

City of San Diego

CONTRACTOR'S NAME: KTA Construction, Inc.
ADDRESS: 821 Tavern Rd. Alpine, CA 91901
TELEPHONE NO.: (619) 562-9464 **FAX NO.:** (619) 562-1685
CITY CONTACT: Juan E. Espindola, Senior Contract Specialist, Email: JEEspindola@sandiego.gov
Phone No. (619) 533-4491
M. Liaghat/R. Bustamante/C. Catapia

BIDDING DOCUMENTS



FOR

AC WATER GROUP 1030

BID NO.: K-19-1834-DBB-3
SAP NO. (WBS/IO/CC): B-16042
CLIENT DEPARTMENT: 2000
COUNCIL DISTRICT: 2
PROJECT TYPE: KB

THIS 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
APRIL 30, 2019

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:



For City Engineer

03/28/19
Date

Seal:



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NOTICE INVITING BIDS

1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for **AC Water Group 1030**. 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 **\$6,660,000**.
4. **BID DUE DATE AND TIME ARE: APRIL 30, 2019 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 **C34** or **C42**
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	9.2%
2. ELBE participation	13.1%
3. Total mandatory participation	22.3%

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 documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Bidder made a good faith effort to outreach to and include SLBE-ELBE Subcontractors required in this document within 3 Working Days of the Bid opening if the overall mandatory participation percentage is not met.

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 Public Works 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:

Public Works Contracts
525 B Street, Suite 750 (7th Floor)
San Diego, California, 92101
Attention: Juan E. Espindola

OR:

JEEspindola@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 an 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 on line. City staff may then begin reviewing the submissions for responsiveness, EOCP 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 Public Works 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 7-3, "LIABILITY INSURANCE", and 7-4, "WORKERS' COMPENSATION 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") http://www.greenbookspecs.org/	2015	PWPI070116-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* https://www.sandiego.gov/publicworks/edocref/greenbook	2015	PWPI070116-02
City of San Diego Standard Drawings* https://www.sandiego.gov/publicworks/edocref/standarddraw	2016	PWPI070116-03
Citywide Computer Aided Design and Drafting (CADD) Standards https://www.sandiego.gov/publicworks/edocref/drawings	2016	PWPI092816-04

Title	Edition	Document Number
California Department of Transportation (CALTRANS) Standard Specifications – http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-05
CALTRANS Standard Plans http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-06
California Manual on Uniform Traffic Control Devices Revision 1 (CA MUTCD Rev 1) - http://www.dot.ca.gov/trafficops/camutcd/	2014	PWPI092816-07
<p>NOTE: *Available online under Engineering Documents and References at: https://www.sandiego.gov/publicworks/edocref/index.shtml</p>		

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 - General; Paragraph 2-3, "Subcontracts", 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 4-1.6, "Trade Names or Equals" 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 conditions 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 2-3, "SUBCONTRACTS" 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 Public Works Contracts.

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. Within twenty-four (24) hours after the bid due date and time, the first five (5) apparent low 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 within twenty-four (24) hours may cause the bid to be rejected and deemed **non-responsive**.

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 2-7, 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 in the herein and in the Notice of 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.

EXECUTED IN THREE COUNTERPARTS.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

KTA Construction, Inc., a corporation, as principal, and The Guarantee Company of North America USA, 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 **Five Million Seven Hundred Ninety Seven Thousand Two Hundred Seven Dollars and Seventy Cents (\$5,797,207.70)** for the faithful performance of the annexed contract, and in the sum of **Five Million Seven Hundred Ninety Seven Thousand Two Hundred Seven Dollars and Seventy Cents (\$5,797,207.70)** 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.

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

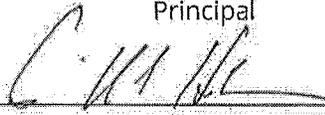
The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

Dated June 20, 2019

Approved as to Form

KTA Construction, Inc.

Principal

By 

Paul M. Henderson
Printed Name of Person Signing for Principal

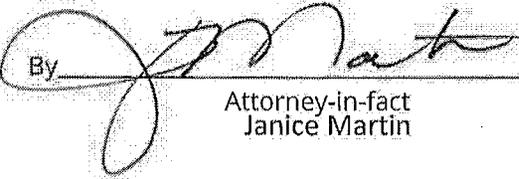
Mara W. Elliott, City Attorney

By 

Deputy City Attorney

The Guarantee Company of North America USA

Surety

By 

Attorney-in-fact
Janice Martin

Approved:

1800 Sutter Street, Suite 880

Local Address of Surety

By 

Claudia C. Abarca
Deputy Director
Public Works Department

Concord, CA 94520

Local Address (City, State) of Surety

(818) 936-2845

Local Telephone No. of Surety

Premium \$44,682.00

Premium subject to adjustment based on final contract price.

Bond No. 12109273

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189

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 JUN 20 2019
Date

before me, Sarah Myers, Notary Public,
Insert Name of Notary exactly as it appears on the official seal

personally appeared Janice Martin
Name(s) of Signer(s)



Place Notary Seal Above

who proved to me on the basis of satisfactory evidence to be the person(~~is~~) whose name(~~is~~) is/~~is~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~it~~/~~we~~ 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 [Signature]
Signature of Notary Public Sarah Myers

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: _____

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



Signer is Representing:
Surety Company

Signer's Name: _____

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



Signer is Representing:



The Guarantee Company of North America USA
Southfield, Michigan

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Lawrence F. McMahon, Maria Vhanneza Guise, Sarah Myers, James D. Castle, Janice Martin
Alliant Insurance Services, Inc.

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

- 1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.
4. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.



IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 2nd day of October, 2015.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

[Signature of Stephen C. Ruschak]

[Signature of Randall Musselman]

STATE OF MICHIGAN
County of Oakland

Stephen C. Ruschak, President & Chief Operating Officer

Randall Musselman, Secretary

On this 2nd day of October, 2015 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of said company.



Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2024
Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

[Signature of Cynthia A. Takai]

I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.



IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 20th day of June, 2019

[Signature of Randall Musselman]

Randall Musselman, Secretary

ATTACHMENTS

ATTACHMENT A
SCOPE OF WORK

SCOPE OF WORK

- 1. SCOPE OF WORK:** AC Water Group 1030 is located in Council District 2, within the Peninsula Community Area. The scope of the project is to replace 9,451 Linear Feet of existing 6, 8, 10, and 12-inch CMLS and prioritized AC water main, water appurtenances, fire hydrants, pavement resurfacing, curb ramps, and install 2002 Linear Feet of 12-inch new parallel water main adjacent to the existing to provide the required loop system on the Shelter Island Drive. Also included water appurtenances, fire hydrants, trench shoring, pavement resurfacing, trench repair, curb ramps, all other work associate with this project.

 - 1.1.** The Work shall be performed in accordance with:

 - 1.1.1.** The Notice Inviting Bids and Plans numbered **40094-01-D** through **40094-29-D**, inclusive.
- 2. LOCATION OF WORK:** The location of the Work is as follows:

Appendix E – Location Map
- 3. CONTRACT TIME:** The Contract Time for completion of the Work shall be **300 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 9-3, "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-19-1834-DBB-3

CONTRACT OR TASK TITLE: AC Water Group Job 1030

CONTRACTOR: KTA Construction, Inc

Funding Phase	Phase Description	Phase Start	Phase Finish	Not-to-Exceed Amount
1	Work to be completed in Phase 1 Shall include, Bonds, Mobilization, Videotaping of conditions, Community liaison services, Preparation of the Hazardous Waste Plan & high-lining installation.	Notice to Proceed	September 2019	\$1,700,000.00
2	Work to be completed in Phase 2 shall include the remaining of the construction activities associated with contract and speculations.	September 2019	Notice of Completion	\$4,097,207.70
Contract Total				\$5,797,207.70

Notes:

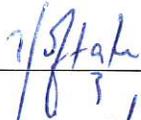
- 1) WHITEBOOK section 9-3.6, "Phased Funding Compensation" applies.
- 2) The total of all funding phases shall be equal to the TOTAL BID PRICE as shown on BID SCHEDULE 1 - PRICES.
- 3) This PHASED FUNDING SCHEDULE AGREEMENT will be incorporated into the CONTRACT and shall only be revised by written modifications to the CONTRACT.

CITY OF SAN DIEGO

CONTRACTOR

PRINT NAME: YOFTAKE GHILIAMICHAEL
Construction Manager

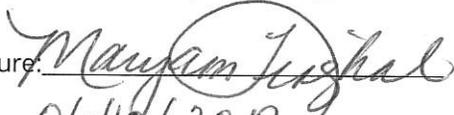
PRINT NAME: Mike Helmersen

Signature: 
 Date: 6/19/19

Title: President
 Signature: 

PRINT NAME: Maryam Liaghat
Project Manager

Date: 5-31-19

Signature: 
 Date: 06/10/2019

ATTACHMENT C
RESERVED

ATTACHMENT D
PREVAILING WAGES

PREVAILING WAGES

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 4.20.11 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 **2015 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK").
2. The **2015 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK"), including the following:
 - a) General Provisions (A) for all Contracts.

SECTION 1 – TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

- 1-2 TERMS AND DEFINITIONS.** To the "WHITEBOOK", item 54, "Normal Working Hours", ADD the following:

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

SECTION 2 - SCOPE AND CONTROL OF WORK

- 2-3.2 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 **AND 50%** of any alternates.

ADD:

2-5.3.7 Contractor's Quality Control Plan (QCP).

1. You shall establish, implement, and maintain an effective Quality Control Plan (QCP) to perform quality control inspection and testing for all items of paving Work required by the Contract Documents, including those performed by subcontractors and material suppliers.
2. The QCP shall ensure conformance to applicable specification and plan requirements with respect to materials, workmanship, construction, finish, and functional performance.
3. The QCP shall detail the methods and procedures that will be taken to ensure that all materials and construction required for street pavement restoration will conform to the Contract Documents, and to ensure that information included will be recorded in Daily Quality Control (QC) Inspection Reports for the Engineer's verification and approval:

4. You shall establish a level of control that will:
 - a) Provide for the production and delivery of acceptable quality materials.
 - b) Provide documentation that construction meets Contract requirements.
5. During the pre-construction meeting, you shall be prepared to discuss and present details of your QCP. You shall not begin any production of materials or construction of surface preparation, pavement restoration, and other related work until your QCP has been reviewed and approved by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the QCP has been approved.
6. The quality control requirements contained in this section and elsewhere in the Contract Documents are in addition to and separate from the acceptance testing requirements discussed elsewhere in the contract specifications.

2-5.3.7.1 QCP Submittal.

1. Submit the QCP in a written document to the Engineer at the pre-construction meeting. The QCP shall be reviewed and approved by the Engineer prior to the start of any material delivery or paving work.
2. The QCP shall be organized to address, at a minimum, the following items:
 - a) Quality Control Administrator
 - b) Surface preparation and paving schedule.
 - c) Inspection and documentation requirements (Daily Quality Control Inspection Report).
 - d) Material quality control testing plan.
 - e) Documentation of quality control activities.
 - f) Procedures for corrective action when quality control and/or acceptance criteria are not met.
3. You are encouraged to add any additional elements to the QCP as deemed necessary to adequately control all production and construction processes required by Contract Documents.

2-5.3.7.2 QCP Administrator.

1. You shall designate a QCP Administrator to implement the QCP.
 - a) The QCP Administrator shall be your full-time employee or your consultant. The QCP Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the QCP to ensure compliance with the Contract Documents.

- b) The QCP Administrator shall ensure that the following functions are performed and documented:
 - i. Inspection of all materials, construction, plant, and equipment for conformance to the specifications.
 - ii. Performance of all quality control tests as required by the Contract Documents.
 - iii. Performance of density tests for the Engineer when required.

2-5.3.7.3 Inspection Requirements.

- 1. Quality control inspection functions shall be organized to provide inspections for all definable features of Work. You shall document all inspections.
- 2. Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of Work. These shall include the following minimum requirement:
 - a) During field operations, quality control test results and periodic inspections shall be utilized to ensure the quality of all materials and workmanship meets the requirements of the contract. All equipment utilized in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the specifications and are within the plan dimensions, lines, grades, and tolerances specified. The QCP shall document how these and other quality control functions will be accomplished and utilized.

2-5.3.7.4 Documentation.

- 1. You shall maintain current quality control records of all inspections performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.
- 2. These records shall cover both conforming and defective or deficient features, and shall include a statement that all supplies and materials incorporated in the Work are in full compliance with the terms of the Contract. Legible copies of these records for the entire week of paving work shall be furnished to the Engineer after 2 Working Days. The records shall cover all Work placed subsequent to the previously furnished records and shall be verified and signed by the QCP Administrator.
- 3. Specific QCP records required for the Contract shall include, but are not necessarily limited to, the following records:
 - a) **Daily Quality Control (QC) Inspection Reports.** The QCP Administrator shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations. These daily QC

inspection reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following items:

- i. Date and location/s of paving work performed.
- ii. Asphalt mix specifications and supplier.
- iii. Dig out locations.
- iv. Tack coat application rate for each location.
- v. Asphalt temperature at placement for each location.
- vi. Asphalt depth for each location.
- vii. Compaction test results for each location.
- viii. Documentation that the following have been verified to be in compliance:
 - Proper storage of materials and equipment.
 - Proper operation of all equipment.
 - Adherence to plans and technical specifications.
 - Review of quality control tests.
 - Safety inspection.
- ix. Location and nature of defects with remedial and corrective actions.
- x. Presence of City Laboratory representative.
- xi. Deviations from QCP.
- xii. Signature of QCP Administrator.

The daily QC inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

- b) The daily QC inspection reports shall be signed by the QCP Administrator. The Engineer shall be provided at least 1 copy of each daily QC inspection report for the entire week 2 Working Days following the end of the week.
- c) See **Appendix G** for a sample of the daily QC inspection report. An updated version of this sample report will be provided at the pre-construction meeting.

2-5.3.7.5 Corrective Action Requirements.

1. The QCP shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control.

2. The requirements for corrective action shall include both general requirements for operation of the QCP as a whole and for individual items of Work contained in the specifications.
3. The QCP shall detail how the results of quality control inspections will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

2-5.3.7.6 Noncompliance.

1. The Engineer will notify you of any noncompliance with any of the foregoing requirements. You shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer to you, shall be considered sufficient notice.
2. In cases where quality control activities do not comply with either the QCP or the contract provisions, or where you fail to properly operate and maintain an effective QCP, as determined by the Engineer, the Engineer may:
 - a) Require replacement of ineffective or unqualified QCP personnel or subcontractors.
 - b) Stop operations until appropriate corrective actions are taken.

2-5.3.7.7 Payment.

1. The payment for preparation, submittal, implementation and maintenance of the Quality Control Plan in accordance with the Contract Documents shall be included in the Contract Price.

2-5.4.2 Asset Specific Red-lines. To the "WHITEBOOK", ADD the following:

1. **Fiber Optic and WIFI Device Red-lines.** Fiber Optic and WIFI Device Red-lines shall clearly record by dimension from 2 known fixed points and by depth of underground facilities all deviations, modifications, and changes in the Work. Records, deviations, modifications, and changes on the day the Work is performed shall reflect the actual Work location and shall be marked in red at the scale of the Plan sheet on which they are recorded. Red-lines shall show the equipment locations and associated information for the following:
 - a) Locations and depths of underground utilities.
 - b) Revisions to the routing of piping and conduits.
 - c) Actual equipment locations.
 - d) Pull Boxes.
 - e) Electrical Meter, including meter address.
 - f) Items abandoned in place.

2-9.1 Permanent Survey Markers. To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. You shall submit to the Engineer a minimum of 7 Days prior to the start of the Work a list of controlling survey monuments which may be disturbed. CMFS (or the private owner for Permit Work) shall perform the following:
 - a) Set survey points outside the affected Work area that reference and locate each controlling survey monument that may be disturbed.
 - b) File a Corner Record or Record of Survey with the County Surveyor after setting the survey points to be used for re-establishment of the disturbed controlling survey monuments.
 - c) File a Corner Record or Record of Survey with the County Surveyor after re-establishment of the disturbed controlling survey monuments.

ADD:

2-10 AUTHORITY OF THE BOARD AND THE ENGINEER. To the "GREENBOOK", Paragraph (2), DELETE in its entirety and SUBSTITUTE with the following:

The decision of the Engineer is final and binding on all questions relating to: quantities; acceptability of material, equipment, or work; execution, progress or sequence of work; requests for information (RFI), and interpretation of the Plans, Specifications, or other Contract Documents. This shall be precedent to any payment under the Contract. The Engineer shall be the single point of contact and shall be included in all communications.

2-14.3 Coordination. To the "WHITEBOOK", ADD the following:

2. Other adjacent City projects are scheduled for construction for the same time period in the vicinity of Shelter Island Drive, Anchorage Lane, and Canon Street See **Appendix F** for the approximate location. Coordinate the Work with the adjacent projects as listed below:
 - a) **AC Water Group Job 1017** – Coordination has been done with Project Manager, **Elham Lotfi. (619) 533-5212.**

2-16 CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM. To the "WHITEBOOK", item 1, DELETE in its entirety.

SECTION 3 – CHANGES IN WORK

3-3.2.3 Markup. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Work paid under Allowance Bid items for permits, governmental fees, or direct payments specified in the Contract Documents shall not be subject to any markups.

2. The allowance for overhead and profit shall not exceed the values listed in the table below:

Component	Overhead	Profit
Labor	10%	10%
Material	10%	5%
Equipment	10%	5%

3. Markups for materials shall be applied to the actual cost of the material before applying the sales tax.
4. When a Subcontractor is performing Extra Work, the allowance for overhead and profit shall be applied to the labor, materials, and equipment costs of the Subcontractor as follows:
 - a) Regardless of the number of Subcontractor tasks for Extra Work, you may only apply 10% for the first \$50,000 of the Subcontractor's portion of accumulated total cost.
 - b) If the accumulated costs of single or subsequent tasks exceed the \$50,000 threshold, you shall instead only apply 5% to any amounts in excess of the \$50,000.
 - c) You shall not apply 10% to any costs after the first \$50,000 of accumulated total costs from performing Extra Work.
 - d) Regardless of the number of hierarchical tiers of Subcontractors, you may only markup a Subcontractor's Work once.

3-5.1 **Claims.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

ADD:
3-5.1

Claims.

1. A Claim is a written demand by you that seeks an adjustment in the Contract Price, Contract Time, or other relief associated with a dispute arising under or relating to the Contract, including a breach of any provision thereof. A voucher, invoice, or other routine request for payment is not a Claim.
2. A Claim shall conform to these specifications and may be considered after the City has previously denied a request by you for a Change Order seeking the demanded relief.
3. You shall submit a Claim to the Engineer if a dispute occurs that arises from or relates to the Contract. The Claim shall seek all relief to which you assert you are entitled as a result of the event(s) giving rise to the dispute. Your failure to process a Claim in accordance with these specifications shall constitute a

waiver of all relief associated with the dispute. Claims are subject to 6-11, "Right to Audit".

4. You shall continue to perform the Services and Work and shall maintain the Schedule during any dispute proceedings. The Engineer will continue to make payments for undisputed Services and Work.
5. The City's Claims process specified herein shall not relieve you of your statutory obligations to present claims prior to any action under the California Government Code.

3-5.1.1 Initiation of Claim.

1. You shall promptly, but no later than 30 Days after the event(s) giving rise to the Claim, deliver the Claim to the Engineer.
2. You shall not process a Claim unless the Engineer has previously denied a request by you for a Change Order that sought the relief to be pursued in the claim.

3-5.1.1.1 Claim Certification Submittal.

1. If your Claim seeks an increase in the Contract Price, the Contract Time, or both, submit with the Claim an affidavit certifying the following:
 - a) The Claim is made in good faith and covers all costs and delays to which you are entitled as a result of the event(s) giving rise to the Claim.
 - b) The amount claimed accurately reflects the adjustments in the Contract Price, the Contract Time, or both to which you believe you are entitled.
 - c) All supporting costs and pricing data are current, accurate, and complete to the best of your knowledge. The cost breakdown per item of Work shall be supplied.
 - d) You shall ensure that the affidavit is executed by an official who has the authority to legally bind you.

3-5.1.2 Initial Determination.

1. The Engineer will respond in writing to your Claim within 30 Days of receipt of the Claim.

3-5.1.3 Settlement Meeting.

1. If you disagree with the Initial Determination, you shall request a Settlement Meeting within 30 Days. Upon receipt of this request, the Engineer will schedule the Settlement Meeting within 15 Working Days.

3-5.1.4 City's Final Determination.

1. If a settle agreement is not reached, the City shall make a written Final Determination within 10 Working Days after the Settlement Meeting.
2. If you disagree with the City's Final Determination, notify the Engineer in writing of your objection within 15 Working Days after receipt of the written determination and file a "Request for Mediation" in accordance with 3-5.2, "Dispute Resolution Process".
3. Failure to give notice of objection within the 15 Working Days period shall waive your right to pursue the Claim.

3-5.1.5 Mandatory Assistance.

1. If a third party dispute, litigation, or both arises out of or relates in any way to the Services provided under the Contract, upon the City's request, you shall agree to assist in resolving the dispute or litigation. Your assistance includes, but is not limited to the following:
 - a) Providing professional consultations.
 - b) Attending mediations, arbitrations, depositions, trials, or any event related to the dispute resolution and litigation.

3-5.1.5.1 Compensation for Mandatory Assistance.

1. The City will reimburse you for reasonable fees and expenses incurred by you for any required assistance rendered in accordance with 3-5.1.5, "Mandatory Assistance" as Extra Work.
2. The Engineer will determine whether these fees and expenses were necessary due to your conduct or failure to act.
3. If the Engineer determines that the basis of the dispute or litigation in which these fees and expenses were incurred were the result of your conduct or your failure to act in part or in whole, you shall reimburse the City for any payments made for these fees and expenses.
4. Reimbursement may be through any legal means necessary, including the City's withholding of your payment.

3-5.2.3 Selection of Mediator. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. A single mediator, knowledgeable in construction aspects and acceptable to both parties, shall be used to mediate the dispute.
2. To initiate mediation, the initiating party shall serve a Request for Mediation at the American Arbitration Association (AAA) on the opposing party.
3. If AAA is used, the initiating party shall concurrently file with AAA a "Request for Mediation" along with the appropriate fees, a copy of requested mediators marked in preference order, and a preference for available dates.

4. If AAA is selected to coordinate the mediation (Administrator), within 10 Working Days from the receipt of the initiating party's Request for Mediation, the opposing party shall file the following:
 - a) A copy of the list of the preferred mediators listed in preference order after striking any mediators to which they have any objection.
 - b) A preference for available dates.
 - c) Appropriate fees.
5. If the parties cannot agree on a mediator, then each party shall select a mediator and those mediators shall select the neutral third party to mediate the matter.

3-5.3 Forum of Litigation. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. It is the express intention that all legal actions and proceedings related to the Contract or Agreement with the City or to any rights or any relationship between the parties arising therefrom shall be solely and exclusively initiated and maintained in courts of the State of California for the County of San Diego.

**ADD:
3-5.4**

Pre-judgment Interest.

1. The parties stipulate that if a judgment is entered against a party for breaching this Contract, the pre-judgment interest shall be two percent (2%) per annum.

SECTION 4 - CONTROL OF MATERIALS

4-1.3.1 General. To the "WHITEBOOK", ADD the following:

1. Steel pipe in sizes larger than 18 inches shall require inspection at the source of production.
2. City lab staff or a qualified inspection agency approved by the Engineer shall witness all welding, lining, coating, and testing. You shall incur additional inspection costs outlined in 4-1.3.3, "Inspection of Items Not Locally Produced".
3. All parts of production (including but not limited to product fabrication, welding, testing, lining, and coating of straight pieces and specials) shall be performed or produced in the United States.
4. Welding and all testing shall be performed by certified welders and testing staff with credentials traceable in the United States.

4-1.3.2 Inspection by the Agency. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The City will provide inspection and testing laboratory services within the continental United States within a 200-mile radius of the geographical limits of the City.

4-1.3.3 Inspection of Items Not Locally Produced. To the "WHITEBOOK", DELETE in its entirety.

ADD:

4-1.3.3 Inspection of Items Not Locally Produced. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. When you intend to purchase materials, fabricated products, or equipment from sources located more than 200 miles (321.9 km) outside the geographical limits of the City, City Lab staff or a qualified inspection agency approved by the Engineer, shall be engaged at your expense to inspect the materials, equipment, or process.
2. This approval shall be obtained before producing any material or equipment. City Lab staff or inspector shall evaluate the materials for conformance with the requirements of the Plans and Specifications. You shall forward reports required by the Engineer. No materials or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by City Lab staff or the approved agent. Approval by said agent shall not relieve you of responsibility for complying with the requirements of the Contract Documents.
3. The Engineer may elect City Lab staff to perform inspection of an out-of-town manufacturer. You shall incur additional inspection costs of the Engineer including lodging, meals, and incidental expenses based on Federal Per Diem Rates, along with travel and car rental expenses. If the manufacturing plant operates a double shift, a double shift shall be figured in the inspection costs.
 - a) At the option of the Engineer, full time inspection shall continue for the length of the manufacturing period. If the manufacturing period will exceed 3 consecutive weeks, you shall incur additional inspection expenses of the Engineer's supervisor for a trip of 2 Days to the site per month.
 - b) When the Engineer elects City Lab staff to perform out-of-town inspections, the wages of staff employed by the City shall not be part of the additional inspection expenses paid by you.
 - c) Federal Per Diem Rates can be determined at the location below:

<https://www.gsa.gov/portal/content/104877>

- 4-1.3.5 Special Inspection.** To the "WHITEBOOK", ADD the following:
5. The payment for special inspection Work specified under this section shall be paid in accordance with 4-1.3.4.1, "Payment".

- 4-1.3.6 Preapproved Materials.** To the "WHITEBOOK", ADD the following:
3. You shall submit in writing a list of all products to be incorporated in the Work that are on the AML.

- 4-1.6 Trade Names or Equals.** To the "WHITEBOOK", ADD the following:
11. You shall submit your list of proposed substitutions for an "equal" item **no less than 15 Working Days prior to the Bid due date** and on the City's Product Submittal Form available at:

<http://www.sandiego.gov/publicworks/edocref/index.shtml>

SECTION 5 – UTILITIES

- 5-1.1 General.** To the "WHITEBOOK", ADD the following:
9. **90 Calendar Days** prior to any paving work, you shall notify the utility owner to provide them adequate time to adjust their utility box frame and cover to finish grade.

- 5-2 PROTECTION.** To the "WHITEBOOK", item 2, ADD the following:
- g) Refer to **Appendix K** for more information on the protection of AMI devices.

- 5-6 COOPERATION.** To the "GREENBOOK", ADD the following:
2. Notify SDG&E at least **90 Working Days** prior to excavating within 10 feet of SDG&E Underground High Voltage Transmission Power Lines (69 KV and higher).

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

- 6-1.1 Construction Schedule.** To the "WHITEBOOK", items 5, 9, and 22, DELETE in their entirety and SUBSTITUTE with the following:
5. Monthly progress payments are contingent upon the submittal of an updated Schedule and cash flow forecast as discussed in item 22 of 6-1.1, "Construction Schedule" to the Engineer. The Engineer may refuse to recommend the whole or part of any monthly payment if, in the Engineer's opinion, your failure or refusal to provide the required Schedule and cash flow forecast information precludes a proper evaluation of your ability to complete the Project within the Contract Time and amount.
 9. Inclusive to the Contract Time, include 15 Working Days to the Schedule for the generation of the Punchlist. You shall Work diligently to complete all Punchlist items within 30 Working Days after the Engineer provides the Punchlist.

22. Submit an updated cash flow forecast with every pay request (for each Project ID or WBS number provided in the Contract) showing periodic and cumulative construction billing amounts for the duration of the Contract Time. If there has been any Extra Work since the last update, include only the approved amounts.
 - b) Refer to the Sample City Invoice materials in **Appendix D – Sample City Invoice with Cashflow Forecast** and use the format shown.
 - c) See also the “Cashflow Forecast Example” at the location below:

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

6-1.6 Excusable Delays. To the “WHITEBOOK”, DELETE in its entirety and SUBSTITUTE with the following:

1. If a delay in the Work occurs and affects Work activities, delays may either be Excusable Compensable Delays or Excusable Non-Compensable Delays.

ADD:

6-1.6.1 Excusable Compensable Delays.

1. If an Excusable Delay meets the requirements of 6-6.2, “Extensions of Time”, then the City shall compensate for the following circumstances:
 - a) The City’s failure or inability to make available any portion of the entire Site in accordance with the requirements of the Schedule.
 - b) The City’s failure or inability to obtain necessary zoning changes, variances, code changes, permits or approvals from any governmental authority, or failure to obtain any street or alley vacations required for the performance of the Work, except to the extent due to your fault or neglect as determined by the Engineer.
 - c) Delays resulting from the acts or omissions of Separate Contractors, except to the extent Separate Contractors perform their work properly and in accordance with the Schedule.
 - d) Differing or concealed site conditions that could not reasonably have been anticipated at the time of Bid.
 - e) Delays resulting from the existence or discovery of hazardous materials or waste on the Site not brought in by you and not included in the Contract.
 - f) Delays resulting from any changes made to any City of San Diego Municipal Code after the date of execution of the Contract.
 - g) Delays due to the City’s acts or omissions and those within the City’s control.
 - h) Delays requested by the City.

ADD:

6-1.6.2

Excusable Non-Compensable and Concurrent Delays.

1. The City shall only issue an extension of time for Excusable Delays that meet the requirements of 6-6.2, "Extensions of Time" for the following circumstances:
 - d) Delays resulting from Force Majeure.
 - e) Delays caused by weather.
 - f) Delays caused by changes to County, State, or Federal law.
2. When a non-excusable delay is concurrent with an Excusable Delay, you shall not be entitled to an extension of Contract Time for the period the non-excusable delay is concurrent with the Excusable Delay.
3. When an Excusable Non-Compensable Delay is concurrent with an Excusable Compensable Delay, you shall be entitled to an extension of Contract Time, but shall not be entitled to compensation for the period the Excusable Non-Compensable Delay is concurrent with the Excusable Compensable Delay.

6-2.1

Moratoriums. To the "WHITEBOOK", ADD the following:

3. Do not Work in the areas where there is currently a moratorium issued by the City. The areas subject to moratorium are listed below:
 - a) Shelter Island Drive, Anchorage Lane, Canon Street from 5/27/2019 to 9/02/2019 (inclusive).
 - b) Shelter Island Drive, Anchorage Lane, Canon Street from 5/25/2020 to 9/07/2020 (inclusive).

ADD:

6-3.2.1.1

Environmental Document.

1. The City of San Diego and The Port of San Diego has prepared a **Notice of Exemption** for **Water Group 1030**, Project No. **B-16042.02.06**, as referenced in the Contract Appendix. You shall comply with all requirements of the **Notice of Exemption** as set forth in **Appendix A**.
2. Compliance with the City's environmental document shall be included in the Contract Price.

6-6.2

Extensions of Time. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The Contract Time shall not be modified except by Change Order.
2. You shall notify the City in writing within **1 Working Day** after the occurrence and discovery of an event that impacts the Project Schedule.
 - a) If you believe this event requires a Change Order, you shall submit a **written Change Order request with a report to** the City that explains the request for Change Order within **5 Working Days**. The Change Order request must include supporting data, a general

description of the discovery, the basis for extension, and the estimated length of extension. The City may grant an extension of time, in writing, for the Change Order request if you require more time to gather and analyze data.

3. The Engineer shall not grant an extension of Contract Time in accordance with 6-1.6, "Excusable Delays" unless you demonstrate, through an analysis of the critical path, the following:
 - a) The event causing the delay impacted the activities along the Project's critical path.
 - b) The increases in the time to perform all or part of the Project beyond the Contract Time arose from unforeseeable causes beyond your control and without your fault or negligence and that all project float has been used.
4. Any modifications to the Contract Time will be incorporated into the weekly document that the Engineer issues that stipulates the Contract Time. If you do not agree with this document, submit to the Engineer for review a written protest supporting your objections to the document within **30 Calendar Days** after receipt of the statement. Your failure to file a timely protest shall constitute your acceptance of the Engineer's weekly document.
 - a) Your protest will be considered a claim for time extension and shall be subject to 3-5.1, "Claims".

6-6.4 Written Notice and Report. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Your failure to notify the Resident Engineer within **1 Working Day** OR provide a Change Order request within **5 Working Days** after the event, in accordance with 6-6.2, "Extensions of Time", will be considered grounds for refusal by the City to consider such request if your failure to notify prejudices the City in responding to the event.

6-8.3 Warranty. To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:

1. You shall warranty and repair all defective materials and workmanship for a period of 1 year. This call back warranty period shall start on the date the Work was accepted by the City unless the City had beneficial use of the project (excluding water, sewer, and storm drain projects). In addition, you shall warranty the Work against all latent defects for a period of 10 years and patent defects for a period of 4 years.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-3 **INSURANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

7-3 **INSURANCE.**

1. The insurance provisions herein shall not be construed to limit your indemnity obligations contained in the Contract.

7-3.1 **Policies and Procedures.**

1. You shall procure the insurance described below, at its 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 for the duration of this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your liabilities under the Contract, e.g., your indemnity obligations, is not deemed limited to the insurance coverage required by this Contract.
4. The payment for insurance shall be included in the Contract Price as bid by you. Except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any Work under this Contract until you have provided and the City has approved all required insurance.
5. Policies of insurance shall provide that the City is entitled to 30 Days (10 Days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

7-3.2 **Types of Insurance.**

7-3.2.1 **Commercial 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	\$2,000,000
Products/Completed Operations Aggregate Limit	\$2,000,000
Personal Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000

7-3.2.2 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.

7-3.2.3 Contractors Pollution Liability Insurance.

1. You shall procure and maintain at your expense or require your Subcontractor, as described below, to procure and maintain the Contractors Pollution Liability Insurance including contractual liability coverage to cover liability arising out of cleanup, removal, storage, or handling of hazardous or toxic chemicals, materials, substances, or any other pollutants by you or any Subcontractor in an amount not less than \$2,000,000 limit for bodily injury and property damage.
2. All costs of defense shall be outside the limits of the policy. Any such insurance provided by your Subcontractor instead of you shall be approved separately in writing by the City.
3. 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.
4. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability.
5. Occurrence based policies shall be procured before the Work commences and shall be maintained for the Contract Time. 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.

6. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.4 Contractors Hazardous Transporters Pollution Liability Insurance.

1. You shall provide at your expense or require your Subcontractor to provide, as described below, 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 not less than \$2,000,000 limit per occurrence/aggregate for bodily injury and property damage.
2. All costs of defense shall be outside the limits of the policy. The deductible shall not exceed \$25,000 per claim. Any such insurance provided by a subcontractor instead of you shall be approved separately in writing by the City.
3. For approval of the substitution of Subcontractor's insurance the Contractor shall certify that all activities for which Contractors Hazardous Transporters Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance.
4. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. Occurrence based policies shall be procured before the Work commences and shall be maintained for the duration of this Contract. 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. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.3 Rating Requirements. Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein 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, and that have been approved by the City.

7-3.3.1 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 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 herein.

7-3.4 Evidence of Insurance. Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.

7-3.5 Policy Endorsements.

7-3.5.1 Commercial General Liability Insurance.

7-3.5.1.1 Additional Insured.

1. You shall provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.
2. To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured.
3. The additional insured coverage for projects for which the Engineer's Estimate is \$1,000,000 or more shall include 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.
4. The additional insured coverage for projects for which the Engineer's Estimate is less than \$1,000,000 shall include liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products, or
 - c) premises owned, leased, controlled, or used by you.

7-3.5.1.2 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.

7-3.5.1.3 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.

7-3.5.2 Commercial Automobile Liability Insurance.

7-3.5.2.1 Additional Insured. Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.

7-3.5.3 Contractors Pollution Liability Insurance Endorsements.

7-3.5.3.1 Additional Insured.

1. The policy or policies shall be endorsed to include as an 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.

Except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of § 2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

2. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that are not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code §11580.04.

7-3.5.3.2 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.

7-3.5.3.3 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.

7-3.5.4 Contractors Hazardous Transporters Pollution Liability Insurance Endorsements.

7-3.5.4.1 Additional Insured.

1. The policy or policies shall be endorsed to include as an 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.

Except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of §2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

2. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that are not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code §11580.04.

7-3.5.4.2 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.

7-3.5.4.3 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.

7-3.6 Deductibles and Self-Insured Retentions. You shall pay for all 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.

7-3.7 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.

7-3.8 Notice of Changes to Insurance. You shall notify the City 30 Days prior to any material change to the policies of insurance provided under this Contract.

7-3.9 Excess Insurance. Policies providing excess coverage shall follow the form of the primary policy or policies e.g., all endorsements.

7-4 NOT USED. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

7-4 WORKERS' COMPENSATION INSURANCE AND EMPLOYERS LIABILITY INSURANCE.

1. In accordance with the provisions of §3700 of the California Labor Code, 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 the requirements of this section.
2. Limits for this insurance shall be not less than the following:

<u>Workers' Compensation</u>	<u>Statutory Employers Liability</u>
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit
3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you shall comply with such provisions before commencing the Work as required by §1861 of the California Labor Code.

7-4.1 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.

ADD:

7-6

THE CONTRACTORS REPRESENTATIVE. To the "GREENBOOK", ADD the following:

1. Both the representative and alternative representative shall be employees of the Contractor and shall not be assigned to a Subcontractor unless otherwise approved by the City in writing.

7-8.6.5

Payment. DELETE in its entirety and SUBSTITUTE with the following:

7-8.6.5

Drinking Water Discharges Requirements.

1. All discharge related to the project of water used for testing an acceptance of new water mains to the storm drain shall comply with the State Water Resources Control Board, ORDER WQ 2014-0194-DWQ, STATEWIDE GENERAL NPDES PERMIT FOR DRINKING WATER SYSTEMS DISCHARGES found at the State Boards website at the following location:

http://www.waterboards.ca.gov/water_issues/programs/npdes/docs/drinking_water/final_statewide_wqo2014_0194_dwq.pdf

All monitoring, sampling and reporting for compliance with the Order must be completed by a QSP.

- a) BMPs shall be in place prior to the start of discharge. At a minimum, you shall:
 - i. Sweep the gutter and street in the flow path
 - ii. Provide inlet protection at all inlets receiving discharge
 - iii. Provide dechlorination
 - iv. Implement sediment and erosion control measures such as diffusers, check dams, flow controls, etc
- b) Monitoring and Samples.
 - i. As required by the Order, you shall monitor, sample and report all discharges to the storm drain. You shall record the results for each discharge event on the City's Drinking Water discharge Monitoring form included as **Appendix H**. Submit completed forms to the Engineer at the end of every month.
 - ii. Notifications: You shall notify the RWQCB at and Transportation and Storm Water Department prior to the start of any large volume discharge (greater than 1 acre-foot volume). You shall notify The County of San Diego, Department of Environmental Health (DEH) at (858) 495-5579 prior to the start of discharges 100,000 gallons or more within ¼ mile of the ocean or bay coastline.
 - iii. Sampling and reporting requirements are outlined in the Order.
 - For Superchlorinated discharges, at a minimum, you shall sample chlorine, turbidity and pH the first 10 minute of discharge, the first 60 minutes of discharge

and last 10 minutes of discharge and provide an estimate of the total volume of water discharged.

- For Large Volume discharges (or discharges greater than 1 acre-foot in total volume), at a minimum, you shall sample chlorine and turbidity pH the first 10 minute of discharge, the first 60 minutes of discharge and last 10 minutes of discharge and provide an estimate of the total volume of water discharged.
- For discharges that are not superchlorinated and are under 1 acre-foot in total volume, at a minimum, you shall provide an estimate of the total volume of water discharged.

iv. Effluent limits:

- Field measurement of 0.1 mg/L chlorine or more is an exceedance of the Order.
- Visual estimates of 20 NTU or more for surface water and 225 NTU or more for ocean is an exceedance the City's Basin Plan.
- Field measurements for pH outside the range of 6.5 to 8.5 is an exceedance of the City's Basin Plan.

v. Receiving water monitoring: if an exceedance is observed, the discharge shall be stopped immediately, BMPs must be adjusted until discharge is no longer exceeding limits. The QSP shall monitor receiving waters for adverse effects to water quality. If any adverse effect to water quality is observed, the RE and RWQCB shall be notified immediately. The QSP shall document the point of confluence between the discharge and receiving water with photographs.

c) Areas of Special Biological Significance (ASBS).

- i. Non-storm water discharges including drinking water discharges to Areas of Special Biological Significance (ASBS) are prohibited. These are ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable and are classified as a subset of State Water Quality Protection Areas. Non-storm water discharges shall be located outside of the designated areas to ensure maintenance of natural water quality conditions in these areas.
- ii. A map showing ASBS locations can be found in the Storm Water Standards Manual Part 2 Appendix A. The areas in the San Diego Region include: La Jolla (ASBS #29), Scripps (ASBS #31), and La Jolla Shores watershed boundaries.

2. If prior approval is obtained to discharge to the sewer system, you shall discharge the water used for testing and acceptance of new water mains to the sewer system in accordance with the Contract Documents as shown on the batch discharge Plans. You shall submit to the Engineer a "Request for Batch Discharge Authorization to Discharge Potable Pipe Flushing Water to Sewer" form. The request form is found on the City website at the following location:

https://www.sandiego.gov/sites/default/files/pipe_flush_batch_disch_0.pdf

- a) When discharging to the sewer system has been approved, you shall use a totalizer flow meter to record the total volume discharged to sewer and shall submit to the Engineer a log of actual discharged water quantities, dates, and locations. Failure to report this information to the Engineer is a violation of the authorization for discharge to the sanitary sewer. Within five (5) Working Days of the discharge, the Engineer shall receive and report actual total flows to the sanitary sewer to the Public Utilities Department (PUD), Industrial Wastewater Control Program (IWCP).
- b) If the discharge to the sewer system is not approved, you shall discharge the water used for the testing of new mains to surface waters, storm drain inlets, or to other approved sources and you shall comply with 7-8.6.5, "Drinking Water Discharges Requirements". All discharge activities related to the project shall 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

ADD:

7-8.6.5.1

Payment.

1. The payment for complying with the requirements of drinking water systems discharge to the storm drain shall be included in the Bid item for "Drinking Water Discharge Monitoring by QSP".
2. The payment for complying with the discharge requirements for discharges to sewer system shall be included in the Bid item for the new water main.

7-8.6.6.9

Payment. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The payment for preparing a Community Health and Safety Plan shall be paid in accordance with 7-22.20, "Payment".
2. The Allowance Bid item for "Dewatering Permit and Discharge Fees" shall cover all costs for fees and related expenses for obtaining permits.
3. The payment for dewatering hazardous contaminated water shall be included in the lump sum Bid item for "Dewatering Hazardous Contaminated Water"

and shall include furnishing, setting up and removal, and operating all equipment necessary to treat and discharge the hazardous contaminated groundwater.

4. Submit supporting invoices and a Schedule of Values for the Lump Sum Bid item for "Dewatering Hazardous Contaminated Water" in accordance with 9-2.1, "Schedule of Values (SOV)". The SOV shall itemize the Work to show the following:
 - a) All costs associated with handling contaminated groundwater specified in 7-8.6.6.6, "Dewatering System", and 7-8.6.6.8, "Hazardous Waste Operations and Emergency Response (HAZWOPER) Certificate".
 - b) All costs associated with equipment used for dewatering hazardous contaminated groundwater, including costs for mobilization and demobilization.
 - c) All rental and operating costs for equipment used for dewatering contaminated groundwater.
5. The payment for the handling and disposal of the hazardous contamination shall be in accordance with 7-22.20, "Payment".
6. The payment for dewatering non-hazardous contaminated water shall be included in the lump sum Bid item for "Dewatering Non-Hazardous Contaminated Water" and shall include furnishing, setting up and removal, and operating all equipment necessary to complete the Work.

7-13.4 Contractor Standards and Pledge of Compliance. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The Contract is subject to City's Municipal Code §22.3004 as amended 10/29/13 by ordinance O-20316.
2. You shall complete a Pledge of Compliance attesting under penalty of perjury that you complied with the requirements of this section.
3. You shall ensure that all Subcontractors complete a Pledge of Compliance attesting under penalty of perjury that they complied with the requirements of this section.
4. You shall require in each subcontract that the Subcontractor shall abide by the provisions of the City's Municipal Code §22.3004. A sample provision is as follows:

"Compliance with San Diego Municipal Code §22.3004. The Subcontractor acknowledges that it is familiar with the requirements of San Diego Municipal Code §22.3004 ("Contractor Standards"), and agrees to comply with requirements of that section. The Subcontractor further agrees to complete the Pledge of Compliance, incorporated herein by reference."

ADD:

7-13.8 Equal Pay Ordinance.

1. You shall comply with the Equal Pay Ordinance (EPO) codified in the San Diego Municipal Code (SDMC) in section 22.4801 through 22.4809, unless

compliance is not required based on an exception listed in SDMC section 22.4804.

2. You shall require all of your Subcontractors to certify compliance with the EPO in their written subcontracts.
3. You shall post a notice informing your employees of their rights under the EPO in the workplace or job site.
4. By signing this Contract with the City of San Diego, you acknowledge the EPO requirements and pledge ongoing compliance with the requirements of SDMC Division 48, section 22.4801 et seq., throughout the duration of this Contract.

ADD:

7-16.1.3

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:

Janice Jaro, Senior Engineer, JJaro@sanidiego.gov

Maryam Liaghat Project Manager, MLiaghat@sanidiego.gov

Jamal Sherzai, Project Engineer, JSherzai@sanidiego.gov

Resident Engineer, TBA, XXX@sanidiego.gov

7-16.3

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 7-16.2 "Community Outreach Services" and 7-16.3 "Exclusive Community Liaison Services".
3. The Exclusive Community Liaison shall attend and Report Exclusive Community Liaison activities at all progress meetings scheduled by the Resident Engineer.

7-20

ELECTRONIC COMMUNICATION. To the "WHITEBOOK", ADD the following:

2. Virtual Project Manager shall be used on this Contract.

7-21.1

General. To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. During the construction phase of projects, the minimum waste management reduction goal is 90% of the inert material (a material not subject to decomposition such as concrete, asphalt, brick, rock, block, dirt, metal, glass, and etc.) and 65% of the remaining project waste. You shall provide appropriate documentation, including a Waste Management Form attached as an appendix, and evidence of recycling and reuse of materials to meet the waste reduction goals specified.

SECTION 9 - MEASUREMENT AND PAYMENT

9-3.2 Partial and Final Payment. To the "GREENBOOK", paragraph (3), DELETE in its entirety and SUBSTITUTE with the following:

Upon commencement of the Work, an escrow account shall be established in a financial institution chosen by you and approved by the City. Documentation for an escrow payment shall have an escrow agreement signed by you, the City, and the escrow agent. From each progress payment, no less than 5% will be deducted and deposited by the City into the escrow account. Upon completion of the Contract, the City will notify the Escrow agent in writing to release the funds to you. Only the designated representative of the City shall sign the request for the release of Escrow funds.

9-3.4.1 Payment. To the "WHITEBOOK", ADD the following:

4. The cost for mobilization excludes the costs for all mobilization and demobilization Work associated with each paving phase. The costs for all mobilization and demobilization Work associated with each paving phase shall be paid under 306-1.2.

9-3.7 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.

SECTION 203 - BITUMINOUS MATERIALS

203-3.4.4 Rubber Polymer Modified Slurry (RPMS). To the "WHITEBOOK", DELETE in its entirety.

203-3.4.4.1 General. To the "WHITEBOOK", DELETE in its entirety.

ADD:

203-3.4.4.1 General. To the "GREENBOOK", paragraph (2), ADD the following:

- e) Crumb rubber shall be a product of recycled material from the City if unavailable from the San Diego County region.

ADD:

203-5.6 Rubber Polymer Modified Slurry (RPMS).

203-5.6.1 General.

1. Rubber polymer modified slurry (RPMS) is a crumb rubber asphalt slurry-seal surface treatment. RPMS shall be a stable mixture of asphaltic emulsion, mineral aggregate, set-control additives, specially produced and graded crumb rubber, polymer, mineral fillers, carbon black, and water. The materials for RPMS shall conform to 203-5.4, "Emulsion-Aggregate Slurry (EAS)" and these specifications. Mixing and spreading of RPMS shall be as described in 302-4.12, "Rubber Polymer Modified Slurry (RPMS)".

2. RPMS shall be used for this Contract.

203-5.6.2 Materials.

1. The ingredients of RPMS immediately prior to the mixing shall conform to the following:

a) Asphaltic emulsion shall be a quick-set type and shall conform to the requirements of CQS-1h and to the following requirements in accordance with the specified test methods:

Quality Tests for Emulsion	Test	Requirements
AASHTO T59	Residue after Distillation	60% min.
ASTM D244		
Quality Tests for Residue	Test	Requirements
AASHTO T49	Penetration at 77° F (25° C)	40% - 90%
ASTM D2397		

b) Quick setting Type CQS-1h Asphaltic Emulsion shall test positive for Particle Charge when tested in accordance with the applicable ASTM test designation. If the Particle Charge Test result is inconclusive, the asphaltic emulsion shall meet a pH requirement of 6.7 maximum.

c) Water shall be potable and of such quality that the asphalt will not separate from the emulsion before the application of slurry seal.

d) If necessary for workability, a set-control agent that will not adversely affect the RPMS material may be added.

e) Polymer additive shall be SBR Latex or approved equal, which is added at a minimum of 2% by weight of the asphaltic emulsion.

f) Crumb Rubber.

i. Crumb rubber shall be ambient granulated or ground from whole passenger tires, truck tires, or a combination only in conformance with the requirements indicated in Tables 203-5.6.2 (A), 203-5.6.2 (B), and 203-5.6.2 (C).

ii. Un-curing or de-vulcanized rubber shall not be acceptable. Rubber tire buffing from either recapping or manufacturing processes may not be used as a supplement to the crumb rubber mixture.

- iii. In order to remove steel and fabric, an initial separation stage which subjects the rubber to freezing temperatures may be used.
- iv. The crumb rubber shall not be elongated or hair-like in shape and individual particles shall not be greater than 1/20 of an inch in length.
- v. The crumb rubber shall be free of contaminants including fiber, metal, and mineral matter within the following tolerances: the fiber content shall be less than 0.30% by weight and the crumb rubber shall be free of metal particles. Metal imbedded in rubber particles shall not be allowed. The amount of mineral contaminants allowed shall not exceed 0.10% by weight.
- vi. The crumb rubber shall be dry with a moisture content of less than 0.75%.

TABLE 203-5.6.2 (A)

CRUMB RUBBER CHEMICAL PROPERTIES SPECIFICATION

Property	Specification Limits
Specific Gravity	1.15 ± .05
Percent of Carbon Black	35.0 Maximum
Percent of Rubber Hydrocarbon	55.0 Maximum
Percent Ash	6.0 Maximum
Percent of Acetone Extract	10.0 Maximum
Percent of Chloroform Extract	3.0 Maximum
Percent Natural Rubber	40 Minimum

TABLE 203-5.6.2 (B)

CRUMB RUBBER GRADATION REQUIREMENTS

Sieve Size	Percent Passing
No. 30	100
No. 40	90 - 100
No. 50	75 - 85
No. 100	25 - 35
No. 200	0 - 10

TABLE 203-5.6.2 (C)

TESTING METHODS FOR CRUMB RUBBER ANALYSIS

Property	Test Method
Specific Gravity	ASTM D1817
Carbon Black	ASTM D297
Ash	ASTM D297
Chloroform Extract	ASTM D297
Natural/Synthetic Rubber	ASTM D297
Sieve Analysis	ASTM C136

- vii. Carbon black solution shall be non-ionic in charge and liquid in form. The carbon black shall be compatible with the emulsion system, polymers, and additives being used and shall conform to the requirements indicated in 203-5.6.2 (D) and ASTM D1511.

TABLE 203-5.6.2 (D)

Specification	Tolerances
Total Solids	40 - 44
% Black by Weight	35 - 37
Type Black	Medium Furnace Color
Type Dispersing	Non-ionic

- viii. Additives may be used to accelerate or retard the break-set of the RPMS. The use of additives shall be in quantities specified in the mix design.
- ix. Mineral filler such as Portland cement, hydrated lime, limestone dust, fly ash, or other approved filler meeting the requirements of ASTM D242 shall be used if required by the mix design and may be used to facilitate set times as needed. Any cement used shall be considered as part of the dry aggregate weight for mix design purposes.
- x. The mineral aggregate used shall be the type and grade specified for the particular Type of RPMS. The aggregate shall be manufactured crushed stone such as granite, slang, limestone, chat, other high quality aggregate, or a combination thereof. Aggregate shall consist of rock dust except that 100% of any aggregate of combination of aggregates larger than the No. 50 sieve size used in the mix shall be obtained by crushing rock. The material shall be free from vegetable matter and other deleterious substances. The aggregate shall be free of caked lumps and oversized particles. The aggregate shall also conform to the following requirements in Table 203-5.6.2 (E).

TABLE 203-5.6.2 (E)

Test	California Test	Requirements
Sand Equivalent	217	45 min.
Durability Index	229	55 min.

- xi. Crumb rubber shall be a product of recycled material from the City if unavailable from the San Diego County region.

203-5.6.3 Composition and Grading.

1. The percentage composition by weight of the aggregate shall conform to the requirements indicated in the tables below when determined by California Test 202 and modified by California Test 105 when there is a difference in specific gravity of 0.20 or more between blends of different aggregates.

TABLE 203-5.6.3 (A)**TYPE I SLURRY SEAL GRADATION**

Sieve Size	Percentage Passing	Stockpile Tolerance
No.4	100	± 5%
No.8	90 - 100	± 5%
No.16	65 - 90	± 5%
No.30	40 - 60	± 5%
No.50	25 - 42	± 4%
No.200	10 - 20	± 2%

TABLE 203-5.6.3 (B)**TYPE II SLURRY SEAL GRADATION**

Sieve Size	Percentage Passing	Stockpile Tolerance
No.3/8	100	± 5%
No.4	90 - 100	± 5%
No.8	65 - 90	± 5%
No.16	45 - 70	± 5%
No.30	30 - 50	± 5%
No.50	18 - 36	± 4%
No.100	10 - 24	± 3%
No.200	5 - 15	± 2%

TABLE 203-5.6.3 (C)**TYPE III SLURRY SEAL GRADATION**

Sieve Size	Percentage Passing	Stockpile Tolerance
No.3/8	100	± 5%
No.4	70 - 90	± 5%

Sieve Size	Percentage Passing	Stockpile Tolerance
No.8	45 - 70	± 5%
No.16	28 - 50	± 5%
No.30	19 - 34	± 5%
No.50	12 - 25	± 4%
No.100	7 - 18	± 3%
No.200	5 - 15	± 2%

2. The job mix (target) gradation shall be within the gradation band for the desired type. After the target gradation has been submitted, the percent passing each sieve shall not be more than the stockpile tolerance.
3. The aggregate shall be accepted at the Site or stockpile. The stockpile shall be accepted based on 5 gradation tests according to California Test 202, modified by California Test 105 when there is a difference in specific gravity of 0.2 or more between blends of different aggregates. If the average of the 5 tests is within the gradation tolerances, then the material will be accepted. If the test shows the material to be out, you may choose to remove the material or blend other aggregates with the stockpile material to bring it into compliance with these specifications. Materials used in blending shall meet the quality test before blending and shall be blended in a manner to produce a consistent gradation.
4. When the results of either the Aggregate Grading or the Sand Equivalent test do not conform to the requirements specified, the aggregate shall be removed. However, if requested in writing and approved by the Engineer, the aggregate may be used and you shall pay to the agency \$1.75 per ton for such aggregate left in place. No single aggregate grading or sand equivalent tests shall represent more than 300 tons or one day's production, whichever is smaller.

203-5.6.4 Mix Design.

1. Before Work begins, you shall submit laboratory reports of mix designs performed in accordance with the tests identified in Table 203-5.6.4 at your expense and shall utilize the specific materials to be used on the project. The design shall be prepared by a laboratory experienced in designing rubber asphalt slurry-seal surface treatments. After the mix design is approved, no substitution shall be made unless approved by the Engineer. The proposed rubber asphalt slurry-seal surface treatment mix design shall verify compatibility of the aggregate, emulsion, mineral filler, set-control additive, and rubber blend.

TABLE 203-5.6.4

Test	Description	Specification
ISSA T-106	Slurry Seal Consistency	Pass
ISSA TB-109	Excess Asphalt	50 grams/ft ² maximum
ISSA TB-100	The Wet Track Abrasion	50 grams/ ft ² maximum

Test	Description	Specification
(Type I)		
ISSA TB-100 (Type II)	The Wet Track Abrasion	60 grams/ ft ² maximum
ISSA TB-100 (Type III)	The Wet Track Abrasion	60 grams/ ft ² maximum
ISSA TB-113	Mixing Time	Controllable to 150 seconds minimum
ISSA TB-114	The Wet Stripping	Pass

2. The Mixing Time test shall be done at the highest temperatures expected during construction. The original lab report shall be signed by the laboratory that performed the mix design and shall show the results of the tests on individual materials. The report shall clearly show the proportions of aggregate, mineral filler (minimum and maximum), water (minimum and maximum), additive (s) (usage), asphalt emulsion, and asphalt rubber blend based on the dry weight of the aggregate.
3. Component materials used in the mix design shall be representative of your proposed materials. The percentage of each individual material required shall be shown in the laboratory report. Adjustments may be required during the construction based on field conditions.
4. The component materials shall be within the following limits:
 - a) Residual Asphalt Type I, 10% - 16% based on dry weight of aggregate.
 - b) Residual Asphalt Type II, 7.5% - 13.5% based on dry weight of aggregate.
 - c) Residual Asphalt Type III, 6.5% - 12% based on dry weight of aggregate.
 - d) The crumb rubber will be added to the rubberized slurry mix at a rate of 5% by volume to the asphalt cement.
 - e) Polymer additive shall be added at 2% of finished emulsion.
 - f) Carbon Black shall be added at 1.3% to 2% of the finished emulsion.
 - g) Mineral filler shall be 0.5% - 2.0% (if required by mix design) based on dry weight of aggregate.
 - h) Additives, as needed.
 - i) Water, as needed to achieve proper mix consistency (total mix liquids shall not exceed the loose aggregate voids).

SECTION 209 – PRESSURE PIPE

209 PRESSURE PIPE. 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

212-10.6.3 Polymer Concrete Water Meter Boxes. To the “WHITEBOOK”, DELETE in its entirety and SUBSTITUTE with the following:

1. Boxes and covers shall be in accordance with the Water Approved Materials List or approved equal.
2. Boxes and covers to be installed in all areas shall have a reinforced polymer concrete frame and cover designed for AASHTO H-20 traffic loading.
3. Covers shall have a logo reading “SD CITY WATER” as well as the manufacturer’s name or logo cast in the polymer concrete surface. A cover selected at random shall be tested.
4. Covers shall be solid per SDW-136, sheet 1 only. Reader lids shall not be installed.

SECTION 217 – BEDDING AND BACKFILL MATERIALS

217-2.2 Stones, Boulders, and Broken Concrete. To the “GREENBOOK”, Table 217-2.2, DELETE in its entirety and SUBSTITUTE with the following:

TABLE 217-2.2

Zone	Zone Limits	Maximum Size (greatest dimension)	Backfill Requirements in Addition to 217-2.1
Street or Surface Zone	From ground surface to 12” (300 mm) below pavement subgrade or ground surface	2.5” (63 mm)	As required by the Plans or Special Provisions.
Street or Surface Zone Backfill of Tunnels beneath Concrete Flatwork		Sand	Sand equivalent of not less than 30.

Zone	Zone Limits	Maximum Size (greatest dimension)	Backfill Requirements in Addition to 217-2.1
Trench Zone	From 12" (300 mm) below pavement subgrade or ground surface to 12" (300 mm) above top of pipe or box	6" (150 mm)	
Deep Trench Zone (Trenches 3' (0.9 m) wide or wider)	From 60" (1.5 m) below finished surface to 12" (300 mm) above top of pipe or box	Rocks up to 12" (300 mm) excavated from trench may be placed as backfill	
Pipe Zone	From 12" (300 mm) above top of pipe or box to 6" (150 mm) below bottom of pipe or box exterior	2.5" (63 mm)	Sand equivalent of not less than 30 or a coefficient of permeability greater than 1-½ inches/hour (35 mm per hour).
Overexcavation	Backfill more than 6" (150 mm) below bottom of pipe or box exterior	6" (150 mm)	Sand equivalent of not less than 30 or a coefficient of permeability greater than 1-½ inches/hour (35 mm per hour). Trench backfill slurry (100-E-100) per 201-1 may also be used.

SECTION 302 – ROADWAY SURFACING

302-3 PREPARATORY REPAIR WORK. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Prior to the application of slurry, the Contractor shall complete all necessary preparation and repair work to the road segment e.g., tree trimming, weed abatement, weed spraying, crack sealing, asphalt repair, removal of humps and pavement irregularities, raising appurtenances and survey monuments,

removal of raised pavement markers, removal of pavement markings, and any other work and as specified in the Special Provisions and Contract Documents.

2. Most areas of damaged asphalt requiring Asphalt Pavement Repair will be defined by the RE as "MP" or "DO" (mill & pave or dig-out) during construction. Mill & paves shall have a minimum depth of 2", and dig-outs, also called base repairs, shall have a minimum depth of 10".
3. The minimum repair area shall be 4 feet by 4 feet regardless of mark out.
4. You shall repair marked out areas of distressed asphalt concrete pavement by milling, grinding, or saw cutting to remove damaged areas of pavement in accordance with 302-1.1, to expose firm and unyielding pavement, base or native. Unyielding pavement will have no visible cracks and unyielding base or native will be properly compacted, as determined by the Engineer. If cracks are visible, then pavement is not unyielding and shall require additional depth be removed. The Contractor shall prepare subgrade as needed and install a maximum of 5" compacted asphalt concrete pavement over compacted base material to be level with adjacent roadway surface.
5. Edges of milled areas shall be cut cleanly.
6. Material removed, regardless of removal method, shall be disposed of at a legal site.
7. If, in order to achieve the minimum specified depth, the base material is exposed, then the existing base material, as well as additional base material shall be compacted to 95% relative compaction to a depth 5" below the finished grade (dig-out).
8. Compaction tests shall be made to ensure compliance with the specifications. The Engineer will determine when and where the test will occur. The City will pay for the soils testing required by the Engineer, which meets the required compaction. The Contractor shall reimburse the City for the cost of retesting failing compaction tests. If additional base material is required, the Contractor shall use Class II Aggregate Base in accordance with 200-2.2 and 200-2.9, "Crushed Aggregate Base" and "Class 2 Aggregate Base" respectively. The base material shall be prepared conforming to 301-1, "Subgrade Preparation."
9. Recycled base material shall conform to Crushed Miscellaneous Base Material in accordance with 200-2.4, "Crushed Miscellaneous Aggregate Base."
10. Prior to replacing asphalt, the area shall be cleaned by removing all loose and damaged material, moisture, dirt, and other foreign matter and shall be tack coated in accordance with 302-5.4 "Tack Coat."
11. When milling and/or grinding asphalt pavement and the Contractor encounters solid, level unyielding PCC trench caps or appurtenance collars before reaching a minimum depth of 2", then the Contractor shall place enough asphalt concrete pavement to bring the surface to be level with the adjacent roadway.
12. The Contractor shall install new asphalt within the repair area or for patches in accordance with 302-5, "ASPHALT CONCRETE PAVEMENT." Asphalt concrete

shall be B3 PG 64-10 (3/4") and C2-PG 64-10 (1/2") in compliance with 203-6, "ASPHALT CONCRETE."

13. Base repairs shall not exceed 20% RAP in content.
14. No preparatory asphalt work shall be done when the atmospheric temperature is below 50 °F or during unsuitable weather.
15. Following the asphalt placement, the Contractor shall roll the entire area of new asphalt in both directions at least twice. The finished patch shall be level and smooth in compliance with 302-5.6.2 "Density and Smoothness." After placement and compaction of the asphalt repair, the Contractor shall seal all finished edges with a 4" wide continuous band of SS-1H.

302-3.2

Payment. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The payment for the preparatory works shall be included in the Contract Unit Bid Item for which preparation works are performed, unless it is specified as a separate Bid Item.
2. The areas and quantities shown on the resurfacing sheet are given only for the Contractor's aid in planning the Work and preparing Bids. The Engineer will designate the limits to be removed and prepared and these designated areas shall take precedent over the areas shown in the Contract Documents. No payment shall be made for areas of over excavation as determined by the Engineer.
3. At the end of each day the Contractor shall submit to the Engineer an itemized list of the asphalt pavement and base repair work completed. The list shall include the location of the work, the exact cubic yard of materials removed, tons of asphalt placed, and tons of base material placed.
4. Asphalt pavement repair, including both mill & pave and base repair dig-outs, shall be paid at the Contract Unit Price per ton for "Asphalt Pavement Repair". No payment shall be made for areas of over excavation as determined by the Engineer.
5. The payment for preparatory repair asphalt works shall be paid at the contract Unit Price for "Asphalt Pavement Repair" and "Class II Base", per 301-2.4 "Measurement and Payment", for each ton placed and includes milling, grinding, saw cutting, hauling and disposal of existing pavement, tree trimming, tack coating, compaction, and all other necessary work related to asphalt pavement installation. No additional payment shall be made for milling, grinding, or saw cutting concrete, pavement fabric, rubberized material, steel reinforcement, or any other material.

ADD:

302-4.12.2.1.1 Slurry Treatment.

1. When slurry treatment is required by the Contract Documents, notify the Engineer at least 10 Working Days prior to the first application of slurry. The Engineer, upon assessment of street condition and classification, will verify the slurry type to be applied.

2. Application of sequential layers of slurry shall not commence until approved by the Engineer and until the following have been completed:
 - a) Mix design and wet track abrasion testing for the first-step slurry application has been approved by the Engineer. Unless otherwise directed by the Engineer, this testing may require 4 Working Days from field sampling to reporting of test results to the Engineer.
 - b) Corrective actions have been executed in accordance with 302-4.11.1.2, "Reduction in Payment Based on WTAT" such as reductions in payment, non-payment, or removal of material not meeting specifications, as directed by the Engineer.

302-4.12.4 Measurement and Payment. To the "WHITEBOOK", item 2, DELETE in its entirety and SUBSTITUTE with the following:

2. The payment for RPMS shall be the total square footage used on the project calculated using the method described and shall be paid under the following Bid items:

BID DESCRIPTION	UNIT
Rubber Polymer Modified Slurry (RPMS) Type I	SF
Rubber Polymer Modified Slurry (RPMS) Type II	SF
Rubber Polymer Modified Slurry (RPMS) Type III	SF
Rubber Polymer Modified Slurry (RPMS) Type I (Bike Lane)	SF

The Bid items for RPMS shall include full compensation for the specified surface preparation not included in other Bid items and shall include the Work necessary to construct the RPMS as specified on the Plans. Sweeping, removals, and furnishing the aggregate required for the mix design shall also be included in this Bid item.

302-5.9 Measurement and Payment. To the "WHITEBOOK", item 2, DELETE in its entirety.

302-7.4 Payment. To the "WHITEBOOK", item 1, last sentence, DELETE in its entirety and SUBSTITUTE with the following:

Payment shall not be made for additional fabric for overlapped areas.

SECTION 304 – METAL FABRICATION AND CONSTRUCTION

304-5 PAYMENT. To the "WHITEBOOK", REVISE section "304-5" to "304-6".

SECTION 306 – OPEN TRENCH CONDUIT CONSTRUCTION

306-1 GENERAL. To the “GREENBOOK”, ADD the following:

Build the Project in accordance with the phasing plan shown on the Plans and in phases as follows:

1. Phase I: Anchorage Land, Canon Street,
2. Phase II: Shelter Island Drive (Sheet 6-8, and 13-19)
3. Phase III: Shelter Island Drive (Sheet 9-12 and 20)

When installing pipelines within the City’s streetsPublic Right of Way, for the following streets, the total time allowed for the completion of Work shall not exceed 220 Working Days per 11454 Linear Feet of pipeline installation:

1. Anchorage Lane, Canon Street, Shelter Island Drive.

**ADD:
306-1.1**

Phased Paving.

1. You shall implement Phased Paving, when directed and approved by the Engineer.
2. The Engineer will notify you when you can proceed with phased paving Work. Each phase shall be completed within **90 Working Days** after the Engineer’s notification. Plan and schedule your Work accordingly to ensure each phase is complete.
3. When Phased Paving is initiated, the following Work shall be completed within the determined areas:
 - a. Installation of mains and appurtenances.
 - b. Operational checks and testing.
 - c. Mains are in service.
 - d. Trench restoration.
4. You may propose to change the limits of the determined phasing, in writing, for the Engineer’s review and approval. If approved, there shall be no additional costs to the City. No additional Working Days will be granted for delays due to the City’s review and approval of your proposed change and due to the implementation of that proposed change.
5. You may use multiple crews to complete each phase of paving.

**ADD:
306-1.2**

Payment.

1. The payment for all Work associated with Phased Paving shall be included in the unit Bid item for each “Phased Paving” area. This payment shall include the costs for all mobilization and demobilization Work associated with each paving

phase regardless of the paving operation. No additional payment shall be made regardless of the number of mobilizations and demobilizations required to complete that phase

306-3.3 Removal and Abandonment of Existing Conduits and Structures. To the "GREENBOOK", ADD the following:

1. For 16 inch (406.4 mm) and larger conduits, abandoned pipe shall be filled with sand or CLSM in accordance with 201-6, "Controlled Low Strength Material (CLSM)".

306-3.3.4.1 Non-Friable Asbestos Cement Pipe (ACP). To the "WHITEBOOK", item 2, subsection "i", DELETE in its entirety and SUBSTITUTE with the following:

- i) A minimum of 5 Working Days prior to the transportation of the ACP disposal bins or friable asbestos waste, you shall provide notice to and assist the Resident Engineer in completing the Inspection Work Request Form for the Asbestos, Lead, and Mold Program. The form is located below:

<https://forms.sandiego.gov/f/gS2064>

306-6.5.1 General. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. For PVC water pipes:
 - a) Bedding material shall:
 - i. Either be sand, crushed aggregate, or native free-draining granular material.
 - ii. 100% of the bedding material shall pass the no. 4 sieve and shall have an expansion when saturated with water of not more than 0.5%.
 - iii. Have a sand equivalent of SE 50. SE 30 or higher may be substituted for SE 50 as bedding material if all of the following requirements are met:
 - The top of the pipe and haunch areas are mechanically compacted by means of tamping, vibrating roller, or other mechanical tamper.
 - Equipment is of size and type approved by the Engineer.
 - 90% relative compaction or better is achieved.
 - b) When jetting, care shall be exercised to avoid floating of the pipe.

2. PVC sewer pipes shall be bedded in 3/8 inch (9.5 mm) or 1/2 inch (12.5 mm) crushed rock in accordance with 200-1.2, "Crushed Rock and Rock Dust". Crushed rock for PVC sewer pipes may contain recycled Portland Cement Concrete and shall conform to gradation requirements for 3/8 inch or 1/2 inch nominal size as shown in Table 200-1.2.1 (A).
3. Storm drains and all types of non-PVC sewer mains shall be bedded in 3/4 inch (19 mm) crushed rock in accordance with 200-1.2, "Crushed Rock and Rock Dust". Crushed rock for storm drains may contain recycled Portland Cement Concrete and shall conform to gradation requirements for 3/4 inch nominal size as shown in Table 200-1.2.1 (A). Bedding shall be placed to a depth of 4 inches (101.6 mm) below the outside diameter of the pipe or 1 inch (25.4 mm) below the bell of the pipe, whichever is greater.

306-7.8.2.1 General. To the "WHITEBOOK", item 2, ADD the following:

- a) Specified test pressure for Class 305 pipe shall be 200 psi and is tested at 300psi.

306-15.1 General. To the "WHITEBOOK", DELETE in its entirety.

ADD:

306-15.1 General. To the "GREENBOOK", paragraph (1), sub-item "d", DELETE in its entirety and SUBSTITUTE with the following:

- d) the excavations of the trench and disposal of excess excavation;

To the "GREENBOOK", paragraph (1), ADD the following:

- n) trench shoring and plans, excluding engineered shoring and engineered shoring plans.
- o) The removal and disposal of the pavement fabric. See **Appendix L**.

To the "GREENBOOK", paragraph (2), DELETE in its entirety and SUBSTITUTE with the following:

No separate or additional payment shall be made for additional bedding or a higher strength of pipe necessitated by you exceeding the maximum trench width, unless a bid item has been provided.

SECTION 314 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

314-4.3.7 Payment. To the "GREENBOOK", ADD the following:

2. The payment for the replacement of existing traffic striping, pavement markings, and pavement markers shall be included in the Bid item for "Striping" and shall also include the payment for new installations of traffic striping, pavement markings, and pavement markers.

314-4.4.6 **Payment.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. No separate payment shall be made for establishing alignment for stripes and layout Work.
2. The payment for the thermoplastic striping of continental crosswalks shall be included in the Bid item for "Continental Crosswalks" and shall include the removal of existing striping, pavement markers, and paving markings..
3. The payment for the removal and replacement of existing traffic striping, pavement markings, and pavement markers shall be included in the Bid item for "Striping" and shall also include the payment for new installations of traffic striping, pavement markings, and pavement markers

SECTION 600 - ACCESS

**ADD:
600-1**

GENERAL. To the "WHITEBOOK", item 5, DELETE in its entirety and SUBSTITUTE with the following:

5. If the City's crews are unable to provide the citizens with the mandated services due to your failure to comply with these specifications, you shall collect trash, recyclables, and yard waste on the City's schedule and deliver to the City's designated locations. If you fail to perform this Work, you shall incur additional costs for the City to reschedule pick up of an area.

600-5 **PAYMENT.** To the "WHITEBOOK", Delete in its entirety and SUBSTITUTE with the following:

1. The payment for access Work as specified in SECTION 600 – ACCESS shall be included in the Contract Price.

601-6 **PAYMENT.** To the "WHITEBOOK", item 5, ADD the following:

- e) The payment for furnishing, installing, programming, maintaining, and removing City approved temporary video or radar detection systems as specified in 601-1, "GENERAL" shall be included in the Bid item for each "Temporary Detection System" required at each intersection.

SECTION 700 – MATERIALS

700-5.1 **(86-5.01) Vehicle Detectors.** To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:

9. Loop wire shall be Type 2. Loop detector lead-in cable shall be Type "B". Slots shall be filled with elastomeric sealant, epoxy sealant, or hot-melt rubberized

asphalt sealant, except asphaltic emulsion loop sealant and cold tar loop sealant are acceptable if the pavement surface will receive an asphaltic concrete overlay.

700-9.1 Pedestrian Barricade. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Pedestrian barricades shall be constructed in accordance with the City of San Diego Standard Drawing SDG-141, "Pedestrian Barricade – Type A".
2. Curb ramp barricades shall be constructed in accordance with the City of San Diego Standard Drawing SDG-140, "Protective Railing at Curb Ramps".
3. Assembly shall be commercial quality galvanized material.

SECTION 701 – CONSTRUCTION

701-2 PAYMENT. To the "WHITEBOOK", ADD the following:

19. The payment for Protective Railing at Curb Ramps shall be included in the Bid item for each "Protective Railing at Curb Ramps".

SECTION 900 – MATERIALS

900-1.1.1 Galvanized Pipe. To the "WHITEBOOK", Item 8 Hoses, DELETE in its entirety and SUBSTITUTE with the following:

8. Hoses:
 - a) User Connection (Service Meters).
 - i. For meters up to 1 inch (25.4 mm), the hose shall be 1 inch (25.4 mm) potable water hose with 300 WP rating. End connections shall be galvanized steel, "Chicago" 2-lug, quarter-turn, quick-disconnect fittings banded to the hose.
 - ii. Materials shall meet the NSF/ANSI 61 certification for potable water use in conformance with AWWA C651-14.
 - b) Curves and Curbs.
 - i. Hose shall be 2 inch (50.8 mm) potable water hose with 300 WP rating. End connections shall be galvanized steel grooved mechanical end fittings in compliance with ASTM C606 banded to the hose.
 - ii. Materials shall meet the NSF/ANSI 61 certification for potable water use in conformance with AWWA C651-14.

900-1.1.2 Fusible PVC Pipe. To the "WHITEBOOK", Item 8, Hoses, DELETE in its entirety and SUBSTITUTE with the following:

8. Hoses:
 - a) User Connection (Service Meters).
 - i. For meters up to 1 inch (25.4 mm), the hose shall be 1 inch (25.4 mm) potable water hose with 300 WP rating. End connections shall be galvanized steel, "Chicago" 2-lug, quarter-turn, quick-disconnect fittings banded to the hose.
 - ii. Materials shall meet the NSF/ANSI 61 certification for potable water use in conformance with AWWA C651-14.
 - b) Curves and Curbs.
 - i. Hose shall be 2 inch (50.8 mm) potable water hose with 300 WP rating. End connections shall be galvanized steel grooved mechanical end fittings in compliance with ASTM C606 banded to the hose.
 - ii. Materials shall meet the NSF/ANSI 61 certification for potable water use in conformance with AWWA C651-14.

900-1.1.3 Yelomine Pipe. To the "WHITEBOOK", Item 8 Hoses, DELETE in its entirety and SUBSTITUTE with the following:

8. Hoses:
 - a) User Connection (Service Meters).
 - i. For meters up to 1 inch (25.4 mm), the hose shall be 1 inch (25.4 mm) potable water hose with 300 WP rating. End connections shall be galvanized steel, "Chicago" 2-lug, quarter-turn, quick-disconnect fittings banded to the hose.
 - ii. Materials shall meet the NSF/ANSI 61 certification for potable water use in conformance with AWWA C651-14.
 - b) Curves and Curbs.
 - i. Hose shall be 2 inch (50.8 mm) potable water hose with 300 WP rating. End connections shall be galvanized steel grooved mechanical end fittings in compliance with ASTM C606 banded to the hose.
 - ii. Materials shall meet the NSF/ANSI 61 certification for potable water use in conformance with AWWA C651-14.

900-1.2 **Payment.** To the "WHITEBOOK", item 2, DELETE in its entirety and SUBSTITUTE with the following:

2. The Payment for your high-lining materials (fittings, valves, and hardware), including delivery and unloading, shall be paid for under the linear foot Bid item "Furnished Materials for Contractor High-line Work".

900-2.3 **Payment.** To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. The payment for furnishing materials for your connection, cut and plug, and cut-in Work shall cover all necessary materials (fittings and hardware, excluding valves), delivery, and unloading. The payment shall be included within the Bid item of the Work involved and no separate payment for furnishing those materials shall be made. The payment for furnishing valve materials for your connection, cut and plug, and cut-in Work shall be included in the separate Bid items for each valve.

SECTION 901 – INSTALLATION AND CONNECTION

901-2.5 **Payment.** To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. Traffic control, saw cutting the trench area, trench caps, and other spot repairs in the vicinity of the disturbed area at each restored connection shall be included in the square foot Bid item for "Pavement Restoration for Final Connection". Asphalt overlay and slurry seal Work shall be paid for under separate Bid items.

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP) SECTION A – GENERAL REQUIREMENTS

4.1 **Nondiscrimination in Contracting Ordinance.** To the "WHITEBOOK", subsection 4.1.1, paragraph (2), sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

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.

END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

APPENDIX A
NOTICE OF EXEMPTION

NOTICE OF EXEMPTION

(Check one or both)

TO: Recorder/County Clerk
P.O. Box 1750, MS A-33
1600 Pacific Hwy, Room 260
San Diego, CA 92101-2400

 Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

FROM: City of San Diego
Public Works Department
525 B Street, Suite 750, MS 908A
San Diego, CA 92101

Project Name: Water Group 1030

Project No. / WBS No.: B-16042.02.06

Project Location-Specific: Anchorage Ln from Talbot St to Shelter Island Dr; Cañon St from Shafter St to Anchorage Ln; Shelter Island Dr from Anchorage Ln through all of Shelter Island; within the Peninsula Community Planning Area & Council District 2.

Project Location-City/County: San Diego/San Diego

Description of nature and purpose of the Project: Replacement of 9,573 Linear Feet (LF) of 6", 8", 10", 12" water main, installation of 2029 (LF) of 12" new parallel water main, as well as water appurtenances, fire hydrants, trench shoring, trench repair, pavement resurfacing, and curb ramps.

Name of Public Agency Approving Project: City of San Diego

Name of Person or Agency Carrying Out Project: Natalie de Freitas, 525 B Street, Suite 750, San Diego, CA, 92101, (619) 533-4603

Exempt Status: (CHECK ONE)

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269 (b)(c))
- Categorical Exemption: 15302 – (Replacement); 15303 – (New Construction)
- Statutory Exemptions:

Reasons why project is exempt: The City of San Diego conducted an environmental review and determined that the project meets the categorical exemption criteria set forth in CEQA State Guidelines, Section 15302 – (Replacement), which allows for the replacement of existing structures where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced; 15303 – (New Construction), which allows for the construction and location of limited numbers of new, small structures; and where the exceptions listed in Section 15300.2 would not apply.

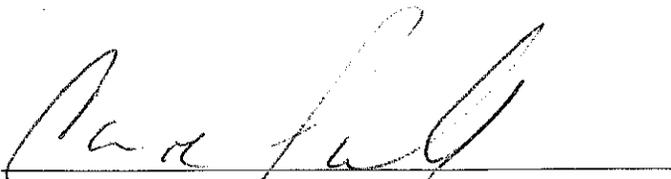
Lead Agency Contact Person: Natalie de Freitas

Telephone: (619) 533-4603

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a notice of exemption been filed by the public agency approving the project? Yes No

It is hereby certified that the City of San Diego has determined the above activity to be exempt from CEQA



Carrie Purcell, Assistant Deputy Director

10/9/18
Date

Check One:

- Signed By Lead Agency
- Signed by Applicant

Date Received for Filing with County Clerk or OPR:

APPENDIX B
FIRE HYDRANT METER PROGRAM

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 1 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

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.)

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 2 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

- 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.

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 3 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

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.

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 4 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

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.) Zip:	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:		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:	
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			

Fire Hydrant Meter Removal Request	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: \$ 936.00 Fees Amount: \$ 62.00
Meter Serial #	Meter Size: 05 Meter Make and Style: 6-7
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

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The City of **SAN DIEGO** Public Works

AC Water Group 1030

COMMUNITY NAME: Peninsula
COUNCIL DISTRICT: 2

WBS: B-16042
DATE: March 19, 2019

SENIOR ENGINEER

Janice Jaro
619-533-3851

PROJECT MANAGER
Maryam Liaghat
619-533-5192

PROJECT ENGINEER Jamal
Sherzai
619-533-4639

Principal Engineering Aide
Lina Hosmi
619-533-4613

LEGEND:

-  Ocean
-  Existing Water Main
-  New Water Main



SITE MAP

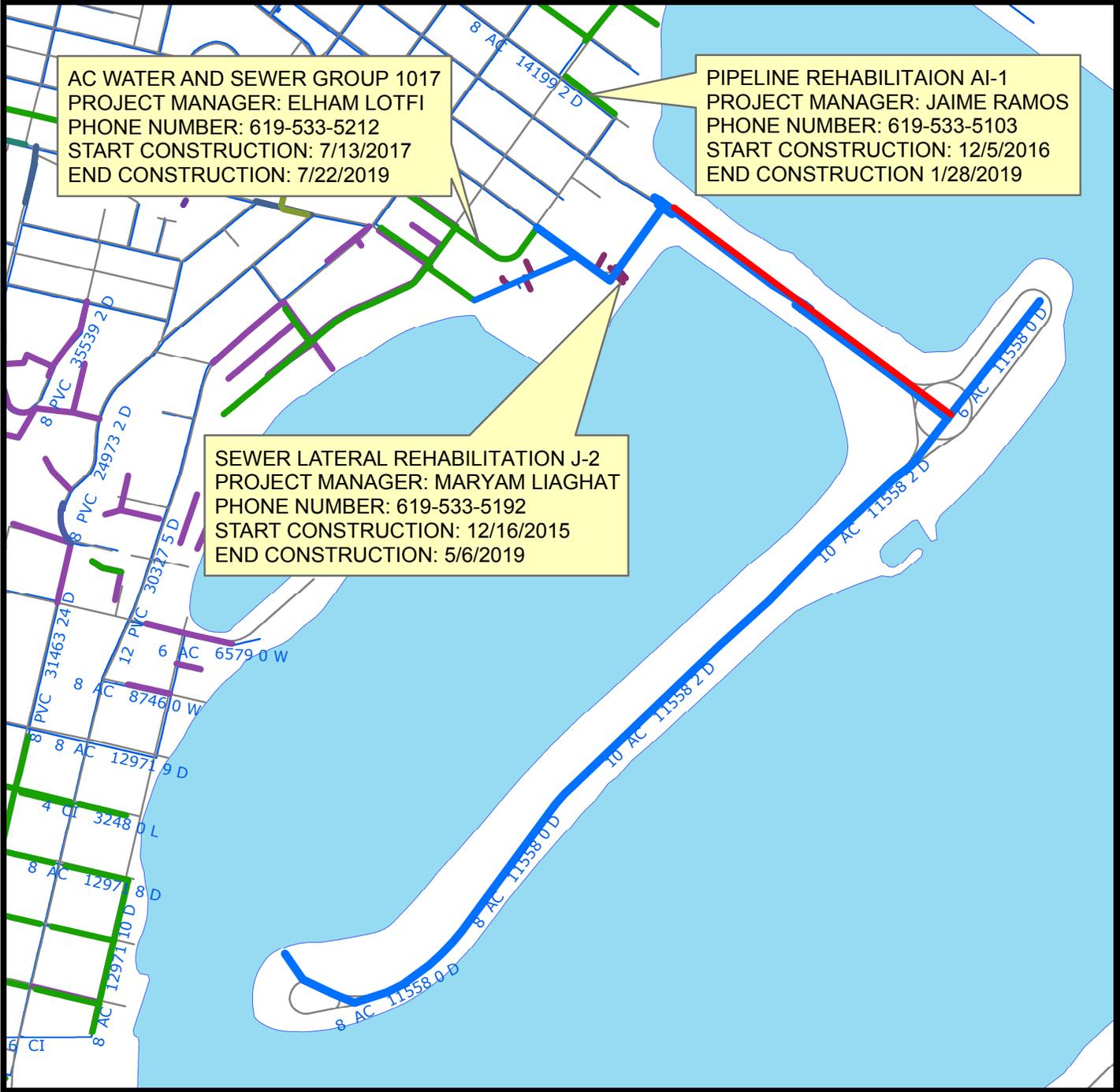
SHEET NO. 02

APPENDIX F
ADJACENT PROJECTS

AC WATER AND SEWER GROUP 1017
 PROJECT MANAGER: ELHAM LOTFI
 PHONE NUMBER: 619-533-5212
 START CONSTRUCTION: 7/13/2017
 END CONSTRUCTION: 7/22/2019

PIPELINE REHABILITATION AI-1
 PROJECT MANAGER: JAIME RAMOS
 PHONE NUMBER: 619-533-5103
 START CONSTRUCTION: 12/5/2016
 END CONSTRUCTION: 1/28/2019

SEWER LATERAL REHABILITATION J-2
 PROJECT MANAGER: MARYAM LIAGHAT
 PHONE NUMBER: 619-533-5192
 START CONSTRUCTION: 12/16/2015
 END CONSTRUCTION: 5/6/2019



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<p>The City of SAN DIEGO Public Works</p>	<p>AC Water Group 1030 COMMUNITY NAME: Peninsula COUNCIL DISTRICT: 2</p>	<p>WBS: B16042 DATE: February 15, 2019</p>
<p>SENIOR ENGINEER Ronak Rekani 619-533-6647</p> <p>PROJECT MANAGER Maryam Liaghat 619-533-5192</p> <p>PROJECT ENGINEER Jamal Sherzai 619-533-4639</p> <p>Principal Engineering Aide Lina Hosmi 619-533-4613</p>	<p>LEGEND:</p> <p>— Existing Water Main</p> <p>— New Water Main</p>	<p style="text-align: center;"> NO SCALE </p> <p style="text-align: center;"> </p>
<p>ADJACENT PROJECTS MAP</p>		<p>SHEET NO. 01</p>

APPENDIX G

CONTRACTOR'S DAILY QUALITY CONTROL INSPECTION REPORT

Appendix_G

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:

APPENDIX H
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), and as follows:

Project Name:		WBS No.:		Watershed No.	
Qualified Person Conducting Tests:		signature			

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 ¹	Category ² (Select one)	Notification ³ (Select all that apply)	BMPs in Place ⁴ (Select all that apply)	Volume ⁵ (gal)	Sampling ⁶ (take samples at 10 mins, 50-60 mins & last 10 mins)				Exceedence ⁷			Notes Report exceedence to RE & complete page 2 of 2
					Measure	Unit	Time	Result	Limit	No	Yes	
Inlet Location Start End Date: Time: Date: Time:	<input type="checkbox"/> Superchlorinated <small>(Chlorine added for disinfection)</small>	<input type="checkbox"/> TSW <small>(All Categories)</small>	<input type="checkbox"/> Sweep flow path <small>(gutter, street, etc.)</small>	Total	Chlorine	mg/L			0.1 mg/L= Exceedence			
	<input type="checkbox"/> Large Volume <small>(≥ 325,850 gal)</small>	<input type="checkbox"/> PUD <small>(All Categories)</small>	<input type="checkbox"/> Dechlorination <small>(diffusers, chemicals, etc.)</small>				Reused <small>(if any)</small>					
	<input type="checkbox"/> Well Dev/Rehab <small>(Not Typical)</small>	<input type="checkbox"/> Water Board <small>(Large Volume Only)</small>	<input type="checkbox"/> Inlet Protection		Turbidity	NTU						
	<input type="checkbox"/> Small Volume/Other <small>(No Sampling Required)</small>	<input type="checkbox"/> County <small>(≥100,000 gal & within ¼ mile of ocean/bay; or if enters the County's MS4)</small>	<input type="checkbox"/> Erosion Controls									
			<input type="checkbox"/> Sediment Controls		pH	Unit			Range 6.5 to 8.5			

Event #2												
Discharge Location ¹	Category ² (Select one)	Notification ³ (Select all that apply)	BMPs in Place ⁴ (Select all that apply)	Volume ⁵ (gal)	Sampling ⁶ (take samples at 10 mins, 50-60 mins & last 10 mins)				Exceedence ⁷			Notes Report exceedence to RE & complete page 2 of 2
					Measure	Unit	Time	Result	Limit	No	Yes	
Inlet Location Start End Date: Time: Date: Time:	<input type="checkbox"/> Superchlorinated <small>(Chlorine added for disinfection)</small>	<input type="checkbox"/> TSW <small>(All Categories)</small>	<input type="checkbox"/> Sweep flow path <small>(gutter, street, etc.)</small>	Total	Chlorine	mg/L			0.1 mg/L= Exceedence			
	<input type="checkbox"/> Large Volume <small>(≥ 325,850 gal)</small>	<input type="checkbox"/> PUD <small>(All Categories)</small>	<input type="checkbox"/> Dechlorination <small>(diffusers, chemicals, etc.)</small>				Reused <small>(if any)</small>					
	<input type="checkbox"/> Well Dev/Rehab <small>(Not Typical)</small>	<input type="checkbox"/> Water Board <small>(Large Volume Only)</small>	<input type="checkbox"/> Inlet Protection		Turbidity	NTU						
	<input type="checkbox"/> Small Volume/Other <small>(No Sampling Required)</small>	<input type="checkbox"/> County <small>(≥100,000 gal & within ¼ mile of ocean/bay; or if enters the County's MS4)</small>	<input type="checkbox"/> Erosion Controls									
			<input type="checkbox"/> Sediment Controls		pH	Unit			Range 6.5 to 8.5			

Submit completed Form to RE

Instructional Notes found on the Page 2 of 2
PAGE 1 OF 2

Construction Management & Field Services Division

Version 4

Receiving Water Monitoring

(Complete only if limits exceed on Page 1 of 2)

Event #1	
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.	
4) If any answers are YES, Notify the RE immediately for further action	

Event #2	
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.	
4) If any answers are YES, Notify the RE immediately for further action	

Instructional Notes to Contractor

- 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	Email	When to Notify
TSW	SWPPP@SanDiego.gov	3 days prior to all discharges
PUD	CompReports@SanDiego.gov RDavenport@sandiego.gov	3 days prior to all discharges
San Diego Water Board	SanDiego@WaterBoards.ca.gov cc:Ben.Neill@WaterBoards.ca.gov	3 days prior to a Large Volume discharge
County of San Diego	DEH: joseph.palmer@sdcounty.ca.gov dominique.edwards@sdcounty.ca.gov	3 days prior if ≥100,000 gal within ¼ mile of the ocean/bay
	WPP: Nicholas.DelValle@sdcounty.ca.gov	3 days prior if enters County's MS4 or unincorporated County

- 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/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 notes section.
- 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 mins, 50-60 mins, last 10 mins
Large Volume	Chlorine, Turbidity	first 10 mins, 50-60 mins, last 10 mins
Well Dev/Rehab	Chlorine, Turbidity	first 10 mins, 50-60 mins, last 10 mins
Small Volume/Other	None	None

- 7) Effluent limitations must be monitored not to exceed per the following table:

Measure	Method	Limit
Volume	Estimate None	
Chlorine	Field Measurement	0.10 mg/L-Cl
Turbidity	Visual Estimate	20 NTU for inland water 225 NTU for ocean 100 NTU for well water
pH	Field Measurement	6.5 to 8.5

APPENDIX I
HAZARDOUS WASTE LABEL AND 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) _____

UN/NA 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 ¹

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.

¹ 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 ³
Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT ³
Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT ³
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)		
F	<input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____		
F	<input type="checkbox"/> CHRONIC OR DELAYED (explain) _____		
F	<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.		
I	REPORTING FACILITY REPRESENTATIVE (print or type) _____		
I	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 OF PUBLIC NOTICE



CONSTRUCTION NOTICE

PROJECT TITLE

Work on your street will begin within one week to replace the existing water mains servicing your community.

The work will consist of:

- Saw-cutting and trench work on Ingulf Street from Morena Boulevard to Galveston Street to install new water mains, water laterals and fire hydrants.
• Streets where trenching takes place will be resurfaced and curb ramps will be upgraded to facilitate access for persons with disabilities where required.
• This work is anticipated to be complete in your community by December 2016.

How your neighborhood may be impacted:

- Water service to some properties during construction will be provided by a two-inch highline pipe that will run along the curb. To report a highline leak call 619-515-3525.
• Temporary water service disruptions are planned. If planned disruptions impact your property, you will receive advance notice.
• Parking restrictions will exist because of the presence of construction equipment and materials.
• "No Parking" signs will be displayed 72 hours in advance of the work.
• Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX



CONSTRUCTION NOTICE

PROJECT TITLE

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• "No Parking" signs will be displayed 72 hours in advance of the work.
• Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX

To contact the City of San Diego: SD Public Works 619-533-4207 | engineering@sandiego.gov | sandiego.gov/CIP

This information is available in alternative formats upon request.

To contact the City of San Diego: SD Public Works 619-533-4207 | engineering@sandiego.gov | sandiego.gov/CIP

This information is available in alternative formats upon request.

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 5-2, "Protection", of the 2015 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:

Photo 2



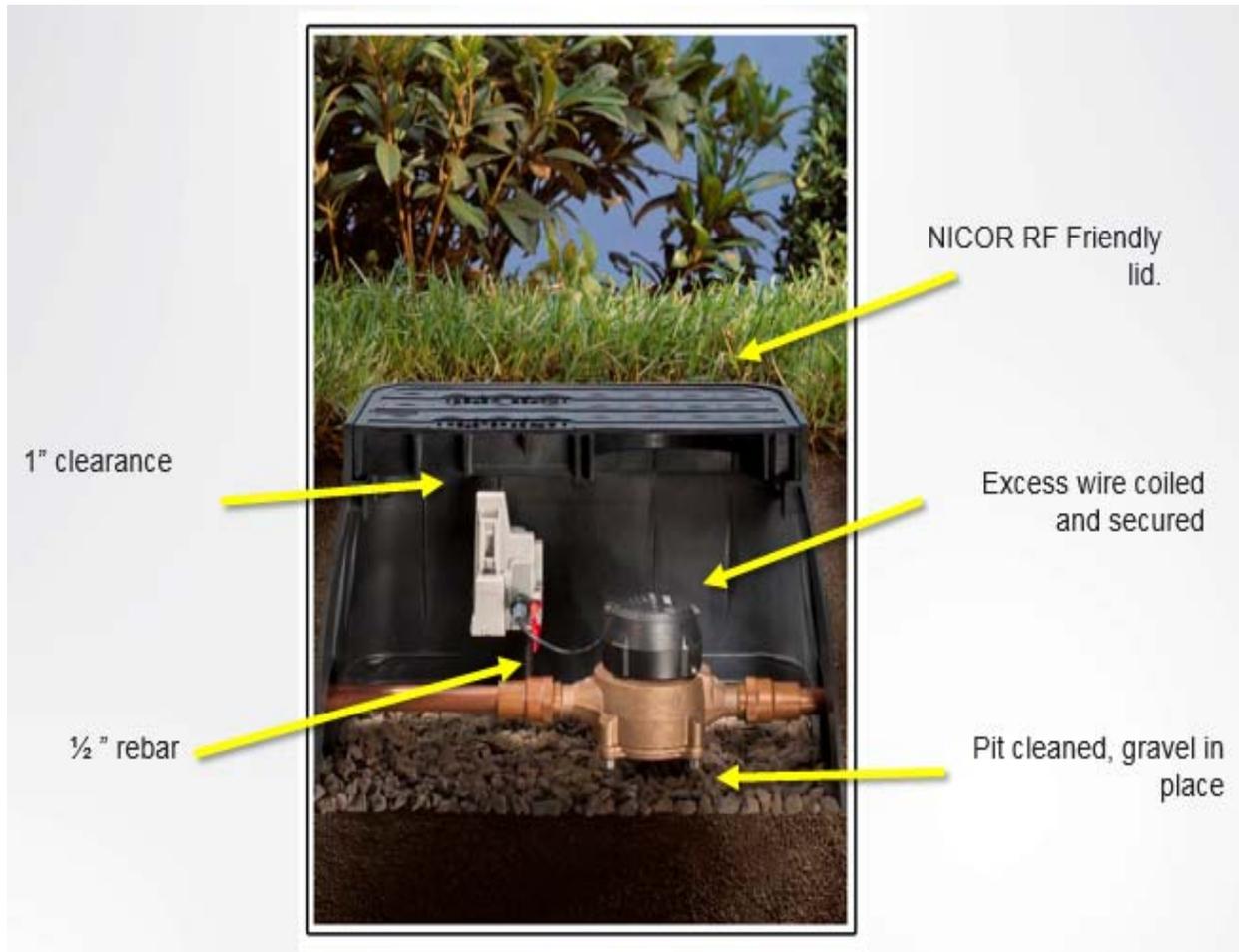
Network Devices, see Photo 3:

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

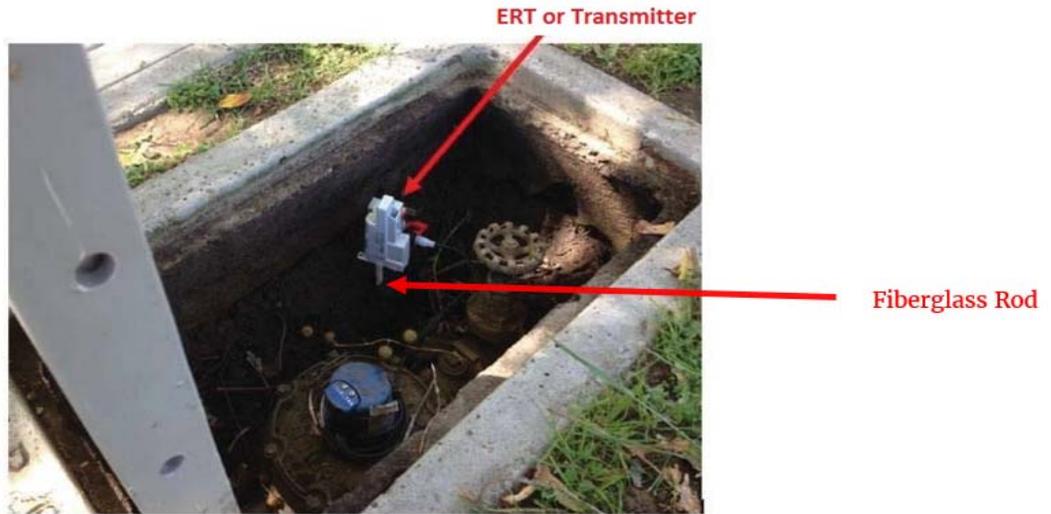


Photo 6 below is an example of disturbance that shall be avoided:

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

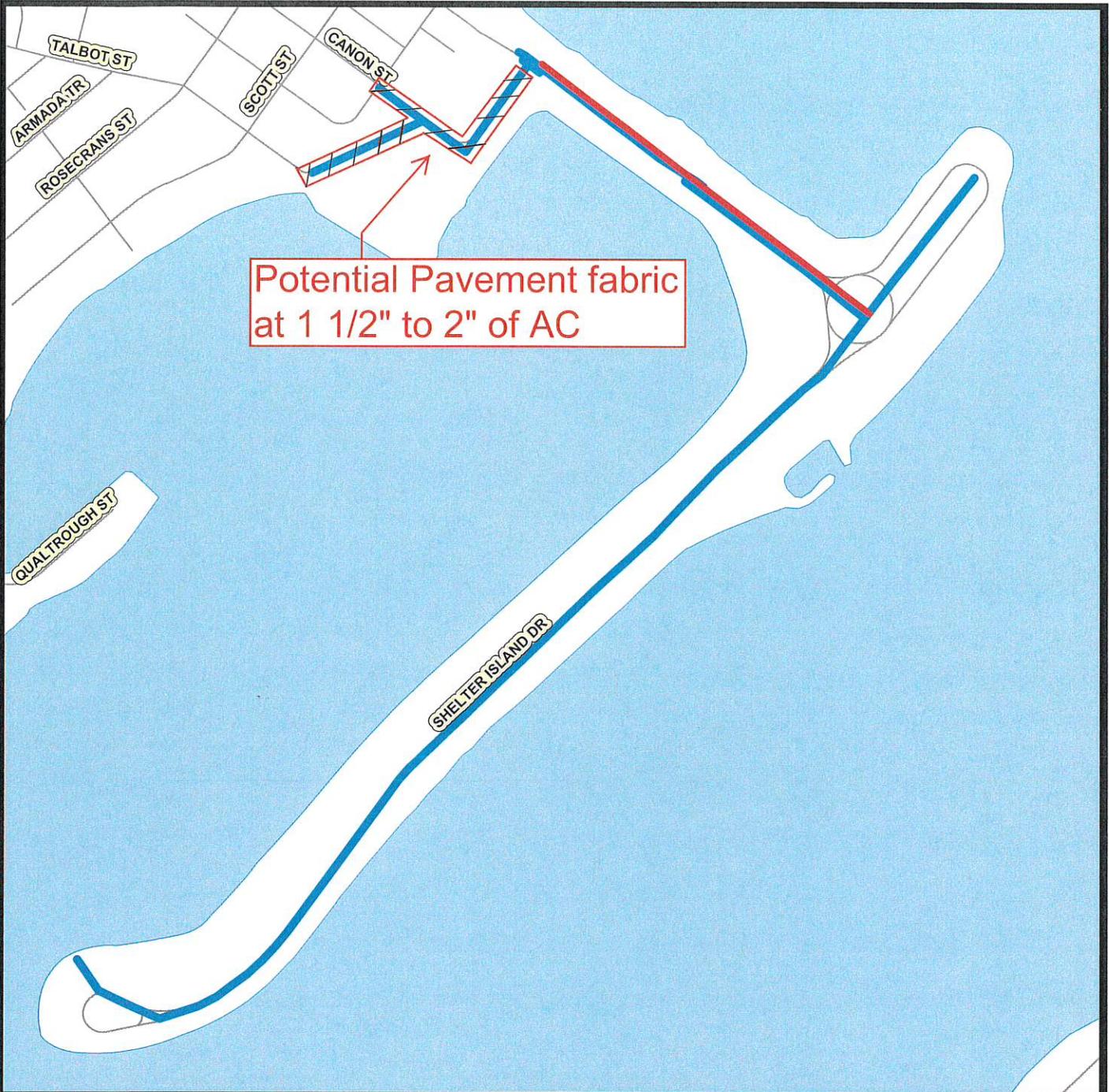
Photo 9



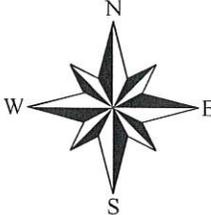
If you encounter any bad installations, disconnected/broken/buried endpoints, or inadvertently damage any AMI devices or cables, notify the Resident Engineer immediately. The Resident Engineer will then immediately contact the AMI Project Manager, Arwa Sayed, at (619) 362-0121.

APPENDIX L
PAVEMENT CORING REPORT

THIS MAP/DATA IS PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Note: This product may contain information from the SANDAG Regional Information System which cannot be reproduced without the written permission of SANDAG. This product may contain information reproduced with permission granted by RAND MCNALLY & COMPANY to SanGIS. This map is copyrighted by RAND MCNALLY.



Potential Pavement fabric
at 1 1/2" to 2" of AC

<p>The City of SAN DIEGO Public Works</p>	<p>AC Water Group 1030 COMMUNITY NAME: Peninsula COUNCIL DISTRICT: 2</p>	<p>WBS: B-16042 DATE: March 19, 2019</p>
<p>SENIOR ENGINEER Janice Jaro 619-533-3851 PROJECT MANAGER Maryam Liaghat 619-533-5192 PROJECT ENGINEER Jamal Sherzai 619-533-4639 Principal Engineering Aide Lina Hosmi 619-533-4613</p>	<p>LEGEND:</p> <ul style="list-style-type: none">  Ocean  Existing Water Main  New Water Main  Area With Potential Pavement Fabric 	 <p>NO SCALE</p> 
<p>SITE MAP</p>	<p>SHEET NO. 02</p>	

CITY OF SAN DIEGO

MEMORANDUM

Date: March 21, 2019

To: Jamal Sherzai, Project Engineer-Civil, Public Works-Engineering

From: Victor Cardenas, Assistant Engineer, Field Division, Materials Testing Laboratory

Subject: Request for Pavement Coring – Water Group Job 1030, WBS No. B-16042

Per your email requesting coring of the above referenced project dated March 6, 2019. Cores were obtained from the locations on the provided map. The results are as follows:

<u>Sample #</u>	<u>Location of sample collected</u>	<u>Pavement Thickness</u>
#1	1525-1581 Shelter Island Dr. Far south end of Shelter Island Dr.	5 1/2" of AC No pavement fabric
#2	2302 Shelter Island Dr. 7' south of north curb	11" of AC No pavement fabric
#3	1010 Anchorage Ln. 7' west of east curb	7 1/2" of AC Pavement fabric at 2" of AC
#4	1167 Anchorage Ln. 10' west of east curb	5 1/2" of AC Pavement fabric at 1 1/2" of AC

Should you have any further questions, or if we can be of further assistance please call 858-627-3256.

Victor Cardenas



cc: Randy Encinas

ATTACHMENT F
RESERVED

ATTACHMENT G
CONTRACT AGREEMENT

CONTRACT AGREEMENT

CONSTRUCTION CONTRACT

This contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and KTA Construction, Inc., herein called "Contractor" for construction of **AC Water Group 1030**; Bid No. **K-19-1834-DBB-3**; in the amount of **Five Million Seven Hundred Ninety Seven Thousand Two Hundred Seven Dollars and Seventy Cents (\$5,797,207.70)**, which is comprised of the Base Bid plus Additive Alternates A and B.

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 **AC Water Group 1030**, on file in the office of the City Clerk as Document No. **B-16042**, as well as all matters referenced therein.
2. 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 Project Title, **AC Water Group 1030**, Bid Number, **K-19-1834-DBB-3** San Diego, California.
3. 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 claims incident to such performances.
4. 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.
5. This contract is effective as of the date that the Mayor or designee signs the agreement.

CONTRACT AGREEMENT (continued)

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

Mara W. Elliott, City Attorney

By: 

By: 

Print Name: Claudia C. Abarca
Deputy Director
Public Works Department

Print Name: Pedro De Lara, Jr.
Deputy City Attorney

Date: June 27, 2019

Date: 6/27/19

CONTRACTOR

By: 

Print Name: Paul M. Henderson

Title: President

Date: 6-19-19

City of San Diego License No.: B 1995007399

State Contractor's License No.: 393234

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000003298

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.

**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

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 7-13.3, "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

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 7-13.2, "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 7-13.4, ("Contractor Standards"), 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

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.

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:

AC Water Group 1030

(Project Title)

as particularly described in said contract and identified as Bid No. **K-19-1834-DBB-3**; SAP No. (WBS/IO/CC) **B-16042**; 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

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 ^①	WHERE CERTIFIED ^②
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.

SUBCONTRACTORS ADDITIVE/DEDUCTIVE ALTERNATE

*** FOR USE WHEN LISTING SUBCONTRACTORS ON ALTERNATES ***

TO BE SUBMITTED WITH OTHER REQUIRED FORMS

(Use Additional Sheets As Needed)

ALTERNATE A

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 ^①	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
Name: TL Scanlan Construction Address: 2308 Shaylene Way City: Alpine State: CA Zip: 91901 Phone: 619-647-9062 Email: Tom@tlscanlanconstruction.com	Constructor	1000036079	1008991	Base Pave	\$5,270.00	SLBE	City of San Diego	
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.

SUBCONTRACTORS ADDITIVE/DEDUCTIVE ALTERNATE

*** FOR USE WHEN LISTING SUBCONTRACTORS ON ALTERNATES ***
TO BE SUBMITTED WITH OTHER REQUIRED FORMS
 (Use Additional Sheets As Needed)

ALTERNATE B

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 ^①	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								
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.

ELECTRONICALLY SUBMITTED FORMS

THE FOLLOWING FORMS MUST BE SUBMITTED IN PDF FORMAT WITH BID SUBMISSION

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. MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM**
- D. SUBCONTRACTOR LISTING (OTHER THAN FIRST TIER)**

Bids will not be accepted until ALL the above-named forms are submitted as part of the bid submittal

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189

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 APR 19 2019 before me, Lilia De Loera, Notary Public,
Date Insert Name of Notary exactly as it appears on the official seal

personally appeared Sarah Myers
Name(s) of Signer(s)

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



Place Notary Seal Above

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 [Handwritten Signature]
Signature of Notary Public Lilia De Loera

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: _____

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



Signer is Representing:
Surety Company

Signer's Name: _____

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



Signer is Representing:



The Guarantee Company of North America USA
Southfield, Michigan

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Lawrence F. McMahon, Maria Vhannaesa Guise, Sarah Myers, James D. Castle, Janice Martin
Alliant Insurance Services, Inc.

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

- 1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.
4. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.



IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 2nd day of October, 2015.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

[Signature of Stephen C. Ruschak]

[Signature of Randall Musselman]

STATE OF MICHIGAN
County of Oakland

Stephen C. Ruschak, President & Chief Operating Officer

Randall Musselman, Secretary

On this 2nd day of October, 2015 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of said company.



Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2024
Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

[Signature of Cynthia A. Takai]

I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.



IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 19th day of April, 2019

[Signature of Randall Musselman]

Randall Musselman, Secretary

CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS

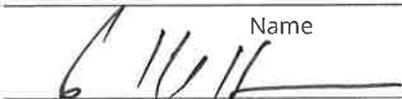
As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated 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: KTA Construction Inc.

Certified By Paul M. Henderson Title President
Name

Signature Date 05/16/2019

USE ADDITIONAL FORMS AS NECESSARY

Mandatory Disclosure of Business Interests Form

BIDDER/PROPOSER INFORMATION

Legal Name KTA Construction Inc.	DBA		
Street Address 821 Tavern Rd.	City Alpine	State CA	Zip 91901
Contact Person, Title Paul M. Henderson	Phone (619) 562-9464	Fax (619) 562-1685	

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:

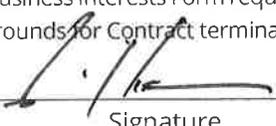
- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City, or
- directing or supervising the actions of persons engaged in the above activity.

Name Adam Ogden	Title/Position Estimator/Project Manager
City and State of Residence San Diego, CA	
Employer (if different than Bidder/Proposer) Estimating	
Interest in the transaction	

Name	Title/Position
City and State of Residence	
Employer (if different than Bidder/Proposer)	
Interest in the transaction	

* 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.

Paul Henderson / President		05/16/2019
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.

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).**

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: _____				
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 ****

City of San Diego

CITY CONTACT: Juan E. Espindola, Senior Contract Specialist, Email: JEEspindola@sandiego.gov
Phone No. (619) 533-4491

ADDENDUM A



FOR

AC WATER GROUP 1030

BID NO.:	<u>K-19-1834-DBB-3</u>
SAP NO. (WBS/IO/CC):	<u>B-16042</u>
CLIENT DEPARTMENT:	<u>2000</u>
COUNCIL DISTRICT:	<u>2</u>
PROJECT TYPE:	<u>KB</u>

BID DUE DATE:

**2:00 PM
MAY 16, 2019**

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:



For City Engineer

04/23/19
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. BIDDER'S QUESTIONS

Q1. Starting on Sheets 8, 18, 19 and 20 the 12" water main enters into landscape areas on Shelter Island. There are no bid items or provisions for dealing with Landscaping. Please provide a bid item or an allowance to deal with Landscaping restoration.

A1. A bid item "Miscellaneous Landscape" will be added.

Q2. The 12" PVC Pipeline runs through a landscaped area on Sheets 8, 18, 19 and 20. Will the contractor be required to match the existing grass area? Will, there be a landscape maintenance bid item issued for the project by the month following construction?

A2. The contractor is required to match the existing grass area. There will be no landscape maintenance required for this contract. Refer to Supplementary Special Provision, Section C, Item 2.

Q3. The 12" PVC Pipeline runs through a landscaped area on Sheets 8, 18, 19 and 20. It appears that several trees may be in the way of the new pipeline alignment. The trees are not shown on the drawings; please provide a bid item for tree removal.

A3. There is no tree removal required for this contract.

Q4. The contractor will be required to excavate through a large parking lot on sheet 20. What will the contractor be required to put back as trench restoration for this area?

A4. Treat the trench restoration within parking lots for this project as street and restore per SDG-107.

- Q5. The new alignment of the PVC water main on sheets 8, 18, 19 and 20 show the new PVC main going through the sidewalk, curb and gutter and possibly some ped ramps. Are these concrete improvements incidental to the work and be included in the pipeline or will these concrete items be paid for in the various bid items?
- A5. The removal and replacement of any sidewalk, curb and gutter, and ped ramps along the trench is included in the cost of the pipe (Payment Reference 306-15.1).
- Q6. On sheets 6, 7, 9, 10 there are dual water mains shown to run parallel down Shelter Island Drive. There are two utilities running in the same trench; Telephone and Electrical. Will these utilities be relocated by the Owners before the contractor mobilizes?
- A6. Their work may occur during or after the contractor's mobilization. The contractor must coordinate with the private utilities at no additional cost to the City.
- Q7. For community liaison services, and wondered if you'd be able to tell me how many addresses will be affected in the area. The city typically has that information because it sends out the first letter for notice of construction about 30 days prior, so I hoped you would be able to provide that information so we have an idea how to bid the cost of the door hangers and have an idea of the potential scope of residents/businesses I would be potentially interacting with.
- A7. Bid as is.

C. SUPPLEMENTARY SPECIAL PROVISIONS

1. To Section 6, Prosecution, Progress and Acceptance of Work, **ADD** the following:

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

2. To accommodate Utility relocations, Contractor shall not begin installation of the mains specified below until all other pipes in this contract have been installed. Contractor must obtain approval from the Engineer prior to beginning installation of the mains specified below:

Sheets C-4, C-5 from Station 1+00 to 10+85.41

Sheets C-7, C-8 from Station 1+00 to 11+62.59

2. To Supplementary Special Provisions, **ADD** the following:

SECTION 801 - INSTALLATION

801-1 General. To the "WHITEBOOK" ADD the following:

5. The contractor shall place equivalent sod on all disturbed area and repair all damage to existing landscape area caused by construction activities.
6. Coordinate the location of existing irrigation systems with The Port of San Diego (The Port) staff prior to construction. The contractor shall be responsible for repairing all damages to existing irrigation system caused by construction activities.
7. All repairs to irrigation systems, turf or other equipment damaged during construction shall be done to satisfaction of The Port.

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
<u>Main Bid</u>	<u>561730</u>	<u>Miscellaneous Landscape</u>	<u>LS</u>	<u>1</u>	<u>801-9</u>

James Nagelvoort, Director
Public Works Department

Dated: *April 23, 2019*
San Diego, California

JN/RWB/cc

City of San Diego

CITY CONTACT: Juan E. Espindola, Senior Contract Specialist, Email: JEspindola@sandiego.gov
Phone No. (619) 533-4491

ADDENDUM B



FOR

AC WATER GROUP 1030

BID NO.:	<u>K-19-1834-DBB-3</u>
SAP NO. (WBS/IO/CC):	<u>B-16042</u>
CLIENT DEPARTMENT:	<u>2000</u>
COUNCIL DISTRICT:	<u>2</u>
PROJECT TYPE:	<u>KB</u>

BID DUE DATE:

**2:00 PM
MAY 16, 2019**

CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS

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

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. SUPPLEMENTARY SPECIAL PROVISIONS

1. To Attachment E, Appendices, ADD "Appendix M Geotechnical Investigation, May 9, 2019 by Geocon Incorporated", Pages 4 through 98 of this Addendum.

James Nagelvoort, Director
Public Works Department

Dated: *May 13, 2019*
San Diego, California

JN/RWB/cc/ig

APPENDIX M

GEOTECHNICAL INVESTIGATION

GEOTECHNICAL INVESTIGATION

**AC WATER GROUP 1030
CONTRACT NO. H156367
TASK NO. 15GG19
SAN DIEGO, CALIFORNIA**



GEOCON
INCORPORATED

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR

**CITY OF SAN DIEGO
PUBLIC WORKS DEPARTMENT
SAN DIEGO, CALIFORNIA**

**MAY 9, 2019
PROJECT NO. G1849-52-21**



Project No. G1849-52-21
May 9, 2019

City of San Diego
Public Works Department
525 B Street, Suite 750, MS 908A
San Diego, California 92101-4502

Attention: Mr. Jamal Sherzai

Subject: GEOTECHNICAL INVESTIGATION
AC WATER GROUP 1030
CONTRACT NO. H156367; TASK NO. 15GG19
SAN DIEGO, CALIFORNIA

Dear Mr. Sherzai:

In accordance with the authorization presented in your notice to proceed letter dated March 6, 2019, we have performed a geotechnical investigation for the proposed AC Water Group 1030 project. The accompanying report presents the results of our study and conclusions and recommendations pertaining to the geotechnical aspects of the proposed improvements.

Should you have questions regarding this report, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

Lilian E. Rodriguez
RCE 83227



Yong Wang
GE 2775



Richard W. Day
PG 5479, CEG 1849, CHG 74



LER:YW:RWD:dmc

(e-mail) Addressee

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GEOTECHNICAL INVESTIGATION

1. PURPOSE AND SCOPE

This report presents the results of a geotechnical investigation for the City of San Diego AC Water Group 1030 pipeline replacement project in the Shelter Island area of San Diego, California (see *Vicinity Map*, Figure 1). The proposed project consists of the replacement of approximately 9,610 lineal feet of the existing 6- to 12-inch-diameter AC and CMLCS pipeline with new 12-inch-diameter PVC pipeline. New parallel water mains on the order of 2,000 lineal feet will also be installed. The project alignment extends along portions of Anchorage Lane, Cañon Street, and Shelter Island Drive. The new pipeline will be installed using cut-and-cover trenching method. Trenchless construction method using horizontal directional drilling is also considered for the installation of an approximately 600-lineal-foot segment near the east end of Shelter Island.

The purpose of this geotechnical investigation is to evaluate the surface and subsurface geologic conditions along the project alignment, and to provide recommendations regarding the geotechnical aspects of constructing the proposed improvements.

The scope of this investigation included a review of readily available published and unpublished geologic literature (see *List of References*), field exploration, laboratory testing, engineering analyses and preparation of this report. We reviewed published geologic maps, aerial photographs, and other literature pertaining to the site to aid in evaluating geologic hazards that may be present.

We performed a field investigation on April 3, 2019, that included drilling 4, small diameter exploratory borings to a maximum depth of approximately 21½ feet. Boring logs and other details of the field investigation are presented in Appendix A. In addition, we previously performed several geotechnical explorations adjacent to the project alignment in 1979, 1993, 1994, 2001 and 2009. The approximate locations of the current and previous explorations are shown on the *Site Plans*, Figures 2 through 11. We tested selected soil samples obtained during the field investigation to evaluate pertinent physical and chemical properties for engineering analyses and to assist in providing recommendations for the installation of the water pipeline. Details of the laboratory tests and a summary of the test results are presented in Appendix B. The logs of the previous explorations and the results of previous laboratory testing are presented in Appendix C. The currently available project plans are included in Appendix D.

The recommendations presented herein are based on analysis of the data obtained from the exploratory borings, laboratory test results, and our experience with similar soil and geologic conditions.

2. SITE AND PROJECT DESCRIPTION

The proposed improvements consist of the replacement of 9,610 lineal feet of existing 6- to 12-inch-diameter water AC and CMLCS pipeline with new 12-inch-diameter PVC water pipeline in San Diego, California. New parallel water mains on the order of 2,000 lineal feet will also be installed together with fire hydrants, water appurtenances and other works. The project alignment extends along portions of Anchorage Lane, Cañon Street, and Shelter Island Drive. We understand an approximately 600-lineal-foot segment may be installed using trenchless construction methods. The surface elevations along the existing water line ranges between approximately 4 and 14 feet above NGVD 29, and the planned invert levels of the planned water pipeline are within 4 and 6 feet of the existing grade. Proposed improvements are based on the project plan set entitled: *AC Water Group 1030, Sheets 1 through 24, 100% Design*, prepared by the City of San Diego, Public Works Department, undated. The plans are included in Appendix D.

We conducted the geotechnical field exploration for this project by drilling four (4), small-diameter borings along the project alignment. In addition, we previously drilled several borings and excavated one test trench adjacent to the project alignment. The approximate locations of our current and previous explorations are shown on *Site Plans*, Figures 2 through 11, and a summary of the exploration locations and depths are listed in Table 2 below.

**TABLE 2
SUMMARY OF PREVIOUS AND CURRENT EXPLORATIONS**

Exploration No. (Previous Project No, Date)	Approximate Location Roadway (Water Line Station No.)	Approximate Surface Elevation, (feet, NGVD 29)	Approximate Depth (feet)	Figure No.
B-3 (06675, 2001)	Anchorage Lane (3+80)	9	36	3
B-4 (06675, 2001)	Anchorage Lane (4+80)	9	51.5	3
B-1 (current)	Anchorage Lane (6+10)	6	19.5	3
GEC-2 (08474, 1993)	Anchorage Lane (1+85)	5.5	13	4
T-3 (D1757, 1979)	Shelter Island Drive (1+00)	7	10	5
B-2 (current)	Shelter Island Drive (3+92)	12	21.5	6
B-3 (05285, 1994)	Shelter Island Drive (10+60)	12	51.5	7
B-4 (05285, 1994)	Shelter Island Drive (18+25)	11	51	8
B-7 (05285, 1994)	Shelter Island Drive (24+95)	11	51.5	9
B-3 (current)	Shelter Island Drive (2+52)	10	21.5	10
B-4 (current)	Shelter Island Drive (5+50)	13	21.5	11
B-1 (G1071, 2009)	Shelter Island Drive (10+00)	12.6	51.5	11

The site description and proposed improvements are based on a site reconnaissance, review of the available plans, and discussions with you. If final project plans differ from those described herein, Geocon Incorporated should be contacted for review of the plans and possible revisions to this report.

3. SOIL AND GEOLOGIC CONDITIONS

We identified the soil and geologic conditions at the site based on our review of published geologic literature for the general area, observation of the exploratory borings, results of previous explorations in the project area, and our experience in the general area. The alignment of the water pipeline is underlain by undocumented fill and bay deposits overlying Old Paralic Deposits. The occurrence and distribution of the units are presented on the boring logs in Appendices A and C. The surficial soil types and geologic unit are described below in order of increasing age.

3.1 Undocumented Fill (Qudf)

Undocumented fill materials are exposed at subgrade and extend to depths ranging from approximately 3 to 14 feet. The majority of the fill materials were hydraulically placed during dredging operations within San Diego Bay in the early to mid 1950's. Hydraulic fill materials typically consist of poorly graded silty, fine to coarse sand with shell fragments. We also encountered occasional lenses of gravel and clayey materials within this unit. The fill materials encountered are considered to be loose to medium dense. The undocumented fill materials are highly susceptible to liquefaction where located below the water table.

3.2 Bay Deposits (Qbd)

We encountered the Pleistocene- to Holocene-age bay deposits underlying the fill materials in most explorations. We expect the bay deposits range in thickness from approximately 6 to 30 feet. The bay deposits encountered generally consist of very loose to medium dense, fine-grained, silty and clayey sands. The loose, sandy portions of the bay deposits have a high potential for liquefaction in the event of seismic shaking.

3.3 Old Paralic Deposits (Qop)

We encountered the Quaternary-age Old Paralic Deposits (formerly mapped as the Bay Point Formation) below the fill and/or bay deposits in one current and several previous borings. The Old Paralic Deposits generally consist of medium dense to very dense silty sand. We do not expect the Old Paralic Deposits to be susceptible to liquefaction, in general, due to the age and dense nature of the deposit. Except for a relatively short segment along Anchorage Lane, we expect that the Old Paralic Deposits are generally located at the depths greater than the planned pipeline invert elevations.

4. GROUNDWATER

We encountered groundwater at depths of approximately 9 to 12.5 feet in current Borings B-1 through B-4, corresponding to approximate elevations of -3 to 0.5 feet NGVD 29, respectively. We also encountered groundwater at depths ranging from approximately 8 to 14 feet in our previous explorations, corresponding to elevations ranging from approximately -5 to 2 feet NGVD 29. The depths at which groundwater was encountered in our current and previous explorations are depicted on *Site Plans*, Figures 3 through 11. In general, we encountered groundwater below the invert level of the planned water pipeline at the locations of our explorations.

Groundwater elevations vary and are affected by seasonal precipitation, irrigation, tidal variations, and land use, among other factors. It is not uncommon for groundwater or seepage conditions to develop where none previously existed and seepage or saturated soils may be encountered at or near the bottom of the trench excavations. In addition, the groundwater may be considered brackish because of the proximity to San Diego Bay. Proper surface drainage will be important to future performance of the project. During the rainy season, perched water conditions are likely to develop within the drainage areas and may require special consideration to minimize construction difficulties.

5. GEOLOGIC HAZARDS

5.1 Geologic Hazard Category

The City of San Diego Seismic Safety Study, Geologic Hazards and Faults, Map Sheet 16 defines the site with a Hazard Category 31: *Liquefaction – High Potential, shallow groundwater, major drainage, hydraulic fills*. The Spanish Bight Fault described as an *Active, Alquist-Priolo Earthquake fault zone* is mapped approximately 1¾ miles east of the alignment. In addition, an unnamed north-south trending fault described as *potentially active, inactive, presumed inactive, or activity unknown* abuts the southwest end of Shelter Island adjacent to the project alignment. The site is not located within the Downtown Special Studies Fault Zone or State of California (Alquist-Priolo) Earthquake Fault Zone.

5.2 Liquefaction

Liquefaction typically occurs during seismic shaking in relatively loose, cohesionless soil that exists below the groundwater surface. Under these conditions, a seismic event could result in a rapid pore water pressure increase from the earthquake-generated ground accelerations. The potential for liquefaction at the site may exist due to presence of a near-surface groundwater elevation and the loose nature of the underlying fill soils and bay deposits. Liquefaction induced settlement on the order of several inches may occur in the areas underlain by saturated fills and bay deposits. It is generally not considered economically feasible to mitigate liquefaction for minor utilities.

5.3 Landslides

We did not encounter landslides during the site investigation and none are known to exist along the alignment that would impact the proposed improvements.

5.4 Ground Rupture

Ground surface rupture occurs when movement along a fault is sufficient to cause a gap or rupture where the upper edge of the fault zone intersects that earth surface. The potential for ground rupture is considered to be very low due to the absence of active or potentially active faults along the subject alignment.

5.5 Seiches and Tsunamis

Seiches are caused by the movement of an inland body of water due to the movement from seismic forces. The water alignment site is not located near an inland body of water. Therefore, the risk of flooding of the roadways along the project alignment due to a seiche is considered low.

A tsunami is a series of long-period waves generated in the ocean by a sudden displacement of large volumes of water. Causes of tsunamis include underwater earthquakes, volcanic eruptions, or offshore slope failures. The first order driving force for locally generated tsunamis offshore southern California is expected to be tectonic deformation from large earthquakes (Legg, *et al.*, 2002). The largest tsunami effect recorded in San Diego since 1950 was May 22, 1960 that had maximum run-up amplitudes of 2.1 feet (0.7 meters) [URS, 2004]. Wave heights and run-up elevations from tsunamis along the San Diego Coast have historically fallen within the normal range of the tides.

The *State of California Tsunami Inundation Map for Emergency Planning Point Loma Quadrangle* (CGS, 2009) shows a majority of the alignment, with the exceptions of the alignment along Anchorage Lane and Cañon Street, is within a tsunami inundation zone. Therefore, there is a risk of tsunamis affecting a majority of the project site. If a tsunami warning is issued during construction, workers should take appropriate action.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 General

- 6.1.1 From a geotechnical engineering standpoint, it is our opinion that subsurface conditions along the project alignments are suitable for the proposed pipeline improvements, provided the recommendations presented herein are implemented in design and construction of the project.
- 6.1.2 Our field investigation indicates that the proposed water alignment is underlain by undocumented fill, bay deposits and Old Paralac Deposits. We expect fill materials or bay deposits will be exposed at the invert elevation of the majority pipeline. Old Paralac Deposits may also be encountered along the relatively short Anchorage Lane. The subsurface materials are generally considered suitable for support of the proposed utility improvements.
- 6.1.3 We encountered groundwater at elevations ranging from approximately -5 to 2 feet NGVD 29 during on our current and previous explorations. Although groundwater was not encountered above the invert level of the planned water pipeline at the locations of our explorations, some variations of the groundwater level should be expected and seepage or saturated soils may be encountered at the bottom of trench excavations. Soils excavated from this zone may require extensive mixing or drying if used as backfill.
- 6.1.4 With the exception of possible strong seismic shaking, tsunamis, liquefaction settlement and shallow groundwater, other significant geologic hazards were not observed or are known to exist on the site that would adversely affect the proposed improvement.

6.2 Excavation and Soil Characteristics

- 6.2.1 Excavation of the undocumented fill, bay deposits, and Old Paralac Deposits (if encountered) should be possible with light to heavy effort using conventional heavy-duty equipment.
- 6.2.2 We expect the soil encountered in the field investigation is considered to be “expansive” to “non-expansive” (expansion index [EI] of greater than 20, and 20 or less, respectively) as defined by 2016 California Building Code (CBC) Section 1803.5.3. Table 6.2 presents soil classifications based on the expansion index. We expect a majority of the soil encountered possess a “very low” to “low” expansion potential (EI of 50 or less) in accordance with ASTM D 4829.

**TABLE 6.2
EXPANSION CLASSIFICATION BASED ON EXPANSION INDEX**

Expansion Index (EI)	Expansion Classification
0 – 20	Very Low
21 – 50	Low
51 – 90	Medium
91 – 130	High
Greater Than 130	Very High

6.3 Temporary Slope and Excavation Support

6.3.1 The recommendations included herein are provided for stable excavations. It is the responsibility of the contractor to provide a safe excavation during the construction of the proposed project.

6.3.2 The stability of the excavations is dependent on the design and construction of the shoring system and site condition. Therefore, Geocon Incorporated cannot be responsible for site safety and the stability of the proposed excavations. It is the responsibility of the contractors during excavations to follow all applicable safety standards and industry protocols when performing excavations during the construction of the proposed project.

6.3.3 Temporary excavations should be made in conformance with OSHA requirements. The undocumented fill and bay deposits should be considered a Type C soil, and properly compacted fill can be considered a Type B soil (Type C soil if seepage or groundwater is encountered), and the Old Paralac Deposits should be considered a Type A soil (Type B soil if seepage or groundwater is encountered) in accordance with OSHA requirements. In general, special shoring requirements may not be necessary if temporary excavations will be less than 4 feet in height. Temporary excavations greater than 4 feet in height, however, should be sloped back at an appropriate inclination. These excavations should not be allowed to become saturated or to dry out. Surcharge loads should not be permitted to a distance equal to the height of the excavation from the top of the excavation. The top of the excavation should be a minimum of 15 feet from the edge of existing improvements. Excavations steeper than those recommended or closer than 15 feet from an existing surface improvement should be shored in accordance with applicable OSHA codes and regulations. Table 6.3 presents the allowable slope inclination for different soil types based on the information presented by OSHA assuming seepage is not encountered.

**TABLE 6.3
ALLOWABLE SLOPE INCLINATIONS FOR EXCAVATIONS
LESS THAN 20 FEET FOR UNDERGROUND CONTRACTORS**

Soil or Rock Type	On-Site Geologic Unit	Maximum Inclination (horizontal:vertical)	Maximum Slope Angle From Horizontal (degrees)
Type A	Old Paralac Deposits	¾:1	53
Type B	Properly Compacted Fill	1:1	45
Type C	Undocumented Fill and Bay Deposits	1½:1	34

- 6.3.4 Where a portable safety shield is used to protect workers, the sidewall of the trench is not directly supported. Therefore, use of a shield generally should be limited to open areas to minimize the effects on adjacent improvements or settlement of the ground surface behind the shield. Shields should be sized to minimize clearance between trench and shield walls. Unsupported trenches should be backfilled immediately after removal of the shield.
- 6.3.5 Temporary shoring with a level backfill should be designed using a lateral pressure envelope acting on the back of the shoring and applying a pressure equal to 28H or 18H for a triangular or rectangular pressure, respectively, where H is the height of the shoring in feet (resulting pressure in pounds per square foot) as shown in Figures 12 and 13. Where groundwater is encountered, a lateral pressure equal to 14H_w or 9H_w for a triangular or rectangular pressure, respectively, where H_w is the height of the shoring below groundwater in feet, in addition to a lateral pressure of 62.4H_w should be used for design. Triangular distribution should be used for cantilevered shoring and the rectangular distribution should be used for braced shoring. The project shoring engineer should determine the applicable soil distribution for the design of the temporary shoring system. Additional lateral earth pressure due to the surcharging effects of adjacent structures or traffic loads should be considered, where appropriate, during design of the shoring system.
- 6.3.6 Passive soil pressure resistance for embedded portions of temporary shoring can be based upon an equivalent passive soil fluid weight of 350H₂ + 400 above groundwater and 175H₂ + 400 below groundwater where H₂ is the depth of embedment, in feet (resulting in pounds per square foot). Figures 12 and 13 present the allowable active and passive pressures for the shoring walls up to a height of about 20 feet. A structural engineer experienced in shoring design should determine the actual embedment depth.
- 6.3.7 Uplift of the base of an excavation due to hydrostatic pressures (bottom heave) is a consideration if the shoring system represents an impermeable barrier to water. A relatively

impermeable barrier can be formed by a shoring system, such as sheet piles, which are not completely impermeable, but are designed to decrease the amount of groundwater entering through the walls of an excavation. Sheet piles are commonly used to limit the amount of dewatering necessary to perform an excavation. Shoring should be extended at least 10 feet below the base of the planned excavation if sheet piles or similar systems are used. A 2-foot-thick layer of freely draining gravel or crushed rock at the bottom of the excavation would assist in reducing the potential for piping and provide a working pad for construction.

6.3.8 Lateral movement of shoring is associated with vertical ground settlement outside of the excavation. It is important that the shoring system allow limited amounts of lateral displacement. We recommend that horizontal movements of the shoring wall be accurately monitored and recorded during excavation if adjacent settlement sensitive improvements are present.

6.3.9 If it is deemed necessary to limit dewatering, the excavations may be performed within relatively impermeable shoring such as sheet piles. Sheet piles are generally driven or vibrated into place. The existing soils are moderately dense and firm; therefore, installation is expected to be relatively easy. If sheetpile-supported excavations are planned in proximity of existing improvements, vibrations and ground surface settlement should be monitored by the contractor. The sheet pile contractor should review this report to evaluate if sheet piles can be used and installed for the planned improvements.

6.4 Corrosion

6.4.1 We performed a laboratory test on a sample of the site materials to evaluate the percentage of water-soluble sulfate content. Appendix B presents result of the laboratory water-soluble sulfate content test. The test result indicates the on-site materials at the location tested possesses “S0” sulfate exposure to concrete structures as defined by 2016 CBC Section 1904 and ACI 318-14 Chapter 19. The presence of water-soluble sulfates is not a visually discernible characteristic; therefore, other soil samples from the site could yield different concentrations. Additionally, over time landscaping activities (i.e., addition of fertilizers and other soil nutrients) may affect the concentration.

6.4.2 We tested samples for potential of hydrogen (pH) and resistivity laboratory tests to aid in evaluating the corrosion potential to subsurface metal structures. Appendix B presents the laboratory test results.

6.4.3 According to *Caltrans Corrosion Guidelines* (Version 3.0, March 2018), a site is considered corrosive to foundation elements if chloride concentration is 500 parts per million (ppm) or

greater, or sulfate concentration is 1,500 ppm or greater, or the pH is 5.5 or less. A review of the laboratory test results indicate that the soil materials tested are not considered corrosive in accordance with Caltrans criteria.

- 6.4.4 Geocon Incorporated does not practice in the field of corrosion engineering. Therefore, further evaluation by a corrosion engineer may be performed if improvements susceptible to corrosion are planned.

6.5 Trench Dewatering

- 6.5.1 Where minor seepage or saturation is encountered during excavations, the bottoms of the excavations should be sloped to a sump location where pumping from a sump pump can be utilized. In this case, an approximately 1- to 2-foot-thick layer of freely draining gravel or crushed rock placed on the excavation bottom would enable groundwater to flow toward the sump as well as provide a working surface.

6.6 Potential Groundwater Contaminants and Discharge

- 6.6.1 The potential for groundwater contaminants during dewatering should be evaluated by an environmental consultant, if required. Appropriate permits should be obtained and possible treatment such as carbon filters may be required prior to discharge water into City drainage/sewer system.

6.7 Ground Control and Improvement

- 6.7.1 It is important that the contractor be provided with complete soil, underground utility, and groundwater information so that appropriate equipment can be mobilized. In addition, providing adequate information before the project starts will be vital if claims for changed conditions are filed during construction.
- 6.7.2 The contractor should monitor existing pavement areas and adjacent improvements for surface deflection (settlement or heave) during construction so that appropriate modification to the excavation and shoring system, as well as trench dewatering system, are implemented to minimize the surface deflection in a timely manner.
- 6.7.3 In addition to existing improvements, other underground utilities may exist near and above the proposed pipe. The actual depths and locations of some of these pipes may not be known accurately. The bedding for these pipes may also carry significant quantities of water. To reduce the settlement potential and avoid damaging adjacent pipelines (by undermining the

pipe if the bedding material is encountered), the bedding material supporting the overlying pipe can be stabilized locally using cement grout from the ground surface.

6.8 Bearing Capacity for Pipeline

6.8.1 Our test borings indicated that on-site soils generally have adequate bearing capacity for support of the proposed pipeline. If unsuitable materials, as determined during construction by the engineer, are encountered near trench bottom elevations, they should be overexcavated to firm materials, in accordance with the latest edition of the *Greenbook, Standard Specifications for Public Works Construction*. The weight of the pipe, water and compacted backfill above the pipe will not result in a significant increase in load over the present overburden. Consequently, pipeline settlement should be negligible.

6.9 Design of Flexible Pipe

6.9.1 Loading on the pipeline will depend on the depth of cover and the unit weight of compacted backfill. An average total unit weight of 130 pounds per cubic feet (pcf) can be used to calculate the overburden pressure on the pipe. The modulus of soil reaction (E') used in determination of pipe deflection depends mainly on the compacted densities of bedding and backfill materials. It also varies slightly with the depth of pipe and the soil type. The estimated soil modulus for the subject pipeline is approximately 1,600 to 2,000 pounds per square inch (psi), assuming bedding materials will be imported and the backfill materials will be derived locally and compacted to a minimum relative compaction of 90 percent (based on ASTM D 1557).

6.10 Pipe Bedding and Trench Backfill

6.10.1 Pipe bedding is defined as that material supporting, surrounding and extending to 1 foot above the top of the pipe, in accordance with the latest edition of the *Greenbook, Standard Specifications for Public Works Construction*. Materials used for pipe bedding should consist of free draining granular soil such as sand, gravel or crushed aggregate containing no rocks greater than 1 inch in maximum dimension and having a sand equivalent of not less than 30. Pipe bedding should conform to the *Greenbook*. Placement should be performed in accordance with these specifications.

6.10.2 Trench backfill is the material placed above the bedding, starting at 1 foot above the top of the pipe. Backfill should be predominately granular and should contain no organic debris and no rocks greater than 6 inches in maximum dimension. A significant quantity of the onsite materials can be reused as trench backfill.

- 6.10.3 Trench backfill should be mechanically compacted. Flooding or jetting should not be allowed. In general, backfill should be placed in lifts 8 inches or less in loose thickness, moisture conditioned to near the optimum moisture content, and compacted to at least 90 percent relative compaction based on the ASTM D 1557 laboratory test method. The upper 12 inches of backfill beneath paved areas should be compacted to at least 95 percent relative compaction. All references to optimum moisture content and relative compaction in this report are based on the ASTM D 1557 test method. Drying and mixing to moisture condition the soil to near optimum moisture content should be expected.

6.11 Suitability of Excavated Materials as Pipe Bedding and Trench Backfill

- 6.11.1 Soils excavated from on-site materials will have variable quantities of fine particles and oversized materials are not expected to be suitable for use as pipe bedding without processing but will generally be suitable for use as trench backfill (without oversized materials), from a geotechnical engineering standpoint. The sand equivalent of on-site materials tested was found to be 20.
- 6.11.2 All deleterious materials should be replaced and not be used in backfill. Disposal of unsuitable materials should follow relevant environmental and governmental regulations. No materials considered hazardous or that would require special handling, removal and disposal were encountered in boring.

6.12 Preliminary Pavement Recommendations

- 6.12.1 We performed laboratory R-Value tests on two subgrade soil samples to provide preliminary recommendations for structural pavement sections for the subject roadway.
- 6.12.2 Public street paving should be designed in accordance with the City of San Diego Standard Drawing, Pavement Design Standard Schedule “J” when final Traffic Indices and R-Value test results of subgrade soil are completed. The results of our laboratory R-Value testing, as shown in Appendix B, indicate that the R-Values of the existing subgrade materials at the location tested is 73. For the purposes of preliminary design, we recommend to use an R-Value of 50 or greater. The preliminary flexible pavement sections are presented in Table 6.12.

**TABLE 6.12
PRELIMINARY FLEXIBLE PAVEMENT SECTIONS**

Street Classification	Assumed Traffic Index	Assumed Subgrade R-Value	Asphalt Concrete (inches)	Cement Treated Base (inches)
Local (L.V.R.)	5.5	≥ 50	3	5
Local (Res.)	6.0	≥ 50	3	5
Local (Res.)	6.5	≥ 50	3	5
Local (Ind.)	8.5	≥ 50	3	7½
Collector (Res.)	7.0	≥ 50	3	5
Collector (Res.)	7.5	≥ 50	3	5½
Collector (Comm.\Ind.)	9.5	≥ 50	3	8½

6.12.3 The upper 12 inches of the subgrade soil should be compacted to a dry density of at least 95 percent of the laboratory maximum dry density based on ASTM D 1557 near to slightly above optimum moisture content beneath pavement sections.

6.12.4 The performance of pavement is highly dependent on providing positive surface drainage away from the edge of the pavement. Ponding of water on or adjacent to the pavement will likely result in pavement distress and subgrade failure. Drainage from landscaped areas should be directed to controlled drainage structures. Landscape areas adjacent to the edge of asphalt pavements are not recommended due to the potential for surface or irrigation water to infiltrate the underlying permeable aggregate base and cause distress. Where such a condition cannot be avoided, consideration should be given to incorporating measures that will significantly reduce the potential for subsurface water migration into the aggregate base. If planter islands are planned, the perimeter curb should extend at least 6 inches below the level of the base materials.

6.13 Trenchless Pipeline

6.13.1 Based on the currently available project information and plans, we understand that approximately 600 lineal feet of the proposed water line between approximately Stations 3+00 and 9+00 within the east segment of Shelter Island may be installed using horizontal directional drilling (HDD). The invert elevations of the proposed HDD are at or above 7 feet NGVD 29. Our recommendations regarding HDD are provided below:

6.13.2 Trenchless pipelines should be constructed in accordance with the Greenbook Standard Specifications for Public Works Construction, Sections 306-2 and/or 306-8, to maintain the line and grade of the proposed pipe. All underground openings should be constructed in

strict compliance with the California Department of Industrial Relations, Division of Occupational Safety and Health, Mining and Tunneling Unit, OSHA, and Cal-OSHA for work safety and public liability.

- 6.13.3 The anticipated subsurface materials near the depth of the proposed HDD generally consist of undocumented fill (Qudf). Groundwater encountered in our borings at approximate depths of 12.5 to 13 feet below the existing grade, or at approximate elevation of 0.5 to - 0.4 feet NGVD 29.
- 6.13.4 The undocumented fill generally consists of loose to medium dense, sand and silt sand, and trace gravel and shell fragments. The drilling equipment and drill fluid should be selected based on the anticipated subsurface conditions. Potential hazardous materials were not encountered in our borings.
- 6.13.5 The on-site bay deposits below the groundwater level are susceptible to liquefaction, and a liquefaction induced settlement on the order of several inches may occur in the event of seismic shaking.
- 6.13.6 We did not observe any sinkholes on site during our field exploration. However, the potential for sinkhole exists if working within undocumented fill and/or bay deposits at shallow depth. The proper depth of HDD should be designed by the project engineer. For the minimum depth of cover, the scour potential as well as a minimum ratio of 10-to-1 for depth of cover to borehole diameter should be considered.
- 6.13.7 The installation methods and/or procedures should be selected by the drilling contractor. The drag force on pipe can be estimated based on the typical coefficients of friction of 0.5 for empty pipe and 0.3 for buoyant pipe.
- 6.13.8 Corrosion testing performed on one soil sample (B4-1) along the HDD alignment. The soil sample tested is not considered corrosive based on Caltrans criteria. Geocon Incorporated does not practice in the field of corrosion engineering. Therefore, further evaluation by a corrosion engineer may be performed if improvements susceptible to corrosion are planned.
- 6.13.9 The proposed HDD should be planned to avoid any conflicts with the existing improvements, underground utilities, and/or other man-made obstructions.
- 6.13.10 The contractor should monitor existing pavement areas and adjacent improvements for surface deflection (settlement or heave) during construction so that appropriate modification

to the borehole equipment are implemented to minimize the surface deflection in a timely manner.

6.14 Plan Review

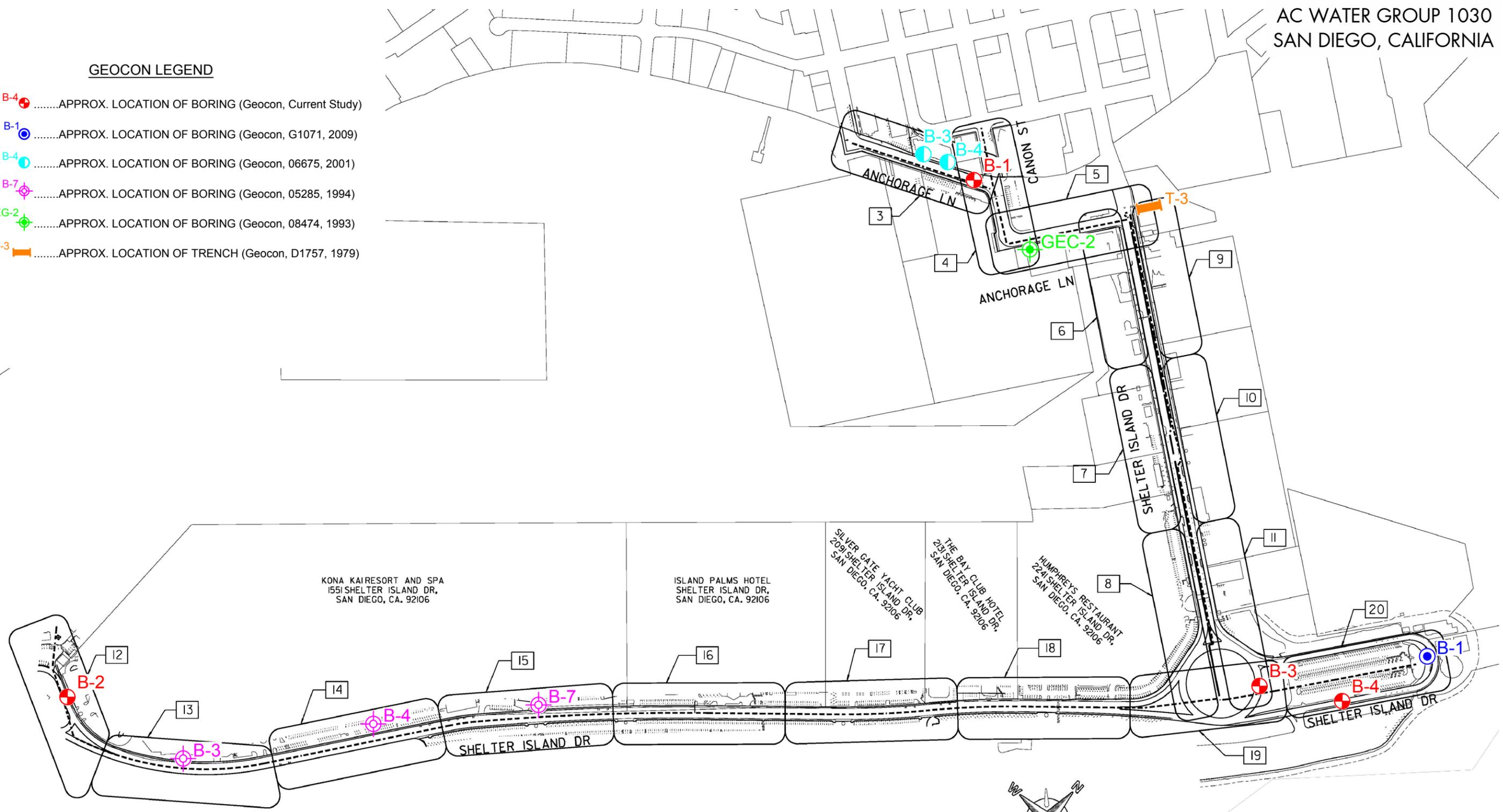
- 6.14.1 We recommend that the final plans and specifications be reviewed by Geocon Incorporated to evaluate if the plans and details have been prepared in substantial conformance with the recommendations contained within this report.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The firm that performed the geotechnical investigation for the project should be retained to provide testing and observation services during construction to provide continuity of geotechnical interpretation and to check that the recommendations presented for geotechnical aspects of site development are incorporated during site grading, construction of improvements, and excavation of foundations. If another geotechnical firm is selected to perform the testing and observation services during construction operations, that firm should prepare a letter indicating their intent to assume the responsibilities of project geotechnical engineer of record. A copy of the letter should be provided to the regulatory agency for their records. In addition, that firm should provide revised recommendations concerning the geotechnical aspects of the proposed development, or a written acknowledgement of their concurrence with the recommendations presented in our report. They should also perform additional analyses deemed necessary to assume the role of Geotechnical Engineer of Record.
2. The recommendations of this report pertain only to the site investigated and are based upon the assumption that the soil conditions do not deviate from those disclosed in the investigation. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that anticipated herein, Geocon Incorporated should be notified so that supplemental recommendations can be given. The evaluation or identification of the potential presence of hazardous or corrosive materials was not part of the scope of services provided by Geocon Incorporated.
3. This report is issued with the understanding that it is the responsibility of the owner or his representative to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project and incorporated into the plans, and the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
4. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of three years.

GEOCON LEGEND

- B-4 APPROX. LOCATION OF BORING (Geocon, Current Study)
- B-1 APPROX. LOCATION OF BORING (Geocon, G1071, 2009)
- B-4 APPROX. LOCATION OF BORING (Geocon, 06675, 2001)
- B-7 APPROX. LOCATION OF BORING (Geocon, 05285, 1994)
- CEG-2 APPROX. LOCATION OF BORING (Geocon, 08474, 1993)
- T-3 APPROX. LOCATION OF TRENCH (Geocon, D1757, 1979)



KONA KAIRESORT AND SPA
155 SHELTER ISLAND DR,
SAN DIEGO, CA. 92106

ISLAND PALMS HOTEL
SHELTER ISLAND DR,
SAN DIEGO, CA. 92106

SILVER GATE YACHT CLUB
209 SHELTER ISLAND DR,
SAN DIEGO, CA. 92106

THE BAY CLUB HOTEL
20 SHELTER ISLAND DR,
SAN DIEGO, CA. 92106

HUMPHREY'S RESTAURANT
224 SHELTER ISLAND DR,
SAN DIEGO, CA. 92106

LEGEND

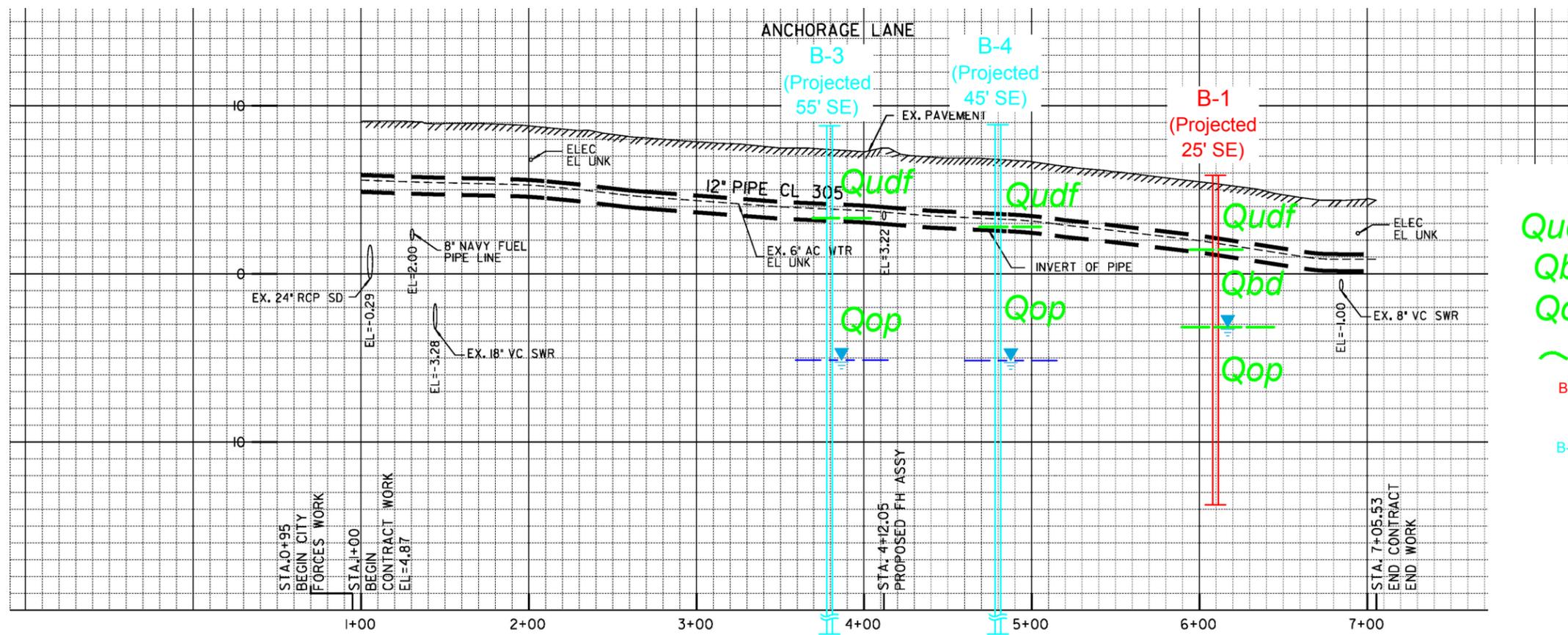
NEW WATER MAIN	
SHEET NO's (WATER)	



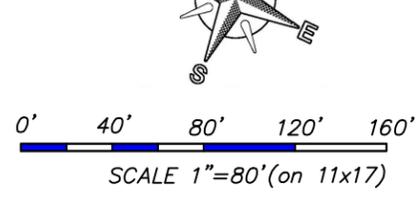
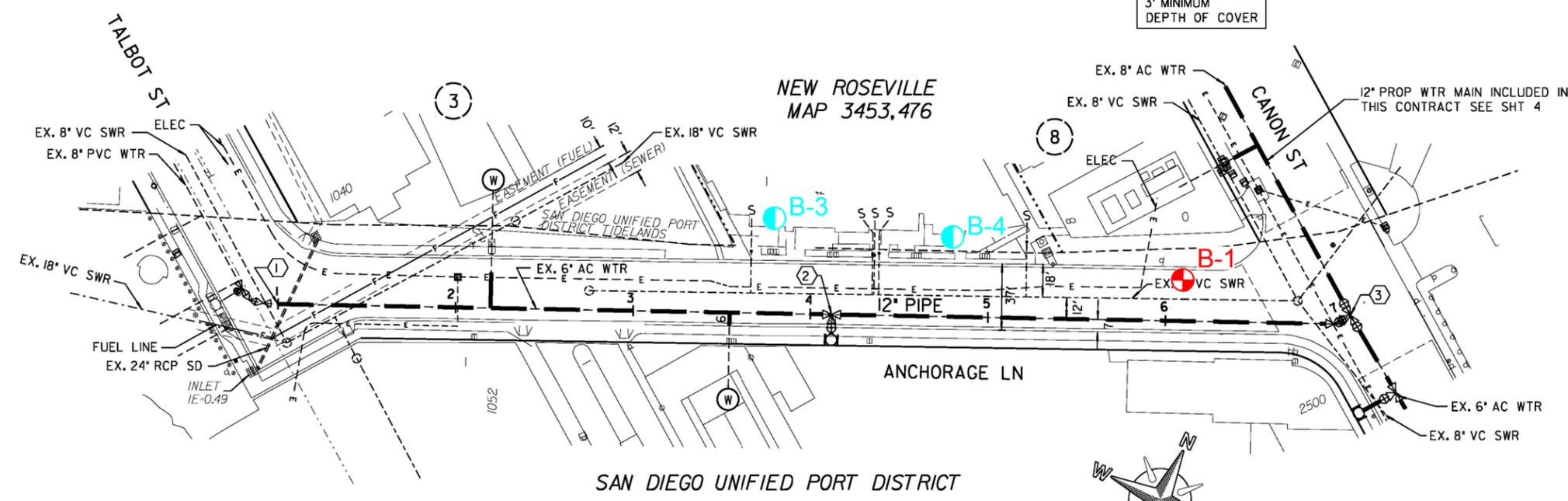
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PHONE 858 558-6900 - FAX 858 558-6159
PROJECT NO. G1849 - 52 - 21
FIGURE 2
DATE 05 - 09 - 2019

SITE PLAN

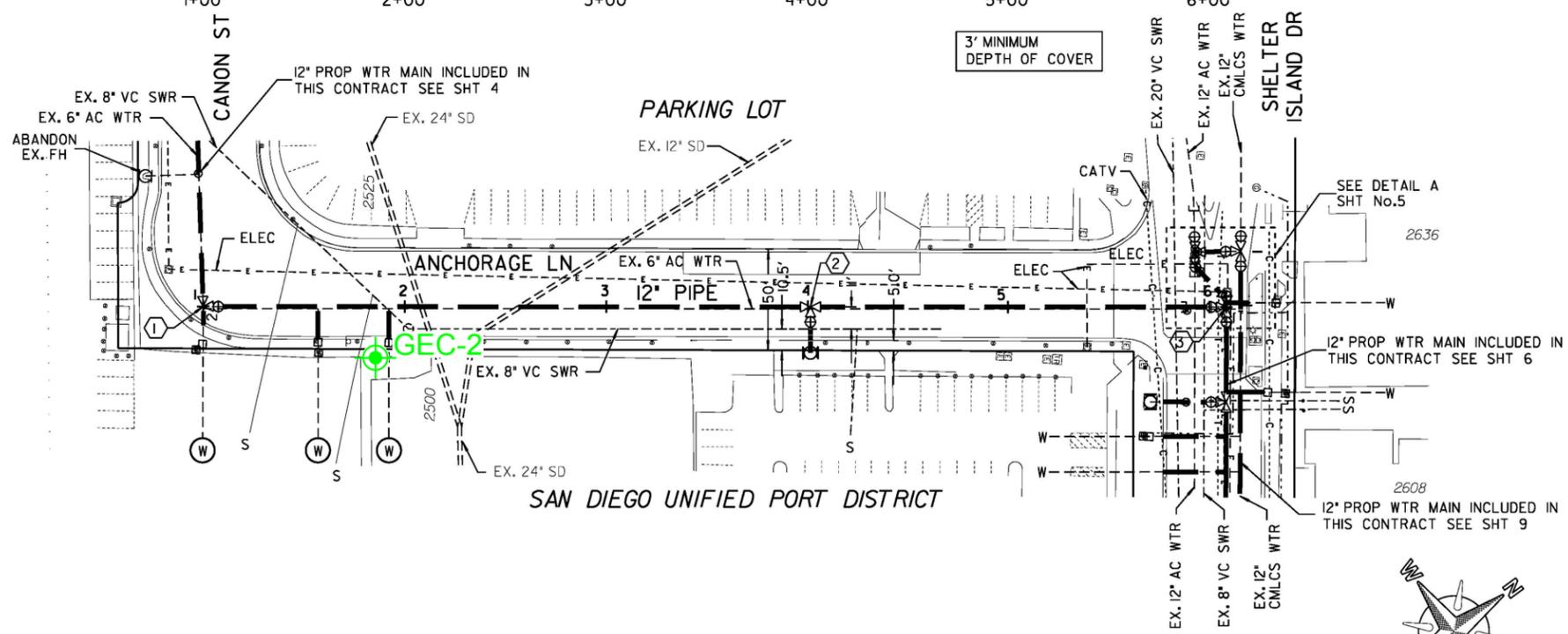
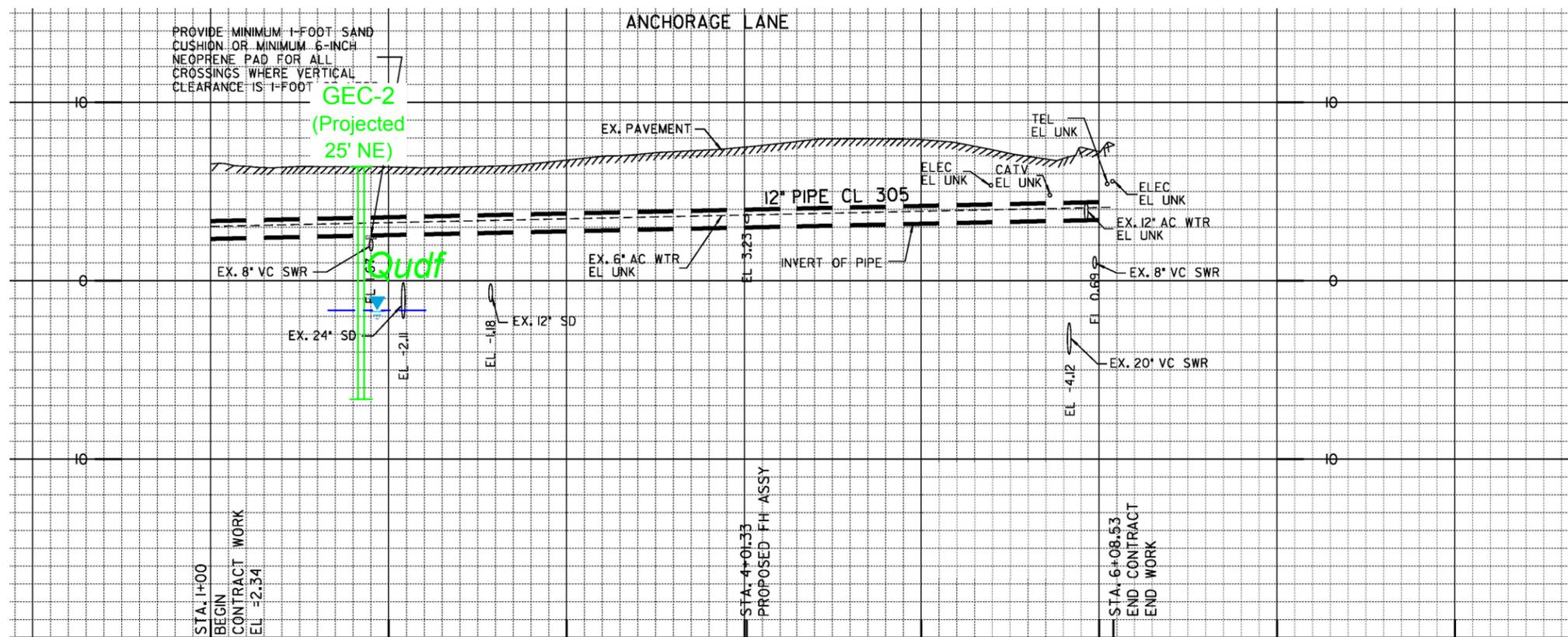


- GEOCON LEGEND**
- Qudf UNDOCUMENTED FILL AND/OR HYDRAULIC FILL
 - Qbd BAY DEPOSITS
 - Qop OLD PARALIC DEPOSITS
 - ~ APPROX. LOCATION OF GEOLOGIC CONTACT
 - B-1 APPROX. LOCATION OF BORING (Geocon, Current Study) (Plan View)
 - B-4 APPROX. LOCATION OF BORING (Geocon, 06675, 2001) (Plan View)
 - B-1 APPROX. LOCATION OF BORING (Geocon, Current Study) (Profile View)
 - B-4 APPROX. LOCATION OF BORING (Geocon, 06675, 2001) (Profile View)
 - ▽ APPROX. LOCATION OF GROUNDWATER

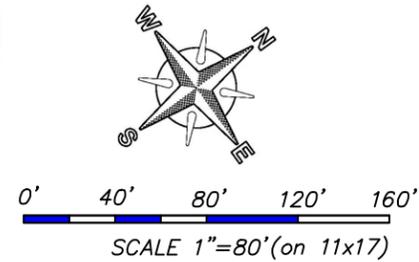


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PROJECT NO. G1849 - 52 - 21
FIGURE 3
DATE 05 - 09 - 2019



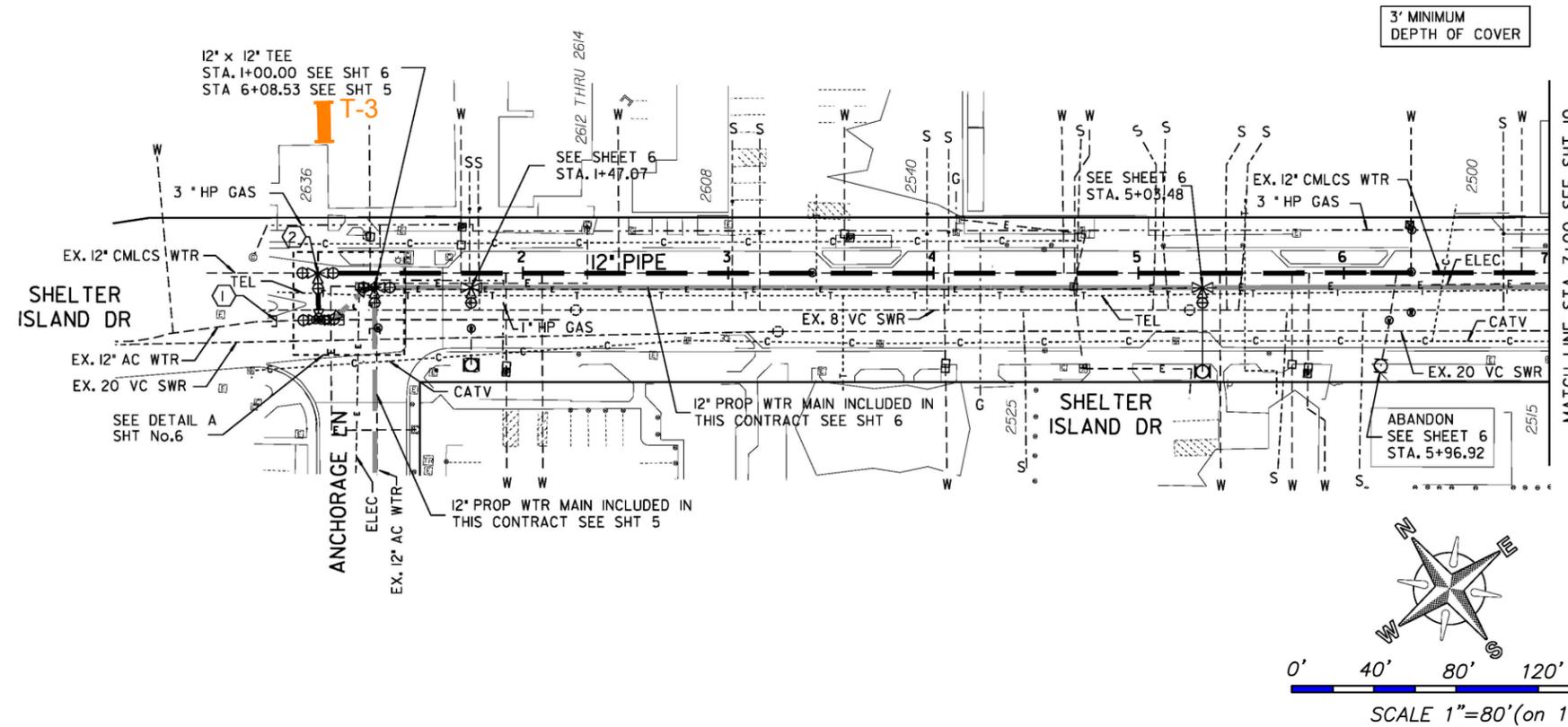
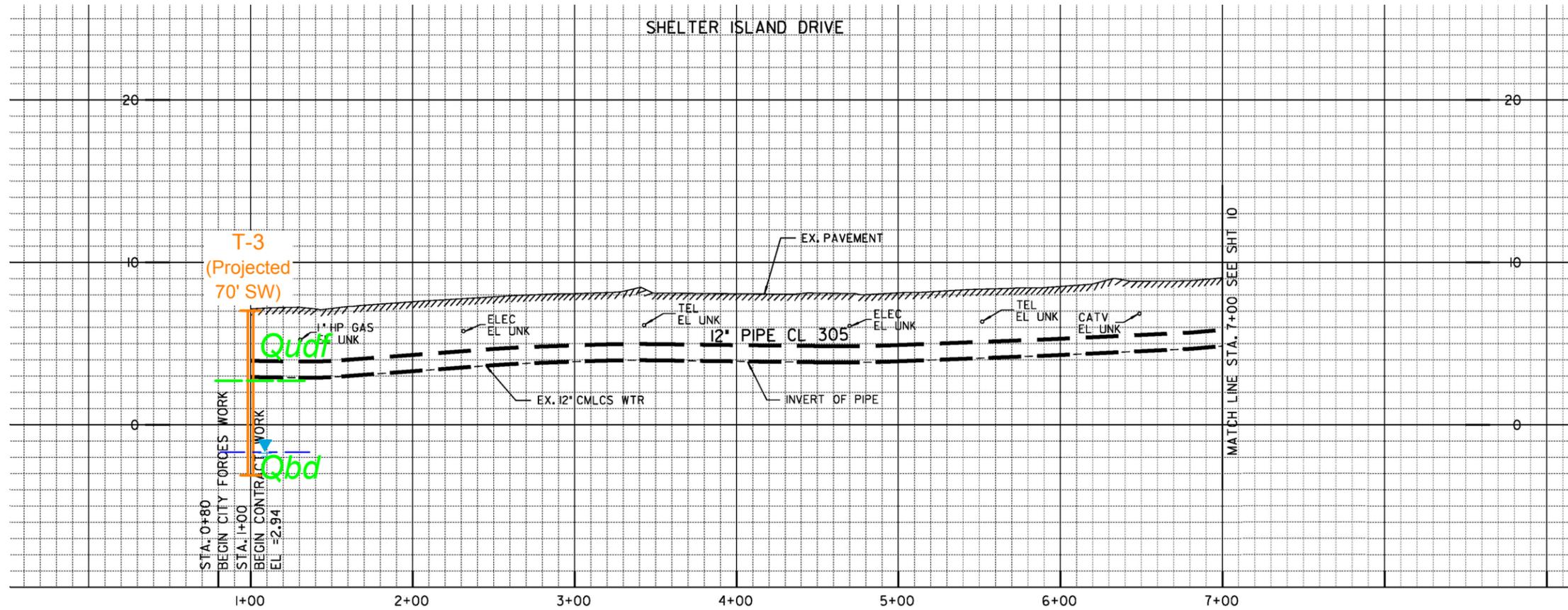
- GEOCON LEGEND**
- Qudf UNDOCUMENTED FILL AND/OR HYDRAULIC FILL
 - ~ APPROX. LOCATION OF GEOLOGIC CONTACT
 - GEC-2 APPROX. LOCATION OF BORING (Geocon, 08474, 1993) (Plan View)
 - GEC-2 APPROX. LOCATION OF BORING (Geocon, 08474, 1993) (Profile View)
 - ▽ APPROX. LOCATION OF GROUNDWATER



SITE PLAN
DATE 05 - 09 - 2019

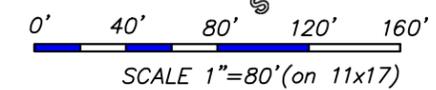
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SHELTER ISLAND DRIVE



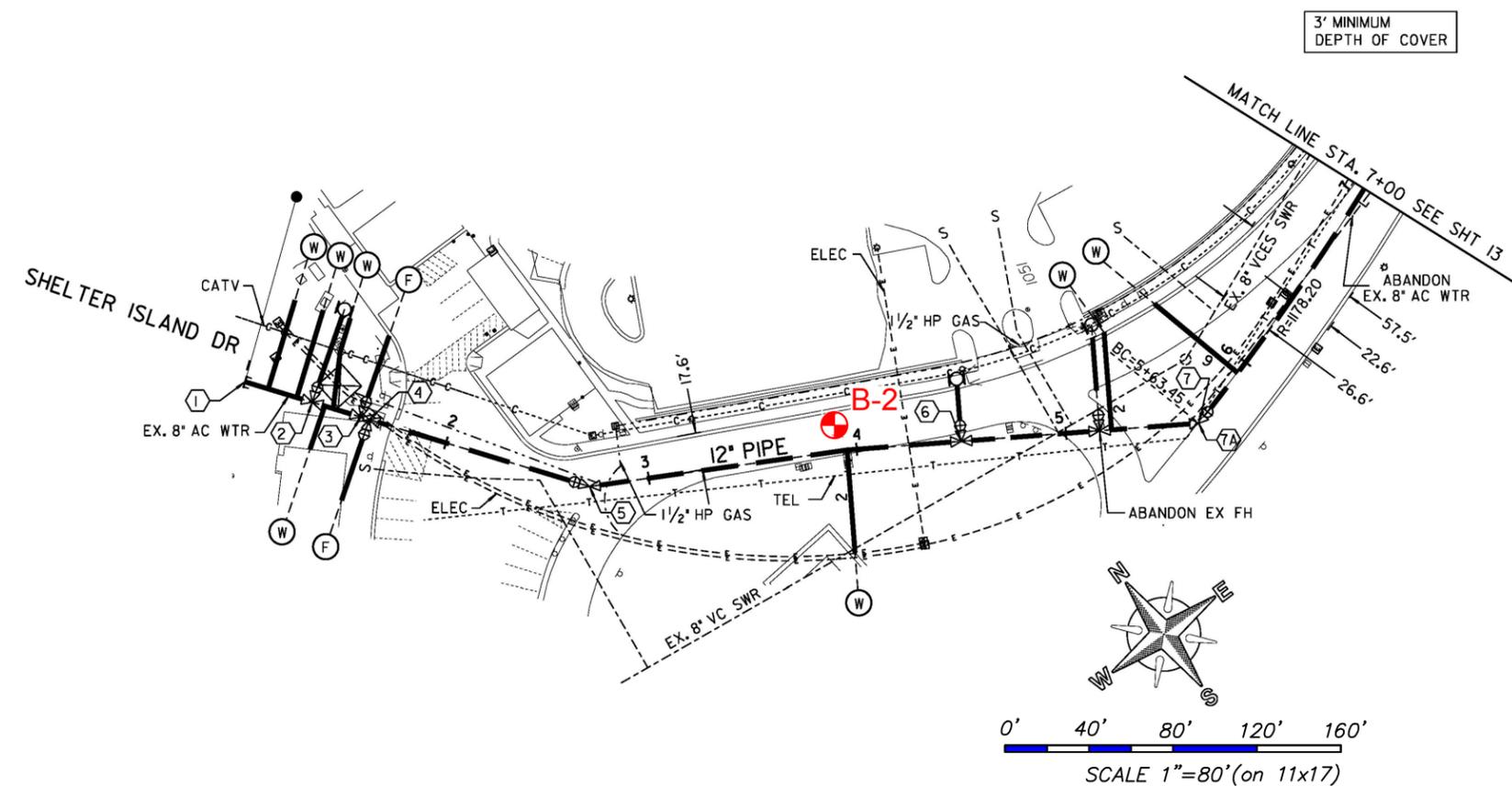
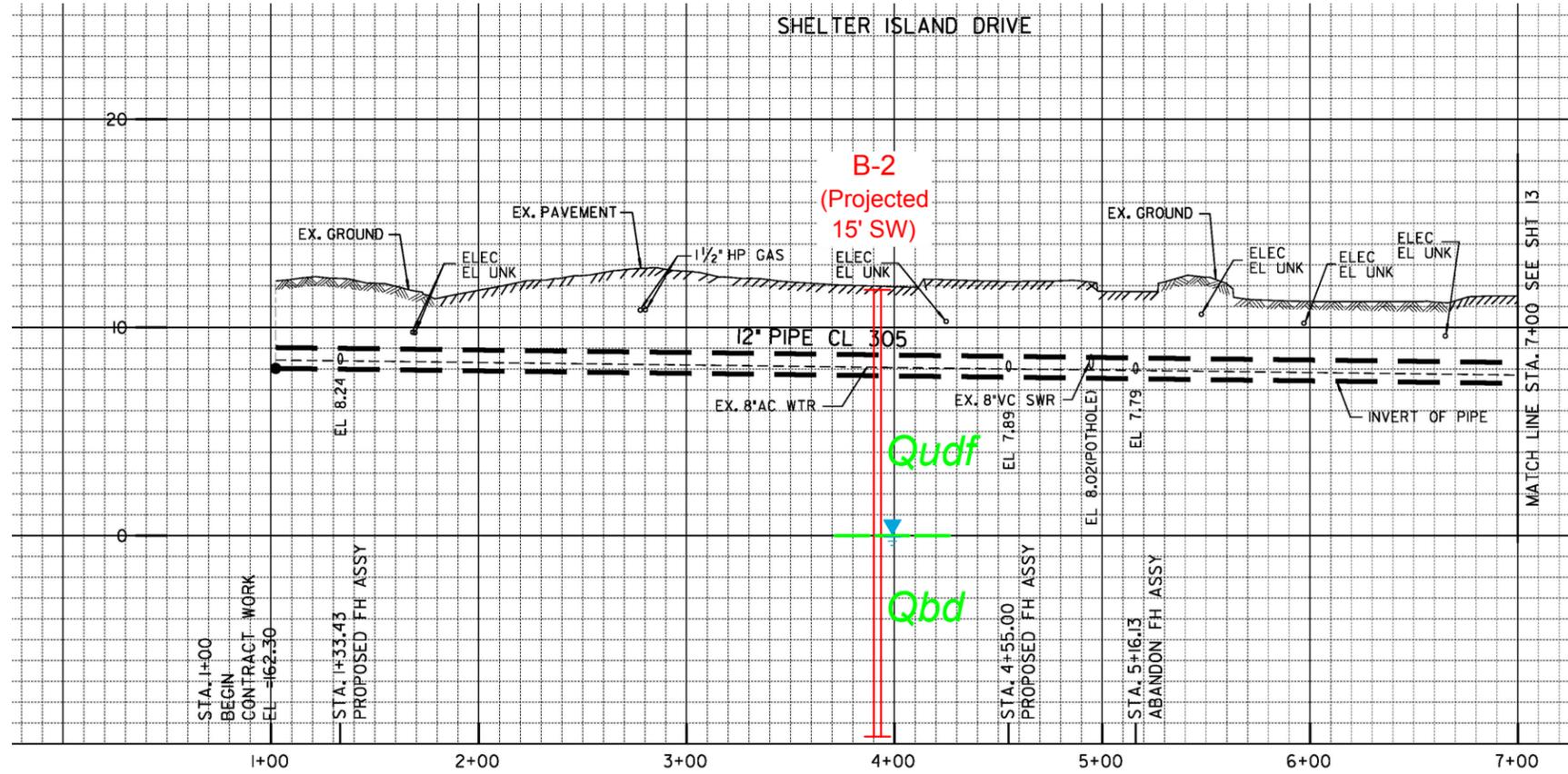
GEOCON LEGEND

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- Qbd BAY DEPOSITS
- ~ APPROX. LOCATION OF GEOLOGIC CONTACT
- T-3 APPROX. LOCATION OF TRENCH (Geocon, D1757, 1979) (Plan View)
- T-3 APPROX. LOCATION OF TRENCH (Geocon, D1757, 1979) (Profile View)
- ▽ APPROX. LOCATION OF GROUNDWATER



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FIGURE 5
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SITE PLAN

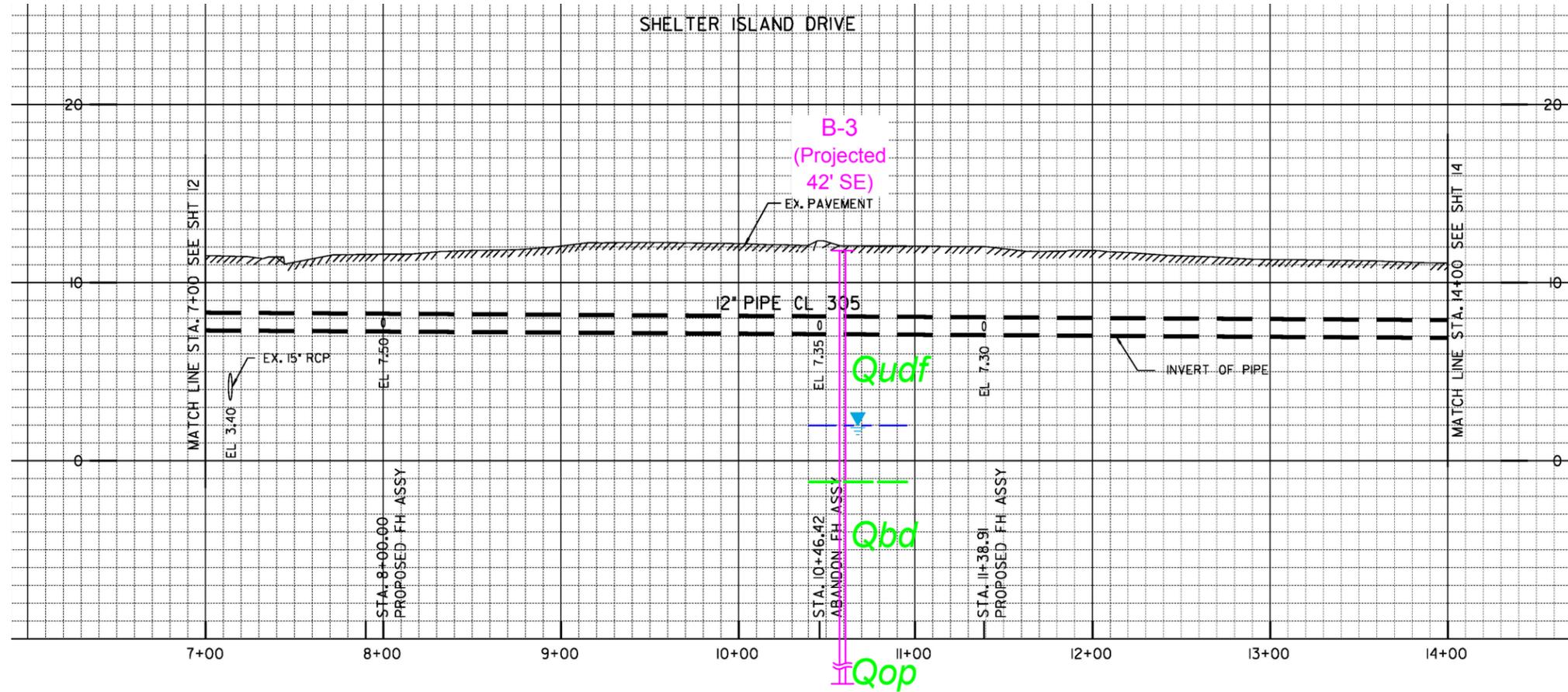


GEOCON LEGEND

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- Qbd BAY DEPOSITS
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- B-2 APPROX. LOCATION OF BORING (Geocon, Current Study) (Plan View)
- B-2 APPROX. LOCATION OF BORING (Geocon, Current Study) (Profile View)
- ▽ APPROX. LOCATION OF GROUNDWATER

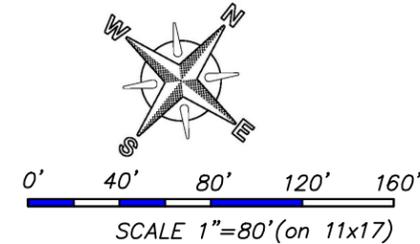
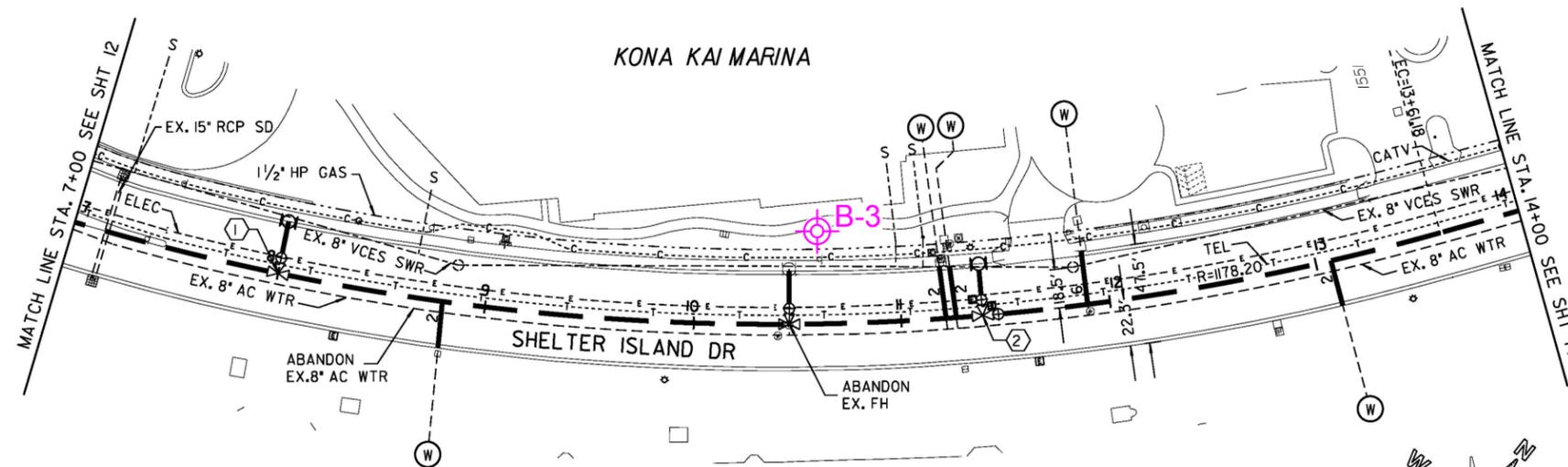
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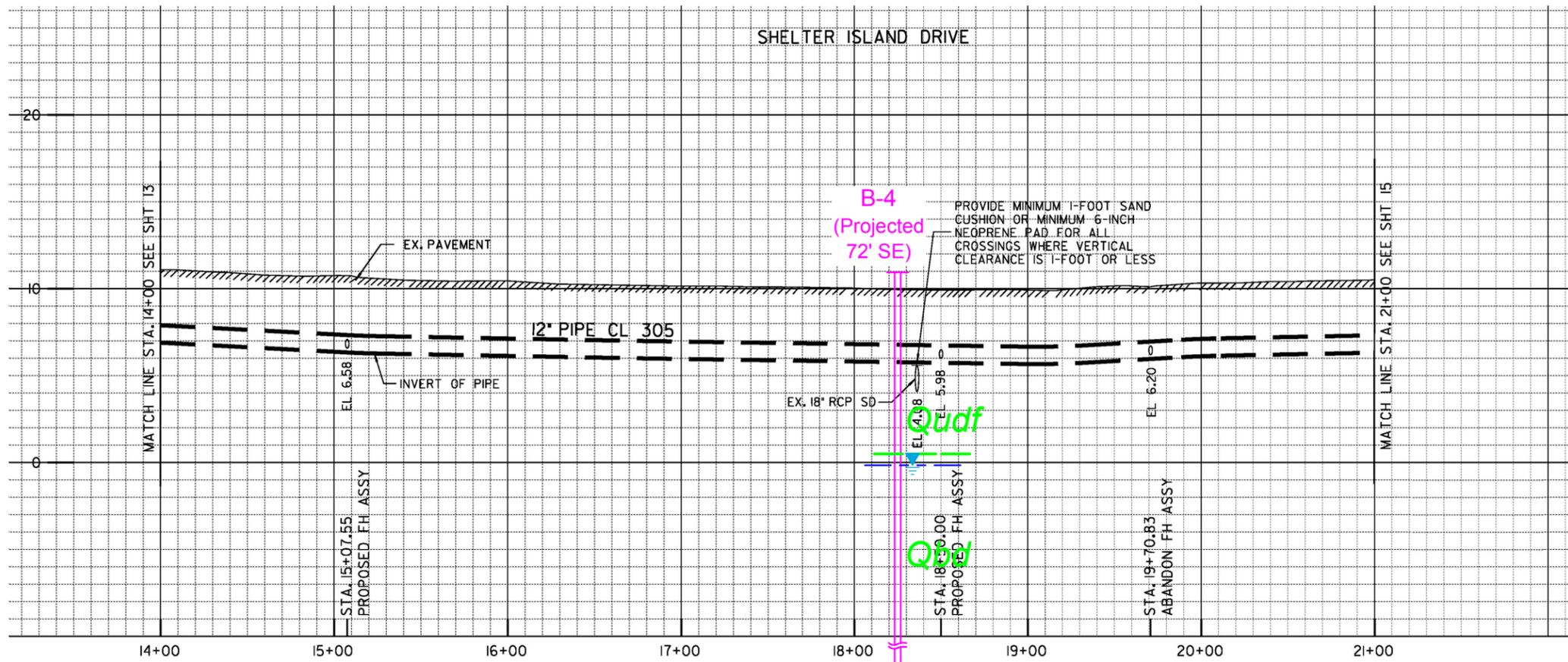
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- Qbd** BAY DEPOSITS
- Qop** OLD PARALIC DEPOSITS
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- APPROX. LOCATION OF BORING (Geocon, 05285, 1994) (Plan View)
- APPROX. LOCATION OF BORING (Geocon, 05285, 1994) (Profile View)
- APPROX. LOCATION OF GROUNDWATER



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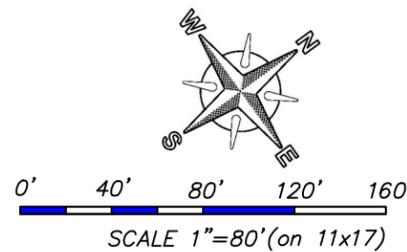
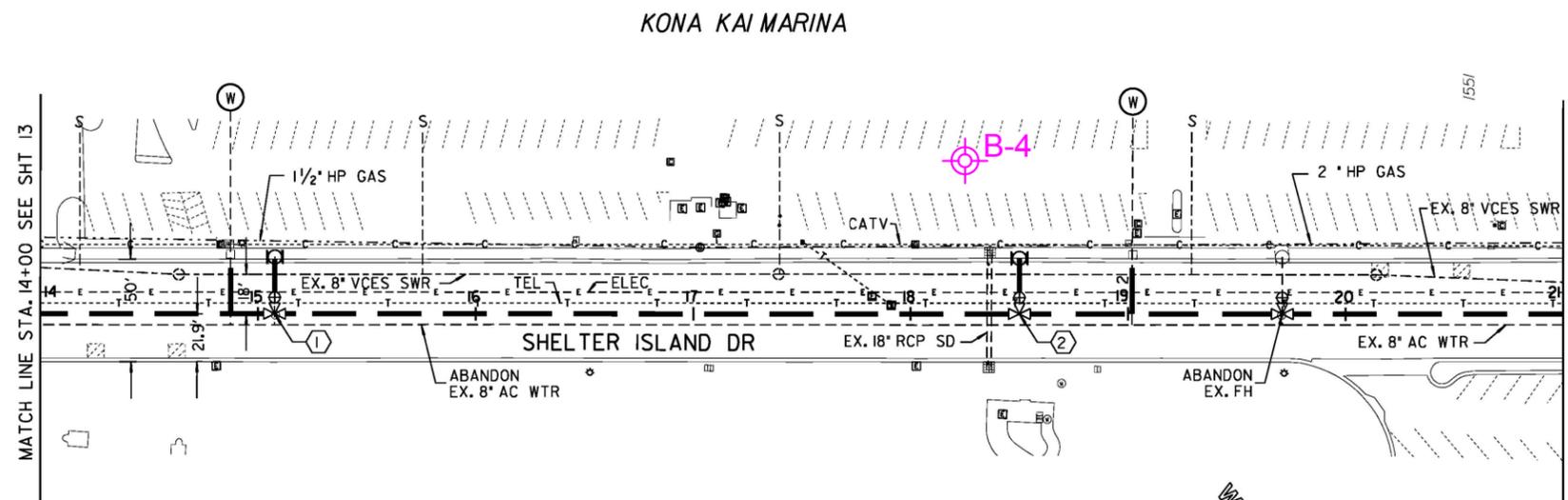
SITE PLAN
FIGURE 7
DATE 05 - 09 - 2019



3' MINIMUM
DEPTH OF COVER

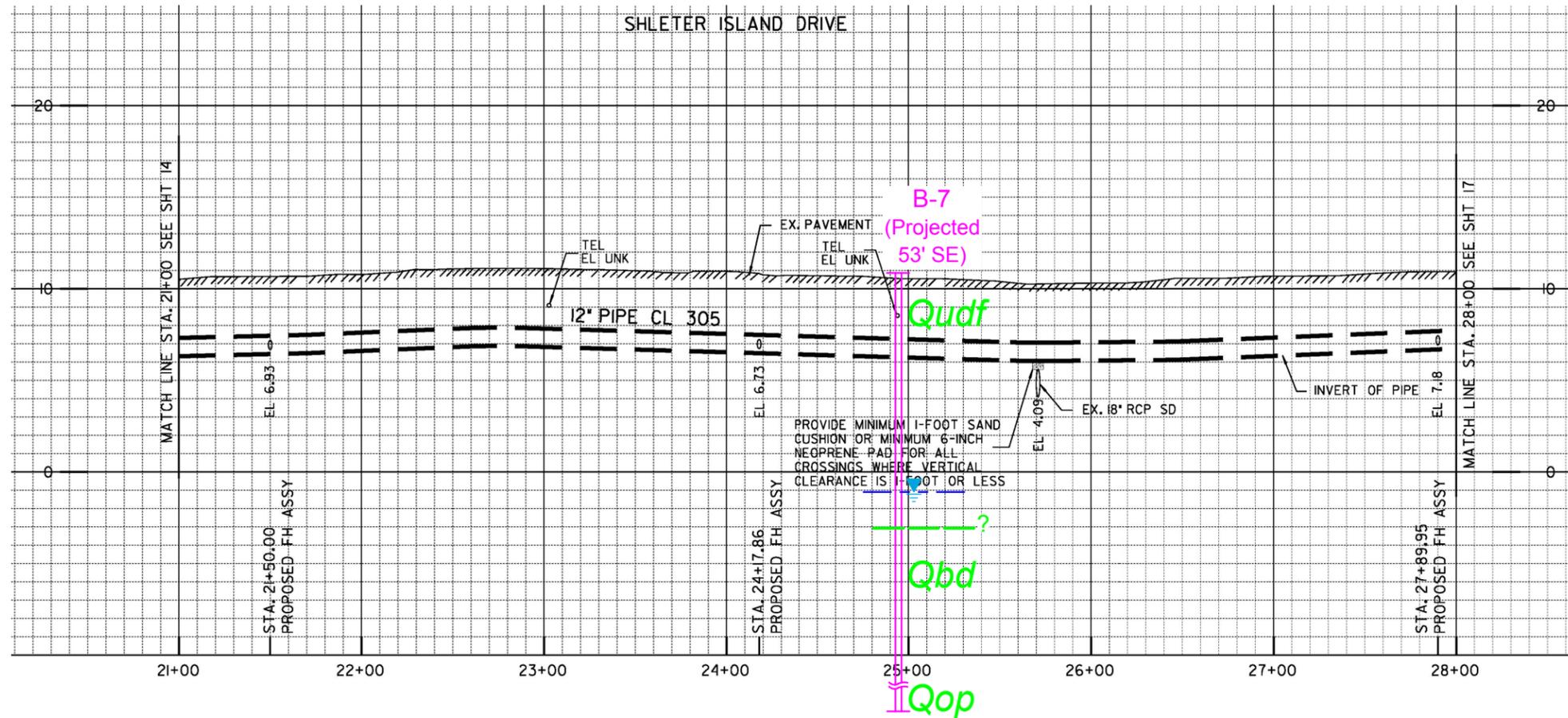
GEOCON LEGEND

- Qudf UNDOCUMENTED FILL AND/OR HYDRAULIC FILL
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- ~ APPROX. LOCATION OF GEOLOGIC CONTACT
- B-4 APPROX. LOCATION OF BORING (Geocon, 05285, 1994) (Plan View)
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- ▽ APPROX. LOCATION OF GROUNDWATER



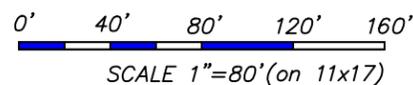
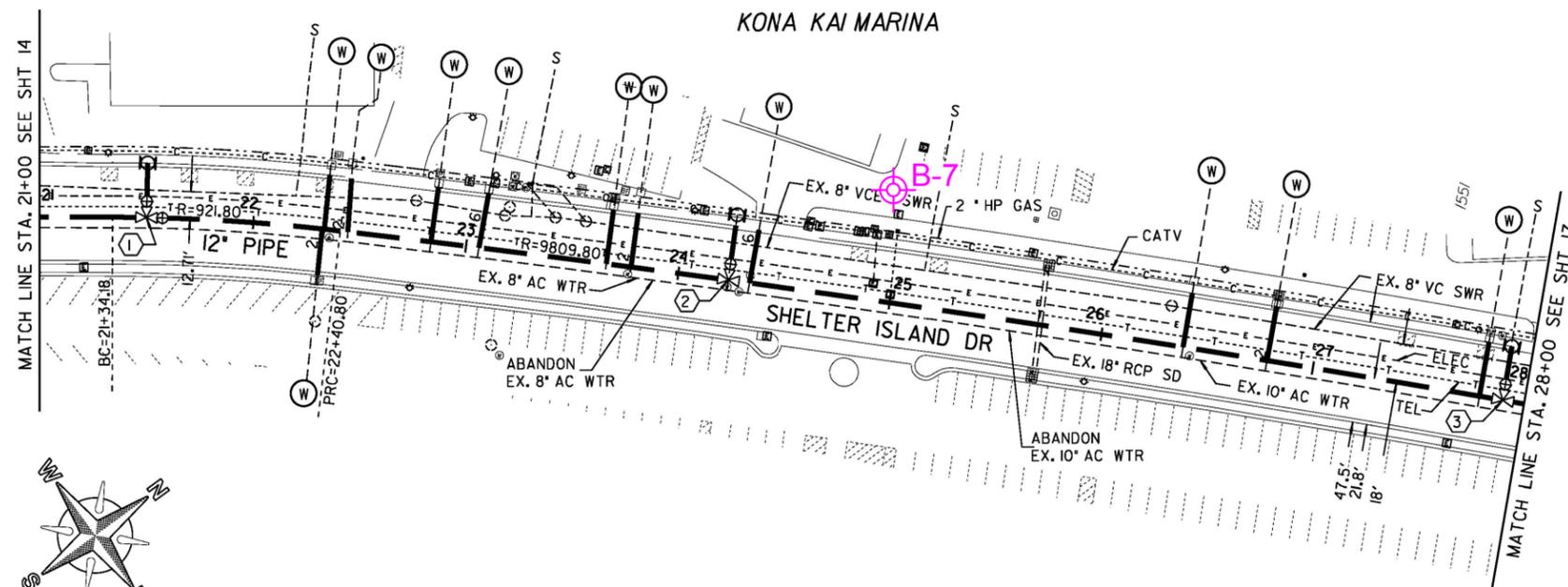
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PROJECT NO. G1849 - 52 - 21

SITE PLAN
FIGURE 8
DATE 05 - 09 - 2019



GEOCON LEGEND

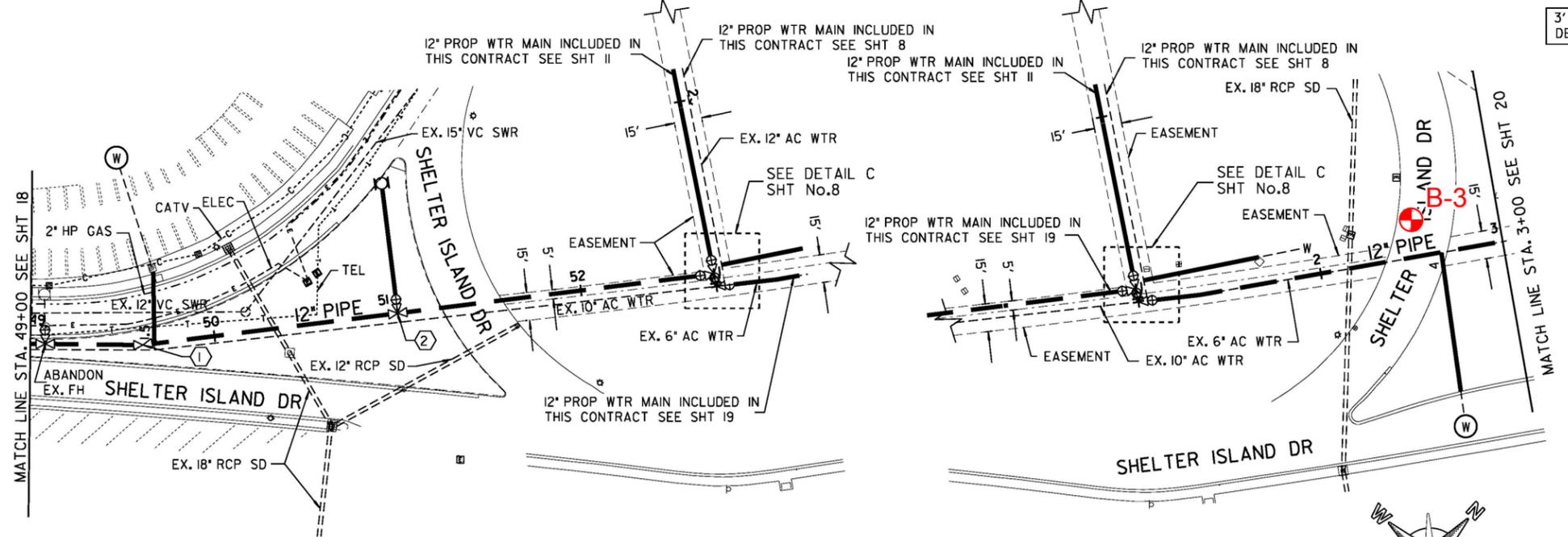
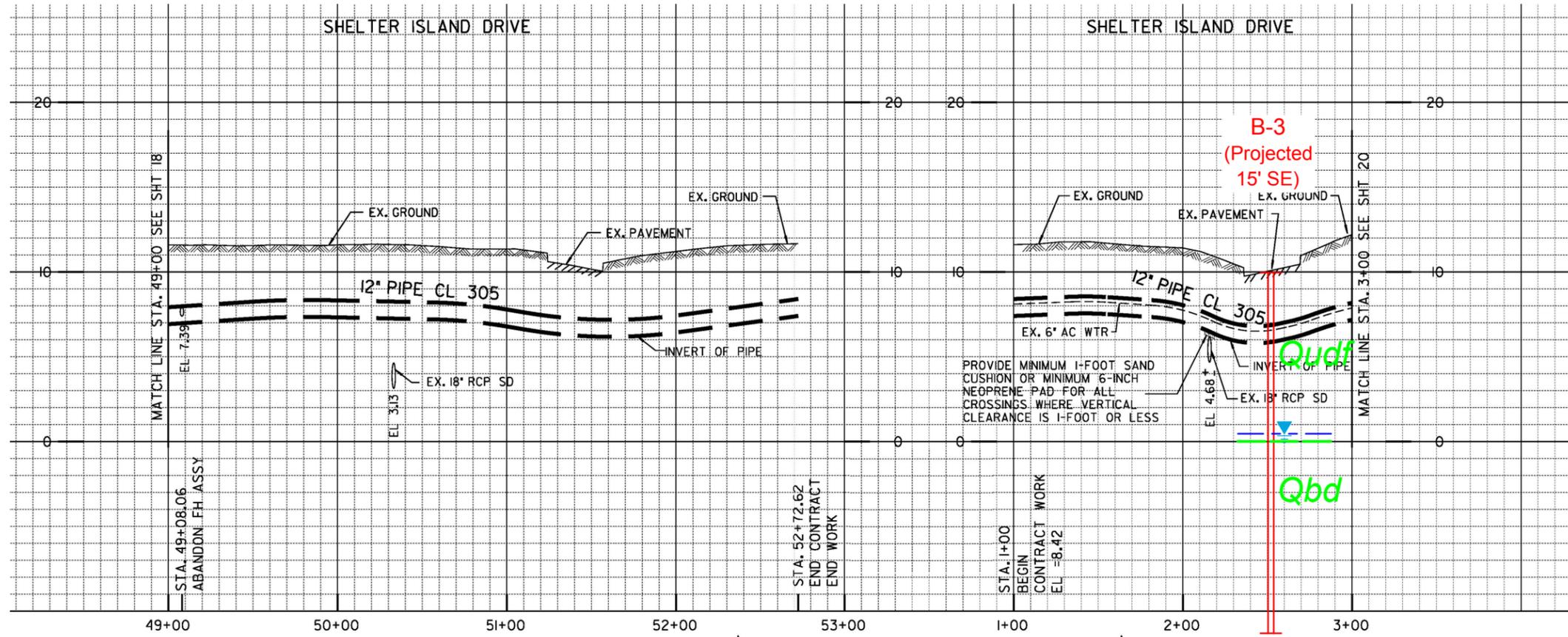
- Qudf UNDOCUMENTED FILL AND/OR HYDRAULIC FILL
- Qbd BAY DEPOSITS
- Qop OLD PARALIC DEPOSITS
- ~ APPROX. LOCATION OF GEOLOGIC CONTACT
- B-7 APPROX. LOCATION OF BORING (Geocon, 05285, 1994) (Plan View)
- I APPROX. LOCATION OF BORING (Geocon, 05285, 1994) (Profile View)
- ▼ APPROX. LOCATION OF GROUNDWATER



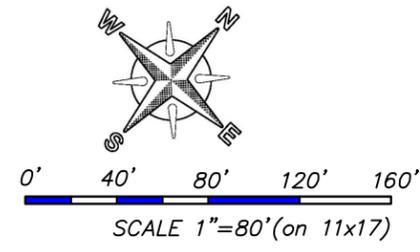
3' MINIMUM
DEPTH OF COVER

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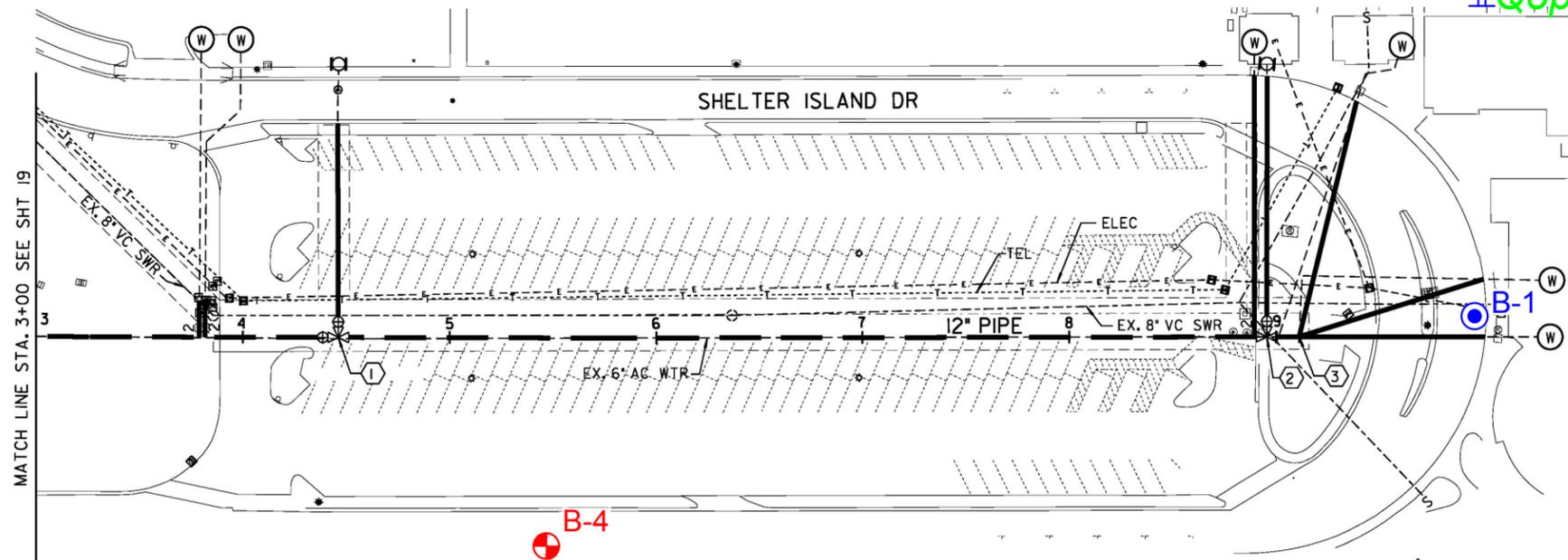
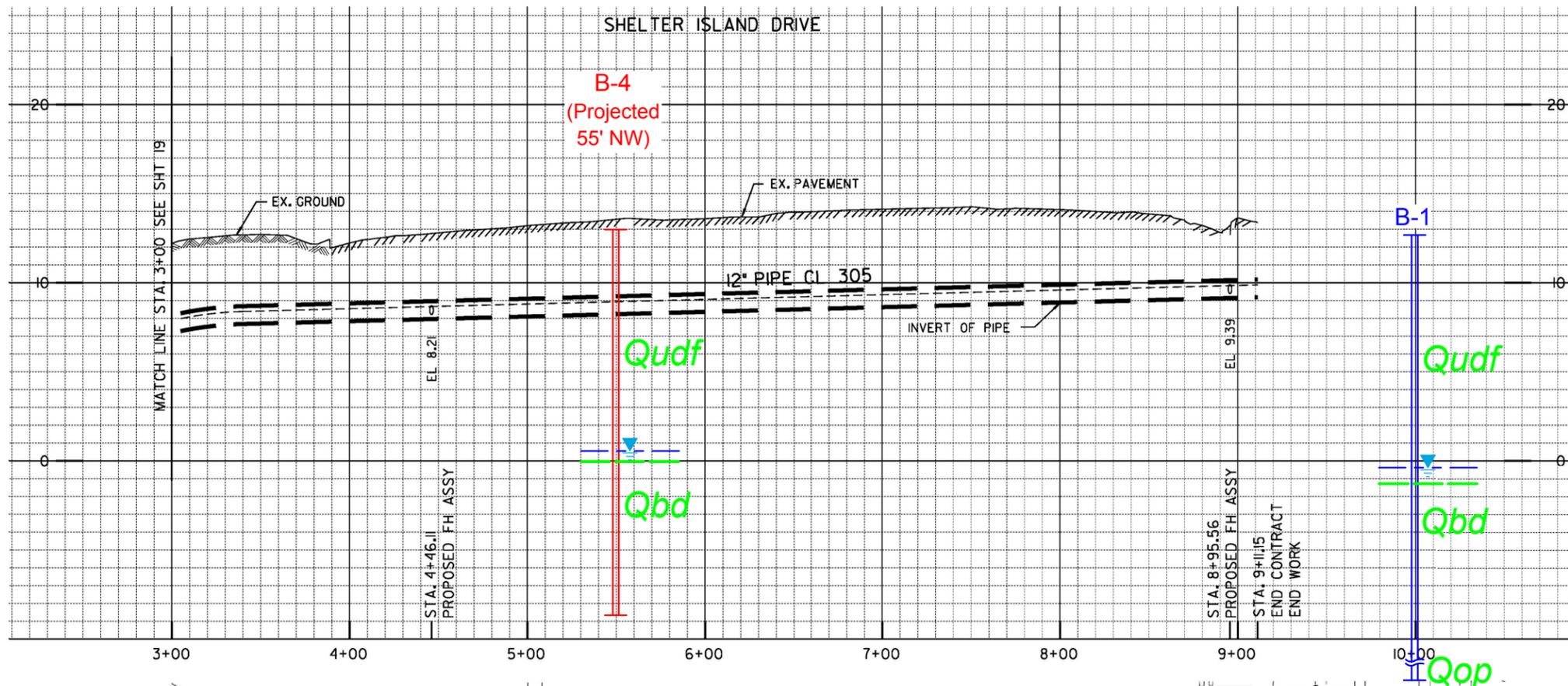


- GEOCON LEGEND**
- Qudf UNDOCUMENTED FILL AND/OR HYDRAULIC FILL
 - Qbd BAY DEPOSITS
 - ~ APPROX. LOCATION OF GEOLOGIC CONTACT
 - B-3 APPROX. LOCATION OF BORING (Geocon, Current Study) (Plan View)
 - B-3 APPROX. LOCATION OF BORING (Geocon, Current Study) (Profile View)
 - ▽ APPROX. LOCATION OF GROUNDWATER



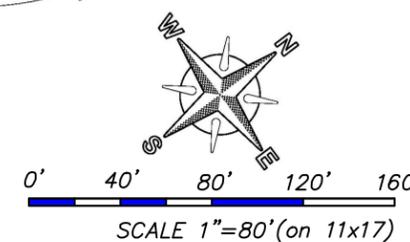
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PROJECT NO. G1849 - 52 - 21
FIGURE NO. 10
DATE 05 - 09 - 2019



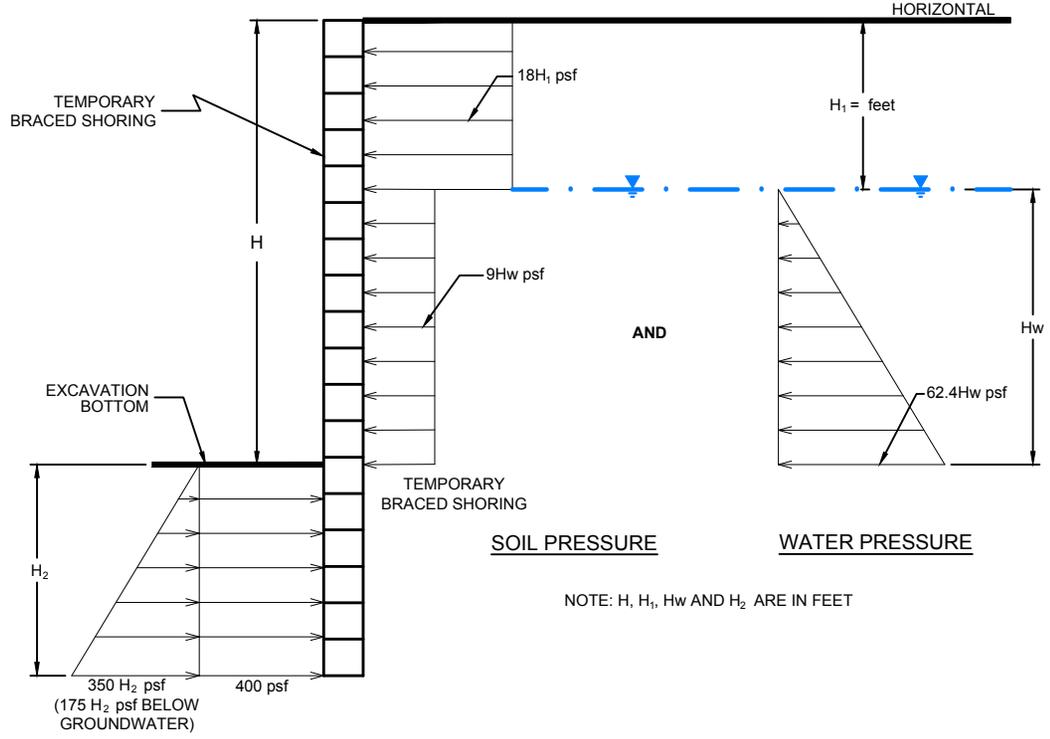
GEOCON LEGEND

- Qudf UNDOCUMENTED FILL AND/OR HYDRAULIC FILL
- Qbd BAY DEPOSITS
- Qop OLD PARALIC DEPOSITS
- ~ APPROX. LOCATION OF GEOLOGIC CONTACT
- B-4 APPROX. LOCATION OF BORING (Geocon, Current Study) (Plan View)
- B-1 APPROX. LOCATION OF BORING (Geocon, G1071, 2009) (Plan View)
- B-4 APPROX. LOCATION OF BORING (Geocon, Current Study) (Profile View)
- B-1 APPROX. LOCATION OF BORING (Geocon, G1071, 2009) (Profile View)
- ▽ APPROX. LOCATION OF GROUNDWATER



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FIGURE 11
DATE 05 - 09 - 2019



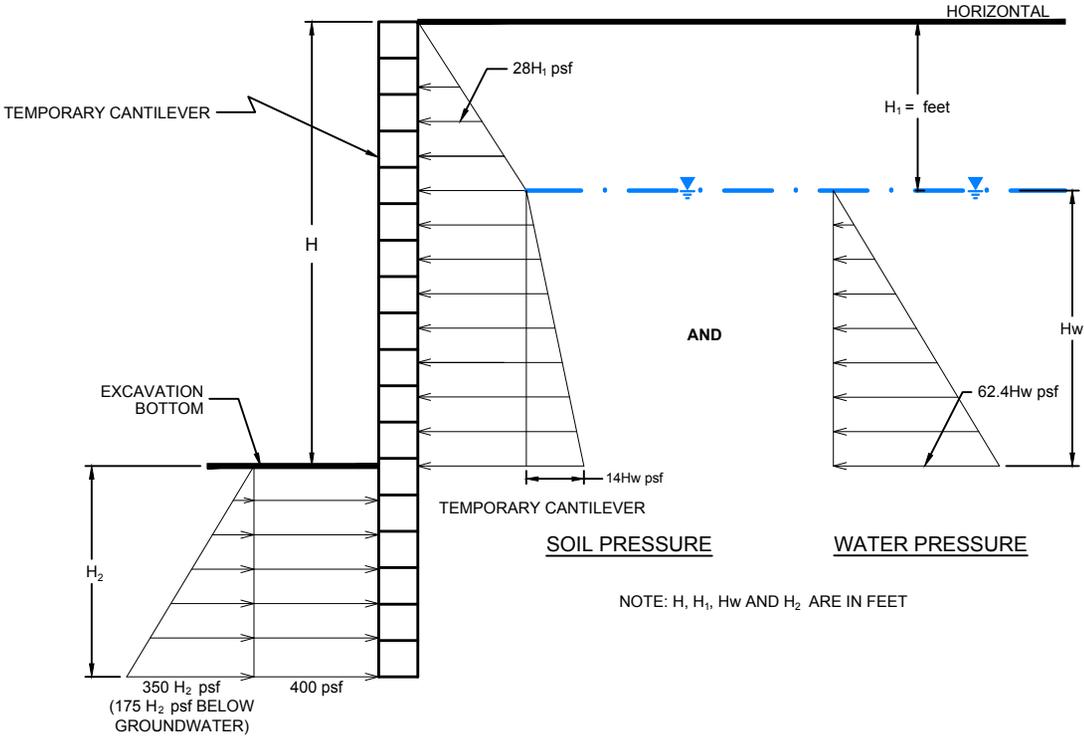
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LATERAL PRESSURES FOR
TEMPORARY BRACED SHORING

PROJECT NO. G1849 - 52 - 21
FIGURE 12
DATE 05 - 09 - 2019

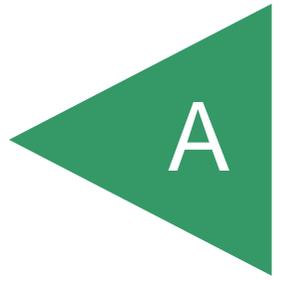


LATERAL PRESSURES FOR
 TEMPORARY CANTILEVER SHORING

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 PROJECT NO. G1849 - 52 - 21
 FIGURE 13
 DATE 05 - 09 - 2019



APPENDIX



APPENDIX A

FIELD INVESTIGATION

We performed our field investigation on April 3, 2019, which consisted of performing a site reconnaissance and drilling 4 exploratory borings. Fieldwork for our investigation included site visits, subsurface exploration, and soil sampling. Pacific Drilling of San Diego, California drilled 6-inch-diameter, hollow-stem borings to a maximum depth of approximately 21½ feet below the existing ground surface using a track-mounted Fraste drill rig. The locations of the exploratory borings are shown on the *Site Plans*, Figures 2 through 11. Boring logs are presented on Figures A-1 through A-4 following the text in this appendix. We located the borings in the field using a measuring tape and existing reference points. Therefore, actual boring locations may deviate slightly. Elevations shown on the boring logs were estimated from the referenced plan with site profile.

We obtained samples during our boring excavations using either a California sampler or a Standard Penetration Test (SPT) sampler. Both samplers are composed of steel and driven to obtain relatively undisturbed soil samples. The California sampler has an inside diameter of 2.5 inches and an outside diameter of 2.875 inches. Up to 18 rings are placed inside the sampler that is 2.4 inches in diameter and 1 inch in height. The SPT sampler has an inside diameter of 1.5 inches and an outside diameter of 2 inches. We obtained ring samples at appropriate intervals were retained in moisture-tight containers and transported to the laboratory for testing. The type of sample is noted on the exploratory boring logs.

The samplers were driven 12 inches and 18 inches for California sampler and SPT sampler, respectively, with the use of an automatic hammer and the use of A rods. The sampler is connected to the A rods and driven into the bottom of the excavation using a 140-pound hammer with a 30-inch drop. Blow counts are recorded for every 6 inches the sampler is driven. The penetration resistances shown on the boring logs are shown in terms of blows per foot. The values indicated on the boring logs are the sum of the last 12 inches of the sampler if driven 12 inches. If the sampler was not driven for 12 inches, an approximate value is calculated in term of blows per foot or the final 6-inch interval is reported. These values are not to be taken as N-values, adjustments have not been applied.

We visually examined, classified, and logged the soil encountered in the borings in general accordance with American Society for Testing and Materials (ASTM) practice for Description and Identification of Soils (Visual-Manual Procedure D 2488). The logs depict the soil and geologic conditions observed and the depth where we obtained samples.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 1		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
					ELEV. (MSL.) 6'	DATE COMPLETED 04-03-2019				
					EQUIPMENT FRASTE BY: L. RODRIGUEZ					
					MATERIAL DESCRIPTION					
0					4.5" ASPHALT CONCRETE					
0	B1-1			SM	UNDOCUMENTED FILL (Qudf) Medium dense, moist, reddish brown, Silty, fine to medium SAND; trace gravel					
2										
4	B1-2			SP	BAY DEPOSITS (Qbd) Loose, wet, gray to yellowish brown, poorly graded fine to medium SAND; trace shell fragments			6		
4				SC/CL	Loose, saturated, olive brown, Clayey, fine SAND to Sandy CLAY; micaceous			4		
6	B1-3			SP-SM	-Becomes saturated Loose, saturated, olive brown, fine to medium poorly-graded SAND to Silty SAND			7	108.4	21.3
8										
10	B1-4			CL	OLD PARALIC DEPOSITS (Qvop) Firm, saturated, olive brown, Sandy, lean CLAY			7		
12	B1-5							8	110.8	18.9
14										
16										
18	B1-6				-Becomes stiff			12		
					BORING TERMINATED AT 19.5 FEET Groundwater encountered at 9 feet Backfilled with 3.8 ft³ bentonite grout					

Figure A-1,
Log of Boring B 1, Page 1 of 1

G1849-52-21.GPJ

SAMPLE SYMBOLS	 ... SAMPLING UNSUCCESSFUL	 ... STANDARD PENETRATION TEST	 ... DRIVE SAMPLE (UNDISTURBED)
	 ... DISTURBED OR BAG SAMPLE	 ... CHUNK SAMPLE	 ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 2			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) <u>12'</u>	DATE COMPLETED <u>04-03-2019</u>	EQUIPMENT <u>FRASTE</u> BY: <u>L. RODRIGUEZ</u>			
					MATERIAL DESCRIPTION					
0					4" ASPHALT CONCRETE Over 10" SLURRY					
2	B2-1			SM	UNDOCUMENTED FILL (Qudf) Medium dense, moist, yellowish brown, Silty, fine to coarse SAND; trace gravel					
4				SP-SM	Loose, moist, yellowish to grayish brown, Silty, fine to medium SAND; trace shell fragments					
6	B2-2							14	100.9	15.3
10	B2-3				-Becomes medium dense, saturated; coarser grained; few to some shell fragments; trace gravel			18		
12			▼	SP-SM	BAY DEPOSITS (Qbd) Medium dense, saturated, yellowish brown to gray, Silty fine to coarse SAND; few to some shell fragments					
16	B2-4							22		
20	B2-5				-Becomes loose			5		
					BORING TERMINATED AT 21.5 FEET Groundwater encountered at 12 feet Backfilled with 4.2 ft³ bentonite grout					

Figure A-2,
Log of Boring B 2, Page 1 of 1

G1849-52-21.GPJ

SAMPLE SYMBOLS		... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
		... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 3			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) <u>10'</u>	DATE COMPLETED <u>04-03-2019</u>	EQUIPMENT <u>FRASTE</u> BY: <u>L. RODRIGUEZ</u>			
					MATERIAL DESCRIPTION					
0					1" ASPHALT CONCRETE Over 8" CTB					
0 - 2	B3-1			SM	UNDOCUMENTED FILL (Qudf) Medium dense, moist, yellowish brown, Silty, fine to coarse SAND; trace to some gravel					
2 - 4				SC	Loose, damp, yellowish to grayish brown, Clayey, fine to coarse; trace gravel up to 3-inch in diameter; few to some shell fragments					
4 - 10	B3-2				-Becomes saturated			15	91.5	4.7
10 - 16	B3-3			SM	BAY DEPOSITS (Qbd) Very loose, saturated, gray, Silty, fine SAND; trace shell fragments; micaceous			4		
16 - 18	B3-4				-No recovery -Becomes loose, coarser-grained			6		
18 - 20	B3-5				-Becomes very loose, finer-grained			6		
20 - 21.5					BORING TERMINATED AT 21.5 FEET Groundwater encountered at 9.5 feet Backfilled with 4.2 ft³ bentonite grout			4		

Figure A-3,
Log of Boring B 3, Page 1 of 1

G1849-52-21.GPJ

SAMPLE SYMBOLS		... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
		... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 4			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) <u>13'</u>	DATE COMPLETED <u>04-03-2019</u>	EQUIPMENT <u>FRASTE</u> BY: <u>L. RODRIGUEZ</u>			
MATERIAL DESCRIPTION										
0					4" ASPHALT CONCRETE					
0	B4-1			SM	UNDOCUMENTED FILL (Qudf) Medium dense, moist, reddish brown, Silty, fine to coarse SAND; trace gravel -Becomes yellowish brown, fine-grained; trace to few shells fragments					
2										
4										
6	B4-2							17	90.2	11.8
8										
10	B4-3			SM	Stiff, saturated, yellowish brown to gray, Silty, fine SAND; trace shell fragments			9		
12										
14				SC	BAY DEPOSITS (Qbd) Loose, saturated, gray, Clayey, fine to medium SAND; trace to few shell fragments					
16	B4-4							10		
18								8		
20	B4-5							6		
					BORING TERMINATED AT 21.5 FEET Groundwater encountered at 12.5 feet Backfilled with 4.2 ft³ bentonite grout					

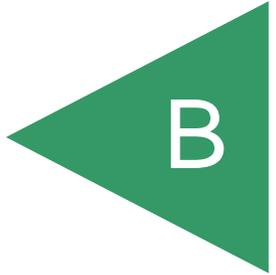
Figure A-4,
Log of Boring B 4, Page 1 of 1

G1849-52-21.GPJ

SAMPLE SYMBOLS		... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
		... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

APPENDIX



APPENDIX B

LABORATORY TESTING

We performed laboratory testing to evaluate the physical and mechanical properties of the soil and formational materials encountered at the site. We performed the laboratory tests in accordance with the current versions of the generally accepted *American Society for Testing Materials* (ASTM) procedures or other suggested procedures. We tested selected soil samples for their in-situ dry density and moisture content, maximum dry density and optimum moisture content, shear strength, water-soluble sulfate characteristics, pH and resistivity, chloride content, sand equivalent, R-value, plasticity, and grain size characteristics. The results of our laboratory tests are presented in Tables B-I through B-VIII and on Figures B-1 through B-3. In addition, the in-situ dry density and moisture content are presented on the exploratory boring logs in Appendix A.

**TABLE B-I
SUMMARY OF LABORATORY MAXIMUM DRY DENSITY AND
OPTIMUM MOISTURE CONTENT TEST RESULTS
ASTM D 1557**

Sample No.	Depth (feet)	Geologic Unit	Description	Maximum Dry Density (pcf)	Optimum Moisture Content (% dry wt.)
B2-1	1 to 5	Qudf	Yellowish to grayish brown, Silty, fine to coarse SAND (SM)	122.8	10.9

**TABLE B-II
SUMMARY OF LABORATORY DIRECT SHEAR TEST RESULTS
ASTM D 3080**

Sample No.	Depth (feet)	Geologic Unit	Dry Density (pcf)	Moisture Content (%)		Peak [Ultimate ¹] Cohesion (psf)	Peak [Ultimate ¹] Angle of Shear Resistance (degrees)
				Initial	Final		
B1-3	6	Qbd	108.4	21.3	23.4	370 [370]	32 [32]
B2-2	5	Qbd	100.9	15.3	21.7	575 [325]	39 [39]

¹ Ultimate at end of test at 0.2 inch deflection.

**TABLE B-III
SUMMARY OF LABORATORY WATER-SOLUBLE SULFATE TEST RESULTS
(CALIFORNIA TEST NO. 417)**

Sample No.	Depth (feet)	Geologic Unit	Water-Soluble Sulfate (%)	Sulfate Severity	Sulfate Class
B4-1	0 to 5	Qudf	0.023	Not Applicable	S0

**TABLE B-IV
SUMMARY OF LABORATORY POTENTIAL OF HYDROGEN (PH) AND RESISTIVITY TEST RESULTS
CALIFORNIA TEST NO. 643**

Sample No.	Depth (feet)	Geologic Unit	pH	Minimum Resistivity (ohm-centimeters)
B4-1	0 to 5	Qudf	8.7	2,100

**TABLE B-V
SUMMARY OF LABORATORY CHLORIDE CONTENT TEST RESULTS
AASHTO TEST NO. T291-94**

Sample No.	Depth (feet)	Geologic Unit	Chloride Content (ppm)	Chloride Content (%)
B4-1	0 to 5	Qudf	96	0.010

**TABLE B-VI
SUMMARY OF LABORATORY SAND EQUIVALENT TEST RESULTS
ASTM D 2419**

Sample No.	Depth (feet)	Geologic Unit	Sand Equivalent
B1-1	½ to 3	Qudf	20

**TABLE B-VII
SUMMARY OF LABORATORY RESISTANCE VALUE (R-VALUE) TEST RESULTS
(ASTM D2844)**

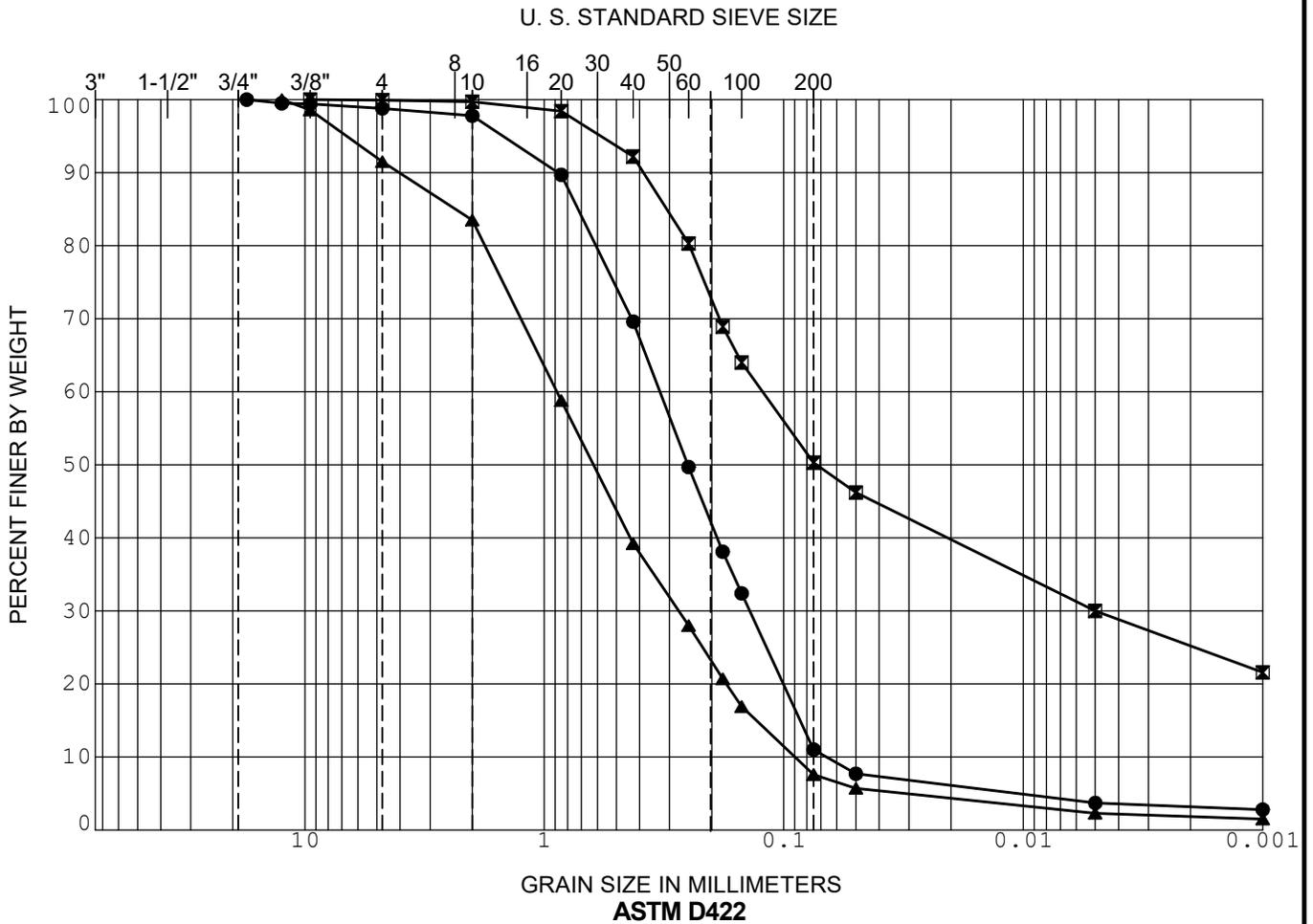
Sample No.	Depth (feet)	Geologic Unit	R-Value
B1-1	½ to 3	Qudf	73

**TABLE B-VIII
SUMMARY OF LABORATORY PLASTICITY INDEX TEST RESULTS
ASTM D 4318**

Sample No.	Depth (feet)	Geologic Unit	Liquid Limit	Plastic Limit	Plasticity Index
B1-5	12	Qop	38	14	24
B2-4	15	Qbd	NP	NP	NP
B3-4	16	Qbd	NP	NP	NP
B4-4	16	Qbd	35	13	22

NP = Non-Plastic

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



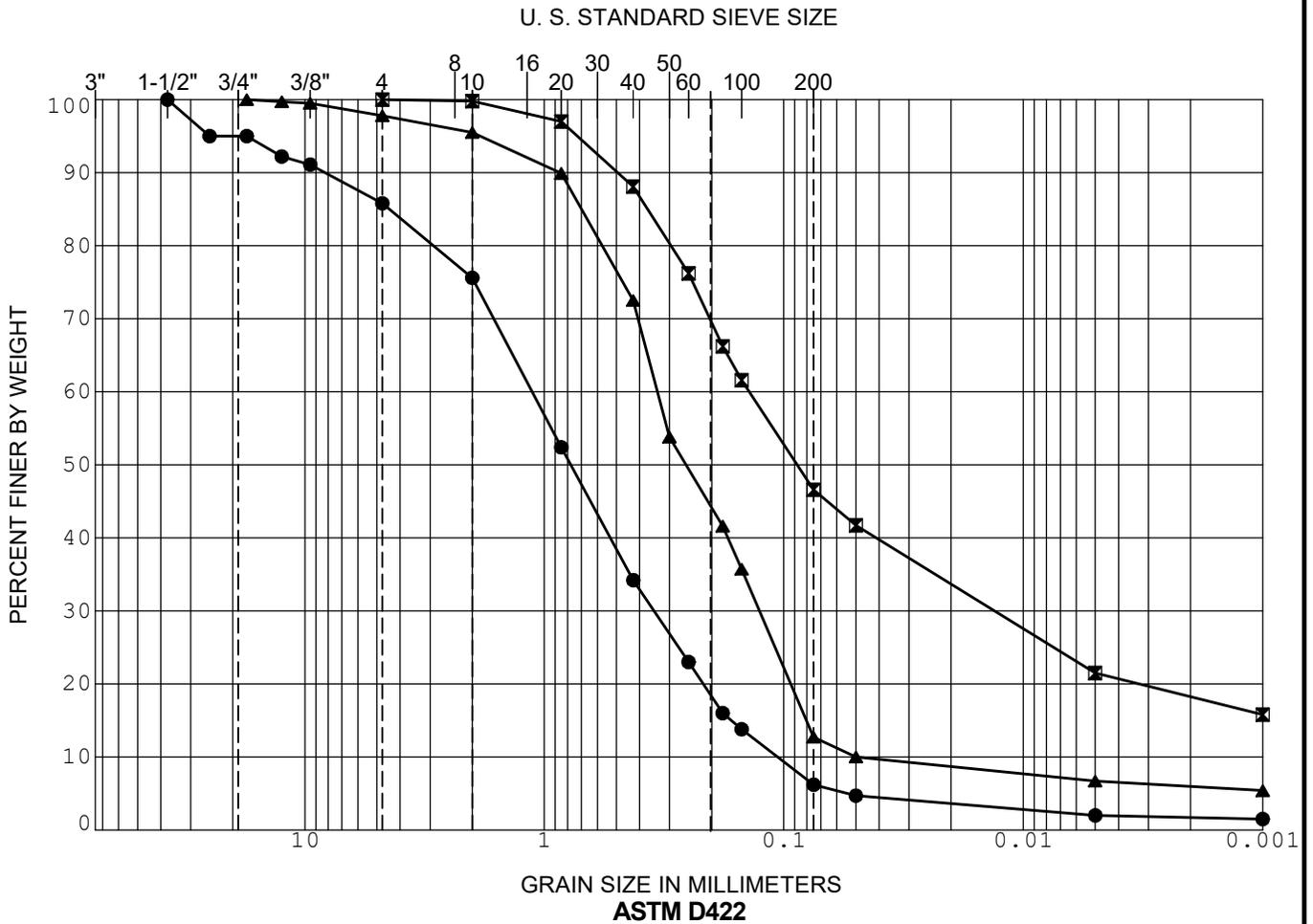
	SAMPLE	DEPTH (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
●	B1-3	6.0	(SP-SM) Poorly graded SAND to Silty SAND				
☒	B1-5	12.0	(CL) Sandy, lean CLAY				
▲	B2-3	10.0	(SP-SM) Poorly graded SAND to Silty SAND				

GRADATION CURVE

AC WATER GROUP 1030

SAN DIEGO, CALIFORNIA

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



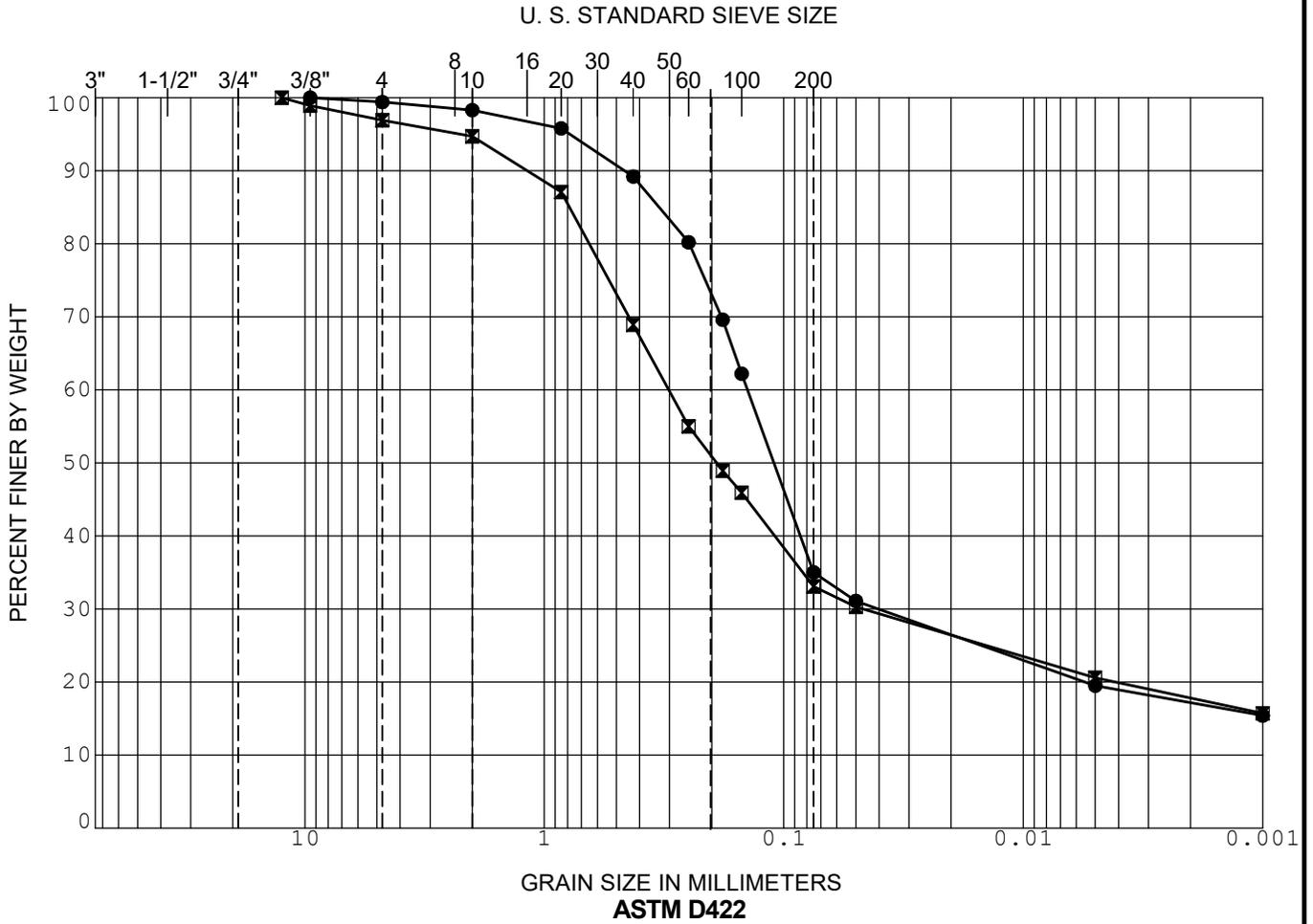
	SAMPLE	DEPTH (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
●	B2-4	15.0	(SP-SM) Poorly graded SAND to Silty SAND				
■	B3-2	5.0	(SC) Clayey SAND				
▲	B3-4	16.0	(SM) Silty SAND				

GRADATION CURVE

AC WATER GROUP 1030

SAN DIEGO, CALIFORNIA

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



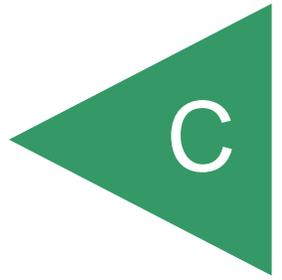
	SAMPLE	DEPTH (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
●	B4-3	10.0	(SM) Silty SAND				
■	B4-4	16.0	(SM) Silty SAND				
▲							

GRADATION CURVE

AC WATER GROUP 1030

SAN DIEGO, CALIFORNIA

APPENDIX



APPENDIX C

PREVIOUS BORINGS AND LABORATORY TESTING
(GEOCON, 1979, 1993, 1994, 2004, 2009)

FOR

AC WATER GROUP 1030
CONTRACT NO. H156367; TASK NO. 15GG19
SAN DIEGO, CALIFORNIA

PROJECT NO. G1849-52-21

File No. D-1757-J01
 March 20, 1979

DEPTH IN FEET	SAMPLE NUMBER	LOG & LOCATION OF SAMPLE	Penetration Resistance Blows/ft	DESCRIPTION	IN-PLACE	
					DRY DENSITY p.c.f	MOISTURE CONTENT % dry wt
0				TRENCH NO. 3		
1				Brown, slightly damp, Silty, fine SAND to fine-medium SAND (SM-SP)		
2				grading to dark brown w/traces of CLAY, becoming moist-very moist below 3'		
3						
4				Dark gray-black, very moist, fine-medium, Sandy SILT to Silty SANDS w/some CLAY, low plasticity (SM-ML)		
5						
6				free groundwater encountered at 8½'		
7						
8						
9						
10				TRENCH TERMINATED AT 10.0 FEET		

Figure 4, Log of Test Trench 3

A-6

DEPTH IN FEET	PENETRAT. RESIST. BLWS/FT.	SAMPLE NO.	LITHOLOGY	BORING/WELL NO. <u>GEC 2</u>		WELL CONSTRUCTION	HEADSPACE (PPM)
				DATE DRILLED <u>6/3/93</u>	WATER LEVEL (ATD) <u>8.0'</u>		
				EQUIPMENT <u>SIMCO</u> DRILLER <u>TRI-COUNTY</u>			
SOIL DESCRIPTION							
1				TOPSOIL			
2				Loose, to medium dense, moist, brown, Silty fine to coarse <u>SAND</u> (SM)			
3				FILL SOILS			
4				Loose to medium dense, moist, brown Silty fine to coarse <u>SAND</u> with trace shell fragments (SM)			
5	11	GEC2-5		-Occasional clay nodules			
6		1015					
7	15	GEC2-7					
8		1025					
9	7	GEC2-9					
10		1035		Grades to loose, saturated, grey Silty fine to coarse <u>SAND</u> with shell fragments (SM)			
11							
12	6	GEC2-12					
13		1045					
14				TRENCH TERMINATED AT 13 FEET			
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Figure A-1, Log of Boring GEC 2

SDYC

CASING ELEVATION:	QUANTITY OF FILTER MATERIAL:
DIAMETER & TYPE OF CASING:	WELL SEAL & INTERVAL:
CASING INTERVAL:	WELL SEAL QUANTITY:
WELL SCREEN:	ANNULUS SEAL/INTERVAL:
SCREEN INTERVAL:	ADDITIVES:
WELL COVER:	WELL DEPTH:
FILTERPACK/INTERVAL:	ENGINEER/GEOLOGIST: JASON HALSEY

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 3			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.)	DATE COMPLETED	EQUIPMENT			
					ELEV. (MSL.)	12	DATE COMPLETED	3/3/94		
					EQUIPMENT			MAYHEW ROTARY WASH		
MATERIAL DESCRIPTION										
0					3 1/2-INCH ASPHALT CONCRETE					
2					FILL SOIL					
4	B3-1			SM	Medium dense to dense, damp, yellow, very Silty, very fine to very coarse SAND with abundant sea shell fragments			10/12"		
6										
8										
10	B3-2			SC	Medium dense, saturated, yellow-brown, Clayey, fine to medium SAND with a little silt			10/12"		
12										
14	B3-3			SP	BAY DEPOSITS Medium dense, saturated, dark gray, Silty, fine to very coarse SAND with sea shell fragments			11/12"	106.5	22.4
16										
18										
20	B3-4				Medium dense, saturated grey, Silty, fine to medium SAND with some shell fragments and mica -Becomes fine to medium grained, some mica			19/12"		
22										
24	B3-5			SM				12/12"	96.4	28.7
26										
28										

Figure A-5 Log of Boring B 3, page 1 of 2

KK

SAMPLE SYMBOLS	□ ... SAMPLING UNSUCCESSFUL	▣ ... STANDARD PENETRATION TEST	■ ... DRIVE SAMPLE (UNDISTURBED)
	⊠ ... DISTURBED OR BAG SAMPLE	▤ ... CHUNK SAMPLE	▽ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 3			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.)	DATE COMPLETED	EQUIPMENT			
					12	3/3/94	MAYHEW ROTARY WASH			
MATERIAL DESCRIPTION										
30	B3-6									
32										
34	B3-7			SM						
36										
38										
40	B3-8									
42										
44	B3-9			SC						
46										
48										
50	B3-10									
BORING TERMINATED AT 51.5 FEET										

Figure A-6 Log of Boring B 3, page 2 of 2

KK

SAMPLE SYMBOLS

<input type="checkbox"/> ... SAMPLING UNSUCCESSFUL	<input type="checkbox"/> ... STANDARD PENETRATION TEST	<input type="checkbox"/> ... DRIVE SAMPLE (UNDISTURBED)
<input type="checkbox"/> ... DISTURBED OR BAG SAMPLE	<input type="checkbox"/> ... CHUNK SAMPLE	<input type="checkbox"/> ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 4			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
					ELEV. (MSL.)	DATE COMPLETED	EQUIPMENT				
					ELEV. (MSL.)	11	DATE COMPLETED	3/3/94			
					EQUIPMENT	MAYHEW ROTARY WASH					
MATERIAL DESCRIPTION											
0					3 1/2-INCHES ASPHALT CONCRETE						
2					FILL SOIL Loose to medium dense, damp, yellow, brownish, Silty, fine to coarse SAND						
4											
6	B4-1			SM				9/12"			
8											
10	B4-2							12/12"			
12					BAY DEPOSITS Medium dense, saturated, dark gray, Silty, fine to medium SAND						
14											
16	B4-3				-Few sea shells					8/12"	
18											
20	B4-4			SM	-Becomes dense, gray, fine to very coarse with abundant sea shell fragments					25/12"	
22											
24											
26	B4-5				-Becomes medium dense, dark gray, very fine to medium, few shell fragments					16/12"	
28											

Figure A-7 Log of Boring B 4, page 1 of 2

KK

SAMPLE SYMBOLS

<input type="checkbox"/> ... SAMPLING UNSUCCESSFUL	<input type="checkbox"/> ... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/> ... DRIVE SAMPLE (UNDISTURBED)
<input checked="" type="checkbox"/> ... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/> ... CHUNK SAMPLE	<input checked="" type="checkbox"/> ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 7			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
					ELEV. (MSL.)	DATE COMPLETED	EQUIPMENT				
					ELEV. (MSL.)	11	DATE COMPLETED	3/4/94			
					EQUIPMENT	MAYHEW ROTARY WASH					
MATERIAL DESCRIPTION											
0					4-INCHES ASPHALT CONCRETE						
2					FILL SOIL Medium dense, damp, brown, very fine to coarse SAND with abundant sea shell fragments						
4	B7-1			SP	-Becomes saturated, with few sea shell fragments					7/12"	
6											
8					-Becomes saturated, with few sea shell fragments					10/12"	
10	B7-2										
12					BAY DEPOSITS Medium dense, saturated, gray, Silty, very fine to medium SAND with mica					15/12"	
14	B7-3										
16					-Becomes dark gray, very fine to fine, some mica, organic odor					15/12"	
18											
20	B7-4				-Becomes dark gray, very fine to fine, some mica, organic odor					17/12"	
22											
24	B7-5										
26											
28											

Figure A-13 Log of Boring B 7, page 1 of 2

KK

SAMPLE SYMBOLS

<input type="checkbox"/> ... SAMPLING UNSUCCESSFUL	<input type="checkbox"/> ... STANDARD PENETRATION TEST	<input type="checkbox"/> ... DRIVE SAMPLE (UNDISTURBED)
<input checked="" type="checkbox"/> ... DISTURBED OR BAG SAMPLE	<input type="checkbox"/> ... CHUNK SAMPLE	<input type="checkbox"/> ... WATER TABLE OR SEEPAGE

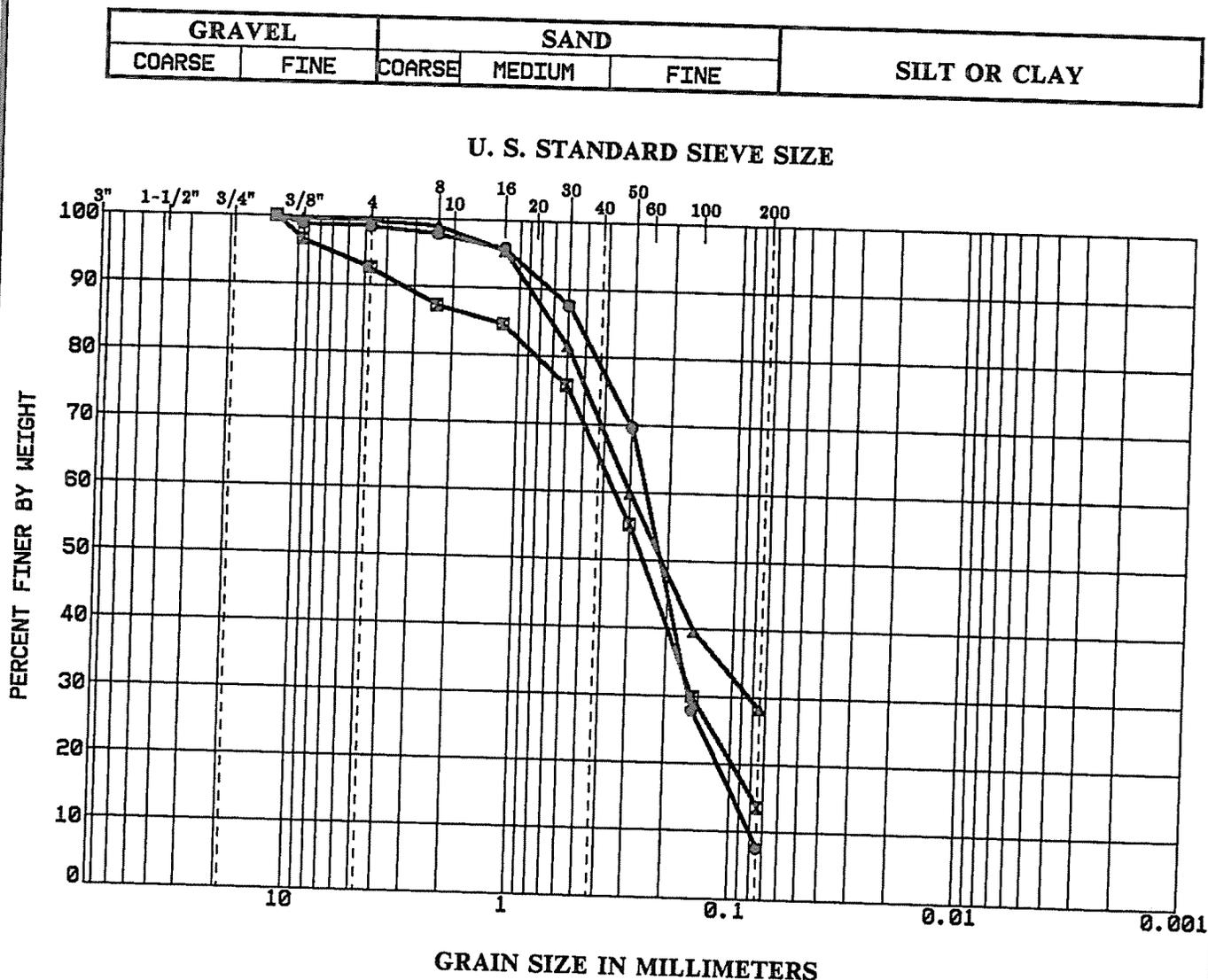
NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 7			PENETRATION RESISTANCE (BLOMS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
					ELEV. (MSL.)	DATE COMPLETED	EQUIPMENT				
					ELEV. (MSL.)	11	DATE COMPLETED	3/4/94			
					EQUIPMENT	MAYHEW ROTARY WASH					
30	B7-6				MATERIAL DESCRIPTION						
32								29/12"			
34	B7-7			SM	-Becomes light gray, fine to very coarse, abundant sea shell fragments			23/12"			
36											
38											
40	B7-8				-Becomes light brownish gray			30/12"			
42											
44	B7-9				BAY POINT FORMATION Dense, very moist to saturated, olive brown, very Silty, very fine to medium SAND			23/12"			
46				SM							
48											
50	B7-10				-Becomes saturated, fine to very coarse, cohesionless - no silt			37/12"			
					BORING TERMINATED AT 51.5 FEET						

Figure A-14 Log of Boring B 7, page 2 of 2

SAMPLE SYMBOLS	<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>	... STANDARD PENETRATION TEST	<input type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)
	<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input type="checkbox"/>	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.



	SAMPLE	Depth (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
●	B1-2	10.0	(SM-SP) F-m SAND w/trace of silt				
■	B1-4	20.0	(SM) Fine to medium Silty SAND				
▲	B3-2	10.0	(SC) F-m Clayey SAND with Silt				

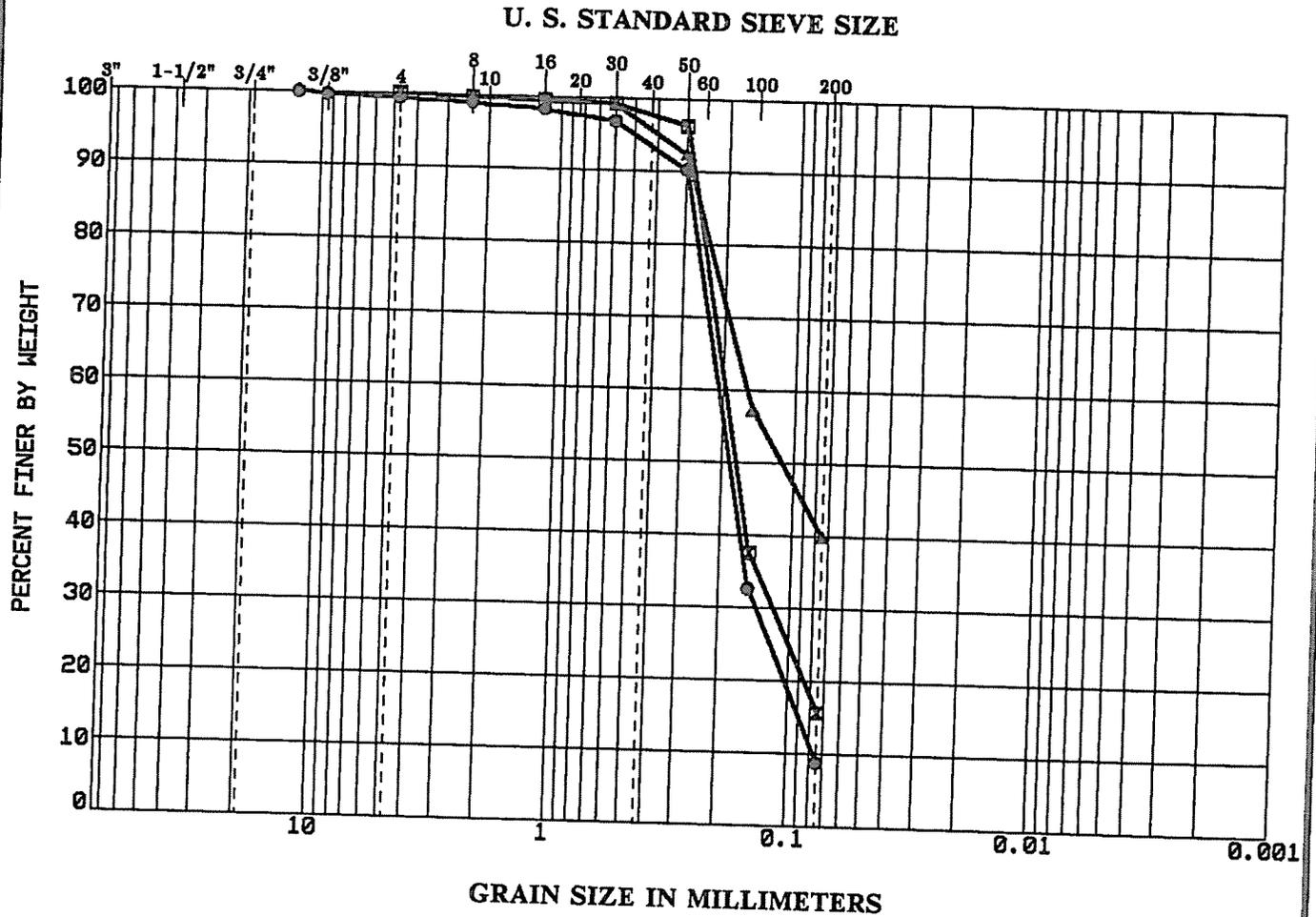
GRADATION CURVE

KONA KAI CLUB AND KONA INN
SHELTER ISLAND
SAN DIEGO, CALIFORNIA

KK

Figure B-1

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



	SAMPLE	Depth (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
●	B3-4	20.0	(SM-SP) F-m SAND with Silt				
☒	B3-6	30.0	(SM) Fine to medium Silty SAND				
▲	B3-8	40.0	(SC) Fine Clayey SAND with Silt				

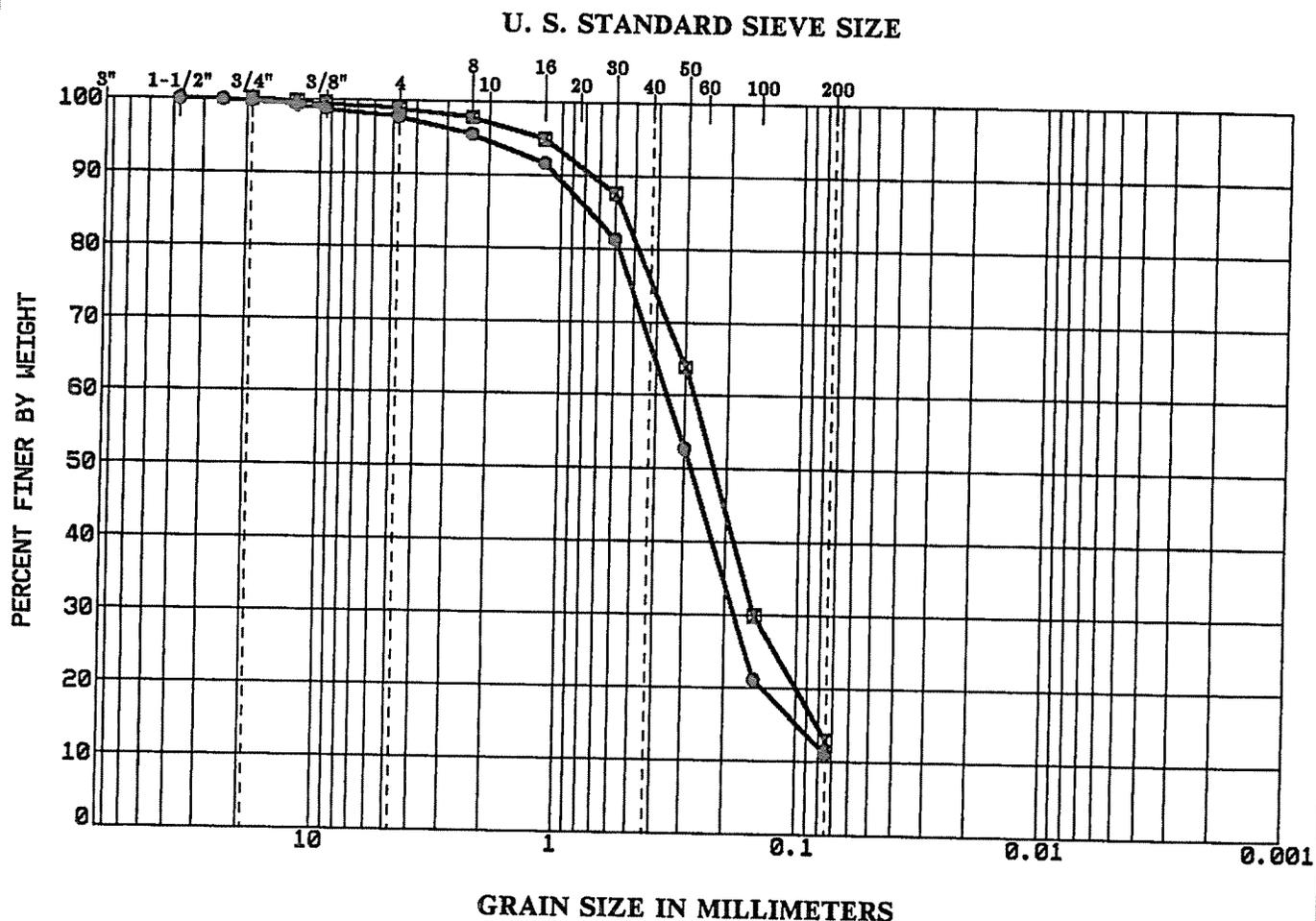
GRADATION CURVE

KONA KAI CLUB AND KONA INN
SHELTER ISLAND
SAN DIEGO, CALIFORNIA

KK

Figure B-2

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



SAMPLE	Depth (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
● B10-1	0.0	(SM-SP) F-m SAND with a little Silt				
■ B12-1	0.0	(SM) Fine to medium Silty SAND				

GRADATION CURVE

KONA KAI CLUB AND KONA INN
SHELTER ISLAND
SAN DIEGO, CALIFORNIA

KK

Figure B-5

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 3			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.)	DATE COMPLETED	EQUIPMENT			
					ELEV. (MSL.) <u>9</u>	DATE COMPLETED <u>2/22/01</u>				
					EQUIPMENT <u>MAYHEW 1000</u>					
MATERIAL DESCRIPTION										
0					HYDRAULIC FILL Moderately dense, moist, light brown, poorly-graded SAND					
2				SP						
4					BAY POINT FORMATION Moderately dense, moist, brown, fine to coarse Silty SAND					
6	B3-1							9	120.8	15.8
8				SM						
10	B3-2							8	118.1	17.2
12										
14					Dense, moist, brown, fine to medium Silty SAND					
16	B3-3							20	121.1	14.0
18										
20	B3-4			SM						
22					14	114.9	17.2			
24										
26	B3-5				20	120.4	14.8			
28										

Figure A-4, Log of Boring-B 3

ALA

SAMPLE SYMBOLS	<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>	... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)
	<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input checked="" type="checkbox"/>	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 3		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) <u>9</u>	DATE COMPLETED <u>2/22/01</u>			
					EQUIPMENT <u>MAYHEW 1000</u>				
					MATERIAL DESCRIPTION				
30	B3-6						24	120.4	16.0
32									
34									
36	B3-7						25	110.5	20.0
					BORING TERMINATED AT 36 FEET				

Figure A-5, Log of Boring-B 3

ALA

SAMPLE SYMBOLS	<input type="checkbox"/> ... SAMPLING UNSUCCESSFUL	<input type="checkbox"/> ... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/> ... DRIVE SAMPLE (UNDISTURBED)
	<input checked="" type="checkbox"/> ... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/> ... CHUNK SAMPLE	 ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 4		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) <u>9</u>	DATE COMPLETED <u>2/22/01</u>			
					EQUIPMENT <u>MAYHEW 1000</u>				
MATERIAL DESCRIPTION									
0									
2				SP	HYDRAULIC FILL Moderately dense, moist, light brown, poorly-graded SAND				
4	B4-1						19		
6	B4-2				BAY POINT FORMATION Moderately dense, moist, brown, fine to coarse Silty SAND		6		
8									
10	B4-3			SM			6		
12	B4-4						12	113.0	19.0
12	B4-5						15		
14									
14									
16	B4-6				Moderately dense, saturated, brown, fine to coarse Silty SAND to Sandy SILT		21		
18	B4-7			SM/ML			17		
20									
22	B4-8						16		
24	B4-9						10	113.5	18.6
24	B4-10						21		
26									
26									
28	B4-11			ML	Moderately dense to dense, saturated, brown, fine to medium Sandy SILT		29		

Figure A-6, Log of Boring-B 4

ALA

SAMPLE SYMBOLS	<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>	... STANDARD PENETRATION TEST	<input type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)
	<input type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input type="checkbox"/>	... CHUNK SAMPLE	<input type="checkbox"/>	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

BORING B 4									
DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	ELEV. (MSL.)	DATE COMPLETED	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					9	2/22/01			
					EQUIPMENT				
					MAYHEW 1000				
MATERIAL DESCRIPTION									
30	B4-12						22		
32									
34	B4-13						19		
36	B4-14			SM	Dense, saturated, brown, fine to coarse Silty SAND		25	123.8	15.2
38	B4-15						33		
40	B4-16						23		
42	B4-17			ML	Stiff, saturated, gray and yellow, Clayey SILT		20		
44	B4-18						17	98.9	27.7
46	B4-19						26		
48				SM	Dense, saturated, brown, fine to coarse Silty SAND				
50	B4-20						31		
BORING TERMINATED AT 51.5 FEET									

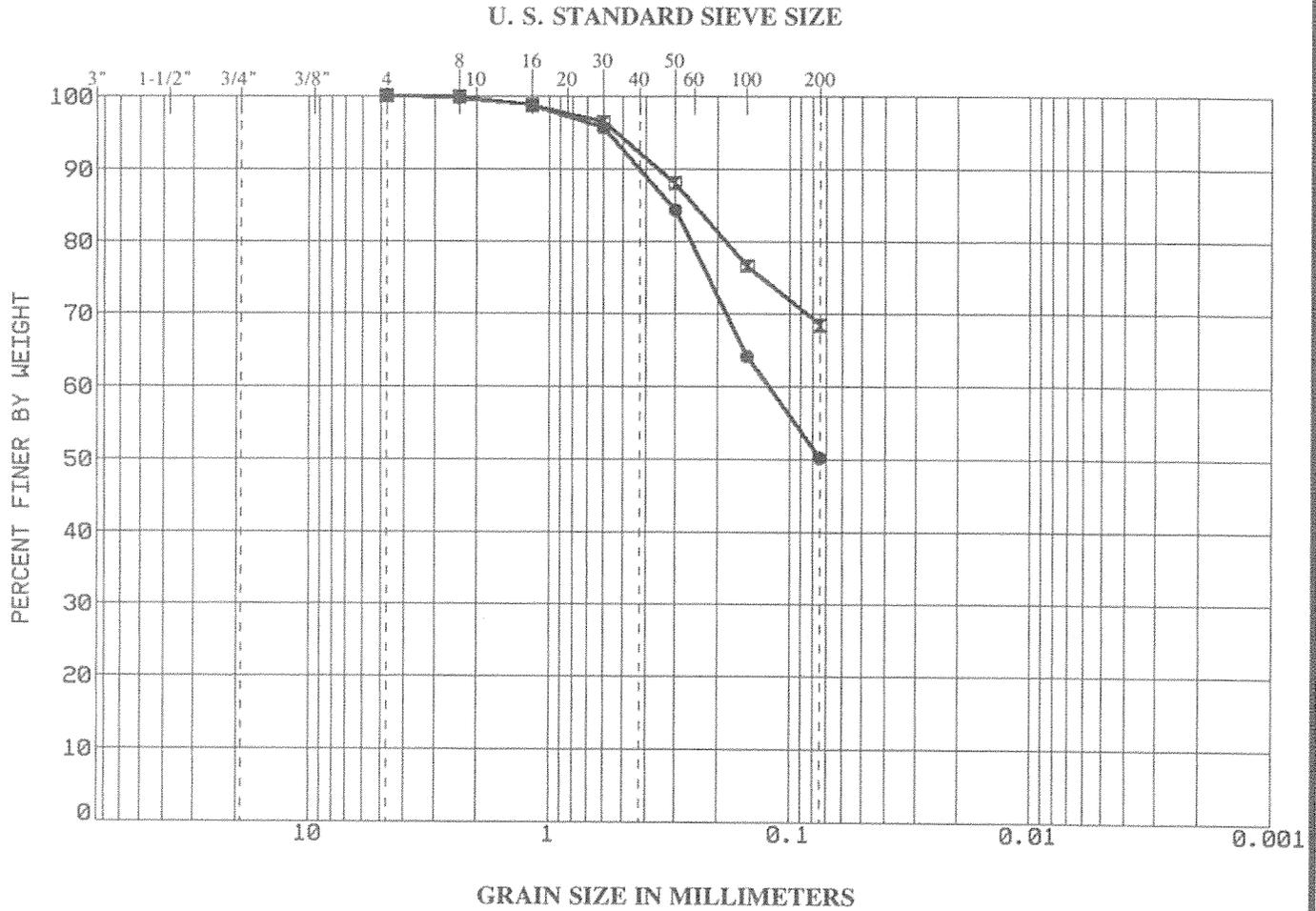
Figure A-7, Log of Boring-B 4

ALA

SAMPLE SYMBOLS	□ ... SAMPLING UNSUCCESSFUL	▣ ... STANDARD PENETRATION TEST	■ ... DRIVE SAMPLE (UNDISTURBED)
	⊠ ... DISTURBED OR BAG SAMPLE	▤ ... CHUNK SAMPLE	▽ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



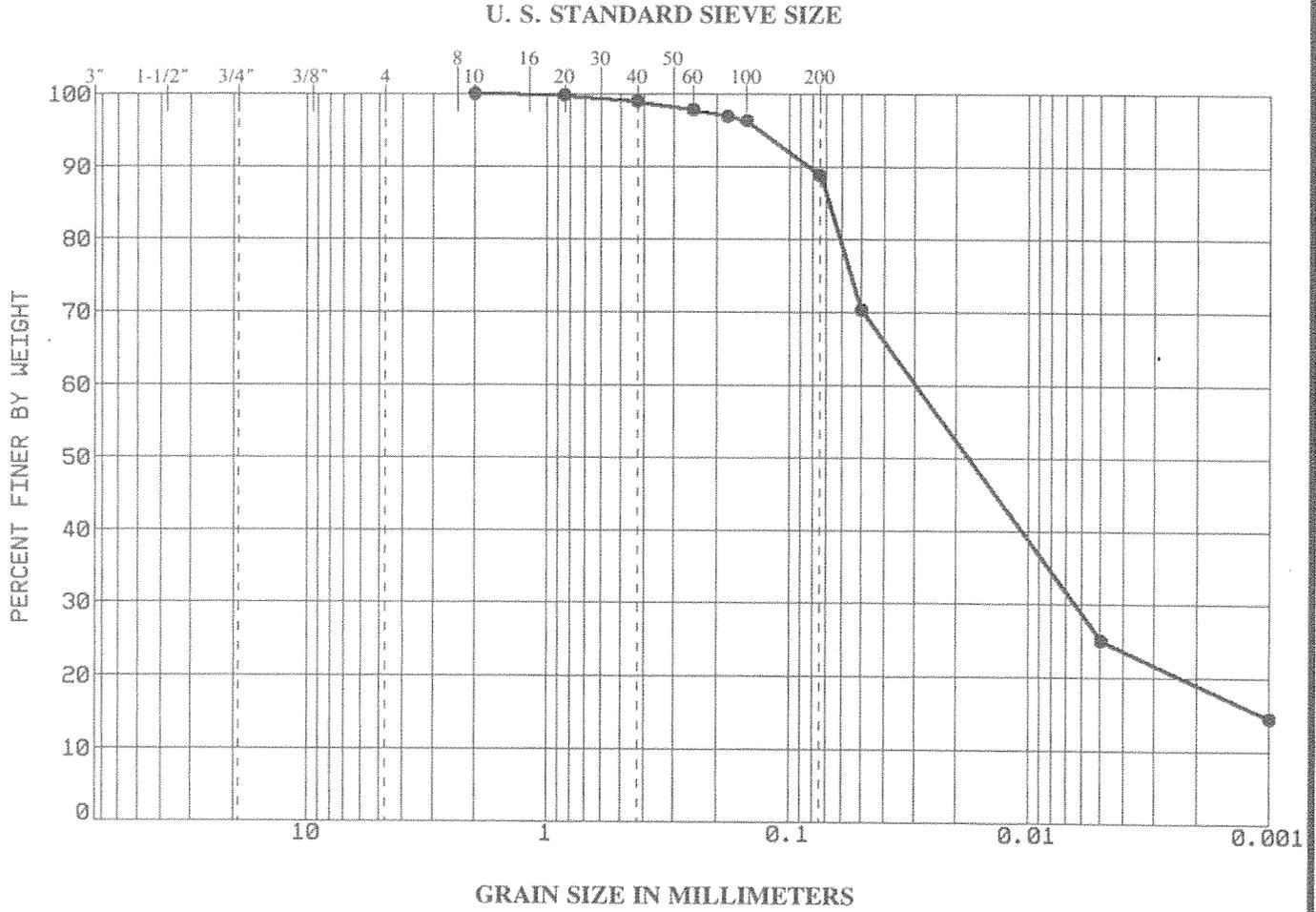
SAMPLE	Depth (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
● B4-7	18.0	(SM/ML)				
☒ B4-11	27.0	(ML)				

GRADATION CURVE

ANCHORAGE LANE APARTMENTS

SAN DIEGO, CALIFORNIA

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



SAMPLE	Depth (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
B4-17	42.0	(ML)				

GRADATION CURVE

ANCHORAGE LANE APARTMENTS

SAN DIEGO, CALIFORNIA

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	BORING B 1		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
				SOIL CLASS (USCS)	ELEV. (MLLW.) 15.5 DATE COMPLETED 01-21-2009 EQUIPMENT M4 6" MUD ROTARY BY: C. LIANG			
MATERIAL DESCRIPTION								
0					ASPHALT~5.5-inch			
0 - 2	B1-1			SW	UNDOCUMENTED FILL (Qudf) Medium dense, moist, brown, fine to medium SAND; trace shells		103.2	14.2
2 - 6	B1-2					11	95.5	24.3
6 - 14	B1-3				-Becomes wet, grayish brown -Encounterd groundwater	27	108.6	27.6
14 - 20	B1-4			SM	BAY DEPOSITS (Qb) Loose, saturated, dark gray, Silty, fine to medium SAND -Sample unsuccessful, no recovery	6		
20 - 26	B1-5			ML	Very soft, saturated, dark olive gray, fine to medium Sandy SILT	1		37.0
26 - 28	B1-6			SM	Very loose, saturated, dark gray, Silty, fine SAND	PUSH		35.8

Figure A-1,
Log of Boring B 1, Page 1 of 2

G1071-52-01.GPJ

SAMPLE SYMBOLS	... SAMPLING UNSUCCESSFUL	... STANDARD PENETRATION TEST	... DRIVE SAMPLE (UNDISTURBED)
	... DISTURBED OR BAG SAMPLE	... CHUNK SAMPLE	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B 1		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MLLW.) 15.5	DATE COMPLETED 01-21-2009			
					EQUIPMENT M4 6" MUD ROTARY		BY: C. LIANG		
MATERIAL DESCRIPTION									
30	B1-7			SM	-Becomes medium dense		15		33.2
32									
34				CL	Very stiff, moist, dark gray, CLAY				
36	B1-8			SC	OLD PARALIC DEPOSITS (Qop) Medium dense, moist, reddish brown to olive gray, Clayey SAND; trace of calcium carbonate pods		22	110.3	19.7
38									
40	B1-9			SM	Medium dense, saturated, grayish brown, Silty, medium to coarse SAND; trace of mica		20		19.3
42									
44									
46	B1-10				-Becomes brown, finer grained		26	105.3	23.1
48									
50	B1-11				-Poor recovery		24		31.4
					BORING TERMINATED AT 51.5 FEET Water encountered at 13 feet Backfilled with 10 ft³ of bentonite slurry				

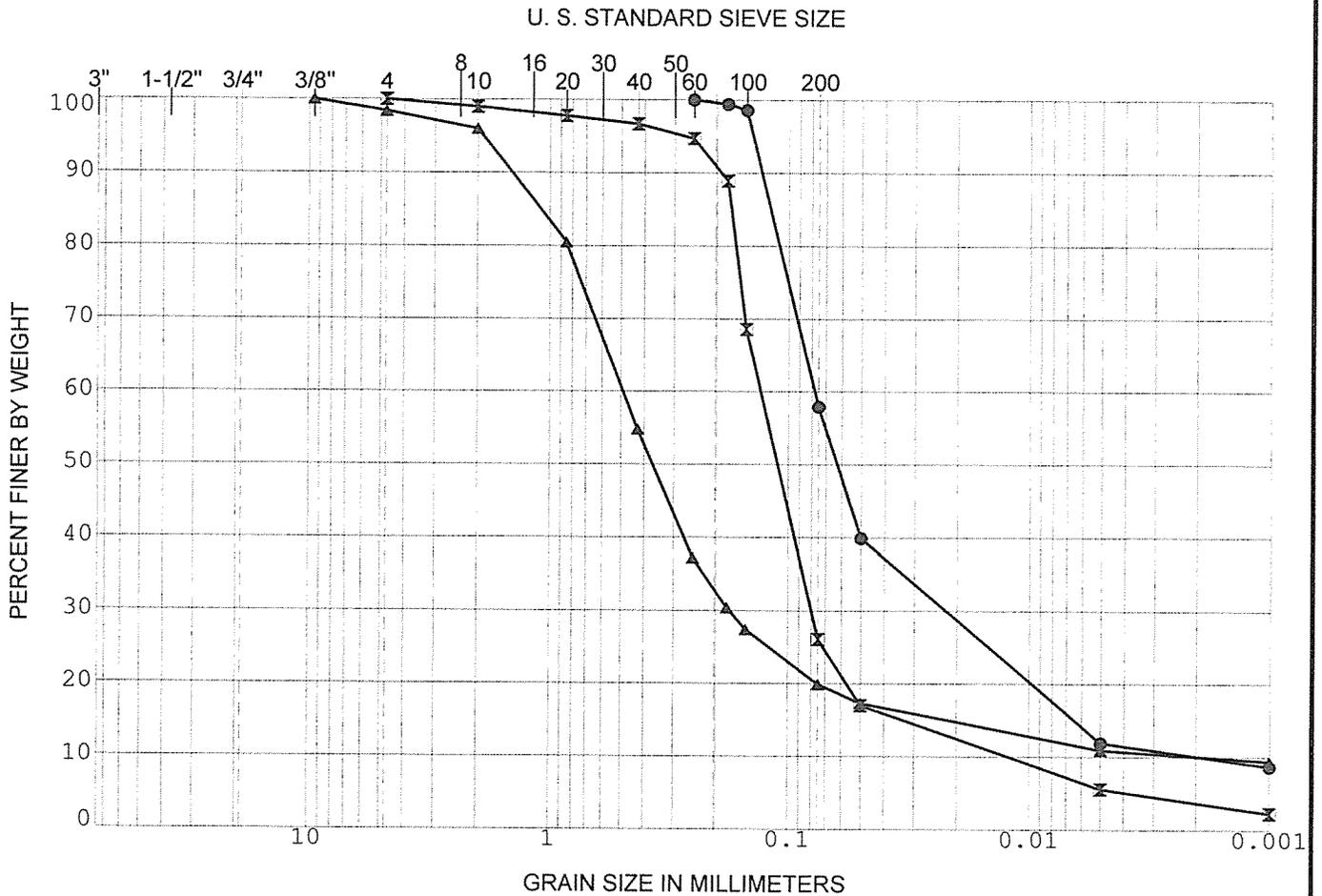
Figure A-1,
Log of Boring B 1, Page 2 of 2

G1071-52-01.GPJ

SAMPLE SYMBOLS	 ... SAMPLING UNSUCCESSFUL	 ... STANDARD PENETRATION TEST	 ... DRIVE SAMPLE (UNDISTURBED)
	 ... DISTURBED OR BAG SAMPLE	 ... CHUNK SAMPLE	 ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



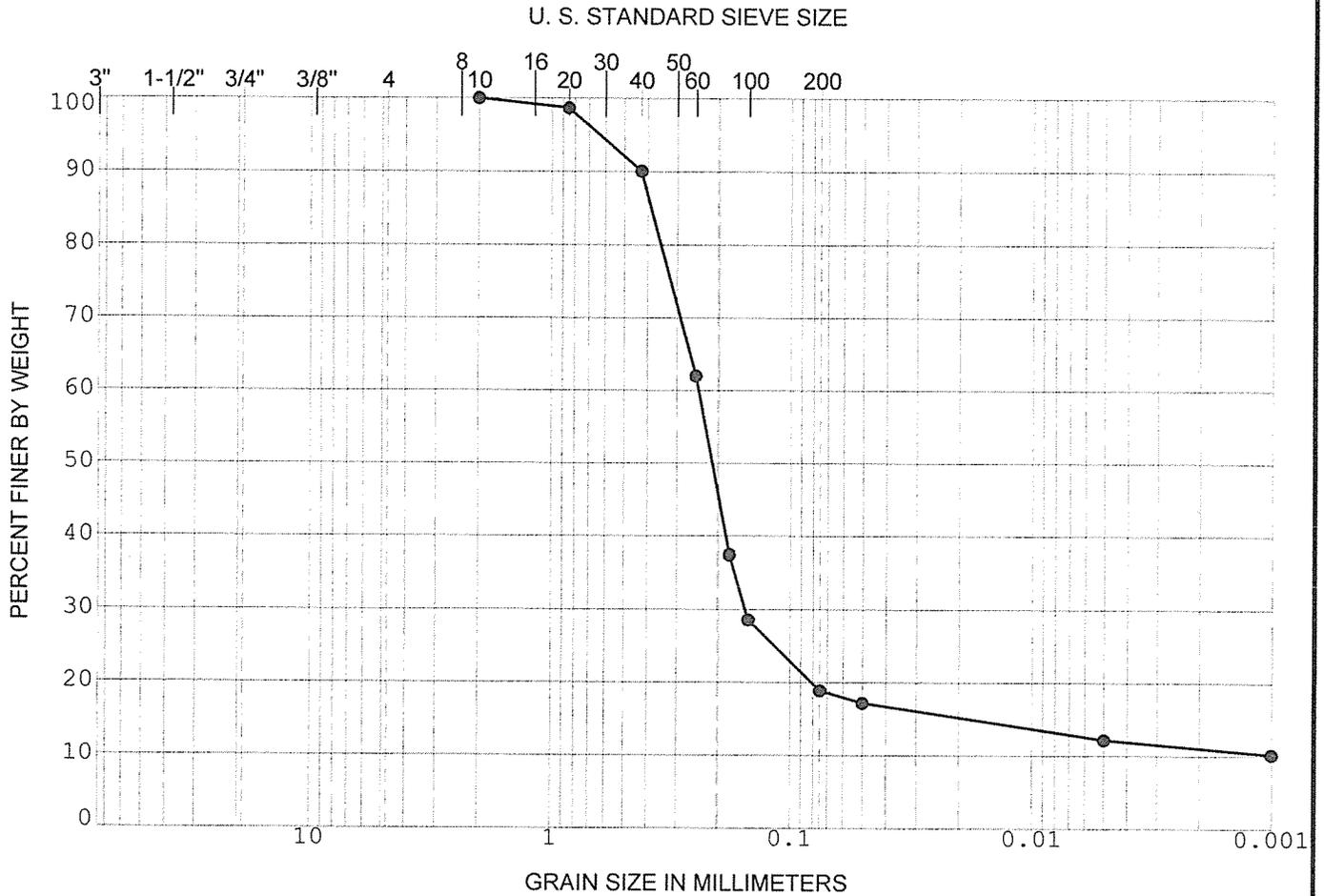
GRADATION CURVE

BALI HAI IMPROVEMENTS

SAN DIEGO, CALIFORNIA

Figure B-1

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



SAMPLE	DEPTH (ft)	CLASSIFICATION	NAT WC	LL	PL	PI
● B1-10	45.0	Silty SAND (SM)				

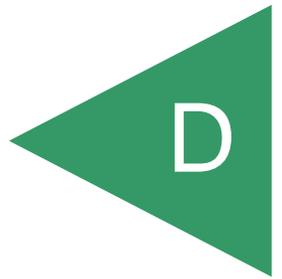
GRADATION CURVE

BALI HAI IMPROVEMENTS

SAN DIEGO, CALIFORNIA

Figure B-2

APPENDIX



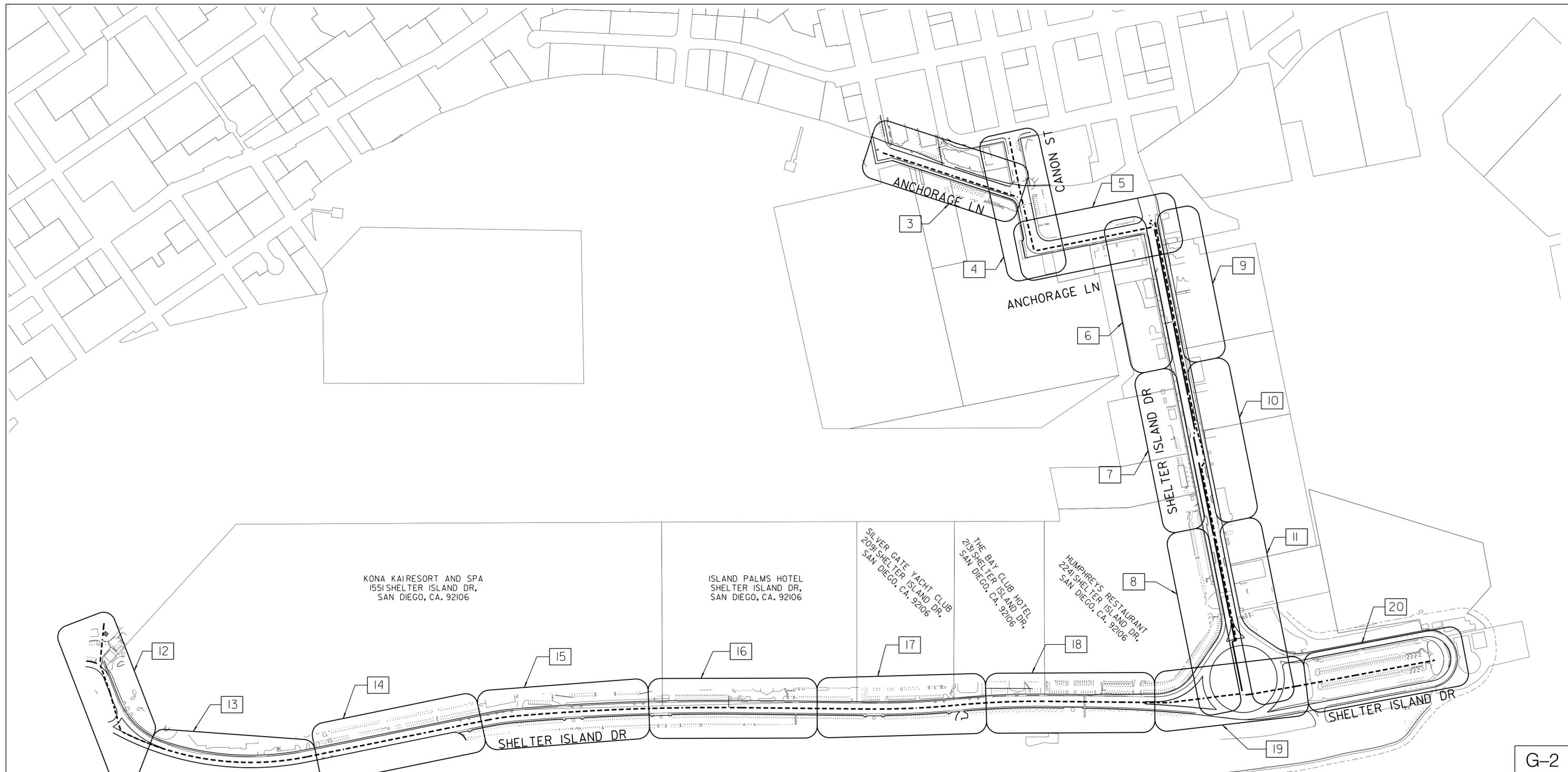
APPENDIX D

CURRENT PROJECT PLANS

FOR

AC WATER GROUP 1030
CONTRACT NO. H156367; TASK NO. 15GG19
SAN DIEGO, CALIFORNIA

PROJECT NO. G1849-52-21



LEGEND

NEW WATER MAIN

SHEET NO's (WATER)



NOT TO SCALE

PLANS FOR THE CONSTRUCTION OF
AC WATER GROUP 1030

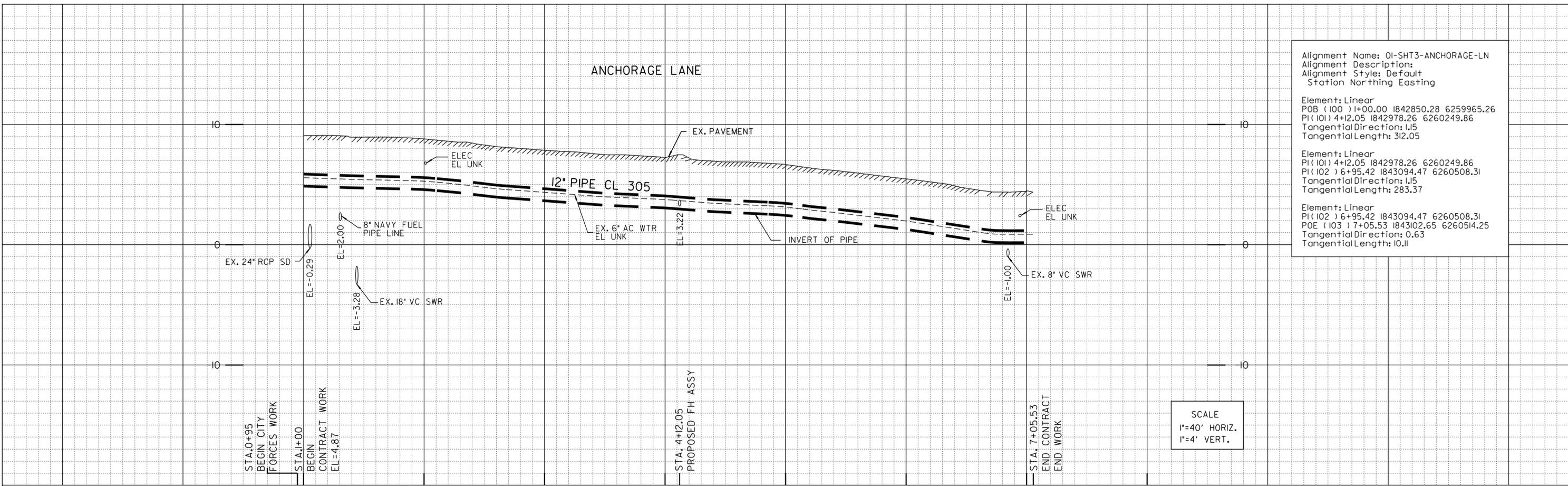
KEY MAP

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 02 OF 24 SHEETS

APPROVED:		DATE		SUBMITTED BY:	
FOR CITY ENGINEER MICHAEL NINH				MARYAM LIAGHAT PROJECT MANAGER	
PRINT DCE NAME		RCE#		CHECKED BY:	
				JAMAL SHERZAI PROJECT ENGINEER	
DESCRIPTION	BY	APPROVED	DATE	FILMED	
ORIGINAL	JS/SV				198-1695
					CCS27 COORDINATE
					6256407-1838444
					CCS83 COORDINATE
CONTRACTOR		DATE STARTED		40094-02-D	
INSPECTOR		DATE COMPLETED			

G-2

KEY MAP



Alignment Name: 01-SHT3-ANCHORAGE-LN
 Alignment Description:
 Alignment Style: Default
 Station Northing Easting

Element: Linear
 POB (100) 1+00.00 1842850.28 6259965.26
 PI (101) 4+12.05 1842978.26 6260249.86
 Tangential Direction: 1.15
 Tangential Length: 312.05

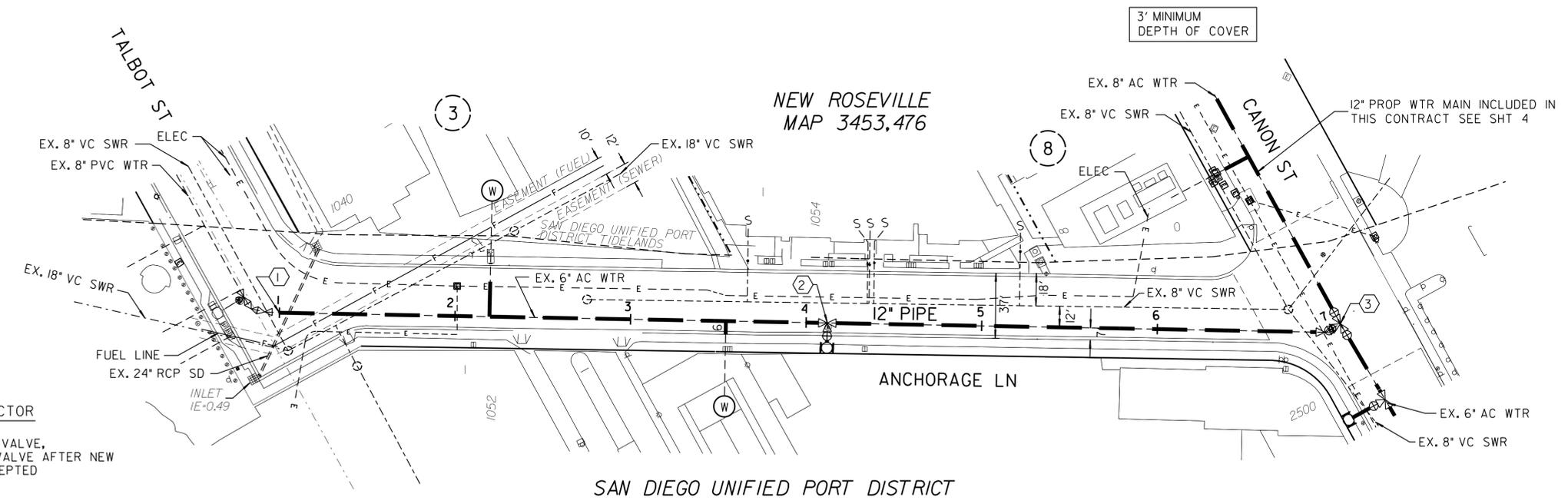
Element: Linear
 PI (101) 4+12.05 1842978.26 6260249.86
 PI (102) 6+95.42 1843094.47 6260508.31
 Tangential Direction: 1.15
 Tangential Length: 283.37

Element: Linear
 PI (102) 6+95.42 1843094.47 6260508.31
 POE (103) 7+05.53 1843102.65 6260514.25
 Tangential Direction: 0.63
 Tangential Length: 10.11

SCALE
 1"=40' HORIZ.
 1"=4' VERT.

REFERENCE:
 WATER: 18764-3D
 SEWER: 1533-L, 29449-3D, 3161-B, 4251-B
 STORM DRAIN:
 GAS:
 ELECTRIC: 15690-118770, 15697-118770
 CABLE TV:
 TELEPHONE: BLZ 1961
 IMPROVEMENTS:
 100' SCALE/FIELD BOOK:
 THOMAS BROS.:
 HGL: POINT LOMA 260

RETIREMENTS:
 6" - AC - 605.53' - 1949
 FH (3-PORT) - 1
 1.5" SERVICE - 1- MATERIAL - 1949
 6" SERVICE - 1- MATERIAL - 1949



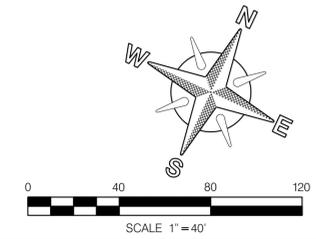
① ---
 BY CITY FORCES
 AHD OF CONTRACTOR
 STA 0+95.00
 CLOSE EX 8" GATE VALVE,
 OPEN EX 8" GATE VALVE AFTER NEW
 MAIN HAS BEEN ACCEPTED

② ①01
 BY CONTRACTOR
 FURNISH AND INSTALL
 STA 4+12.05
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)

③ ①03
 BY CONTRACTOR
 FURNISH AND INSTALL
 STA 7+05.53
 1- 12" x 12" TEE (F)
 3 - 12" GV (F, MJ) BK, LT, RT
 1- 12" 22' 1/2 BEND (MJ), BK

CITY FORCES NOTES:
 LIMITS OF HIGHLINING APPROXIMATELY FROM
 STA. 1+00 TO STA. 7+05.53 ANCHORAGE LANE
 SHALL BE HIGHLINING BY CITY FORCES
 PRIOR TO CONSTRUCTION.
 CITY FORCES TO FURNISH HIGHLINING MATERIALS
 AND PERFORM TRANSFER OF SERVICES.

CAUTION:
 NAVY FUEL LINE, CONTRACTOR TO VERIFY EXACT
 LOCATION AND MUST CONTACT NAVY FUEL DEPT
 STEVE FRE'S (619) 553-1314 THREE (3) WEEKS
 IN ADVANCE PRIOR TO EXCAVATION. NAVY FUEL
 DEPT STANDBY REQUIRED.



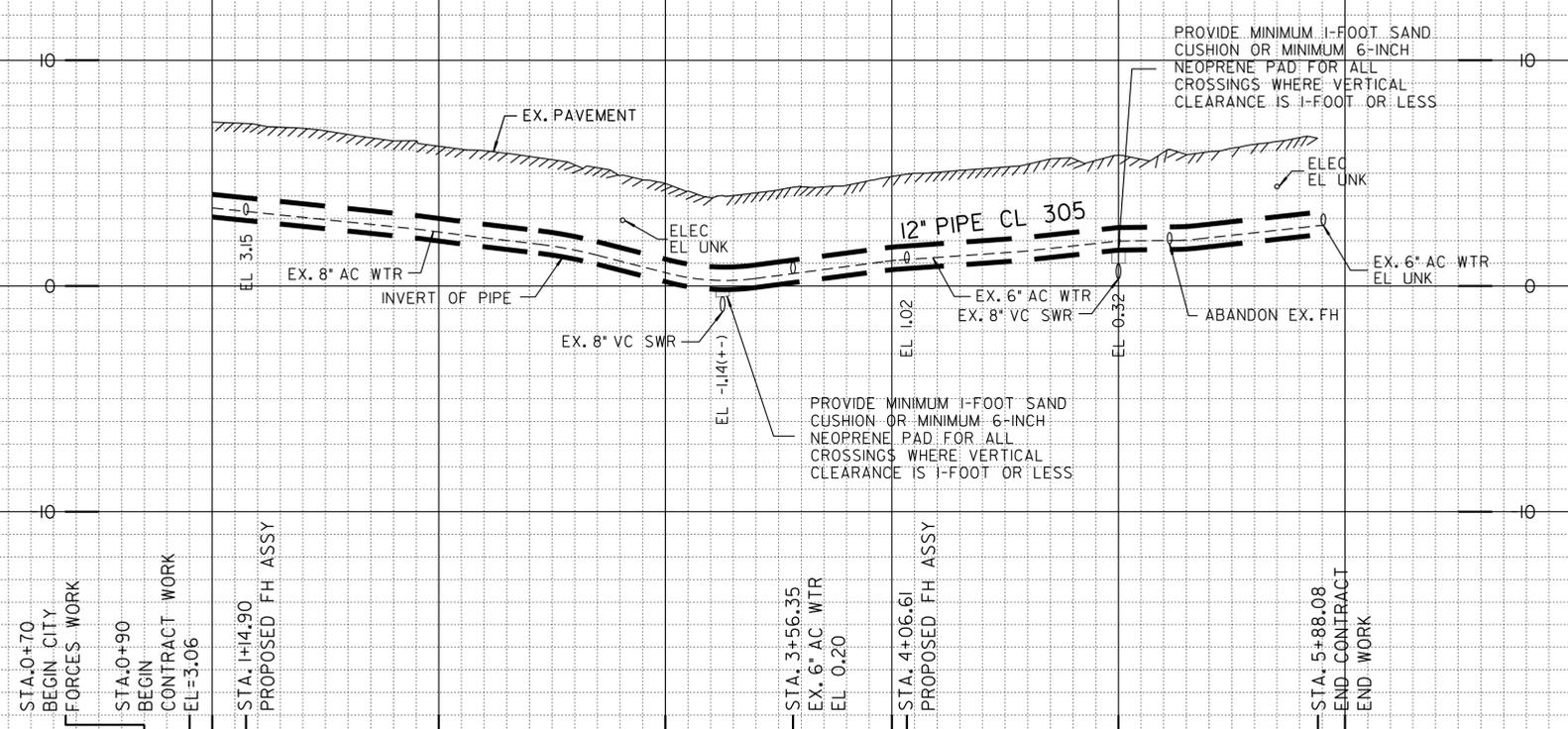
AC WATER GROUP 1030
 ANCHORAGE LANE
 TALBOT STREET TO CANON STREET

CITY OF SAN DIEGO, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 SHEET 03 OF 24 SHEETS

APPROVED:		DATE		WATER WBS B-16042	
FOR CITY ENGINEER MICHAEL NINH				SUBMITTED BY MARYAM LIAGHAT PROJECT MANAGER	
PRINT DCE NAME		RCE#		CHECKED BY JAMAL SHERZAI PROJECT ENGINEER	
DESCRIPTION	BY	APPROVED	DATE	FILMED	198-1695
ORIGINAL	JS/SV				CCS27 COORDINATE
					6256407-1838444
					CCS83 COORDINATE
CONTRACTOR		DATE STARTED		40094-03-D	
INSPECTOR		DATE COMPLETED			

ANCHORAGE LANE

CANON STREET



Alignment Name: 02-SHT4-CANON-ST
 Alignment Description:
 Station Northing Easting

Element: Linear
 POB (120) 1+00.00 1843253.25 6260306.80
 PI (121) 1+14.90 1843244.50 6260318.86
 Tangential Direction: 2.20
 Tangential Length: 14.90

Element: Linear
 PI (121) 1+14.90 1843244.50 6260318.86
 PI (103) 3+56.35 1843102.65 6260514.25
 Tangential Direction: 2.20
 Tangential Length: 241.45

Element: Linear
 PI (103) 3+56.35 1843102.65 6260514.25
 PI (122) 4+06.61 1843074.39 6260555.82
 Tangential Direction: 2.17
 Tangential Length: 50.26

Element: Linear
 PI (122) 4+06.61 1843074.39 6260555.82
 PI (123) 5+22.59 1843009.19 6260651.74
 Tangential Direction: 2.17
 Tangential Length: 115.98

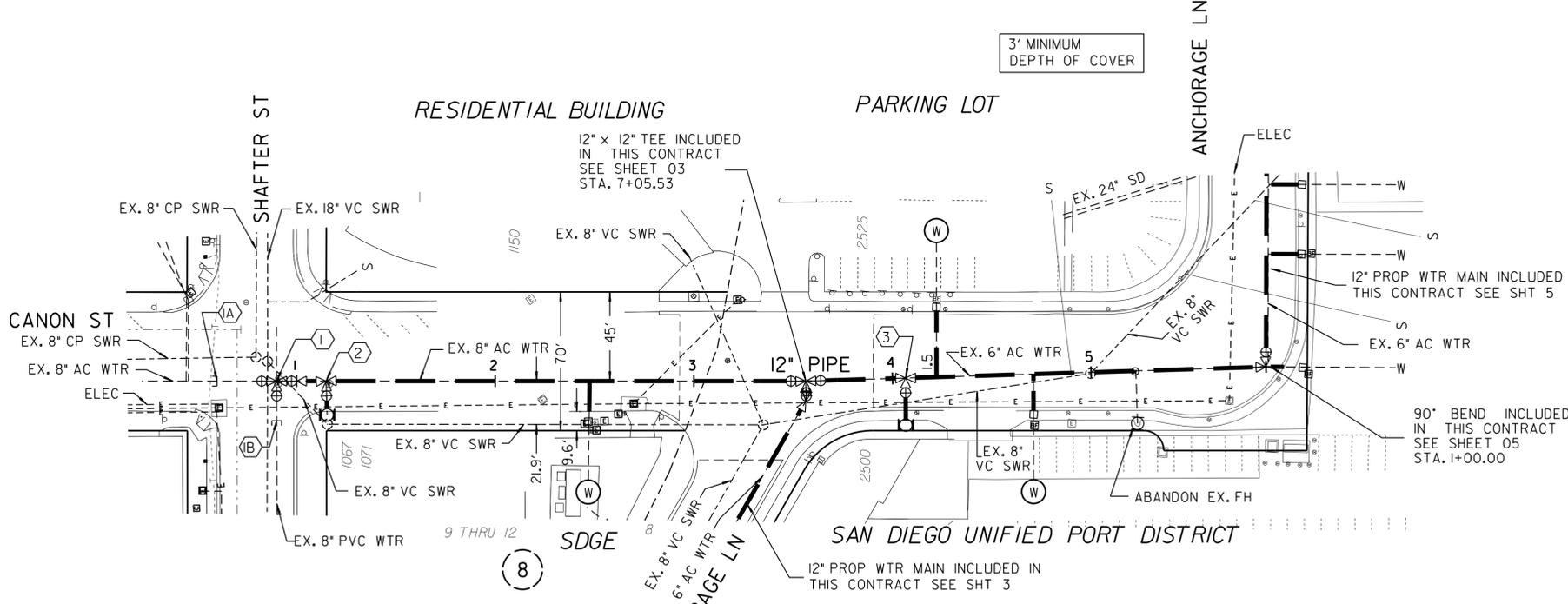
Element: Linear
 PI (123) 5+22.59 1843009.19 6260651.74
 POE (124) 5+88.08 1842972.37 6260705.90
 Tangential Direction: 2.17
 Tangential Length: 65.49

SCALE
 1"=40' HORIZ.
 1"=4' VERT.

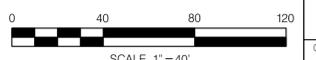
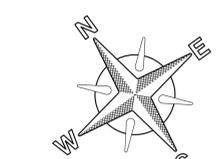
REFERENCE:
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 SEWER: 4251-0B, 29449-3D, 29449-2D, 4251-0B
 STORM DRAIN: 8082-B
 GAS:
 ELECTRIC: 15697-118775, 15697-118770
 CABLE TV:
 TELEPHONE:
 IMPROVEMENTS:
 100' SCALE/FIELD BOOK:
 THOMAS BROS.:
 HGL: P:OINT LOMA 260

RETIREMENTS:
 6" - AC - 255' - 1951
 8" - AC - 235' - 1979
 FH (2-PORT) - 2
 1" SERVICE - 2 - UNK - 1951
 1.5" SERVICE - 1 - UNK - 1979

- (A) --- BY CITY FORCES AHD OF CONTRACTOR
 STA 0+70.00
 CUT AND PLUG
 RECONNECT AFTER NEW MAIN HAS BEEN ACCEPTED
- (B) --- BY CITY FORCES AHD OF CONTRACTOR
 STA 0+90.00
 CUT AND PLUG ± 20' RT
 RECONNECT AFTER NEW MAIN HAS BEEN ACCEPTED
- (1) --- BY CONTRACTOR FURNISH AND INSTALL
 STA 0+90.00
 1- 8"x8" TEE (F)
 3 - 8" GV (F, MJ) BK, AHD, RT
 1- 12"x8" REDUCER AHD
- (2) (121) BY CONTRACTOR FURNISH AND INSTALL
 STA 1+14.90
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)
- (3) (122) BY CONTRACTOR FURNISH AND INSTALL
 STA 4+06.61
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)



CITY FORCES NOTES:
 LIMITS OF HIGHLINING APPROXIMATELY FROM STA. 1+00 TO STA. 5+88.08 CANON STREET SHALL BE HIGHLINING BY CITY FORCES PRIOR TO CONSTRUCTION. CITY FORCES TO FURNISH HIGHLINING MATERIALS AND PERFORM TRANSFER OF SERVICES.



C-2

AC WATER GROUP 1030
 CANON STREET
 SHAFTER STREET TO ANCHORAGE LANE

CITY OF SAN DIEGO, CALIFORNIA PUBLIC WORKS DEPARTMENT SHEET 04 OF 24 SHEETS		WATER WB# B-16042
FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	DATE
PROJECT MANAGER MARYAM LIAGHAT	PROJECT ENGINEER JAMAL SHERZAI	
DESCRIPTION	BY	APPROVED
ORIGINAL	JS/SV	
		DATE
		FILMED
		198-1695
		CCS27 COORDINATE
		6256407-1838444
		CCS83 COORDINATE
		40094-04-D

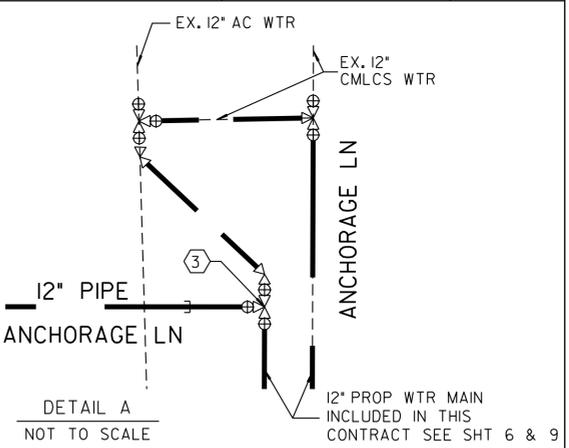
CANON STREET

ANCHORAGE LANE

Alignment Name: 03-SHT5-ANCHORAGE-LN
 Alignment Description:
 Alignment Style: Default
 Station Northing Easting

Element: Linear
 POB (124) 1+00.00 1842972.37 6260705.90
 PI (140) 4+01.33 1843215.76 6260883.55
 Tangential Direction: 0.63
 Tangential Length: 301.33

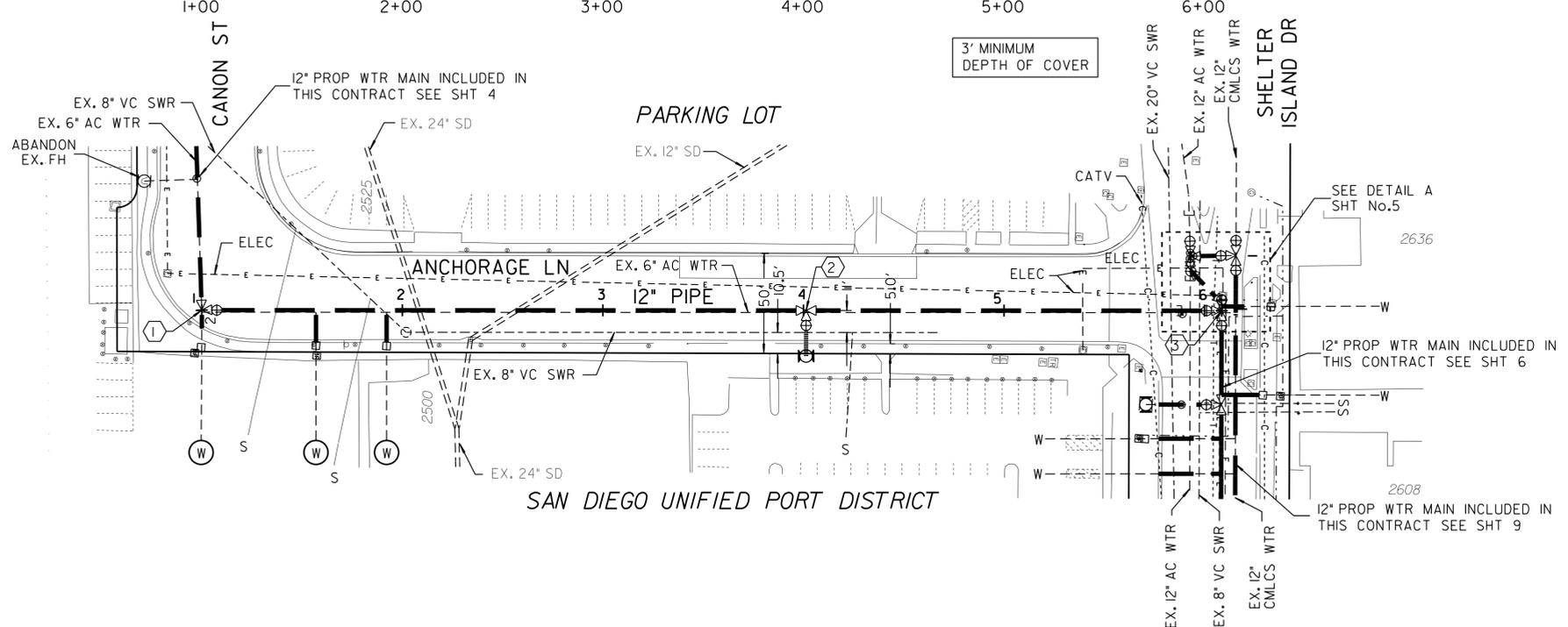
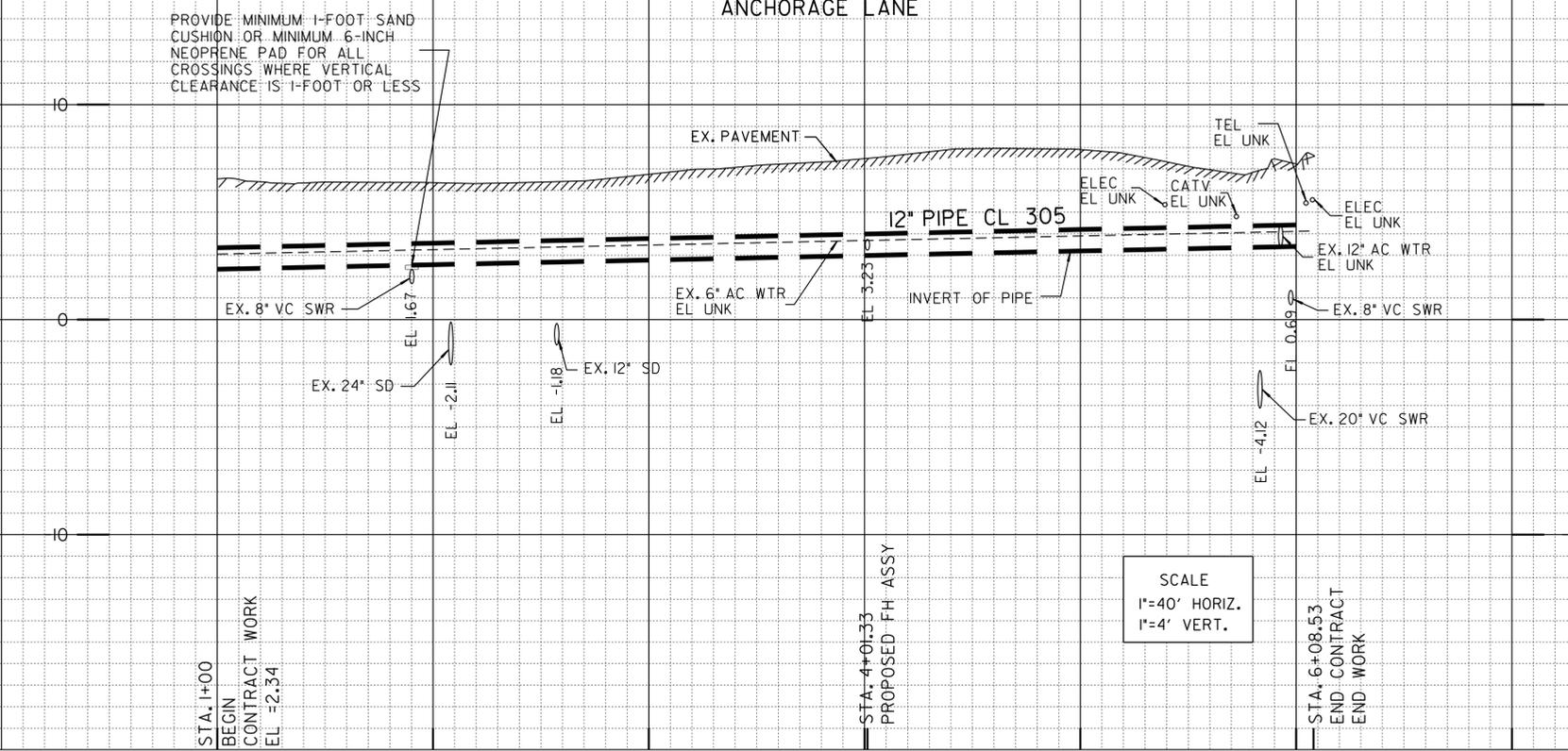
Element: Linear
 PI (140) 4+01.33 1843215.76 6260883.55
 POE (141) 6+08.53 1843383.13 6261005.71
 Tangential Direction: 0.63
 Tangential Length: 207.20



SCALE
 1"=40' HORIZ.
 1"=4' VERT.

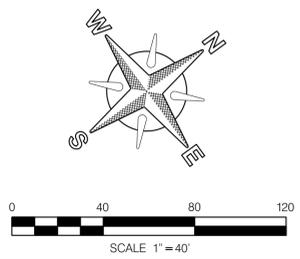
REFERENCE:
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 SEWER: 4251-B, 8062-B, 24353-2D, 971I-D
 STORM DRAIN: 8082-B
 GAS: 15705-118780
 ELECTRIC: 15697-118780
 CABLE TV: COX FACILITY MAP 1
 TELEPHONE: BL21961
 IMPROVEMENTS:
 100' SCALE/FIELD BOOK:
 THOMAS BROS.:
 HGL: POINT LOMA 260

RETIREMENTS:
 6" - AC - 508.04' - 1951
 2" SERVICE - 1 - UNK - 1951
 1" SERVICE - 2 - UNK - 1951



- ① ⑫④ BY CONTRACTOR FURNISH AND INSTALL
 STA 1+00.00
 1- 12" 90° BEND (MJ)
 1- 12" GV (F.MJ), AHD
- ② ⑭① BY CONTRACTOR FURNISH AND INSTALL
 STA 4+01.33
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)
- ③ ⑮① BY CITY FORCE AHEAD OF CONTRACTOR
 STA 6+08.53
 CUT AND PLUG 20' BK RECONNECT AFTER NEW MAIN HAS BEEN ACCEPTED

CITY FORCES NOTES:
 LIMITS OF HIGHLINING APPROXIMATELY FROM STA. 1+00 TO STA. 6+08.53 ANCHORAGE LANE SHALL BE HIGHLINING BY CITY FORCES PRIOR TO CONSTRUCTION. CITY FORCES TO FURNISH HIGHLINING MATERIALS AND PERFORM TRANSFER OF SERVICES.



AC WATER GROUP 1030
 ANCHORAGE LANE
 STA. 1+00 TO SHELTER ISLAND DRIVE.

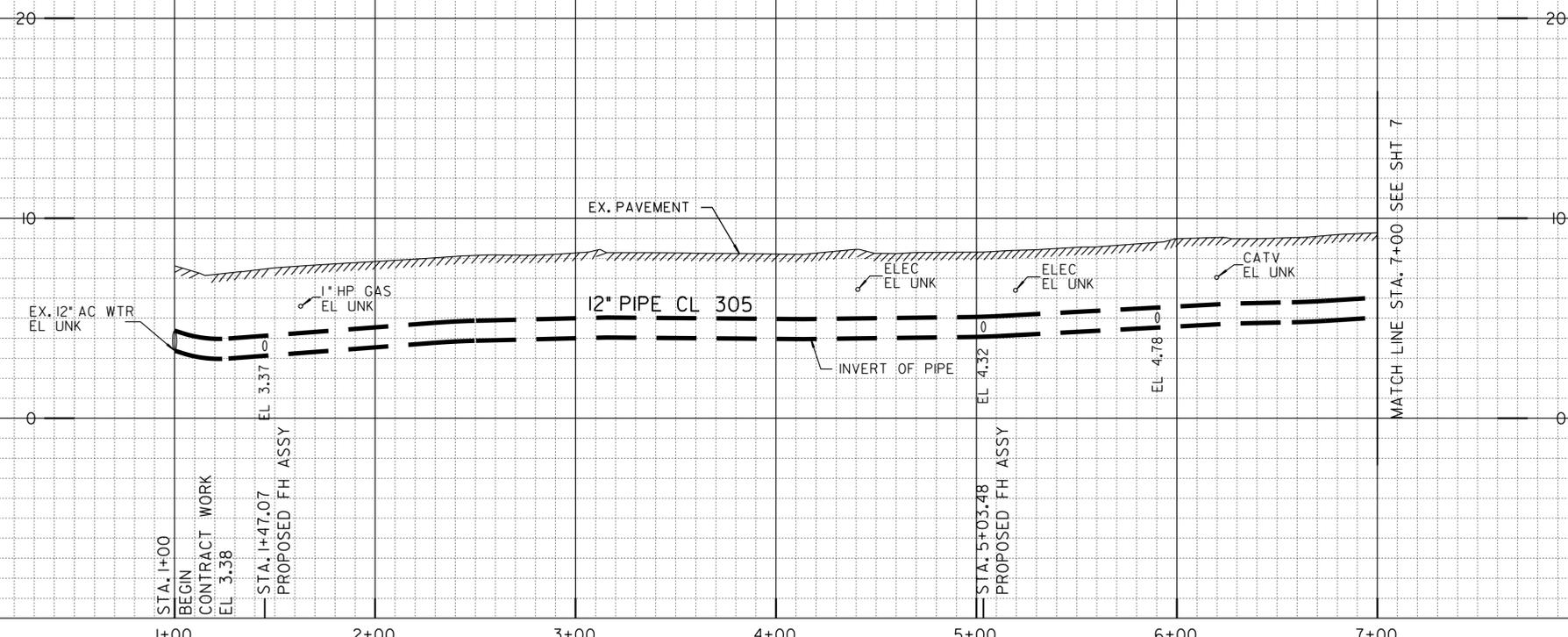
CITY OF SAN DIEGO, CALIFORNIA PUBLIC WORKS DEPARTMENT SHEET 05 OF 24 SHEETS		WATER WBS B-16042
APPROVED: FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	SUBMITTED BY MARYAM LIAGHAT PROJECT MANAGER
DESIGNER ORIGINAL	BY JS/SV	CHECKED BY JAMAL SHERZAI PROJECT ENGINEER
APPROVED	DATE	198-1695 CCS27 COORDINATE
FILED		6256407-1838444 CCS83 COORDINATE
CONTRACTOR INSPECTOR		DATE STARTED DATE COMPLETED
		40094-05-D

ANCHORAGE LANE

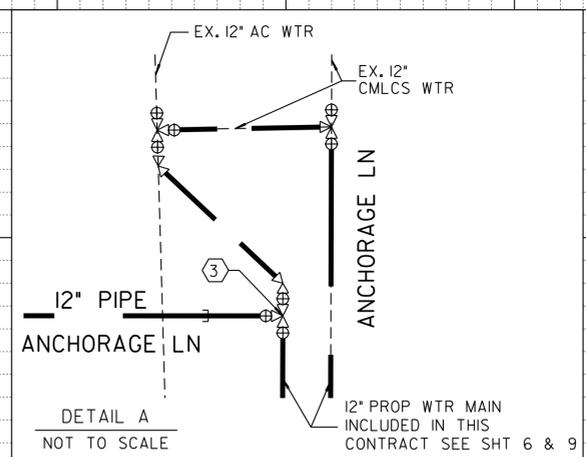
C-3

SHELTER ISLAND DRIVE

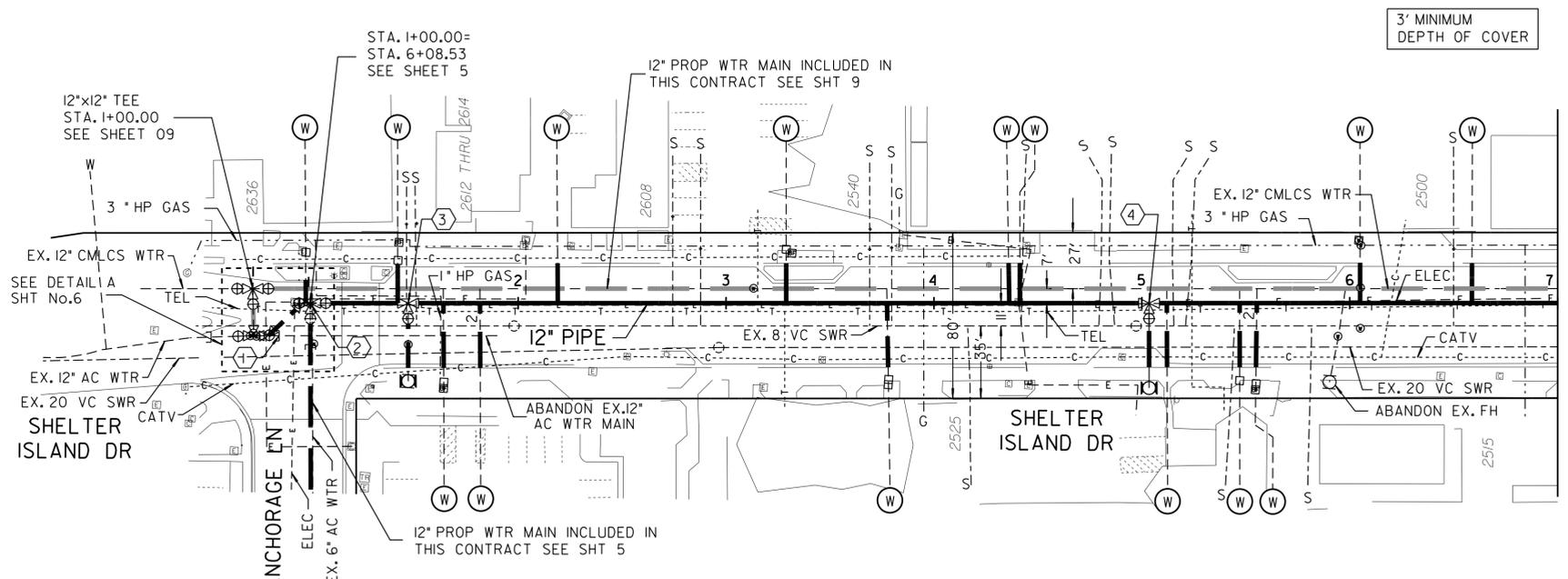
Alignment Name: O4-SHT6-7-8-SHELTER-IS-NEW2A
 Element: Linear
 Alignment Description:
 Alignment Style: Default
 Station Northing Easting
 Element: Linear
 POB (141) 1+00.00 1843383.13 6261005.71
 PI (160) 1+47.07 1843355.27 6261043.64
 Tangential Direction: 2.20
 Tangential Length: 47.07
 Element: Linear
 POB (161) 1+00.00 1843383.13 6261005.71
 PI (162) 1+47.07 1843355.27 6261043.64
 Tangential Direction: 2.20
 Tangential Length: 47.07
 Element: Linear
 POB (163) 1+47.07 1843355.27 6261043.64
 PI (164) 1+47.07 1843355.27 6261043.64
 Tangential Direction: 2.20
 Tangential Length: 350.21
 Element: Linear
 POB (161) 4+97.28 1843148.02 6261325.95
 PI (162) 5+03.48 1843144.36 6261330.95
 Tangential Direction: 2.20
 Tangential Length: 6.20
 Element: Linear
 POB (162) 5+03.48 1843144.36 6261330.95
 PI (163) 5+90.26 1843093.02 6261400.92
 Tangential Direction: 2.20
 Tangential Length: 86.78
 Element: Linear
 POB (163) 5+90.26 1843093.02 6261400.92
 PI (164) 7+97.76 1842970.28 6261568.22
 Tangential Direction: 2.20
 Tangential Length: 207.50



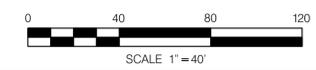
SCALE
 1"=40' HORIZ.
 1"=4' VERT.



REFERENCE:
 WATER: 5500W, 18764-3D, 24353-3D, 11558-D
 SEWER: 24353-2D, 9711-D, 24353-3D, 24353-4D
 STORM DRAIN:
 GAS: 15705-118775
 ELECTRIC: 15705-118775
 CABLE TV: COX FACILITY MAP 1
 TELEPHONE: BLZ1962
 IMPROVEMENTS:
 100' SCALE/FIELD BOOK:
 THOMAS BROS.:
 HGL: POINT LOMA 260



- ① --- BY CITY FORCES
 AHD OF CONTRACTOR
 STA 0+90.00
 PERMANENT CUT AND PLUG
 EX 12" AC WTR 16", RT
- ② (141) BY CONTRACTOR
 FURNISH AND INSTALL
 STA 1+00.00
 1- 12" x 12" TEE (F)
 3- 12" GV (F, MJ) BK, AHD, RT
 1- 12" 45" BEND (MJ) BK
 1- 10" STUB OUT BK
 1- 12" 45" BEND (MJ) BK
 1- 20" STUB OUT RT
 (KEEP THE 12" GV BK CLOSED AND BLIND FLANGED)
 RECONNECT AFTER NEW MAIN HAS BEEN
 ACCEPTED
- ③ (160) BY CONTRACTOR
 FURNISH AND INSTALL
 STA 1+47.07
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)
- ④ (162) BY CONTRACTOR
 FURNISH AND INSTALL
 STA 5+03.48
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)



AC WATER GROUP 1030
 (NEW MAIN) SHELTER ISLAND DRIVE
 ANCHORAGE LANE TO STA. 7+00

CITY OF SAN DIEGO, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 SHEET 06 OF 24 SHEETS

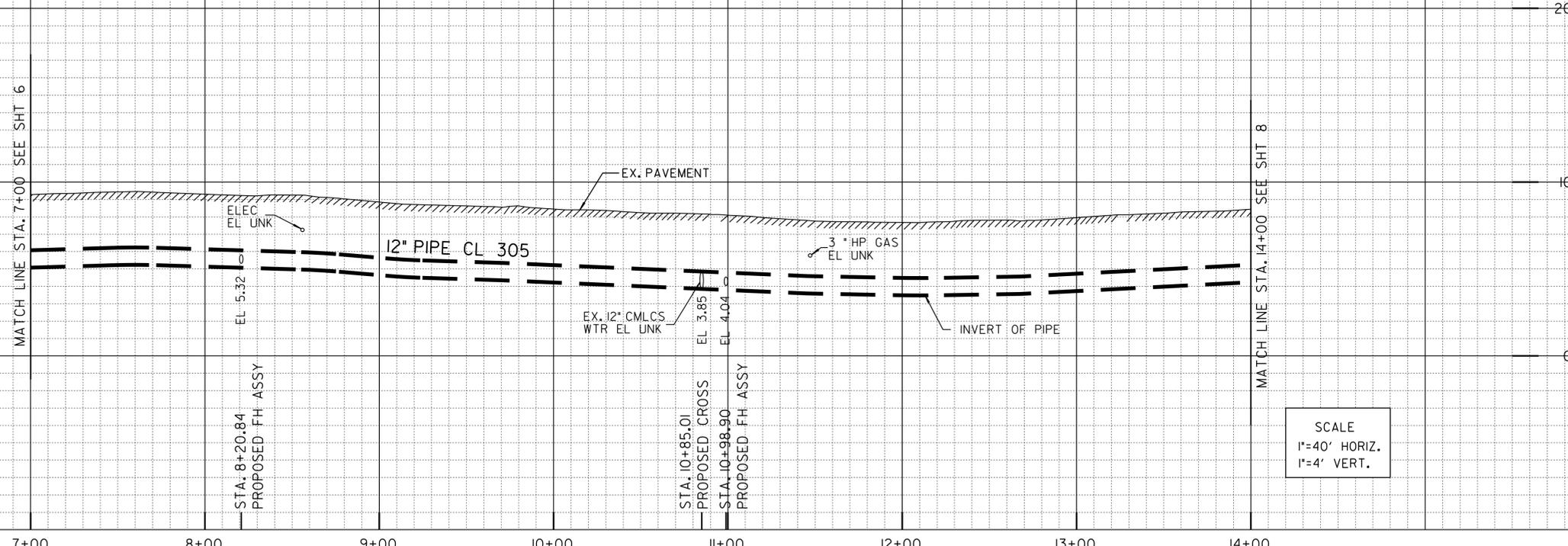
FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	RCE#	DATE	FILED	DATE	FILED	DATE	FILED
SUBMITTED BY MARYAM LIAGHAT PROJECT MANAGER			CHECKED BY JAMAL SHERZAI PROJECT ENGINEER			DATE STARTED		
DESCRIPTION			BY	APPROVED	DATE	FILED	DATE COMPLETED	
ORIGINAL			JS/SV				198-1695	
							6256407-1838444	
							40094-06-D	

C-4

SHELTER ISLAND DRIVE

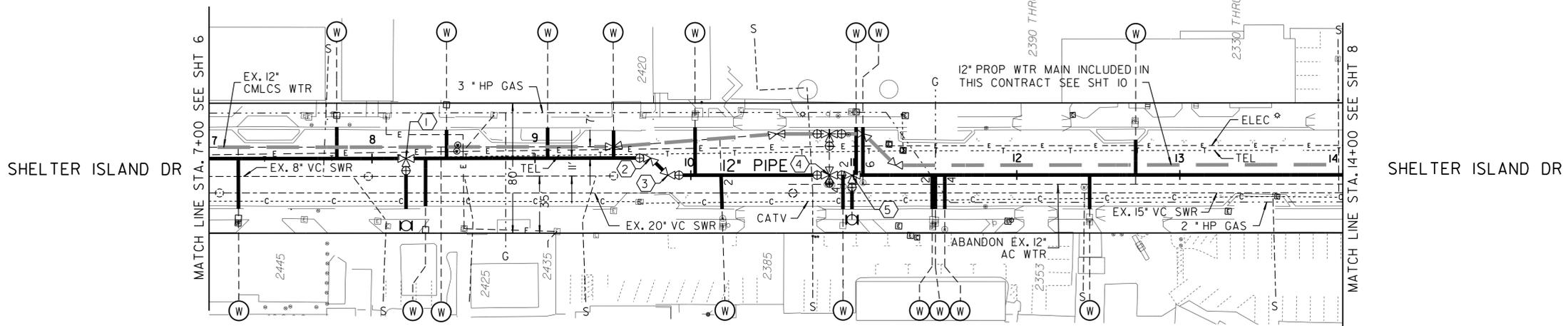
SHELTER ISLAND DRIVE

Alignment Name: 04-SHT6-7-8-SHELTER-IS-NEW2A			
Alignment Description:			
Alignment Style: Default			
Station Northing Easting			
Element: Linear	PI (163)	5+90.26	1843093.02 6261400.92
	PI (164)	7+97.76	1842970.28 6261568.22
Tangential Direction: 2.20			
Tangential Length: 207.50			
Element: Linear	PI (164)	7+97.76	1842970.28 6261568.22
	PI (165)	8+20.84	1842956.66 6261586.85
Tangential Direction: 2.20			
Tangential Length: 23.08			
Element: Linear	PI (165)	8+20.84	1842956.66 6261586.85
	PI (166)	9+71.02	1842868.02 6261708.08
Tangential Direction: 2.20			
Tangential Length: 150.18			
Element: Linear	PI (166)	9+71.02	1842868.02 6261708.08
	PI (167)	9+85.92	1842853.28 6261710.30
Tangential Direction: 2.99			
Tangential Length: 14.91			
Element: Linear	PI (167)	9+85.92	1842853.28 6261710.30
	PI (168)	10+85.01	1842794.67 6261790.21
Tangential Direction: 2.20			
Tangential Length: 99.09			
Element: Linear	PI (168)	10+85.01	1842794.67 6261790.21
	PI (169)	10+98.89	1842786.46 6261801.40
Tangential Direction: 2.20			
Tangential Length: 13.88			



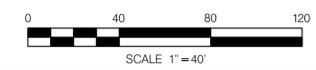
SCALE
1"=40' HORIZ.
1"=4' VERT.

- REFERENCE:
- WATER: 24353-3D, 11558-D
 - SEWER: 9711-ID, 24353-3D, 24353-4D
 - STORM DRAIN:
 - GAS: 15705-118775
 - ELECTRIC: 15705-118775, 15705-118780
 - CABLE TV: COX FACILITY MAP 1
 - TELEPHONE: BLZ 1962, BLZ 1963
 - IMPROVEMENTS:
 - 100' SCALE/FIELD BOOK:
 - THOMAS BROS.:
 - HGL: POINT LOMA 260



3' MINIMUM DEPTH OF COVER

- ① (165) BY CONTRACTOR FURNISH AND INSTALL
STA 8+20.84
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)
- ② (166) BY CONTRACTOR FURNISH AND INSTALL
STA 9+71.02
1- 12" 45° BEND (MJ)
1- 12" GV (F, MJ) BK,
- ③ (167) BY CONTRACTOR FURNISH AND INSTALL
STA 9+85.92
1- 12" 45° BEND (MJ)
1- 12" GV (F, MJ) AHD
- ④ (168) BY CONTRACTOR FURNISH AND INSTALL
STA 10+85.01
CUT IN
1- 12" x 12" CROSS (MJ, MJ)
3 - 12" GV (F, MJ) BK, AHD, RT
KEEP THE VALVES BK, AHD CLOSED
REOPEN AFTER THE NEW MAIN HAS
BEEN ACCEPTED
PERMANENTLY CLOSE THE VALVE RT AFTER
THE NEW MAIN HAS BEEN ACCEPTED
- ⑤ (169) BY CONTRACTOR FURNISH AND INSTALL
STA 10+98.89
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)



C-5

AC WATER GROUP 1030
(NEW MAIN) SHELTER ISLAND DRIVE
STA. 7+00.00 TO 14+00.00

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 02 OF 24 SHEETS

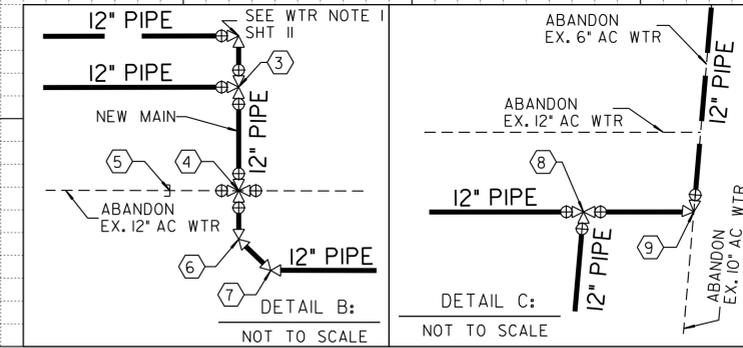
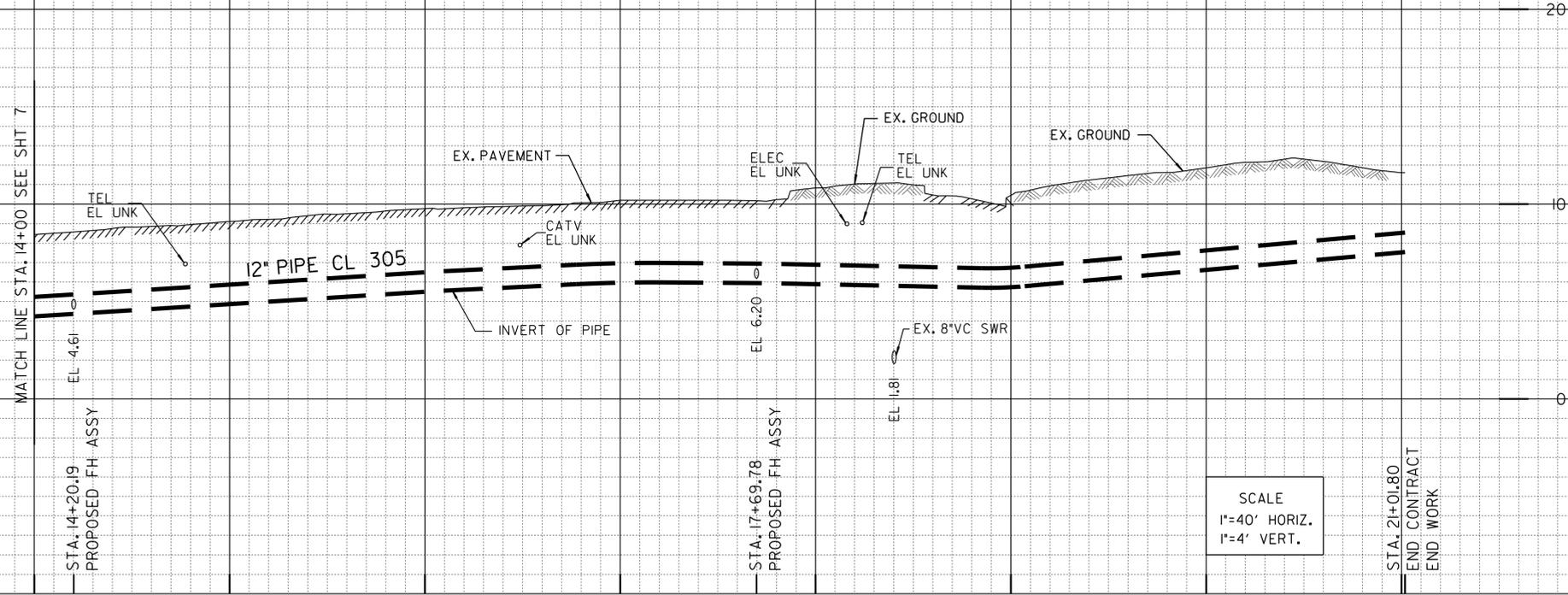
FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	RCE#	DATE	FILED	DATE	FILED
DESCRIPTION	BY	APPROVED	DATE	FILED	DATE	FILED
ORIGINAL	JS/SV					
SUBMITTED BY: MARYAM LIAGHAT PROJECT MANAGER						WATER WBS: B-16042
CHECKED BY: JAMAL SHERZAI PROJECT ENGINEER						
198-1695						
CCS27 COORDINATE						
6256407-1838444						
CCS83 COORDINATE						
40094-7-D						

SHELTER ISLAND DRIVE

SHELTER ISLAND DRIVE

Alignment Name: 04-SHT6-7-8-SHELTER-IS-NEW2A

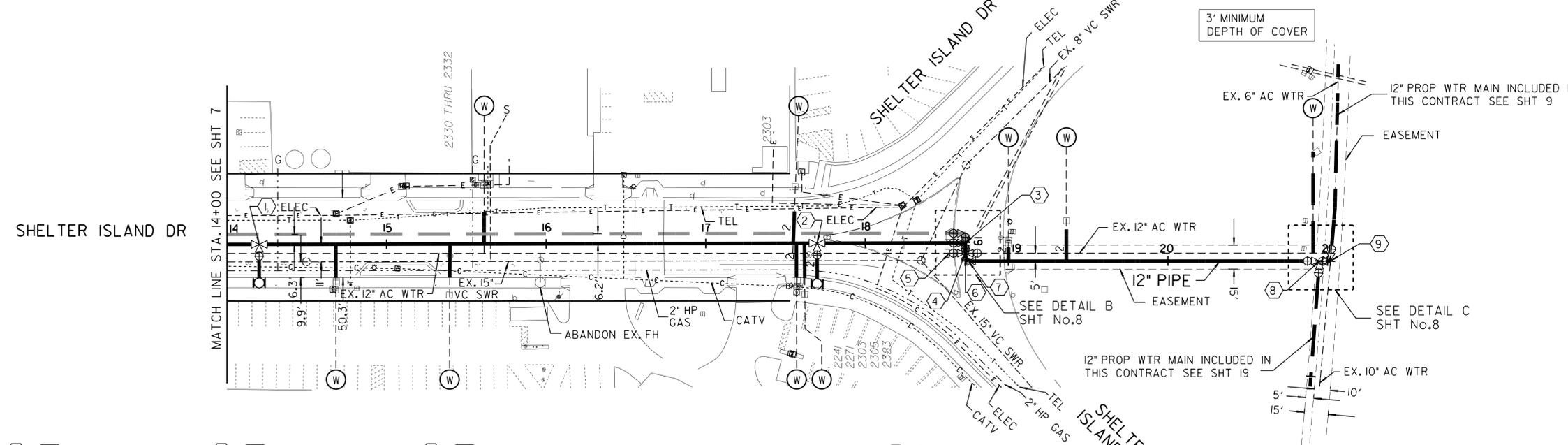
Element: Linear PI(169) 10+98.89 1842786.46 6261801.40 PI(170) 14+20.19 1842596.45 6262060.49 Tangential Direction: 2.20 Tangential Length: 321.30	Element: Linear PI(199) 18+62.71 1842335.33 6262417.75 PI(174) 18+69.20 1842330.09 6262413.91 Tangential Direction: 3.77 Tangential Length: 6.49
Element: Linear PI(171) 14+49.66 1842579.02 6262084.25 PI(172) 15+96.26 1842492.53 6262202.62 Tangential Direction: 2.20 Tangential Length: 29.47	Element: Linear PI(175) 18+72.20 1842327.67 6262412.13 PI(176) 18+75.03 1842324.87 6262412.56 Tangential Direction: 3.77 Tangential Length: 3.00
Element: Linear PI(172) 15+96.26 1842492.53 6262202.62 PI(173) 17+69.78 1842390.15 6262342.72 Tangential Direction: 2.20 Tangential Length: 173.52	Element: Linear PI(175) 18+72.20 1842327.67 6262412.13 PI(176) 18+75.03 1842324.87 6262412.56 Tangential Direction: 2.20 Tangential Length: 2.83
Element: Linear PI(173) 17+69.78 1842390.15 6262342.72 PI(199) 18+62.71 1842335.33 6262417.75 Tangential Direction: 2.20 Tangential Length: 92.93	Element: Linear PI(177) 20+94.91 1842194.81 6262589.85 POE (178) 21+01.80 1842190.74 6262595.40 Tangential Direction: 2.20 Tangential Length: 6.89



SCALE
1"=40' HORIZ.
1"=4' VERT.

14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00

REFERENCE:
WATER: I1558-D
SEWER: 24353-4D, 24353-3D
STORM DRAIN:
GAS: I5712-I18765, I5705-I18770
ELECTRIC: I5712-I18765, I5705-I18770
CABLE TV: COX FACILITY MAP I
TELEPHONE: BLZ 1962, BLZ 1963
IMPROVEMENTS:
100' SCALE/FIELD BOOK:
THOMAS BROS.
HGL: POINT LOMA 260



- ① (170) BY CONTRACTOR FURNISH AND INSTALL
STA 14+20.19
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)
- ② (173) BY CONTRACTOR FURNISH AND INSTALL
STA 17+69.78
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)
- ③ (199) BY CONTRACTOR FURNISH AND INSTALL
STA 18+62.71
1- 12" x 12" TEE (F)
3 - 12" GV (F, MJ) BK, LT, RT
- ④ (174) BY CONTRACTOR FURNISH AND INSTALL
STA 18+69.20
1- 12" x 12" CROSS (MJ, MJ)
4 - 12" GV (F, MJ) BK, AHD, LT, RT
KEEP THE VALVES LT, RT CLOSED
REOPEN AFTER THE NEW MAIN HAS
BEEN ACCEPTED.
PERMANENTLY CLOSE THE VALVES BK, AHD
AFTER NEW MAIN HAS BEEN ACCEPTED.
- ⑤ (---) BY CITY FORCES AHD OF CONTRACTOR
STA 18+52.71
PERMANENT CUT AND PLUG
EX 12" AC WTR 12, RT
- ⑥ (175) BY CONTRACTOR FURNISH AND INSTALL
STA 18+72.20
1- 12" 45° BEND (MJ)
- ⑦ (176) BY CONTRACTOR FURNISH AND INSTALL
STA 18+75.03
1- 12" 45° BEND (MJ)
- ⑧ (177) BY CONTRACTOR FURNISH AND INSTALL
STA 20+94.91
1- 12" x 12" TEE (F)
3 - 12" GV (F, MJ) BK, AHD, RT
- ⑨ (178) BY CONTRACTOR FURNISH AND INSTALL
STA 21+01.80
1- 90° BEND
1- 12" GV (F, MJ) LT



SCALE 1"=40'

AC WATER GROUP 1030
(NEW MAIN) SHELTER ISLAND DRIVE
STA. 14+00.00 TO STA. 21+01.80

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 08 OF 24 SHEETS

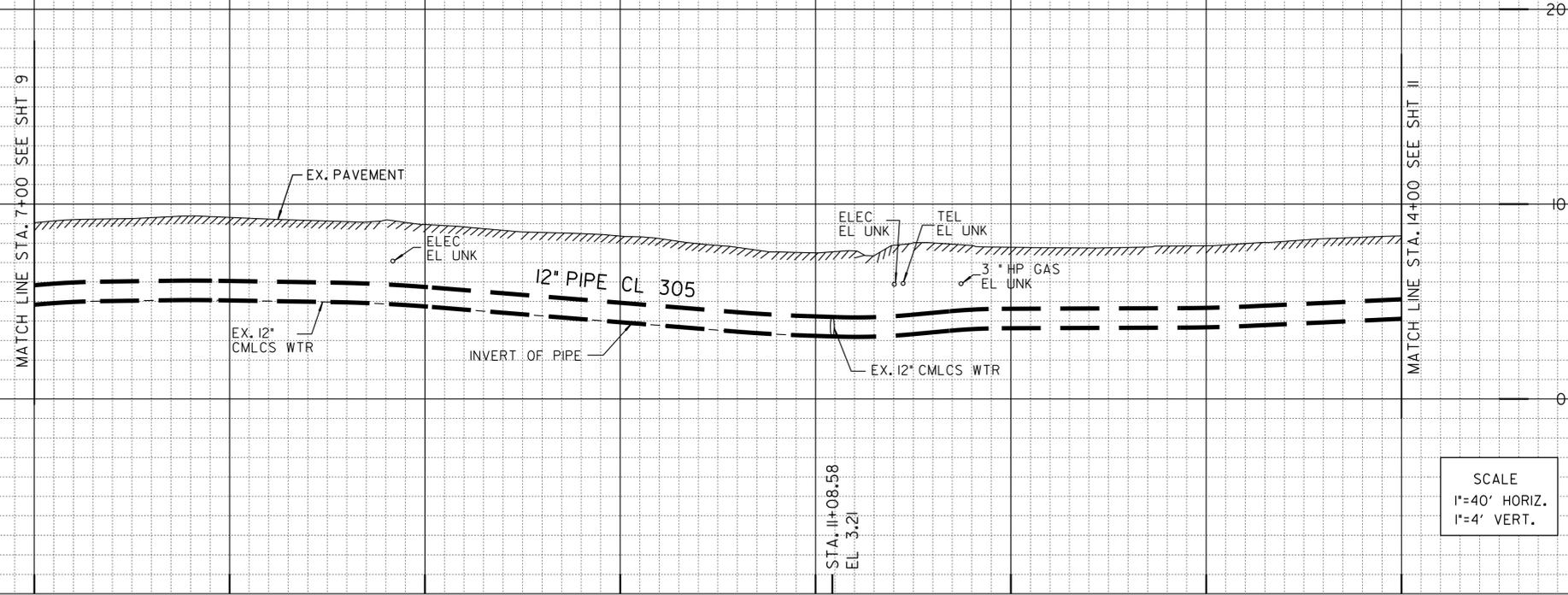
FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	RCE#	DATE	FILMED	DATE STARTED	DATE COMPLETED
PROJECT MANAGER MARYAM LIAGHAT						
PROJECT ENGINEER JAMAL SHERZAI						
198-1695 CCS27 COORDINATE						
6256407-1838444 CCS83 COORDINATE						
CONTRACTOR						
INSPECTOR						

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SHELTER ISLAND DRIVE

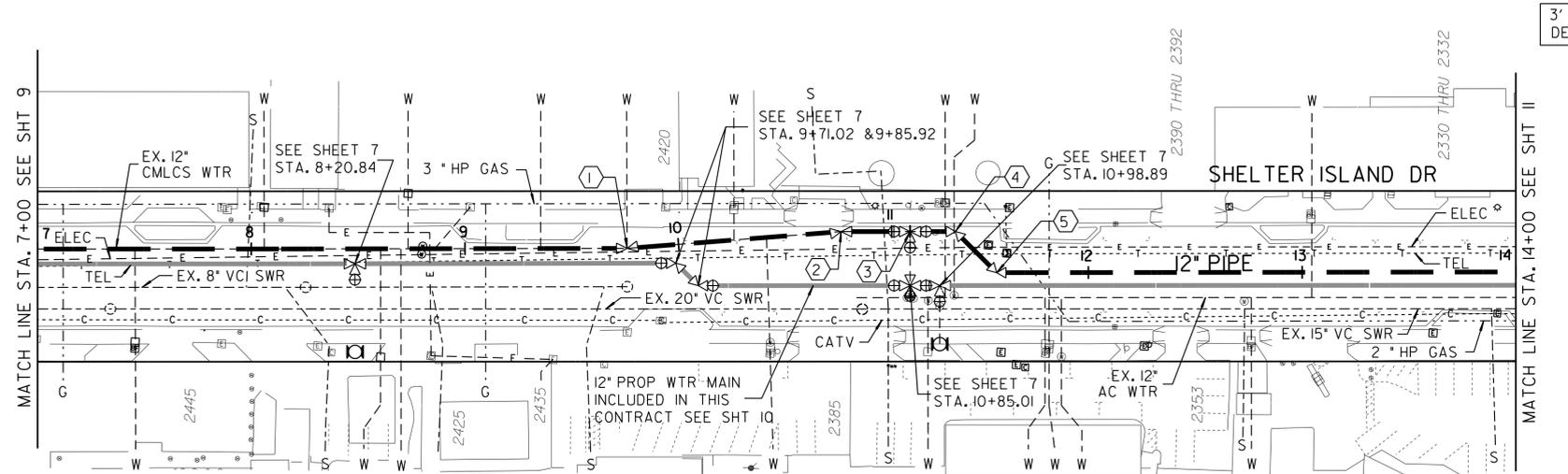
SHELTER ISLAND DRIVE

<p>Element: Linear PI (191) 5+30.84 1843150.18 6261334.84 PI (192) 8+13.97 1842982.69 6261563.13 Tangential Direction: 2.20 Tangential Length: 283.14</p>
<p>Element: Linear PI (192) 8+13.97 1842982.69 6261563.13 PI (193) 9+75.89 1842887.08 6261693.81 Tangential Direction: 2.20 Tangential Length: 161.92</p>
<p>Element: Linear PI (193) 9+75.89 1842887.08 6261693.81 PI (194) 10+76.29 1842834.21 6261779.16 Tangential Direction: 2.13 Tangential Length: 100.40</p>
<p>Element: Linear PI (194) 10+76.29 1842834.21 6261779.16 POE (195) 11+08.58 1842815.11 6261805.19 Tangential Direction: 2.20 Tangential Length: 32.29</p>
<p>Alignment Name: 06-SHT10-II-SHELTER-IS-NEW1 Alignment Description: Alignment Style: Default Station Northing Easting</p>
<p>Element: Linear POB (195) 11+08.58 1842815.11 6261805.19 PI (196) 11+29.80 1842802.56 6261822.30 Tangential Direction: 2.20 Tangential Length: 21.22</p>
<p>Element: Linear PI (196) 11+29.80 1842802.56 6261822.30 PI (197) 11+57.11 1842775.57 6261826.45 Tangential Direction: 2.99 Tangential Length: 27.31</p>
<p>Element: Linear PI (197) 11+57.11 1842775.57 6261826.45 PI (198) 11+94.28 1842340.15 6262421.29 Tangential Direction: 2.20 Tangential Length: 737.17</p>



SCALE
 1"=40' HORIZ.
 1"=4' VERT.

7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00



3' MINIMUM DEPTH OF COVER

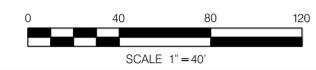
REFERENCE:

WATER: 24353-3D, 11558-D
 SEWER: 9711-ID, 24353-3D, 24353-4D
 STORM DRAIN:
 GAS: 15705-118770, 15705-118775
 ELECTRIC: 15705-118770, 15705-118775
 CABLE TV: COX FACILITY MAP 1
 TELEPHONE: BLZ 1962, BLZ 1963
 IMPROVEMENTS:
 100' SCALE/FIELD BOOK:
 THOMAS BROS.
 HGL:POINT LOMA 260

RETIREMENTS:

12" - CMLCS - 453' - 1999
 12" - AC - 247' - 1951
 FH (3-PORT) - 1
 1" SERVICE - 8 - CMLCS - 1999
 2" SERVICE - 1 - CMLCS - 1999
 1" SERVICE - 3 - AC - 1951
 2" SERVICE - 2 - AC - 1951
 4" SERVICE - 2 - AC - 1951
 6" SERVICE - 1 - AC - 1951

- ① (193)
BY CONTRACTOR FURNISH AND INSTALL
STA 9+75.89
1- 12" 11-1/4" BEND (MJ)
- ② (194)
BY CONTRACTOR FURNISH AND INSTALL
STA 10+76.29
1- 12" 11-1/4" BEND (MJ)
- ③ (195)
BY CONTRACTOR FURNISH AND INSTALL
STA 11+08.58
1- 12" x 12" TEE (F)
3 - 12" GV (F, MJ) BK, AHD, RT
1-20' STUB OUT RT
- ④ (196)
BY CONTRACTOR FURNISH AND INSTALL
STA 11+29.80
1- 12" 45' BEND (MJ)
- ⑤ (197)
BY CONTRACTOR FURNISH AND INSTALL
STA 11+57.11
1- 12" 45' BEND (MJ)



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AC WATER GROUP 1030
 SHELTER ISLAND DRIVE
 STA. 7+00.00 TO 14+00.00

CITY OF SAN DIEGO, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 SHEET 10 OF 24 SHEETS

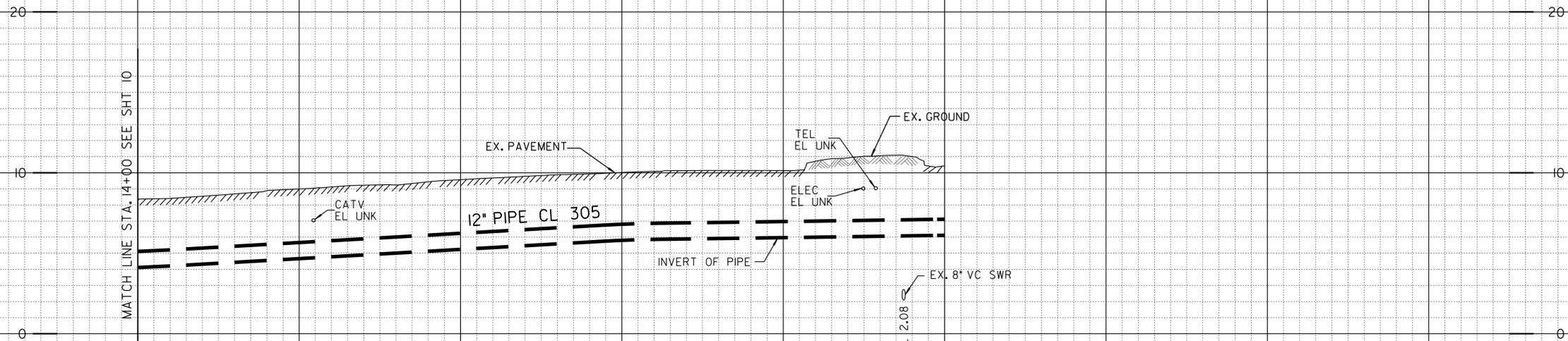
WATER WBS B-16042

APPROVED FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	DATE	DATE	DATE	DATE
PROJECT MANAGER MARYAM LIAGHAT	PROJECT ENGINEER JAMAL SHERZAI	198-1695			
DESCRIPTION		BY	APPROVED	DATE	FILMED
ORIGINAL		JS/SV			
6256407-1838444		CCS83 COORDINATE			
40094-10-D		CCS83 COORDINATE			

CONTRACTOR _____ DATE STARTED _____
 INSPECTOR _____ DATE COMPLETED _____

SHELTER ISLAND DRIVE

SHELTER ISLAND DRIVE

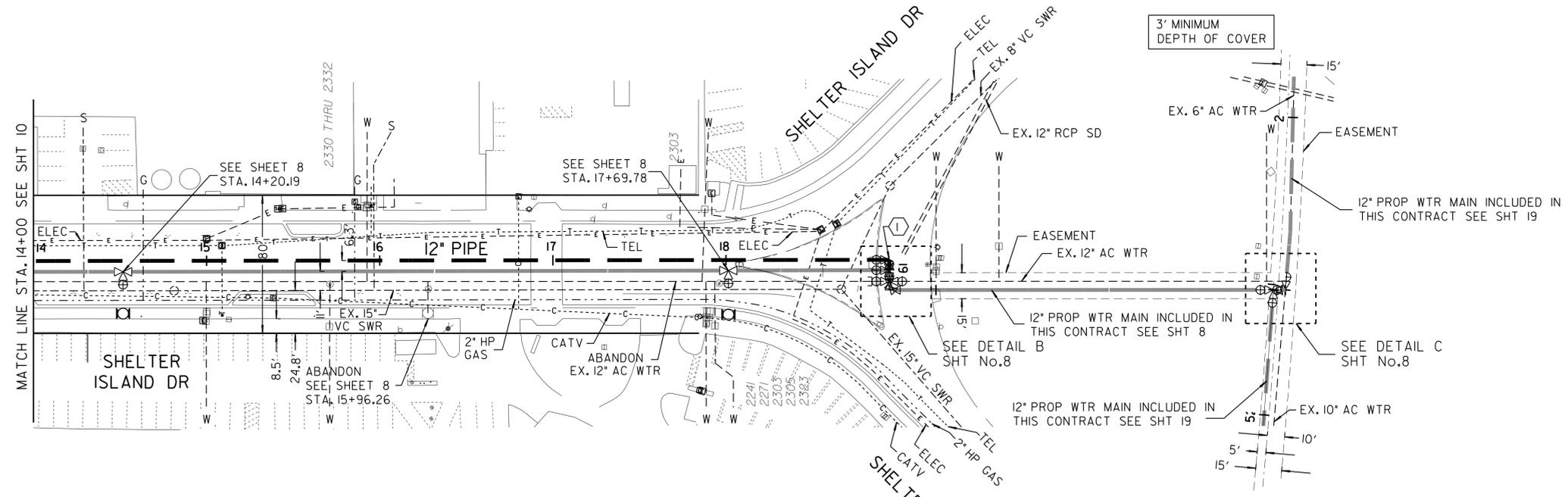


SCALE
1"=40' HORIZ.
1"=4' VERT.

Alignment Name: 06-SHT10-II-SHELTER-IS-NEWI
Alignment Description:
Alignment Style: Default
Station Northing Easting

Element: Linear
PI (198) 18+94.28 1842340.15 6262421.29
POE (199) 19+00.27 1842335.33 6262417.75
Tangential Direction: 3.77
Tangential Length: 5.99

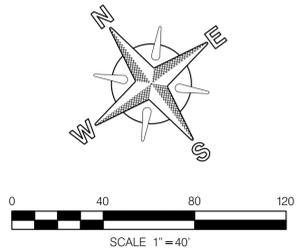
14+00 15+00 16+00 17+00 18+00 19+00 20+00



REFERENCE:
WATER: I1558-D
SEWER: 24353-4D, 24353-3D
STORM DRAIN:
GAS: I5712-I18765, I5705-I18770
ELECTRIC: I5712-I18765, I5705-I18770
CABLE TV: COX FACILITY MAP 1
TELEPHONE: BLZ 1962, BLZ 1963
IMPROVEMENTS:
100' SCALE/FIELD BOOK:
THOMAS BROS.:
HGL: POINT LOMA 260

RETIREMENTS:
12" - AC - 728.64' - 1951
FH (3-PORT) - 1
1" SERVICE - 4 - UNK - 1951
2" SERVICE - 5 - UNK - 1951

198
BY CONTRACTOR
FURNISH AND INSTALL
STA 18+94.28
1- 12" 90° BEND
1- 12" GV (F, MJ) BK



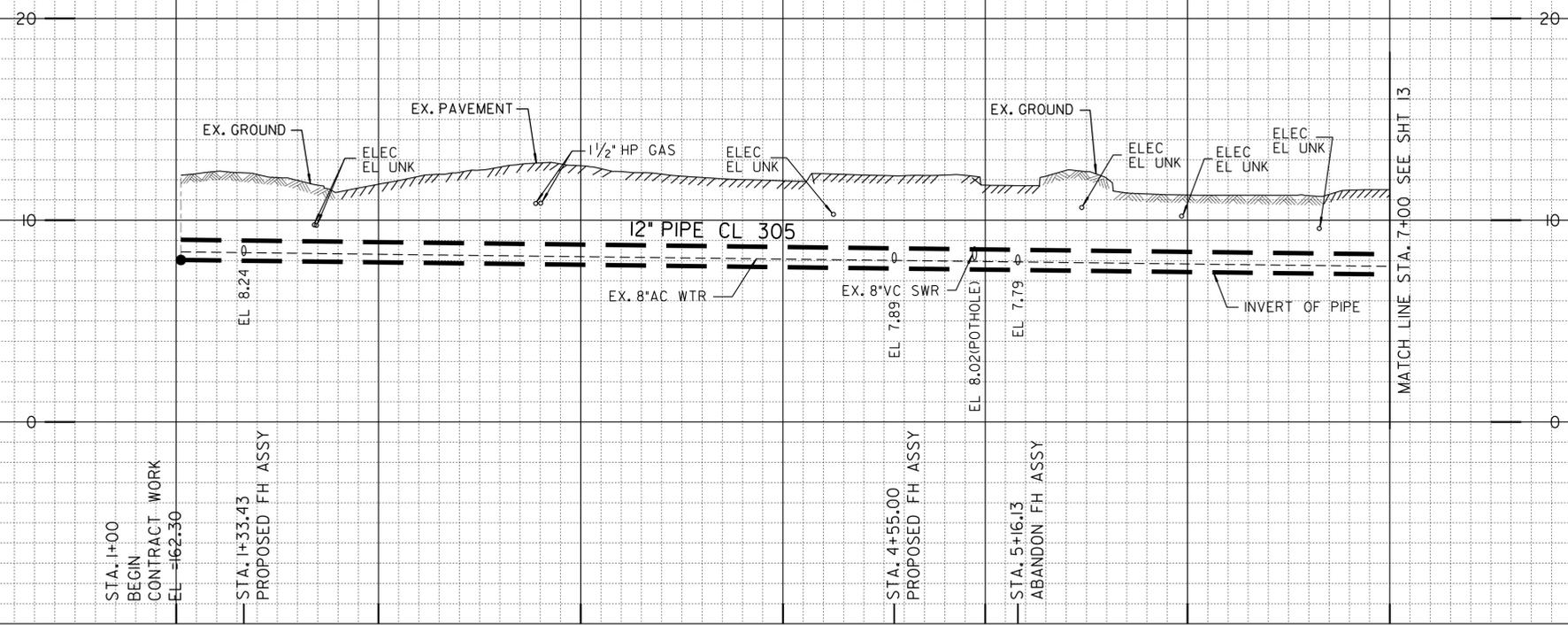
AC WATER GROUP 1030
SHELTER ISLAND DRIVE
STA. 14+00.00 TO STA. 19+00.27

CITY OF SAN DIEGO, CALIFORNIA PUBLIC WORKS DEPARTMENT SHEET 11 OF 24 SHEETS		WATER WBS B-16042
FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	DATE
SUBMITTED BY MARYAM LIAGHAT PROJECT MANAGER		DATE
CHECKED BY JAMAL SHERZAI PROJECT ENGINEER		DATE
DESCRIPTION	BY	APPROVED
ORIGINAL	JS/SV	
		DATE
		FILMED
198-1695		
CCS27 COORDINATE		
6256407-1838444		
CCS83 COORDINATE		
40094-11-D		
CONTRACTOR	DATE STARTED	DATE COMPLETED
INSPECTOR		

C-9

SHELTER ISLAND DRIVE

SHELTER ISLAND DRIVE



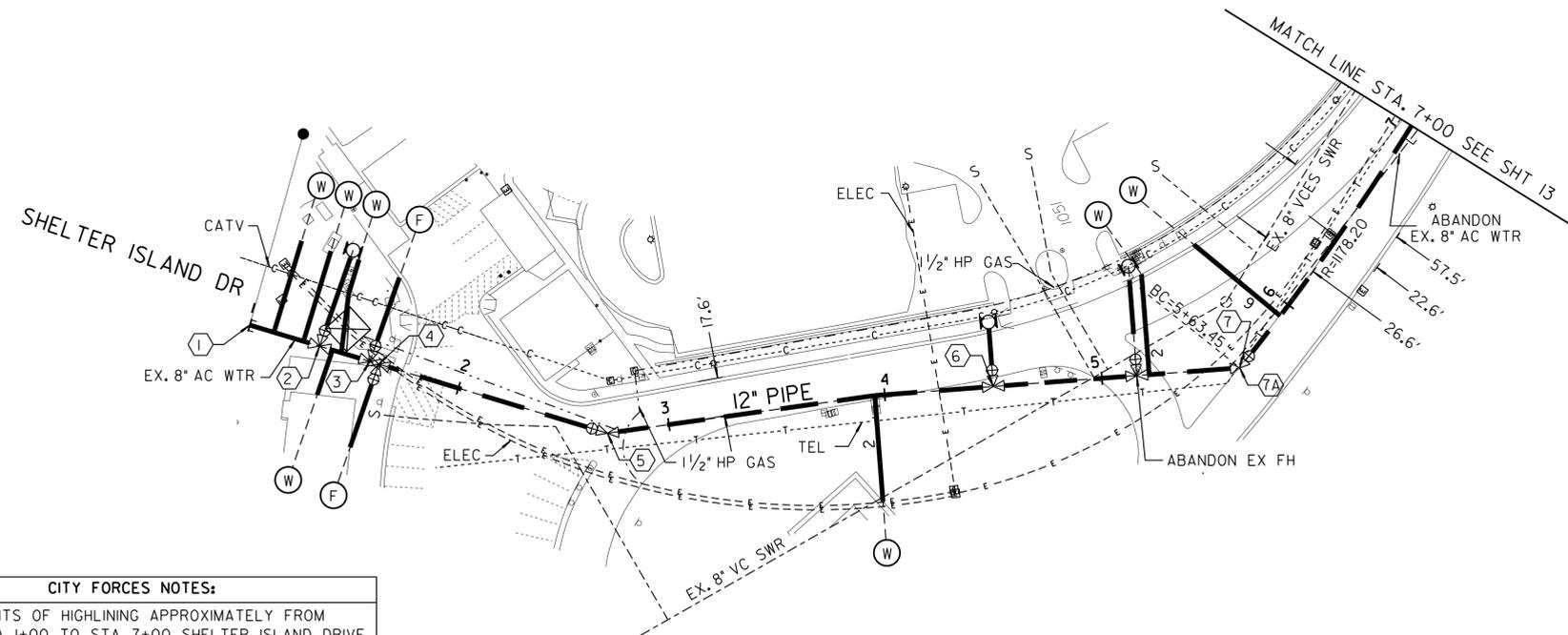
Alignment Name: 07-SHT12-19-SHELTER-DR-NEWI Alignment Description: Alignment Style: Default Station Northing Easting	Element: Linear PI (305) 3+95.42 1839022.20 6259107.53 PI (306) 4+50.00 1838993.35 6259153.86 Tangential Direction: 2.13 Tangential Length: 54.58
Element: Linear POB (300) 1+00.00 1839218.07 6258895.51 PI (301) 1+33.43 1839191.32 6258915.56 Tangential Direction: 2.50 Tangential Length: 33.43	Element: Linear PI (306) 4+50.00 1838993.35 6259153.86 PI (307) 5+16.04 1838958.40 6259209.90 Tangential Direction: 2.13 Tangential Length: 66.04
Element: Linear PI (301) 1+33.43 1839191.32 6258915.56 PI (302) 1+57.63 1839171.95 6258930.07 Tangential Direction: 2.50 Tangential Length: 24.21	Element: Linear PI (307) 5+16.04 1838958.40 6259209.90 PC (308) 5+63.45 1838933.33 6259250.13 Tangential Direction: 2.13 Tangential Length: 47.41
Element: Linear PI (302) 1+57.63 1839171.95 6258930.07 PI (303) 1+61.80 1839168.62 6258932.57 Tangential Direction: 2.50 Tangential Length: 4.16	Element: Circular PC (308) 5+63.45 1838933.33 6259250.13 PI () 6+82.12 1838964.31 6259364.69 CC (309) 1840070.69 6258942.61 PCC (310) 8+00.00 1839017.51 6259470.78 Radius: 1178.20 Delta: 0.20 Left Degree of Curvature (Arc): 0.08 Length: 236.55 Tangent: 118.67 Chord: 236.15 Middle Ordinate: 5.93 External: 5.96
Element: Linear PI (303) 1+61.80 1839168.62 6258932.57 PI (304) 2+71.53 1839080.80 6258998.37 Tangential Direction: 2.50 Tangential Length: 109.73	Tangent Direction: 1.31 Radial Direction: 1.81 Chord Direction: 1.21 Radial Direction: 2.68 Tangent Direction: 1.11
Element: Linear PI (304) 2+71.53 1839080.80 6258998.37 PI (305) 3+95.42 1839022.20 6259107.53 Tangential Direction: 2.06 Tangential Length: 123.89	

SCALE
1"=40' HORIZ.
1"=4' VERT.

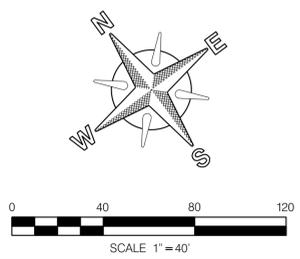
- ① ③00
BY CONTRACTOR
FURNISH AND INSTALL
STA 1+00.00
1- 2" BLOW -OFF ASSY
1- 12" END CAP
- ② ③01
BY CONTRACTOR
FURNISH AND INSTALL
STA 1+33.43
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)
- ③ ③02
BY CONTRACTOR
FURNISH AND INSTALL
STA 1+57.63
1- 4" FIRE SERVICE
- ④ ③03
BY CONTRACTOR
FURNISH AND INSTALL
STA 1+61.80
1- 4" FIRE SERVICE
- ⑤ ③04
BY CONTRACTOR
FURNISH AND INSTALL
STA 2+71.53
1- 12" 22' 1/2 BEND (MJ)
1- 12" GV (MJ, F), BK
- ⑥ ③06
BY CONTRACTOR
FURNISH AND INSTALL
STA 4+50.00
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)
- ⑦ ③08
BY CONTRACTOR
FURNISH AND INSTALL
STA 5+63.45
1- 12" 45" BEND (MJ)
1- 12" GV (MJ, F), AHD
- ⑦A ③08
BY CITY FORCES
AHD OF CONTRACTOR
STA 5+63.45
PERMANENT CUT AND PLUG
EX 12" AC WTR 130, AHD

REFERENCE:
WATER: 11558-D
SEWER: 9711-2D
STORM DRAIN:
GAS: 15682-118735
ELECTRIC: 15682-118735
CABLE TV: COX FACILITY MAPS 5
TELEPHONE: BMB 1960
IMPROVEMENTS:
100' SCALE/FIELD BOOK:
THOMAS BROS.:
HGL: POINT LOMA 260

RETIREMENTS:
8" - AC - 600' - 1952
FH (3-PORT) - 2
1" SERVICE - 4 - UNK - 1952
2" SERVICE - 2 - COOPER - 1952
4" F.SERVICE - 2-UNK-1952
6" SERVICE - 1 - UNK - 1952



CITY FORCES NOTES:
LIMITS OF HIGHLINING APPROXIMATELY FROM STA. 1+00 TO STA. 7+00 SHELTER ISLAND DRIVE SHALL BE HIGHLINING BY CITY FORCES PRIOR TO CONSTRUCTION. CITY FORCES TO FURNISH HIGHLINING MATERIALS AND PERFORM TRANSFER OF SERVICES.



C-10

AC WATER GROUP 1030
SHELTER ISLAND DRIVE
STA. 1+00.00 TO STA. 7+00.00

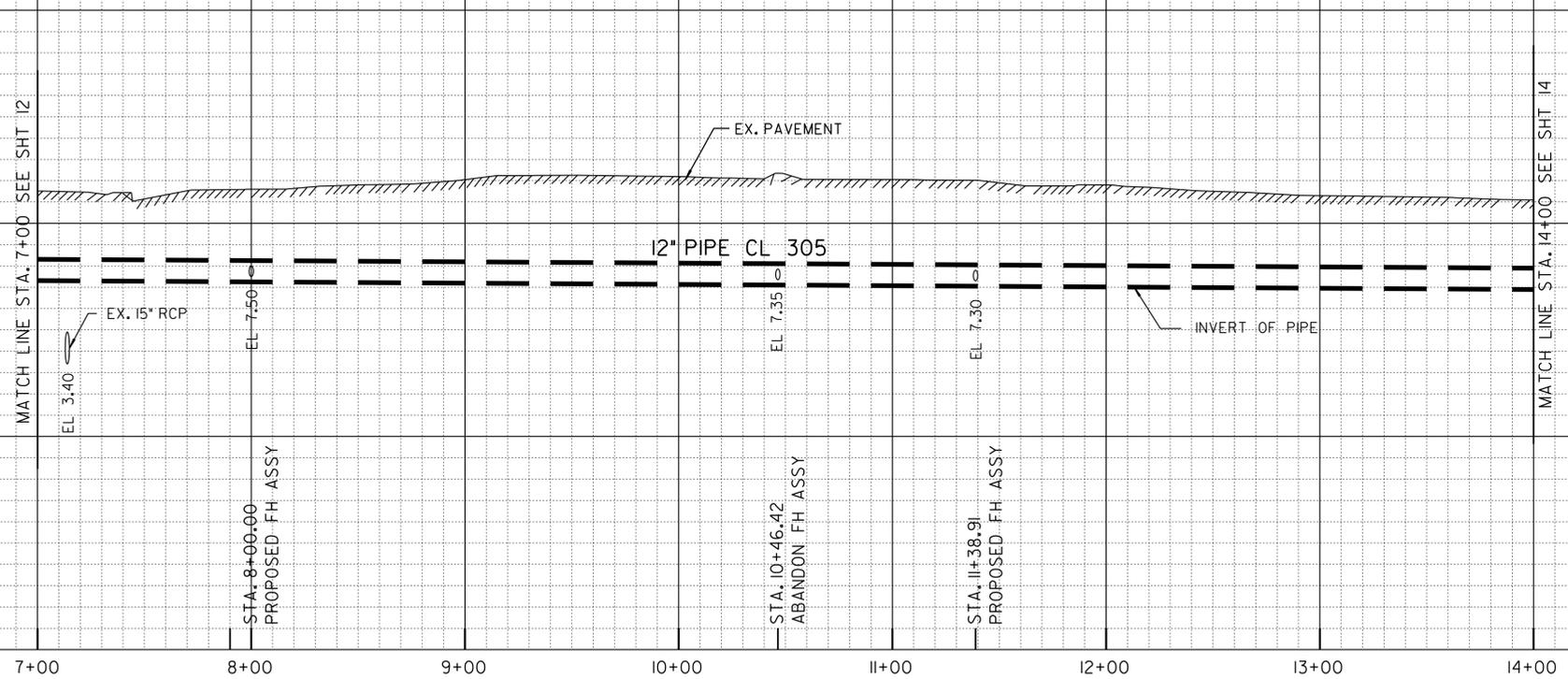
CITY OF SAN DIEGO, CALIFORNIA PUBLIC WORKS DEPARTMENT SHEET 12 OF 24 SHEETS		WATER WBS B-16042
APPROVED: FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE RCE#	SUBMITTED BY MARYAM LIAGHAT PROJECT MANAGER CHECKED BY JAMAL SHERZAI PROJECT ENGINEER
DESCRIPTION ORIGINAL	BY JS/SV	APPROVED DATE FILMED
198-1695 CCS27 COORDINATE		6256407-1838444 CCS83 COORDINATE
CONTRACTOR INSPECTOR		DATE STARTED DATE COMPLETED

40094-12-D

SHELTER ISLAND DRIVE

SHELTER ISLAND DRIVE

Alignment Name: 07-SHT12-19-SHELTER-DR-NEW1 Element: Circular PCC (310) 8+00.00 1839017.51 6259470.78 PI () 9+23.66 1839072.94 6259581.32 CC (309) 1840070.69 6258942.61 PCC (311) 10+46.42 1839150.12 6259677.94 Radius: 1178.20 Delta: 0.21 Left Degree of Curvature (Arc): 0.08 Length: 246.42 Tangent: 123.66 Chord: 245.97 Middle Ordinate: 6.44 External: 6.47 Tangent Direction: 111 Radial Direction: 2.68 Chord Direction: 1.00 Radial Direction: 2.47 Tangent Direction: 0.90	Element: Circular PCC (312) 11+38.91 1839210.61 6259747.86 PI () 12+50.37 1839286.80 6259829.23 CC (309) 1840070.69 6258942.61 PT (313) 13+61.18 1839376.89 6259894.87 Radius: 1178.20 Delta: 0.19 Left Degree of Curvature (Arc): 0.08 Length: 222.28 Tangent: 111.47 Chord: 221.95 Middle Ordinate: 5.24 External: 5.26 Tangent Direction: 0.82 Radial Direction: 2.39 Chord Direction: 0.72 Radial Direction: 2.20 Tangent Direction: 0.63
Element: Circular PCC (311) 10+46.42 1839150.12 6259677.94 PI () 10+92.69 1839178.99 6259714.09 CC (309) 1840070.69 6258942.61 PCC (312) 11+38.91 1839210.61 6259747.86 Radius: 1178.20 Delta: 0.08 Left Degree of Curvature (Arc): 0.08 Length: 92.48 Tangent: 46.26 Chord: 92.46 Middle Ordinate: 0.91 External: 0.91 Tangent Direction: 0.90 Radial Direction: 2.47 Chord Direction: 0.86 Radial Direction: 2.39 Tangent Direction: 0.82	Element: Linear PT (313) 13+61.18 1839376.89 6259894.87 PI (314) 15+07.55 1839495.19 6259981.06 Tangential Direction: 0.63 Tangential Length: 146.37

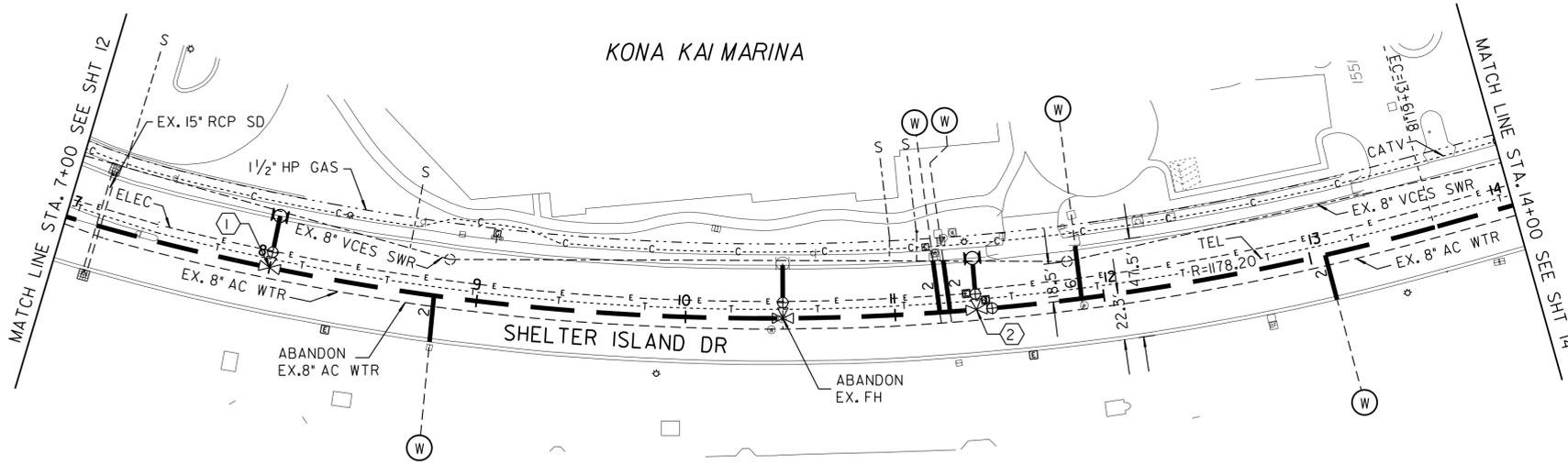


SCALE
1"=40' HORIZ.
1"=4' VERT.

3" MINIMUM DEPTH OF COVER

REFERENCE:
 WATER: 11558.D;
 SEWER: 9711-2D
 STORM DRAIN:
 GAS: 15682-118740
 ELECTRIC: 15682-118740
 CABLE TV: COX FACILITY MAP 4 AND 5
 TELEPHONE: BMB 1960, BMB 1961
 IMPROVEMENTS:
 100' SCALE/FIELD BOOK:
 THOMAS BROS.;
 HGL: POINT LOMA 260

RETIREMENTS:
 8" - AC - 700' - 1952
 FH (3-PORT) - 1
 2" SERVICE - 4 - UNK - 1952
 6" SERVICE - 1 - UNK - 1952



① ③10
 BY CONTRACTOR
 FURNISH AND INSTALL
 STA 8+00.00
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)

② ③12
 BY CONTRACTOR
 FURNISH AND INSTALL
 STA 11+38.91
 1- 6" FH ASSY AND MARKER
 1- 12" x 6" TEE (MJ, MJ)
 1- 12" GV (MJ, F), AHD

CITY FORCES NOTES:
 LIMITS OF HIGHLINING APPROXIMATELY FROM STA. 7+00 TO STA. 8+00 SHELTER ISLAND DRIVE SHALL BE HIGHLINING BY CITY FORCES PRIOR TO CONSTRUCTION.
 CITY FORCES TO FURNISH HIGHLINING MATERIALS AND PERFORM TRANSFER OF SERVICES.



SCALE 1"=40'

C-11

AC WATER GROUP 1030
 SHELTER ISLAND DRIVE
 STA. 7+00.00 TO STA. 14+00.00

CITY OF SAN DIEGO, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 SHEET 13 OF 24 SHEETS

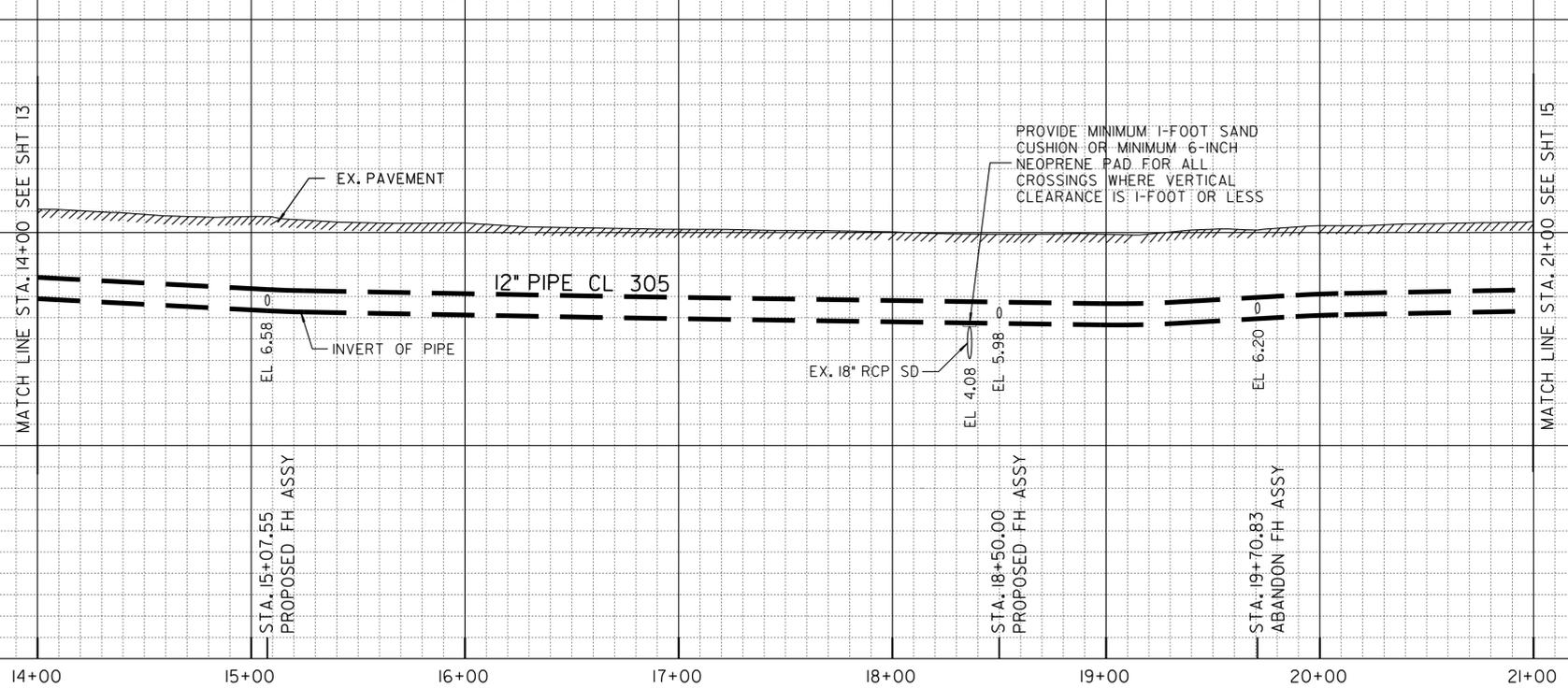
APPROVED: FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME DATE RCE#	SUBMITTED BY MARYAM LIAGHAT PROJECT MANAGER CHECKED BY JAMAL SHERZAI PROJECT ENGINEER			
DESCRIPTION ORIGINAL	BY JS/SV	APPROVED	DATE	FILMED
198-1695 CCS27 COORDINATE				6256407-1838444 CCS83 COORDINATE
CONTRACTOR INSPECTOR				DATE STARTED DATE COMPLETED

40094-13-D

SHELTER ISLAND DRIVE

SHELTER ISLAND DRIVE

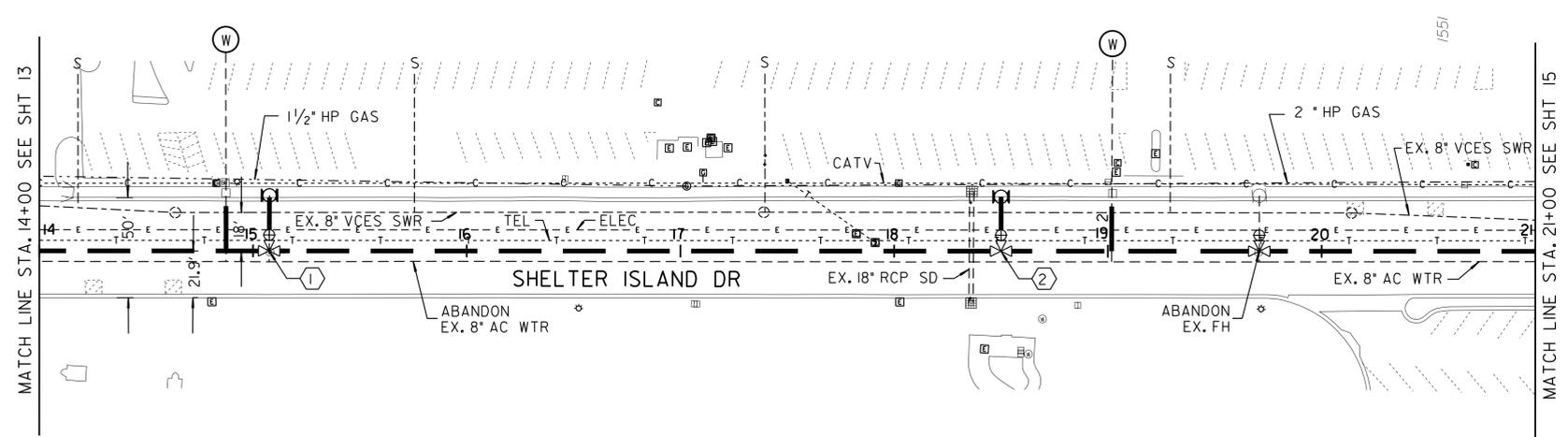
Alignment Name:	07-SHT12-19-SHELTER-DR-NEW1
Element:	Linear
PT (313)	13+61.8 1839376.89 6259894.87
PI (314)	15+07.55 1839495.19 6259981.06
Tangential Direction:	0.63
Tangential Length:	146.37
Element:	Linear
PI (314)	15+07.55 1839495.19 6259981.06
PI (315)	18+50.00 1839771.97 6260182.72
Tangential Direction:	0.63
Tangential Length:	342.45
Element:	Linear
PI (315)	18+50.00 1839771.97 6260182.72
PI (316)	19+70.83 1839869.63 6260253.87
Tangential Direction:	0.63
Tangential Length:	120.83
Element:	Linear
PI (316)	19+70.83 1839869.63 6260253.87
PC (317)	21+34.18 1840001.65 6260350.06
Tangential Direction:	0.63
Tangential Length:	163.35



SCALE
1"=40' HORIZ.
1"=4' VERT.

3' MINIMUM
DEPTH OF COVER

KONA KAI MARINA

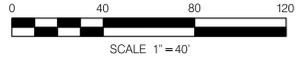


REFERENCE:
WATER: 11558-0D
SEWER: 9711-2D
STORM DRAIN:
GAS: 15682-118740
ELECTRIC: 15690-118730, 15690-118735
CABLE TV: COX FACILITY MAP 3, 4
TELEPHONE: BMA 1961
IMPROVEMENTS:
100' SCALE/FIELD BOOK:
THOMAS BROS.:
HGL: POINT LOMA 260

RETIREMENTS:
8" - AC - 700' - 1952
FH (3-PORT) - 2
1" SERVICE - 1 - UNK - 1952
2" SERVICE - 1 - UNK - 1952

① 314
BY CONTRACTOR
FURNISH AND INSTALL
STA 15+07.55
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)

② 315
BY CONTRACTOR
FURNISH AND INSTALL
STA 18+50.00
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)



SCALE 1"=40'

C-12

AC WATER GROUP 1030
SHELTER ISLAND DRIVE
STA. 14+00.00 TO STA. 21+00.00

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 14 OF 24 SHEETS

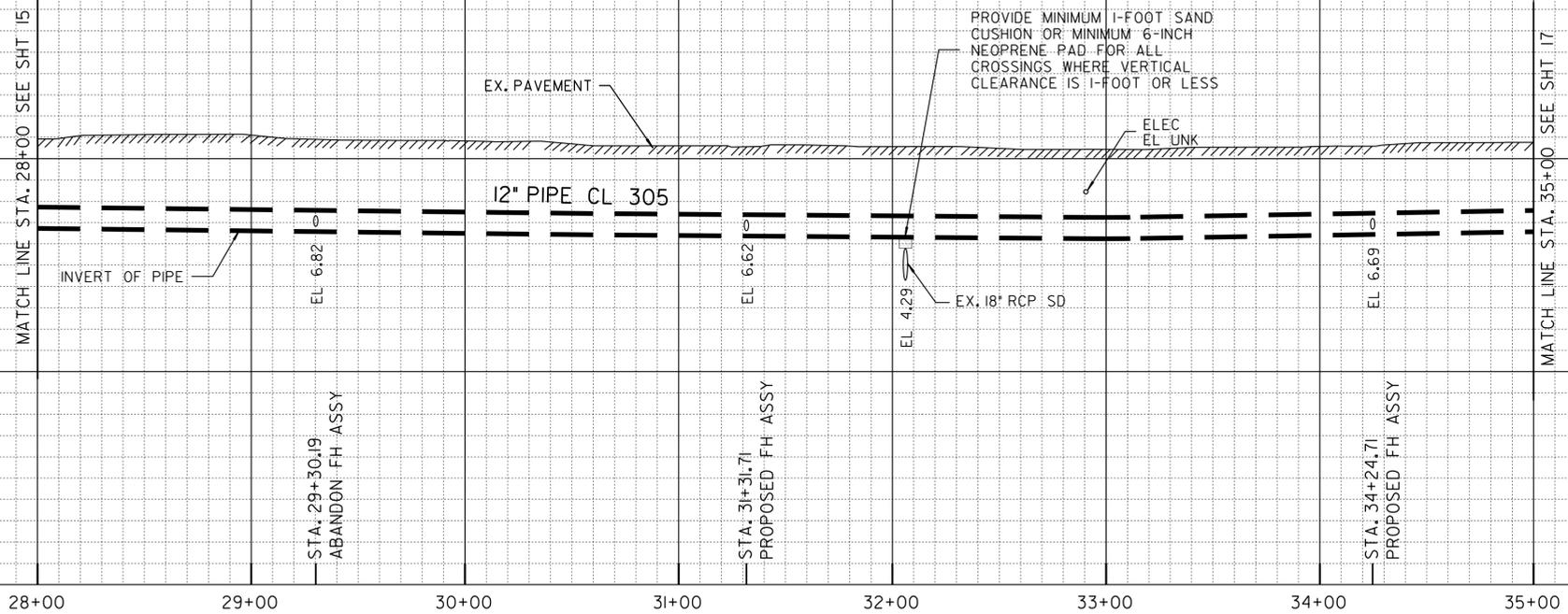
WATER
WBS B-16042

APPROVED FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME	DATE	RCE#	DATE	DATE	DATE
SUBMITTED BY MARYAM LIAGHAT PROJECT MANAGER			CHECKED BY JAMAL SHERZAI PROJECT ENGINEER		
DESCRIPTION			BY	APPROVED	DATE
ORIGINAL			J5/SV		
198-1695			CCS27 COORDINATE		
6256407-1838444			CCS83 COORDINATE		
CONTRACTOR			DATE STARTED		
INSPECTOR			DATE COMPLETED		
			40094-14-D		

SHELTER ISLAND DRIVE

SHELTER ISLAND DRIVE

Alignment Name: 07-SHT12-19-SHELTER-DR-NEW Element: Circular PCC (323) 27+89.95 1840476.78 6260801.41 PI () 28+60.07 1840525.56 6260851.77 CC (321) 1833430.62 6267626.65 PCC (324) 29+30.19 1840573.62 6260902.83 Radius: 9809.80 Delta: 0.01 Right Degree of Curvature (Arc): 0.01 Length: 140.23 Tangent: 70.12 Chord: 140.23 Middle Ordinate: 0.25 External: 0.25 Tangent Direction: 0.80 Radial Direction: 2.37 Chord Direction: 0.81 Radial Direction: 2.39 Tangent Direction: 0.82	Element: Circular PCC (325) 31+31.71 1840710.23 6261050.98 PI () 31+58.77 1840728.37 6261071.06 CC (321) 1833430.62 6267626.65 PT (326) 31+85.83 1840746.40 6261091.24 Radius: 9809.80 Delta: 0.01 Right Degree of Curvature (Arc): 0.01 Length: 54.12 Tangent: 27.06 Chord: 54.12 Middle Ordinate: 0.04 External: 0.04 Tangent Direction: 0.84 Radial Direction: 2.41 Chord Direction: 0.84 Radial Direction: 2.41 Tangent Direction: 0.84
Element: Circular PCC (324) 29+30.19 1840573.62 6260902.83 PI () 30+30.95 1840642.69 6260976.20 CC (321) 1833430.62 6267626.65 PCC (325) 31+31.71 1840710.23 6261050.98 Radius: 9809.80 Delta: 0.02 Right Degree of Curvature (Arc): 0.01 Length: 201.53 Tangent: 100.77 Chord: 201.52 Middle Ordinate: 0.52 External: 0.52 Tangent Direction: 0.82 Radial Direction: 2.39 Chord Direction: 0.83 Radial Direction: 2.41 Tangent Direction: 0.84	Element: Linear PT (326) 31+85.83 1840746.40 6261091.24 PC (327) 34+24.71 1840905.56 6261269.37 Tangential Direction: 0.84 Tangential Length: 238.87
Element: Linear PC (328) 37+00.87 1841089.56 6261475.31 Tangential Direction: 0.84 Tangential Length: 276.17	



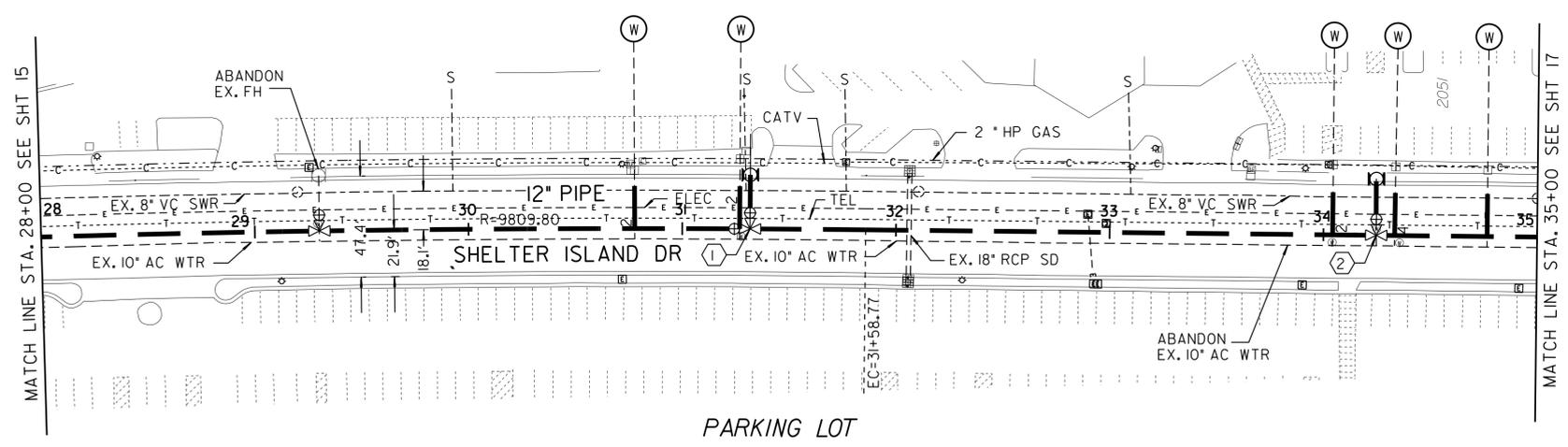
SCALE
1"=40' HORIZ.
1"=4' VERT.

3' MINIMUM
DEPTH OF COVER

- REFERENCE:
- WATER: I1558-2D
 - SEWER: 9711-2D
 - STORM DRAIN:
 - GAS: I5690-I18735
 - ELECTRIC: I5705-I18750
 - CABLE TV: COX FACILITY MAP 3
 - TELEPHONE: BMA 1962
 - IMPROVEMENTS:
 - 100' SCALE/FIELD BOOK:
 - THOMAS BROS.:
 - HGL: POINT LOMA 260

- RETIREMENTS:
- 10' - AC - 700' - 1952
 - FH (3-PORT) - 2
 - 1" SERVICE - 1 - UNK - 1952
 - 2" SERVICE - 3 - UNK - 1952
 - 4" SERVICE - 1 - UNK - 1952

ISLAND PALMS HOTEL AND MARINA



① (325)
BY CONTRACTOR
FURNISH AND INSTALL
STA 31+31.71
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)
1- 12" GV (MJ, F.), BK

② (327)
BY CONTRACTOR
FURNISH AND INSTALL
STA 34+24.71
1- 6" FH ASSY AND MARKER
1- 12" x 6" TEE (MJ, MJ)



SCALE 1"=40'

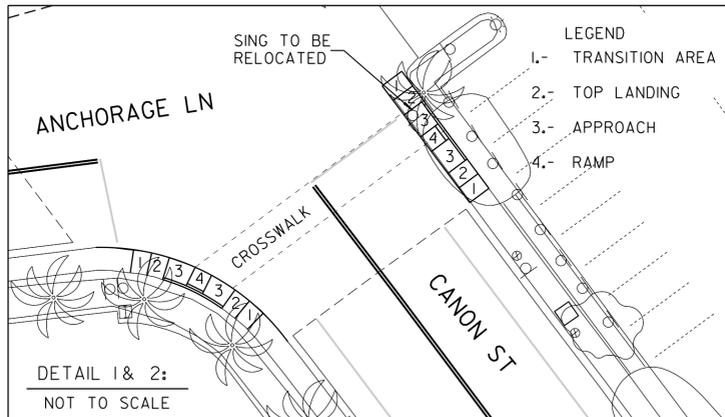
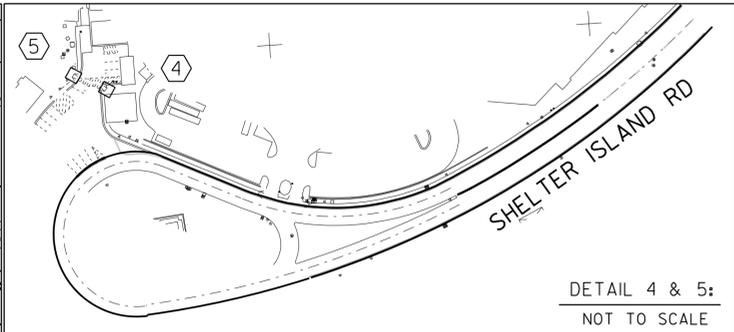
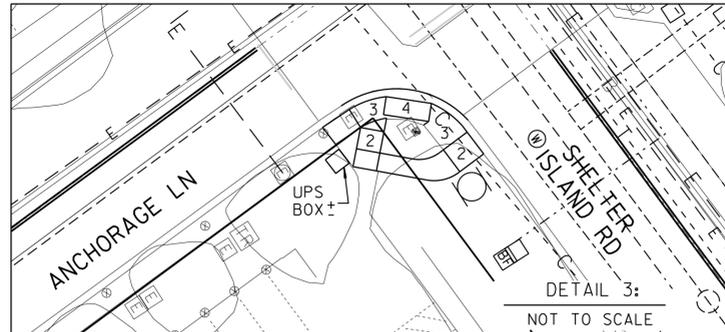
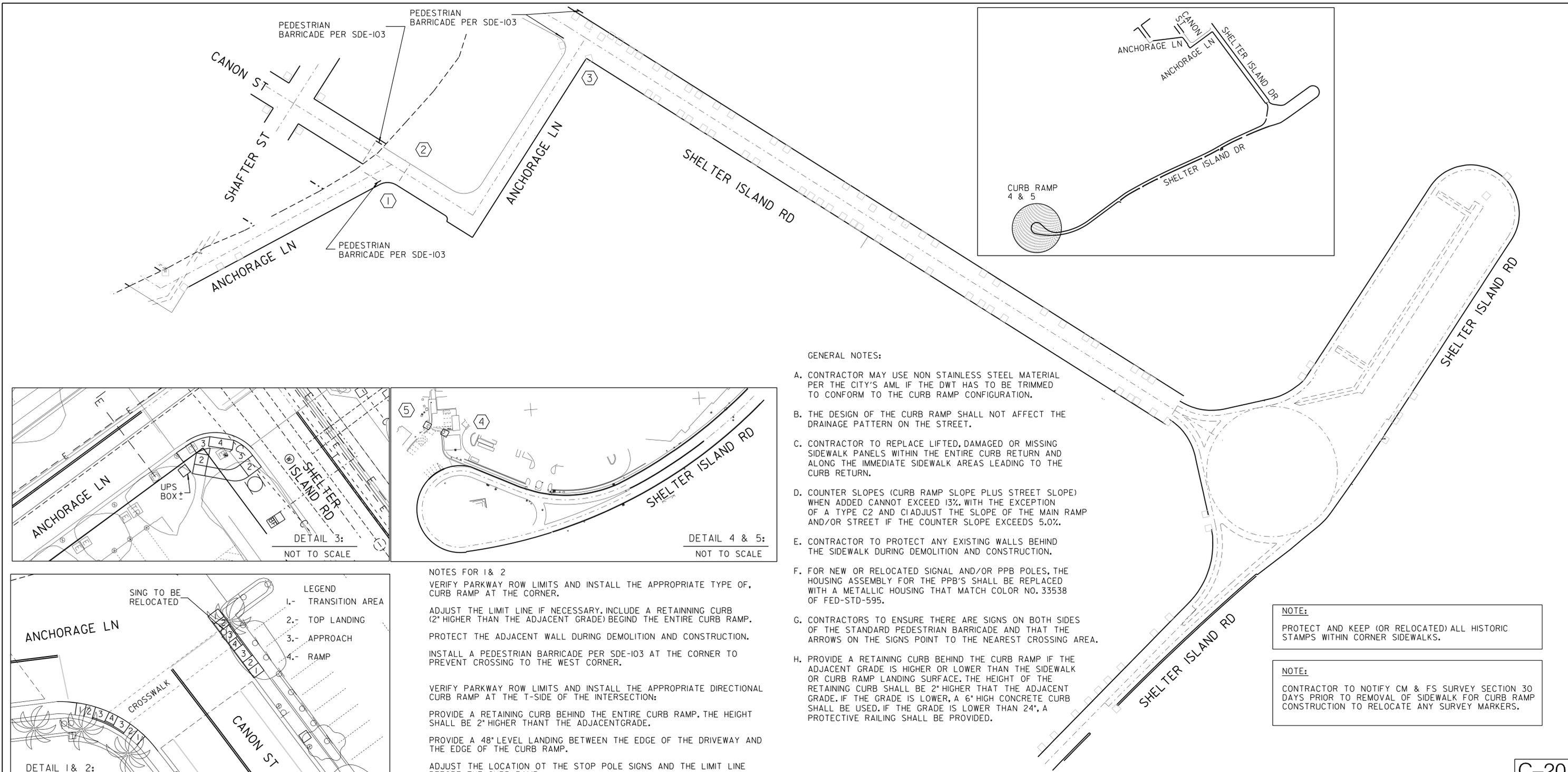
C-14

AC WATER GROUP 1030
SHELTER ISLAND DRIVE
STA. 28+00.00 TO STA. 35+00.00

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 16 OF 24 SHEETS

APPROVED: FOR CITY ENGINEER MICHAEL NINH PRINT DCE NAME DATE RCE#	SUBMITTED BY: MARYAM LIAGHAT PROJECT MANAGER CHECKED BY: JAMAL SHERZAI PROJECT ENGINEER 198-1695 CCS27 COORDINATE 6256407-1838444 CCS83 COORDINATE 40094-16-D			
DESCRIPTION ORIGINAL	BY JS/SV	APPROVED	DATE	FILMED
CONTRACTOR INSPECTOR		DATE STARTED DATE COMPLETED		

SHELTER ISLAND DRIVE



NOTES FOR 1 & 2
 VERIFY PARKWAY ROW LIMITS AND INSTALL THE APPROPRIATE TYPE OF CURB RAMP AT THE CORNER.
 ADJUST THE LIMIT LINE IF NECESSARY. INCLUDE A RETAINING CURB (2" HIGHER THAN THE ADJACENT GRADE) BEHIND THE ENTIRE CURB RAMP.
 PROTECT THE ADJACENT WALL DURING DEMOLITION AND CONSTRUCTION.
 INSTALL A PEDESTRIAN BARRICADE PER SDE-103 AT THE CORNER TO PREVENT CROSSING TO THE WEST CORNER.
 VERIFY PARKWAY ROW LIMITS AND INSTALL THE APPROPRIATE DIRECTIONAL CURB RAMP AT THE T-SIDE OF THE INTERSECTION:
 PROVIDE A RETAINING CURB BEHIND THE ENTIRE CURB RAMP. THE HEIGHT SHALL BE 2" HIGHER THAN THE ADJACENT GRADE.
 PROVIDE A 48" LEVEL LANDING BETWEEN THE EDGE OF THE DRIVEWAY AND THE EDGE OF THE CURB RAMP.
 ADJUST THE LOCATION OF THE STOP POLE SIGNS AND THE LIMIT LINE BEFORE THE CURB RAMP.
 IF NECESSARY, REMOVE ONE OF THE METERED PARKING SPACES TO ALLOW ROOM FOR PEDESTRIAN CROSSING AND NEW CURB RAMP.

- GENERAL NOTES:**
- A. CONTRACTOR MAY USE NON STAINLESS STEEL MATERIAL PER THE CITY'S AML IF THE DWT HAS TO BE TRIMMED TO CONFORM TO THE CURB RAMP CONFIGURATION.
 - B. THE DESIGN OF THE CURB RAMP SHALL NOT AFFECT THE DRAINAGE PATTERN ON THE STREET.
 - C. CONTRACTOR TO REPLACE LIFTED, DAMAGED OR MISSING SIDEWALK PANELS WITHIN THE ENTIRE CURB RETURN AND ALONG THE IMMEDIATE SIDEWALK AREAS LEADING TO THE CURB RETURN.
 - D. COUNTER SLOPES (CURB RAMP SLOPE PLUS STREET SLOPE) WHEN ADDED CANNOT EXCEED 13%. WITH THE EXCEPTION OF A TYPE C2 AND CI ADJUST THE SLOPE OF THE MAIN RAMP AND/OR STREET IF THE COUNTER SLOPE EXCEEDS 5.0%.
 - E. CONTRACTOR TO PROTECT ANY EXISTING WALLS BEHIND THE SIDEWALK DURING DEMOLITION AND CONSTRUCTION.
 - F. FOR NEW OR RELOCATED SIGNAL AND/OR PPB POLES, THE HOUSING ASSEMBLY FOR THE PPB'S SHALL BE REPLACED WITH A METALLIC HOUSING THAT MATCH COLOR NO. 33538 OF FED-STD-595.
 - G. CONTRACTORS TO ENSURE THERE ARE SIGNS ON BOTH SIDES OF THE STANDARD PEDESTRIAN BARRICADE AND THAT THE ARROWS ON THE SIGNS POINT TO THE NEAREST CROSSING AREA.
 - H. PROVIDE A RETAINING CURB BEHIND THE CURB RAMP IF THE ADJACENT GRADE IS HIGHER OR LOWER THAN THE SIDEWALK OR CURB RAMP LANDING SURFACE. THE HEIGHT OF THE RETAINING CURB SHALL BE 2" HIGHER THAN THE ADJACENT GRADE. IF THE GRADE IS LOWER, A 6" HIGH CONCRETE CURB SHALL BE USED. IF THE GRADE IS LOWER THAN 24", A PROTECTIVE RAILING SHALL BE PROVIDED.

NOTE:
 PROTECT AND KEEP (OR RELOCATED) ALL HISTORIC STAMPS WITHIN CORNER SIDEWALKS.

NOTE:
 CONTRACTOR TO NOTIFY CM & FS SURVEY SECTION 30 DAYS PRIOR TO REMOVAL OF SIDEWALK FOR CURB RAMP CONSTRUCTION TO RELOCATE ANY SURVEY MARKERS.

CURB RAMP NOTES TABLE

LOCATION NO	RAMP TYPE	NEW	REPLACEMENT	HISTORIC STAMPS	DETECTABLE WARNING TILES		CONSTRAINTS	COMMENTS / MODIFICATIONS
					STAINLESS STEEL	OTHER		
1	C-1	✓			✓			SEE NOTES FOR 6 & 7
2	B	✓			✓			SEE NOTES FOR 6 & 7
3	A		✓		✓			DUAL CURB RAMPS
4	A		✓		✓			REPLACE THE CURB RAMP WITH A TYPE A
5	B		✓		✓			REPLACE THE CURB RAMP WITH A TYPE B

* THE DETECTABLE WARNING TILES SHALL BE PER THE CITY'S APPROVED MATERIALS LIST

LEGEND

(8) CURB RAMP NO'S T EX TREE ○ EX STREET LIGHT
 • EX UTILITY POLE † EX STREET SIGN
 □ EX FIRE HYDRANT □ EX CURB RAMP

PROPOSED CURB RAMPS PER STANDARD DRAWINGS:

DETECTABLE WARNING TILES	SDG-130
GENERAL CURB RAMP NOTES	SDG-131
GENERAL CURB RAMP NOTES & SUPPLEMENTAL DETAILS	SDG-132
CURB RAMP A & B	SDG-133
DUAL CURB RAMPS	SDG-134
CURB RAMP - TYPE CI & C2	SDG-135
CURB RAMP - TYPE CI & C2 & MORE DETAILS	SDG-136
CURB RAMP - TYPE D	SDG-137
GENERAL CURB RAMPS	SDG-138
ISLAND AND PASSAGEWAY DETAILS	SDG-139
CURB RAMP BARRICADE	SDG-140
EX STAMP/IMPRESSION PLACEMENT	SDG-115



AC WATER GROUP 1030
CURB RAMP LOCATION

CITY OF SAN DIEGO, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 SHEET 22 OF 24 SHEETS

WATER WBS B-16042

FOR CITY ENGINEER: MICHAEL NINH
 PRINT DATE: _____ RCE# _____
 DATE: _____

SUBMITTED BY: MARYAM LIAGHAT
 PROJECT MANAGER
 CHECKED BY: JAMAL SHERZAI
 PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JS/SV			

198-1695
 CCS27 COORDINATE
 6256407-1838444
 CCS83 COORDINATE

CONTRACTOR: _____ DATE STARTED: _____
 INSPECTOR: _____ DATE COMPLETED: _____

40094-22-D

C-20

CURB RAMP LOCATION

LIST OF REFERENCES

1. California Emergency Management Agency, California Geological Survey, University of Southern California (2009). *Tsunami Inundation Map for Emergency Planning, State of California, County of San Diego, Point Loma Triangle, Scale 1:24,000*, dated June 1.
2. California Geologic Survey, State of California Earthquake Fault Zones, Point Loma Quadrangle, May 1, 2003.
3. *City of San Diego Seismic Safety Study, Geologic Hazards and Faults*, Map Sheet 16, Development Services Department, revised date April 3, 2008.
4. Geocon Incorporated, *Geotechnical Investigation, 1050 Anchorage Lane Condominiums, San Diego California*, Project No. 06675-22-01, dated March 27, 2001.
5. Geocon Incorporated, *Geotechnical Investigation, Bali Hai Improvements, Planned Pavilion and Entrance, San Diego California*, Project No. G1071-52-01, dated February 11, 2009.
6. Geocon Incorporated, *Geotechnical Investigation for the Kona Kai Club (Parcel 8) and Kona Kai Inn (Parcel 4), Shelter Island, San Diego, California, San Diego, California*, Project No. 05285-31-01, dated April 29, 1994.
7. Geocon Incorporated, *Limited Soil Sampling Report for San Diego Yacht Club, San Diego, California*, Project No. 08474-06-01, dated August 19, 1993.
8. Geocon Incorporated, *Soil Investigation for San Diego Marine Exchange Addition, San Diego, California, San Diego, California*, Project No. D-1757-J01, dated March 20, 1979.
9. *Geology and Mineral Resources of San Diego County, California*, California Division of Mines and Geology Publication, 1963.
10. *Geology of San Diego Metropolitan Area, California, California Division of Mines and Geology*, Bulletin 200, reprint 2001.
11. Kennedy, M. P., and S. S. Tan, 2005, *Geologic Map of the San Diego 30'x60' Quadrangle, California*, USGS Regional Map Series Map No. 3, Scale 1:100,000.
12. Legg, M. R., J. C. Borrero, and C. E. Synolakis (2002), *Evaluation of Tsunami Risk to Southern California Coastal Cities*, 2002 NEHRP Professional Fellowship Report, dated January.
13. United States Geological Survey, *7.5 Minute Quadrangle Series Point Loma Quadrangle, 1967*, photo revised 1975
14. California State Water Resources Board. GeoTracker, accessed in October 2018. <<http://geotracker.swrcb.ca.gov/>>.
15. State of California, Department of Toxic Substances Control, EnviroStor website (<http://www.envirostor.dtsc.ca.gov/public/>), accessed in October 2018.
16. Unpublished reports and maps on file with Geocon Incorporated.

Bid Results

Bidder Details

Vendor Name KTA Construction, Inc.
Address 821 Tavern Rd.
 Alpine, CA 91901
 United States

Respondee Mike Henderson
Respondee Title President
Phone 619-562-9464 Ext.
Email adam@ktaconstruction.com

Vendor Type PQUAL,CADIR,Local
License # 398284
CADIR 1000008298

Bid Detail

Bid Format Electronic
Submitted May 16, 2019 1:54:01 PM (Pacific)
Delivery Method
Bid Responsive
Bid Status Submitted
Confirmation # 178574
Ranking 0

Respondee Comment

Buyer Comment

Attachments

File Title	File Name	File Type
Certificate of Pending Actions Form	Cert of Pending Actions - 1030.pdf	CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS
Mandatory Disclosure of Business Interests	Disclosure of Business Int - 1030.pdf	MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM
Subcontractor Listing Other Than First Tier	Pages from K-19-1834-DBB-3 - Subcontractor Listing (Other Than First Tier).pdf	SUBCONTRACTOR LISTING (OTHER THAN FIRST TIER)
Additive/Deductive Alternates for Subs	K-19-1834-DBB-3 - Subcontractors Additive Deductive Form.pdf	SUBCONTRACTORS ADDITIVE/DEDUCTIVE FORM
Bid Bond	Bid Bond - Group 1030.pdf	Bid Bond

Line Items

Type	Item Code	UOM	Qty	Unit Price	Line Total	Comment
	Main Bid					
1	Bonds (Payment and Performance)					
	524126	LS	1	\$44,000.00	\$44,000.00	
2	WPCP Development					
	541330	LS	1	\$1,000.00	\$1,000.00	

Bid Results

Type	Item Code	UOM	Qty	Unit Price	Line Total	Comment
3	WPCP Implementation					
	237110	LS	1	\$56,000.00	\$56,000.00	
4	Video Recording of Existing Conditions					
	238990	LS	1	\$5,000.00	\$5,000.00	
5	Exclusive Community Liaison Services					
	541820	LS	1	\$35,000.00	\$35,000.00	
6	Preparation of Hazardous Waste Management Plan and Reporting					
	238990	LS	1	\$7,500.00	\$7,500.00	
7	Monitoring of Contaminated Soil					
	541690	HR	575	\$135.00	\$77,625.00	
8	Testing, Sampling, Site Storage and Handling of Petroleum Contaminated Soil					
	562910	TON	3600	\$10.00	\$36,000.00	
9	Loading, Transportation, and Disposal of Petroleum Contaminated Soil					
	562910	TON	3600	\$10.00	\$36,000.00	
10	Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water					
	562910	AL	1	\$150,000.00	\$150,000.00	
11	Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of Non-RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water					
	562910	AL	1	\$130,000.00	\$130,000.00	
12	Dewatering Permit and Discharge Fees (EOC Type I)					
	237110	AL	1	\$80,000.00	\$80,000.00	
13	Dewatering Hazardous Contaminated Water					
	237110	LS	1	\$10,000.00	\$10,000.00	
14	Dewatering Non-Hazardous Contaminated Water					
	237110	LS	1	\$10,000.00	\$10,000.00	
15	Remove and Relocate Existing Sign					
	238990	EA	1	\$400.00	\$400.00	
16	Mobilization					
	237110	LS	1	\$170,000.00	\$170,000.00	
17	Field Orders (EOC Type II)					
		AL	1	\$520,000.00	\$520,000.00	
18	Asphalt Pavement Repair					
	237310	TON	300	\$260.00	\$78,000.00	

Bid Results

Type	Item Code	UOM	Qty	Unit Price	Line Total	Comment
19	Phased Paving					
	237310	EA	3	\$2,750.00	\$8,250.00	
20	Rubber Polymer Modified Slurry (RPMS) Type II					
	237310	SF	379651	\$0.30	\$113,895.30	
21	Rubber Polymer Modified Slurry (RPMS) Type III					
	237310	SF	379651	\$0.40	\$151,860.40	
22	Pavement Restoration Adjacent to Trench					
	237310	SF	11500	\$15.00	\$172,500.00	
23	Crack Seal					
	237310	LB	1500	\$10.00	\$15,000.00	
24	Remove and Replace Existing Sidewalk					
	237310	SF	1500	\$12.00	\$18,000.00	
25	Additional Curb and Gutter Removal and Replacement					
	237310	LF	1000	\$60.00	\$60,000.00	
26	Cross Gutter					
	237310	SF	1874	\$20.00	\$37,480.00	
27	Curb Ramp (Type A) with Detectable Warning Tiles					
	237310	EA	1	\$4,500.00	\$4,500.00	
28	Curb Ramp (Type B) with Detectable Warning Tiles					
	237310	EA	1	\$4,500.00	\$4,500.00	
29	Curb Ramp (Type C-1) with Detectable Warning Tiles					
	237310	EA	1	\$4,500.00	\$4,500.00	
30	Curb Ramp (Type C-2) with Detectable Warning Tiles					
	237310	EA	1	\$4,500.00	\$4,500.00	
31	Curb Ramp Safety Railing (Per 40094-22-D, Detail E)					
	237310	EA	1	\$6,000.00	\$6,000.00	
32	Curb Ramp Modified (Per 40094-22-D, Detail D)					
	237310	EA	1	\$4,500.00	\$4,500.00	
33	Stamped Colored Concrete Pavement					
	237310	SF	2778	\$14.00	\$38,892.00	
34	Water Main (12 Inch, Class 305)					
	237110	LF	11454	\$175.00	\$2,004,450.00	

Bid Results

Type	Item Code	UOM	Qty	Unit Price	Line Total	Comment
35	Gate Valve (12 Inch)					
	237110	EA	26	\$3,500.00	\$91,000.00	
36	Gate Valve (8 Inch)					
	237110	EA	1	\$2,000.00	\$2,000.00	
37	3-Port Fire Hydrant Assembly and Marker (4 Inch)					
	237110	EA	28	\$10,000.00	\$280,000.00	
38	Fire Service Connection (4 Inch)					
	237110	EA	23	\$8,400.00	\$193,200.00	
39	Fire Service Connection (6 Inch)					
	237110	EA	9	\$8,700.00	\$78,300.00	
40	Water Service (1 Inch)					
	237110	EA	40	\$4,800.00	\$192,000.00	
41	Water Service (2 Inch)					
	237110	EA	55	\$5,400.00	\$297,000.00	
42	Blow-Off Valve Assembly (2 Inch)					
	237110	EA	3	\$6,000.00	\$18,000.00	
43	Air and Vacuum (Air Release) Valve Assembly (1 Inch)					
	237110	EA	1	\$7,200.00	\$7,200.00	
44	Handling and Disposal of Non-friable Asbestos Material					
	237110	LF	8700	\$7.00	\$60,900.00	
45	Temporary Resurfacing					
	237310	TON	493	\$125.00	\$61,625.00	
46	Imported Backfill For Trench					
	237110	TON	2700	\$50.00	\$135,000.00	
47	Removal of Curb Markings					
	237310	LF	115	\$12.00	\$1,380.00	
48	Striping					
	237310	LS	1	\$16,000.00	\$16,000.00	
49	Continental Crosswalks					
	237310	EA	3	\$750.00	\$2,250.00	
50	Traffic Control Design (Working Drawings)					
	541330	LS	1	\$2,500.00	\$2,500.00	

Bid Results

Type	Item Code	UOM	Qty	Unit Price	Line Total	Comment
51	Traffic Control					
	237310	LS	1	\$7,000.00	\$7,000.00	
52	Miscellaneous Landscape					
	561730	LS	1	\$25,000.00	\$25,000.00	
53	Pavement Restoration for Final Connection					
	237110	SF	500	\$20.00	\$10,000.00	
54	Temporary Resurfacing for High-lining					
	237110	TON	100	\$125.00	\$12,500.00	
Subtotal					\$5,588,207.70	
Alternate Items A						
55	Contractor Furnished Materials for the City Forces High-line Work					
	237110	LF	3900	\$4.00	\$15,600.00	
56	High-lining Installation by the Contractor					
	237110	LF	3900	\$16.00	\$62,400.00	
57	Furnished Materials for Contractor High-line Work					
	237110	LF	3900	\$4.00	\$15,600.00	
58	High-lining Removed by the Contractor					
	237110	LF	3900	\$6.00	\$23,400.00	
Subtotal					\$117,000.00	
Alternate Items B						
59	Cut-in Cross by Contractor (12 Inch)					
	237110	EA	2	\$12,000.00	\$24,000.00	
60	Connections to The Existing System by Contractor (8 Inch through 12 Inch)					
	237110	EA	4	\$5,000.00	\$20,000.00	
61	Cut and Plug by Contractor					
	237110	EA	8	\$6,000.00	\$48,000.00	
Subtotal					\$92,000.00	
Total					\$5,797,207.70	

Subcontractors

Name & Address	Description	License Num	CADIR	Amount	Type
Vic Salazar Communications 5205 Kearny Villa Way Suite 107 San Diego, CA 92123 United States	Liaison	N/A	N/A	\$30,000.00	DBE,ELBE,LAT,MAL E,MBE
Quality Construction & Engineering inc. 11956 Bernardo Plaza Drive #133 san diego, CA 92128 United States	AC Paving and Concrete Flatwork	1005282	1000026419	\$348,229.22	SLBE,CADIR,SDB,P QUAL
Soclaris Contracting 7437 Lowell Ct. La Mesa, CA 91941 United States	Hazardous Waste Management Plan, monitoring, sampling, testing, and handling of PCS	793838 PlanetBids, Inc.	1000011964	\$117,075.00	CADIR,CAU,DVBE,M ALE,SDVSB,SLBE

Bid Results

Name & Address	Description	License Num	CADIR	Amount	Type
American Asphalt South, Inc. PO Box 310036 Fontana, CA 92331 United States	Slurry Seal and Crack Seal	784969	1000000645	\$225,696.42	CAU,MALE,CADIR,P QUAL
Payco Specialties, Inc. 120 North Second Ave Chula Vista, CA 91910-1127 United States	Striping	298637	1000003515	\$17,474.00	DBE, WBE
TL Scanlan Construction, Inc. 2308 Shaylene Way Alpine, CA 91901 United States	Base Paving and dewatering	1008991	1000036079	\$872,846.00	SLBE

Line Totals (Unit Price * Quantity)								
Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	KTA Construction, Inc. Unit Price	KTA Construction, Inc. - Line Total
1	Main Bid	524126	Bonds (Payment and Performance)	2-4.1	LS	1	\$44,000.00	\$44,000.00
2	Main Bid	541330	WP/CP Development	7-8.6.4.2	LS	1	\$1,000.00	\$1,000.00
3	Main Bid	237110	WP/CP Implementation	7-8.6.4.2	LS	1	\$56,000.00	\$56,000.00
4	Main Bid	238990	Video Recording of Existing Conditions	7-9.1.1	LS	1	\$5,000.00	\$5,000.00
5	Main Bid	541820	Exclusive Community Liaison Services	7-16.4	LS	1	\$35,000.00	\$35,000.00
6	Main Bid	238990	Preparation of Hazardous Waste Management Plan and Reporting	7-22.20	LS	1	\$7,500.00	\$7,500.00
7	Main Bid	541690	Monitoring of Contaminated Soil	7-22.20	HR	575	\$135.00	\$77,625.00
8	Main Bid	562910	Testing, Sampling, Site Storage and Handling of Petroleum Contaminated Soil	7-22.20	TON	3600	\$10.00	\$36,000.00
9	Main Bid	562910	Loading, Transportation, and Disposal of Petroleum Contaminated Soil	7-22.20	TON	3600	\$10.00	\$36,000.00
10	Main Bid	562910	Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water	7-22.20	AL	1	\$150,000.00	\$150,000.00
11	Main Bid	562910	Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of Non-RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water	7-22.20	AL	1	\$130,000.00	\$130,000.00
12	Main Bid	237110	Dewatering Permit and Discharge Fees (EOC Type I)	7-8.6.6.9	AL	1	\$80,000.00	\$80,000.00
13	Main Bid	237110	Dewatering Hazardous Contaminated Water	7-8.6.6.9	LS	1	\$10,000.00	\$10,000.00
14	Main Bid	237110	Dewatering Non-Hazardous Contaminated Water	7-8.6.6.9	LS	1	\$10,000.00	\$10,000.00
15	Main Bid	238990	Remove and Relocate Existing Sign	9-3.1	EA	1	\$400.00	\$400.00
16	Main Bid	237110	Mobilization	9-3.4.1	LS	1	\$170,000.00	\$170,000.00
17	Main Bid		Field Orders (EOC Type II)	9-3.5	AL	1	\$520,000.00	\$520,000.00
18	Main Bid	237310	Asphalt Pavement Repair	302-3.2	TON	300	\$260.00	\$78,000.00
19	Main Bid	237310	Phased Paving	306-1.2	EA	3	\$2,750.00	\$8,250.00
20	Main Bid	237310	Rubber Polymer Modified Slurry (RPMS) Type II	302-4.12.4	SF	379651	\$0.30	\$113,895.30
21	Main Bid	237310	Rubber Polymer Modified Slurry (RPMS) Type III	302-4.12.4	SF	379651	\$0.40	\$151,860.40
22	Main Bid	237310	Pavement Restoration Adjacent to Trench	302-5.2.1	SF	11500	\$15.00	\$172,500.00
23	Main Bid	237310	Crack Seal	302-14.5	LB	1500	\$10.00	\$15,000.00
24	Main Bid	237310	Remove and Replace Existing Sidewalk	303-5.9	SF	1500	\$12.00	\$18,000.00
25	Main Bid	237310	Additional Curb and Gutter Removal and Replacement	303-5.9	LF	1000	\$60.00	\$60,000.00
26	Main Bid	237310	Cross Gutter	303-5.9	SF	1874	\$20.00	\$37,480.00
27	Main Bid	237310	Curb Ramp (Type A) with Detectable Warning Tiles	303-5.10.2	EA	1	\$4,500.00	\$4,500.00
28	Main Bid	237310	Curb Ramp (Type B) with Detectable Warning Tiles	303-5.10.2	EA	1	\$4,500.00	\$4,500.00
29	Main Bid	237310	Curb Ramp (Type C-1) with Detectable Warning Tiles	303-5.10.2	EA	1	\$4,500.00	\$4,500.00
30	Main Bid	237310	Curb Ramp (Type C-2) with Detectable Warning Tiles	303-5.10.2	EA	1	\$4,500.00	\$4,500.00
31	Main Bid	237310	Curb Ramp Safety Railing (Per 40094-22-D, Detail E)	303-5.10.2	EA	1	\$6,000.00	\$6,000.00
32	Main Bid	237310	Curb Ramp Modified (Per 40094-22-D, Detail D)	303-5.10.2	EA	1	\$4,500.00	\$4,500.00
33	Main Bid	237310	Stamped Colored Concrete Pavement	303-6.5	SF	2778	\$14.00	\$38,892.00
34	Main Bid	237110	Water Main (12 Inch, Class 305)	306-15.1	LF	11454	\$175.00	\$2,004,450.00
35	Main Bid	237110	Gate Valve (12 Inch)	306-15.5	EA	26	\$3,500.00	\$91,000.00
36	Main Bid	237110	Gate Valve (8 Inch)	306-15.5	EA	1	\$2,000.00	\$2,000.00
37	Main Bid	237110	3-Port Fire Hydrant Assembly and Marker (4 Inch)	306-15.6	EA	28	\$10,000.00	\$280,000.00
38	Main Bid	237110	Fire Service Connection (4 Inch)	306-15.6	EA	23	\$8,400.00	\$193,200.00
39	Main Bid	237110	Fire Service Connection (6 Inch)	306-15.6	EA	9	\$8,700.00	\$78,300.00
40	Main Bid	237110	Water Service (1 Inch)	306-15.8	EA	40	\$4,800.00	\$192,000.00
41	Main Bid	237110	Water Service (2 Inch)	306-15.8	EA	55	\$5,400.00	\$297,000.00
42	Main Bid	237110	Blow-Off Valve Assembly (2 Inch)	306-15.8	EA	3	\$6,000.00	\$18,000.00
43	Main Bid	237110	Air and Vacuum (Air Release) Valve Assembly (1 Inch)	306-15.8	EA	1	\$7,200.00	\$7,200.00
44	Main Bid	237110	Handling and Disposal of Non-friable Asbestos Material	306-3.3.4.5	LF	8700	\$7.00	\$60,900.00
45	Main Bid	237310	Temporary Resurfacing	306-15.9	TON	493	\$125.00	\$61,625.00
46	Main Bid	237110	Imported Backfill For Trench	306-15.12	TON	2700	\$50.00	\$135,000.00
47	Main Bid	237310	Removal of Curb Markings	314-2.3	LF	115	\$12.00	\$1,380.00
48	Main Bid	237310	Striping	314-4.3.7 And 314-4.4.6	LS	1	\$16,000.00	\$16,000.00
49	Main Bid	237310	Continental Crosswalks	314-4.4.6	EA	3	\$750.00	\$2,250.00
50	Main Bid	541330	Traffic Control Design (Working Drawings)	601-6	LS	1	\$2,500.00	\$2,500.00
51	Main Bid	237310	Traffic Control	601-6	LS	1	\$7,000.00	\$7,000.00
52	Main Bid	561730	Miscellaneous Landscape	801-9	LS	1	\$25,000.00	\$25,000.00
53	Main Bid	237110	Pavement Restoration for Final Connection	901-2.5	SF	500	\$20.00	\$10,000.00
54	Main Bid	237110	Temporary Resurfacing for High-lining	901-1.3	TON	100	\$125.00	\$12,500.00
							Subtotal	\$5,588,207.70
55	Alternate Items	237110	Contractor Furnished Materials for the City Forces High-line Work	900-1.2	LF	3900	\$4.00	\$15,600.00
56	Alternate Items	237110	High-lining Installation by the Contractor	901-1.3	LF	3900	\$16.00	\$62,400.00
57	Alternate Items	237110	Furnished Materials for Contractor High-line Work	900-1.2	LF	3900	\$4.00	\$15,600.00
58	Alternate Items	237110	High-lining Removed by the Contractor	901-1.3	LF	3900	\$6.00	\$23,400.00
							Subtotal	\$117,000.00
59	Alternate Items	237110	Cut-in Cross by Contractor (12 Inch)	901-2.5	EA	2	\$12,000.00	\$24,000.00
60	Alternate Items	237110	Connections to The Existing System by Contractor (8 Inch through 12 Inch)	901-2.5	EA	4	\$5,000.00	\$20,000.00
61	Alternate Items	237110	Cut and Plug by Contractor	901-2.5	EA	8	\$6,000.00	\$48,000.00
							Subtotal	\$92,000.00
							Total	\$5,797,207.70