	1	\$143,000.00	\$143,000.00
82	Main Bid	238990	Video Recording of Existing Conditions	400-1.1.1	LS	1	\$5,500.00	\$5,500.00
83	Main Bid	238910	Removal and Disposal of Railroad Tracks	401-7	LF	20	\$275.00	\$5,500.00
84	Main Bid	238910	Remove and Replace Miscellaneous Hardscape with Topsoil	401-7	SF	1000	\$12.00	\$12,000.00
85	Main Bid	238910	Tree Removal and Disposal (24-Inch Trunk Diameter and Greater)	401-7	EA	1	\$1,000.00	\$1,000.00
86	Main Bid	237110	Abandon Water Services (Stiffs)	402-8	EA	5	\$605.00	\$3,025.00
87	Main Bid	237110	MTS Right of Entry Permit (EOC Type I)	600-5	AL	1	\$10,000.00	\$10,000.00
88	Main Bid	541330	Traffic Control and Engineered Traffic Control Plans	2-2.3	LS	1	\$275,000.00	\$275,000.00
89	Main Bid	238210	SDG&E Service Orders	701-2	LS	1	\$28,750.00	\$28,750.00
90	Main Bid	238210	SDG&E Fee Allowance (EOC Type I)	701-2	AL	1	\$25,000.00	\$25,000.00
91	Main Bid	238210	Pull Box	701-2	EA	8	\$1,045.00	\$8,360.00
92	Main Bid	238210	Remove and Reinstall Traffic Signs	701-2	EA	1	\$25,740.00	\$25,740.00
93	Main Bid	238210	Remove and Reinstall Existing Post Top Street Light Pole	701-2	EA	1	\$25,740.00	\$25,740.00
94	Main Bid	238210	Remove and Reinstall Existing Light Pole	701-2	EA	1	\$16,500.00	\$16,500.00
95	Main Bid	237310	Pedestrian Barricade (Type A)	701-2	EA	2	\$1,100.00	\$2,200.00
96	Main Bid	561730	36-inch box tree - Carrotwood	801-9	EA	2	\$5,500.00	\$11,000.00
97	Main Bid	561730	36-inch box tree - Raywood Ash	801-9	EA	2	\$5,500.00	\$11,000.00
98	Main Bid	561730	Irrigation System	801-9	LS	1	\$35,750.00	\$35,750.00
99	Main Bid	561730	Tree Trimming	801-9	EA	2	\$5,500.00	\$11,000.00
100	Main Bid	561730	Root Pruning	801-9	EA	2	\$3,300.00	\$6,600.00
101	Main Bid	561730	Root Barrier	801-9	EA	4	\$3,300.00	\$13,200.00
102	Main Bid	237110	Pavement Restoration for Final Connection	901-2.5	SF	500	\$23.00	\$11,500.00
103	Main Bid	541330	WPCP Development	1001-4.2	LS	1	\$633.00	\$633.00
104	Main Bid	237310	WPCP Implementation	1001-4.2	LS	1	\$120,000.00	\$120,000.00
105	Main Bid	238120	Precast Concrete Vault	33 05 16	EA	3	\$57,500.00	\$172,500.00
106	Main Bid	237310	Port of San Diego Permit (EOC Type I)	2-2.3	AL	1	\$25,000.00	\$25,000.00
							<b>Subtotal</b>	<b>\$9,929,843.10</b>
107	ADDITIVE ALTERNATE A CONTRACTOR HIGHLINING	237110	Furnished Materials for Contractor High-line Work	900-1.9	LF	3070	\$3.00	\$9,210.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
108	ADDITIVE ALTERNATE A CONTRACTOR HIGHLINING	237110	High-lining Installation by the Contractor	901-1.3	LF	3070	\$7.00	\$21,490.00
109	ADDITIVE ALTERNATE A CONTRACTOR HIGHLINING	237110	High-lining Removed by the Contractor	901-1.3	LF	3070	\$5.00	\$15,350.00
							<b>Subtotal</b>	<b>\$46,050.00</b>
110	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Reducer by Contractor (12 Inch x 10 Inch)	901-2.5	EA	1	\$12,940.00	\$12,940.00
111	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in 90 Degree Bend by Contractor (16 Inch)	901-2.5	EA	1	\$19,382.00	\$19,382.00
112	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Tee by Contractor (8 Inch through 12 Inch)	901-2.5	EA	1	\$27,179.00	\$27,179.00
113	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Tee by Contractor (16 x 6 Inch)	901-2.5	EA	1	\$29,528.00	\$29,528.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
114	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Tee by Contractor (16 x 8 Inch)	901-2.5	EA	1	\$26,794.00	\$26,794.00
115	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Tee by Contractor (16 x 16 Inch)	901-2.5	EA	1	\$37,926.00	\$37,926.00
116	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Tee by Contractor (20 x 12 Inch)	901-2.5	EA	1	\$25,028.00	\$25,028.00
117	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Cross by Contractor (16 x 12 Inch)	901-2.5	EA	4	\$40,246.00	\$160,984.00
118	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Cross by Contractor (16 x 16 Inch)	901-2.5	EA	1	\$46,463.00	\$46,463.00
119	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut-in Cross by Contractor (20 x 12 Inch)	901-2.5	EA	1	\$53,764.00	\$53,764.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
120	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Cut and Plug by Contractor	901-2.5	EA	9	\$5,376.00	\$48,384.00
121	ADDITIVE ALTERNATE B CONTRACTOR CUT-INS /CUT & PLUGS / CONNECTIONS	237110	Connections to The Existing System by Contractor (16-Inch)	901-2.5	EA	2	\$8,458.00	\$16,916.00
							<b>Subtotal</b>	<b>\$505,288.00</b>
122	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237310	Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	303-5.10.2	EA	1	\$5,157.00	\$5,157.00
123	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Abandon and Fill Existing Water Main Outside of the Trench Limit	306-3.3.4	LF	256	\$34.00	\$8,704.00
124	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Water Main (8 Inch, Class 305)	306-15.1	LF	26	\$380.00	\$9,880.00
125	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Water Main (12 Inch)	306-15.1	LF	20	\$418.00	\$8,360.00
126	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Water Main (16 Inch)	306-15.1	LF	227	\$358.00	\$81,266.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
127	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Water Main (16 Inch, Class 305)	306-15.1	LF	80	\$572.00	\$45,760.00
128	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Water Service (1 Inch)	306-15.8	EA	3	\$6,397.00	\$19,191.00
129	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Gate Valve (8 Inch)	306-15.5	EA	1	\$3,593.00	\$3,593.00
130	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Butterfly Valve (16 Inch, Class 150B)	306-15.5	EA	7	\$8,373.00	\$58,611.00
131	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Butterfly Valve (24 Inch, Class 150B)	306-15.5	EA	1	\$16,303.00	\$16,303.00
132	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Blow-Off Valve Assembly (2 Inch)	306-15.8	EA	1	\$11,964.00	\$11,964.00
133	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Air and Vacuum (Air Release) Valve Assembly (1 Inch, Class 150)	306-15.8	EA	1	\$8,457.00	\$8,457.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
134	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	306-15.10	EA	5	\$1,775.00	\$8,875.00
135	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Cut-in Tee by Contractor (24 x 8 Inch)	901-2.5	EA	1	\$35,733.00	\$35,733.00
136	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Cut-in Cross by Contractor (16 x 16 Inch)	901-2.5	EA	2	\$54,869.00	\$109,738.00
137	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Pavement Restoration for Final Connection	901-2.5	SF	500	\$23.00	\$11,500.00
138	ADDITIVE ALTERNATE C ELEVENTH AVE AND A ST (SHEET 4)	237110	Cut and Plug by Contractor	901-2.5	EA	5	\$5,423.00	\$27,115.00
							<b>Subtotal</b>	<b>\$470,207.00</b>
139	ADDITIVE ALTERNATE D TENTH AVE (SHEET 5)	237110	Water Main (16 Inch)	306-15.1	LF	61	\$520.00	\$31,720.00
140	ADDITIVE ALTERNATE D TENTH AVE (SHEET 5)	237110	Water Main (36 Inch, Steel)	306-15.1	LF	81	\$3,627.00	\$293,787.00
141	ADDITIVE ALTERNATE D TENTH AVE (SHEET 5)	237110	Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	306-15.10	EA	1	\$1,791.00	\$1,791.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
							<b>Subtotal</b>	<b>\$327,298.00</b>
142	ADDITIVE ALTERNATE E B ST (SHEET 10)	237310	Historical and Contractor Date Stamps and Impressions	303-5.9	EA	1	\$296.00	\$296.00
143	ADDITIVE ALTERNATE E B ST (SHEET 10)	237310	Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	303-5.10.2	EA	3	\$5,126.00	\$15,378.00
144	ADDITIVE ALTERNATE E B ST (SHEET 10)	237310	Curb Ramp (Type C1) with Stainless Steel Detectable Warning Tiles	303-5.10.2	EA	1	\$5,187.00	\$5,187.00
145	ADDITIVE ALTERNATE E B ST (SHEET 10)	238110	Type A Island Passageway	303-5.10.2	EA	2	\$5,885.00	\$11,770.00
146	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Abandon and Fill Existing Water Main Outside of the Trench Limit	306-3.3.4	LF	743	\$27.00	\$20,061.00
147	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Water Main (12 Inch)	306-15.1	LF	838	\$243.00	\$203,634.00
148	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Water Main (24 Inch, Steel)	306-15.1	LF	554	\$1,038.00	\$575,052.00
149	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Water Service (2 Inch)	306-15.8	EA	1	\$9,188.00	\$9,188.00
150	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Water Service (4 Inch)	306-15.8	EA	2	\$8,234.00	\$16,468.00
151	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Gate Valve (12 Inch)	306-15.5	EA	5	\$5,815.00	\$29,075.00
152	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Butterfly Valve (16 Inch, Class 150B)	306-15.5	EA	2	\$8,316.00	\$16,632.00
153	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Air and Vacuum (Air Release) Valve Assembly (1 Inch, Class 150)	306-15.8	EA	1	\$8,047.00	\$8,047.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
154	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	306-15.10	EA	8	\$1,500.00	\$12,000.00
155	ADDITIVE ALTERNATE E B ST (SHEET 10)	237310	Pedestrian Barricade (Type A)	701-2	EA	2	\$1,100.00	\$2,200.00
156	ADDITIVE ALTERNATE E B ST (SHEET 10)	238210	Remove and Reinstall Traffic Signs	701-2	EA	3	\$184.00	\$552.00
157	ADDITIVE ALTERNATE E B ST (SHEET 10)	237110	Cut and Plug by Contractor	901-2.5	EA	3	\$5,392.00	\$16,176.00
							<b>Subtotal</b>	<b>\$941,716.00</b>
158	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237310	Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	303-5.10.2	EA	4	\$5,218.00	\$20,872.00
159	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Water Main (12 Inch)	306-15.1	LF	60	\$287.00	\$17,220.00
160	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Water Main (16 Inch)	306-15.1	LF	388	\$340.00	\$131,920.00
161	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Water Main (16 Inch, CML)	306-15.1	LF	280	\$594.00	\$166,320.00
162	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Water Main (28 Inch, Steel)	306-15.1	LF	273	\$1,371.00	\$374,283.00
163	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Butterfly Valve (16 Inch, Class 150B)	306-15.5	EA	2	\$8,492.00	\$16,984.00



Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
164	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Water Service (1 Inch)	306-15.8	EA	3	\$6,748.00	\$20,244.00
165	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Blow-Off Valve Assembly (2 Inch)	306-15.8	EA	1	\$9,478.00	\$9,478.00
166	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Air and Vacuum (Air Release) Valve Assembly (2 Inch, Class 150)	306-15.8	EA	1	\$10,481.00	\$10,481.00
167	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Cut-in Cross by Contractor (16 x 12 Inch)	901-2.5	EA	1	\$40,585.00	\$40,585.00
168	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Pavement Restoration for Final Connection	901-2.5	SF	100	\$23.00	\$2,300.00
169	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	237110	Cut and Plug by Contractor	901-2.5	EA	3	\$5,869.00	\$17,607.00
170	ADDITIVE ALTERNATE F MARKET ST (SHEET 15)	238120	Precast Concrete Vault	33 05 16	EA	2	\$57,500.00	\$115,000.00
							<b>Subtotal</b>	<b>\$943,294.00</b>
171	ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)	237310	Excavate and Export (Unclassified)	300-2.9	CY	55	\$70.00	\$3,850.00

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
172	ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)	237310	Class 2 Aggregate Base	301-2.4	TON	112.5	\$18.00	\$2,025.00
173	ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)	237310	Asphalt Concrete Overlay	302-5.9	TON	2037	\$167.00	\$340,179.00
174	ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)	237310	Cold Mill AC Pavement (2 Inch)	404-12	SF	67918	\$1.10	\$74,709.80
175	ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)	237310	Cold Mill AC Pavement (3 Inch)	404-12	SF	116303	\$1.10	\$127,933.30
176	ADDITIVE ALTERNATE G STREET RESURFACING (SHEET 33)	237310	Traffic Signal Loop and Appurtenance Replacement (Type E)	404-12	EA	15	\$660.00	\$9,900.00
							<b>Subtotal</b>	\$558,597.10
177	DEDUCTIVE ALTERNATE H STREET RESURFACING	237310	Rubber Polymer Modified Slurry (RPMS) Type I [(Deductive) Enter Unit Price as Negative (-)]	302-4.12.4	SF	67918	-\$0.20	-\$13,583.60
178	DEDUCTIVE ALTERNATE H STREET RESURFACING	237310	Rubber Polymer Modified Slurry (RPMS) Type II [(Deductive) Enter Unit Price as Negative (-)]	302-4.12.4	SF	184221	-\$0.20	-\$36,844.20
179	DEDUCTIVE ALTERNATE H STREET RESURFACING	237310	Rubber Polymer Modified Slurry (RPMS) Type III [(Deductive) Enter Unit Price as Negative (-)]	302-4.12.4	SF	116303	-\$0.30	-\$34,890.90

Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	S.C. Valley Engineering, Inc. - Unit Price	S.C. Valley Engineering, Inc. - Line Total
180	DEDUCTIVE ALTERNATE H STREET RESURFACING	237310	Crack Seal [(Deductive) Enter Unit Price as Negative (-)]	302-15.5	LB	754	-\$19.00	-\$14,326.00
							<b>Subtotal</b>	<b>-\$99,644.70</b>
							<b>Total</b>	<b>\$13,622,648.50</b>

**SUBCONTRACTOR LISTING (OTHER THAN FIRST TIER)**

Pursuant to California Senate Bill 96 and in accordance with the requirements of Labor Code sections 1771.1 and 1725.5, by submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the California Department of Industrial Relations (DIR). **The Bidder is to list below the name, address, license number, DIR registration number of any (known tiered subcontractor)** - who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement pursuant to the contract. **If none are known at this time, mark the table below with non-applicable (N/A).**

Prime Contractor Name: S C Valley Engineering Inc.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	DIR REGISTRATION NUMBER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____	N/A			
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____				
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____				
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____				

**\*\* USE ADDITIONAL FORMS AS NECESSARY \*\***