

# CITY OF PINOLE



## CITY COUNCIL

Mayor, Devin Murphy  
Mayor Pro Tem, Maureen Toms  
Councilmember, Anthony Tave  
Councilmember, Norma Martínez-Rubin  
Councilmember, Cameron N. Sasai

## INVITATION FOR BID AND CONTRACT DOCUMENTS FOR HAZEL STREET STORM DRAIN IMPROVEMENTS

**CIP PROJECT #: SW1901**  
**APRIL 13, 2023**

Questions concerning interpretation of plans, general provisions, special provisions, technical specifications and bid items shall be directed to:

City of Pinole, Public Works Department  
**Attn: Misha Kaur, Capital Improvement & Environmental Program Manager**  
2131 Pear St, Pinole, CA 94564  
Phone: (510) 724-9839 | Email: [mkaur@ci.pinole.ca.us](mailto:mkaur@ci.pinole.ca.us)

**BID OPENING: May 10, 2023 at 2:00PM (PST/local time)**

Release of IFB authorized by:

*Misha Kaur*

04/13/2023

Misha Kaur, Capital Improvement & Environmental Program Manager

Date

**NOTICE OF INVITATION FOR BIDS**

1. RECEIPT OF BIDS: Sealed Bids will be received at the office of the City of Pinole Authority (CITY) located at **2131 Pear Street, Pinole, CA 94564**, until **2:00PM on Wednesday, May 10, 2023**, for the Hazel Street Storm Drain Improvements, Project SW1901. Any Bids received after the specified time and date will not be considered. Fax and other electronically transmitted Bids will not be accepted.
2. OPENING OF BIDS: The Bids will be publicly opened and read at **2:00PM on Wednesday, May 10, 2023** at the above-mentioned office of the CITY. The CITY reserves the right to postpone the date and time for opening of Bids at any time prior to the aforesaid date and time.
3. COMPLETION OF WORK: The WORK must be completed within sixty (60) working days after the commencement date stated in the Notice to Proceed.
4. DESCRIPTION OF WORK: The WORK includes:
  - Mobilization
  - Demolition/Clearing/Excavation/Offhaul
  - Storm Water Pollution Prevention Control
  - Sewage Bypass Pumping
  - Dewatering and Stormwater Management
  - 29" x 45" Elliptical RCP
  - 36" RCP Storm Drain
  - Storm Drain Structures
  - Sanitary Sewer Force Main
  - Steel Casing
  - Replace Existing Monument
  - Misc. Site Restoration
5. ENGINEER'S COST ESTIMATE: The design engineer's opinion of probable construction cost for this project is approximately \$ 400,000.
6. SITE OF WORK: The site of the WORK is located: at the intersection of Hazel Street and Hazel Lane in Pinole, California.
7. OBTAINING CONTRACT DOCUMENTS: The Contract Documents are entitled "Hazel Street Storm Drain Improvements, Project SW1901."

Documents can be downloaded free of charge through the City's webpage at <https://www.ci.pinole.ca.us/bids>. Bid documents will also be posted on [www.publicpurchase.com](http://www.publicpurchase.com).
8. BID SECURITY: Each Bid shall be accompanied by a certified or cashier's check or Bid Bond executed by an admitted surety in the amount of 10 percent of the Total Bid Price payable to the City of Pinole Authority as a guarantee that the Bidder, if its Bid is accepted, will promptly execute the Agreement. A Bid shall not be considered unless one of the forms of Bidder's security is enclosed with it. Upon acceptance of the Bid, if the Bidder refuses to or fails to promptly execute the Agreement, the Bidder's security shall be forfeited to the CITY.

9. **CONTRACTOR'S LICENSE CLASSIFICATION:** In accordance with the provisions of California Public Contract Code Section 3300, the CITY has determined that the CONTRACTOR shall possess a valid Class A license at the time that the Contract is awarded. Failure to possess the specified license shall render the Bid as non-responsive and shall act as a bar to award of the Contract to any bidder not possessing said license at the time of award.
10. **PREFERENCE FOR MATERIAL:** Substitute products will be considered prior to award of the Contract in accordance with Section 3400 of the California Public Contract Code. The Bidder will submit data substantiating its request for a substitution of "an equal" item within 14 days following submission of its Bid. Substantiation data will conform to the requirements of the instructions for Proposed Substitutions or "or equal" items contained in the Bid Forms. The ENGINEER will make a determination of approval or rejection of the proposed substitution prior to the award of the Contract. No request for substitution of "an equal" item will be considered by the ENGINEER after award of the Contract.
11. **REJECTION OF PROPOSALS:** The CITY reserves the right to reject all or any part of all bids submitted, waive informalities and irregularities, and will not, to the extent allowed by law, be bound to accept the lowest bid.
12. **BIDS TO REMAIN OPEN:** The Bidder shall guarantee the total bid price for a period of 120 calendar days from the date of bid opening.
13. **CALIFORNIA WAGE RATE REQUIREMENTS:** In accordance with the provisions of California Labor Code Sections 1770, 1773, 1773.1, 1773.6 and 1773.7 as amended, the Director of the Department of Industrial Relations has determined the general prevailing rate of per diem wages in accordance with the standards set forth in Section 1773 for the locality in which the WORK is to be performed. It shall be mandatory upon the CONTRACTOR to whom the WORK is awarded and upon any subcontractor under the CONTRACTOR to pay not less than said specified rates to all workers employed by them in the execution of the WORK.
14. **LABOR COMPLIANCE PURSUANT TO CALIFORNIA LABOR CODE § 1771.1.** A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirement of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for 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.
15. **RETAINAGE FROM PAYMENTS:** The CONTRACTOR may elect to receive 100 percent of payments due under the Contract Documents from time to time, without retention of any portion of the payment by the CITY, by depositing securities of equivalent value with the CITY in accordance with the provisions of Section 22300 of the Public Contract Code. Alternatively, the CONTRACTOR may request and the CITY shall make payment of retentions earned directly to the escrow agent at the expense of CONTRACTOR. At the expense of the CONTRACTOR, the CONTRACTOR may direct the investments of the payments into securities and the CONTRACTOR shall receive the interest earned on the investments upon the same terms as provided in Section 22300 of the Public Contract

Code for securities deposited by the CONTRACTOR. The CONTRACTOR shall be responsible for paying all fees for the expenses incurred by the escrow agent in administering the escrow account and all expenses of the CITY. These expenses and payment terms shall be determined by the CITY's Finance Director or his/her designee and the escrow agent. Upon satisfactory completion of the WORK, the CONTRACTOR shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from the CITY, pursuant to the terms of Section 22300 of the Public Contract Code. Such securities, if deposited by the CONTRACTOR, shall be valued by the CITY, whose decision on valuation of the securities shall be final. Securities eligible for investment under this provision shall be limited to those listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the CONTRACTOR and the CITY.

16. PAYMENT BOND: Pursuant to and in accordance with California Civil Code Section 3247, a payment (labor and materials) bond must be filed if the expenditure for the WORK is in excess of Twenty-Five Thousand Dollars (\$25,000).

17. PRE-BID CONFERENCE/SITE VISITS:

**No pre-bid conference/site visit is to be held.**

18. PROJECT ADMINISTRATION: All communications relative to this WORK shall be directed to the ENGINEER prior to opening of the Bids.

NAME	Misha Kaur
ADDRESS	City of Pinole 2131 Pear Street Pinole, CA, 94564
PHONE	510-724-9839
Email	mkaur@ci.pinole.ca.us

19. CITY'S RIGHTS RESERVED: The CITY reserves the right to reject any or all bids, to waive any minor irregularity in a bid, and to make awards to the lowest responsive, responsible bidder as it may best serve the interest of the CITY.

END OF NOTICE OF INVITATION FOR BIDS

## **INSTRUCTIONS TO BIDDERS**

1. **DEFINED TERMS.** Terms used in these Instructions to Bidders and the Notice of Invitation for Bids which are defined in the General Conditions have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a bid directly to CITY, as distinct from a sub-bidder, who submits a price or quote to a Bidder.
2. **LOCAL BUSINESS LICENSE.** All CONTRACTORS, including subcontractors, not already having a local business license for the work contemplated, will be required to secure the appropriate license before a contract can be executed.
3. **INTERPRETATIONS AND ADDENDA.**
  - 3.1 All questions about the meaning or intent of the Contract Documents are to be directed to the ENGINEER. Additions, deletions, or revisions to the Contract Documents considered necessary by the ENGINEER in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by the ENGINEER as having received the Contract Documents. Questions received less than 14 days prior to due date of bids may not be answered. Only answers to such questions issued by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
  - 3.2 Addenda(s) may be issued to make other additions, deletions, or revisions to the Contract Documents.
  - 3.3 Bidders shall make no special interpretation or inference of intent from differing formats in the Technical Specifications.
4. **BIDDER'S EXAMINATION OF CONTRACT DOCUMENTS AND SITE.**
  - 4.1 It is the responsibility of each Bidder before submitting a Bid:
    - A. To examine thoroughly the Contract Documents and other related data identified in the Bidding Documents (including "technical" data referred to below);
    - B. To visit the site to become familiar with local conditions that may affect cost, progress, or performance of the WORK;
    - C. To consider federal, state, and local laws and regulations that may affect cost, progress, or performance of the WORK;
    - D. To study and carefully correlate the Bidder's observations with the Contract Documents; and
    - E. To notify the ENGINEER of all conflicts, errors, ambiguities, or discrepancies in or between the Contract Documents and such other related data.
  - 4.2 Reference is made to the General Conditions, Special Provisions and Specifications for identification of:

- A. Those reports of explorations and tests of subsurface conditions at the site which have been utilized by the ENGINEER in the preparation of the Contract Documents.
  - B. Those drawings of physical conditions in or relating to existing surface and subsurface conditions (except Underground Utilities) which are at or contiguous to the site which have been utilized by the ENGINEER in the preparation of the Contract Documents.
  - C. Those environmental reports or drawings relating to asbestos, hazardous waste, PCBs, petroleum, and/or radioactive materials identified at the site which have been utilized by the ENGINEER in the preparation of the Contract Documents.
  - D. The ENGINEER makes representation as to the completeness of the reports or drawings referred to in Sections 4.2A, 4.2B, and 4.2C above or the accuracy of any data or information contained therein. The Bidder may rely upon the accuracy of the technical data contained in such reports and drawings. However, the Bidder may not rely upon any interpretation of such technical data, including any interpretation or extrapolation thereof, or any non-technical data, interpretations, and opinions contained therein.
- 4.3 Copies of reports and drawings referred to in Section 4.2 will be made available by the CITY to any Bidder on request, if said reports and drawings are not bound herein. Those reports and drawings are not part of the Contract Documents, but the technical data contained therein upon which the Bidder is entitled to rely, are incorporated herein by reference.
- 4.4 Information and data reflected in the Contract Documents with respect to Underground Utilities at or contiguous to the site are based upon information and data furnished to the ENGINEER by the owners of such Underground Utilities or others, and the CITY does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Contract documents.
- 4.5 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, Underground Utilities, and other physical conditions, and possible changes in the Contract Documents due to differing conditions appear in Sections 1-4.02, 1-4.03, and 1-4.04 of the General Conditions.
- 4.6 Before submitting a bid, each Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface, and Underground Utilities) at or contiguous to the site or otherwise which may affect cost, progress, or performance of the WORK and which the Bidder deems necessary to determine its bid for performing the WORK in accordance with the time, price, and other terms and conditions of the Contract Documents.
- 4.7 On request a minimum of two (2) working days in advance, the CITY will provide each Bidder access to the site to conduct such examinations, investigations, explorations, tests, and studies as each Bidder deems necessary for submission of a Bid. Location of any excavation or boring shall be subject to prior approval of ENGINEER and applicable agencies. Bidder shall fill all holes, restore all pavement to match existing structural section, and shall clean up and restore the site to its former condition upon completion of such explorations. CITY reserves the right to require Bidder to execute an Access Agreement prior to accessing the

site.

- 4.8 The lands upon which the WORK is to be performed, rights-of-way, and easements for access thereto and other lands designated for use by the CONTRACTOR in performing the WORK are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by the CONTRACTOR. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by the CITY unless otherwise provided in the Contract Documents.
- 4.9 The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of this Section 4 and the following:
- A. That the Bid is premised upon performing the WORK required by the Contract Documents without exception and such means, methods, techniques, sequences, or procedures of construction (if any) as may be required by the Contract Documents;
  - B. That Bidder has given the ENGINEER written notice of all conflicts, errors, ambiguities, and discrepancies in the Contract Documents and the written resolution thereof by the ENGINEER is acceptable to the Bidder; and
  - C. That the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the WORK.

- 5. BID FORMS.** The bid shall be submitted on the Bid Forms provided by the CITY. All blanks on the Bid Forms shall be completed in ink. All names must be printed below the signatures. The bid shall be submitted in a sealed envelope which shall be plainly marked in the upper left hand corner with the name and address of the Bidder and shall bear the words "BID FOR" followed by the title of the Contract Documents for the WORK, the name of the CITY, the address where Bids are to be delivered or mailed to, and the date and hour of opening of Bids.

The bid must set forth the name and location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the WORK, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the WORK according to detailed Drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets and highways, including bridges, in excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.

**6. CERTIFICATES.**

- 6.1 Bids by corporations must be executed in the corporate name by the president, a vice-president, or other corporate officer. Such Bid shall be accompanied by the enclosed Certificate of Authority to sign, attested by the secretary or assistant secretary, and with the corporate seal affixed. The corporate address and state of incorporation must appear below the signature.

- 62 Bids by partnerships must be executed in the partnership name and be signed by a managing partner, accompanied by the enclosed Certificate of Authority to sign, and his/her title must appear under the signature and the official address of the partnership must appear below the signature.
- 63 Bids by joint venture must be executed in the joint venture name and be signed by a joint venture managing partner, accompanied by the enclosed Certificate of Authority to sign, and his/her title must appear under the signature and the official address of the joint venture must appear below the signature.
7. **DISQUALIFICATION OF BIDDERS.** More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. If the CITY believes that any Bidder is interested in more than one Bid for the WORK contemplated, all Bids in which such Bidder is interested will be rejected. If the CITY believes that collusion exists among the Bidders, all Bids will be rejected. A party who has quoted prices to a bidder is not hereby disqualified from quoting prices to other Bidders, or from submitting a Bid directly for the WORK. If a Bidder is not registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5 and Section 1771.1, then the Bid may be rejected as non-responsive. A bidder who is ineligible to perform work on a public works project pursuant to Sections 1777.1 or 1777.7 of the Labor Code is prohibited from bidding on this project.
8. **QUANTITIES OF WORK.** The quantities of work or material stated in unit price items of the Bid are supplied only to give an indication of the general scope of the WORK; the OWNER does not expressly or by implication agree that the actual amount of work or material will correspond therewith, and reserves the right after award to increase or decrease the quantity of any unit price item of the WORK by an amount up to and including 25 percent of any Bid item in its entirety, or to add additional Bid items up to and including an aggregate total amount not to exceed 25 percent of the Bid price.
9. **SUBSTITUTE OR "OR EQUAL" ITEMS.** Whenever materials or equipment are specified or described in the Contract Documents by using the name of a particular manufacturer and the name is followed by the words "or equal", the Bidder may write the name of a substitute manufacturer (which the Bidder considers as an "or equal") in the List of Proposed Substitutions in the Bid Forms. The ENGINEER will make a determination of approval or rejection of the proposed substitution prior to award of the Contract. No request for substitution of an "or equal" item will be considered by the ENGINEER after award of the Contract. The procedure for the submittal of substitute or "or equal" products is contained in the Bid Forms. The Bidder shall not be relieved of any obligations of the Contract Documents or be entitled to an adjustment in the Contract Price in the event any proposed substitution is not approved.
10. **COMPETENCY OF BIDDERS.** In selecting the lowest responsive, responsible Bidder, consideration will be given not only to the financial standing but also to the general competency of the Bidder for the performance of the WORK covered by the Bid. To this end, each Bid shall be supported by a statement of the Bidder's experience as of recent date including: (a) all projects worked on by the Bidder over the past three (3) years including the contract amount for each project; (b) all complaints made against the Contractor's license in the past ten (10) years; and (c) all claims and lawsuits presented or filed in the last five (5) years, regardless of the form, regarding any public works project.



11. **SUBMISSION OF BIDS.** The Bid shall be delivered by the time and to the place stipulated in the Notice Inviting Bids. It is the Bidder's sole responsibility to see that its Bid is received in proper time and at the proper place.
12. **BID SECURITY, BONDS, AND INSURANCE.** Each Bid shall be accompanied by a certified or cashier's check or approved Bid Bond in the amount stated in the Notice Inviting Bids. Said check or bond shall be made payable to the CITY and shall be given as a guarantee that the Bidder, if awarded the WORK, will enter into an Agreement with the CITY and will furnish the necessary insurance certificates, Payment Bond, and Performance Bond. In case of refusal or failure to enter into said Agreement, the check or Bid Bond, as the case may be, shall be forfeited to the CITY. If the Bidder elects to furnish a Bid Bond as its Bid security, the Bidder shall use the Bid Bond form bound herein. Bid Bonds shall comply with the requirements applicable to payment and performance bonds in the General Conditions.
  - 12.1 **BIDDING CAPACITY.** Each Bid shall be accompanied by a list of the projects currently being worked on by Bidder, their size, contract price, scheduled completion date, location, and owner. Additionally, Bidder shall provide certified evidence of its current bonding capacity.
13. **DISCREPANCIES IN BIDS.** In the event there is more than one Bid item in a Bid Schedule, the Bidder shall furnish a price for all Bid Items in the Schedule, and failure to do so will render the Bid non-responsive and shall cause its rejection. In the event there are unit price Bid items in a Bidding schedule and the amount indicated for a unit price Bid item does not equal the product of the unit price and quantity, the unit price shall govern and the amount will be corrected accordingly, and the BIDDER shall be bound by said correction. In the event there is more than one Bid item in a Bid Schedule and the total indicated for the Schedule does not agree with the sum of the prices Bid on the individual items, the prices Bid on the individual items shall govern and the total for the Schedule will be corrected accordingly, and the BIDDER shall be bound by said correction.
14. **MODIFICATIONS AND UNAUTHORIZED ALTERNATIVE BIDS.** Unauthorized conditions, limitations, or provisos attached to the Bid shall render it informal and may cause its rejection as being non-responsive. The Bid forms shall be completed without interlineations, alterations, or erasures in the printed text. Alternative Bids will not be considered unless called for. Oral, telegraphic, or telephonic Bids or modifications will not be considered.
15. **WITHDRAWAL OF BID.** The Bid may be withdrawn by the Bidder by means of a written request, signed by the Bidder or its properly authorized representative. Such written request must be delivered to the place stipulated in the Notice Inviting Bids for receipt of Bids prior to the scheduled closing time for receipt of Bids.
16. **BID PROTEST.** Any bid protest must be submitted in writing to City Manager before 5:00PM (PST/Local Time) on the fifth (5<sup>th</sup>) working day following bid opening.
  - A. The initial protest document must contain a complete statement of the basis for the protest, and all supporting documentation.
  - B. The party filing the protest must have submitted a Bid for the WORK. A subcontractor of a party submitting a Bid for the WORK may not submit a Bid protest. A party may not rely on the Bid protest submitted by another Bidder but must timely pursue its

own protest.

- C. The protest must refer to the specific portion of the bid document which forms the basis for the protest.
  - D. The protest must include the name, address and telephone number of the person representing the protesting party.
  - E. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest which may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.
  - F. The CITY will give the protested Bidder five (5) working days after the receipt of the protest to submit a written response. The responding Bidder shall transmit the response to the protesting Bidder concurrent with delivery to the CITY.
  - G. The procedure and time limits set forth in this section are mandatory and are the Bidder's sole and exclusive remedy in the event of bid protest. The Bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder, but must timely pursue its own protest.
  - H. If the CITY determines that a protest is frivolous, the protesting bidder may be determined to be non-responsible, and that bidder may be determined to be ineligible for future contract awards.
- 17. AWARD OF CONTRACT.** Award of the contract, if awarded, will be made to the lowest responsive, responsible Bidder whose bid complies with the requirements of the Contract Documents. Unless otherwise specified, any such award will be made within the period stated in the Notice Inviting Bids that the bids are to remain open. Unless otherwise indicated, a single award will be made for all the Bid items in an individual Bid Schedule. In the event the WORK is contained in more than one Bid Schedule, the CITY may award Schedules individually or in combination. In the case of two (2) Bid Schedules which are alternative to each other, only one (1) of such alternative schedules will be awarded. The CITY may condition the award upon the Bidder's timely submission of all items required by the Contract Documents, including, but not limited to the executed Agreement, performance, labor and materials, and maintenance bonds, and required certificates of insurance and endorsements.
- 18. RETURN OF BID SECURITY.** Within 14 days after award of the contract, the CITY will, if requested, return the Bid securities accompanying such Bids that are not being considered in making the award. All other Bid securities will be held until the Agreement has been finally executed. They will then be returned, if requested, to the respective Bidders whose Bids they accompany.
- 19. EXECUTION OF AGREEMENT.** The Bidder to whom the award is made shall execute a written agreement with the CITY on the form of agreement provided, shall secure all insurance, and shall furnish all certificates and bonds required by the Contract Documents

within five (5) working days after receipt of Notice of Award from the CITY. Failure or refusal to enter into an Agreement as herein provided or to conform to any of the stipulated requirements in connection therewith shall be just cause for annulment of the award and forfeiture of the Bid security. If the lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the CITY may award the Contract to the second lowest responsive, responsible Bidder. If the second lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the OWNER may award the contract to the third lowest responsive, responsible Bidder. On the failure or refusal of such second or third lowest Bidder to execute the Agreement, each such Bidder's Bid securities shall be likewise forfeited to the CITY.

20. **LIQUIDATED DAMAGES.** Provisions for liquidated damages, if any, are set forth in the Agreement.
21. **WORKERS' COMPENSATION REQUIREMENT.** The Bidder should be aware that in accordance with Section 3700 of the California Labor Code it will, if awarded the Contract, be required to secure the payment of compensation to its employees and execute the Workers' Compensation Certification in the form contained in these Contract Documents.
22. **NON-COLLUSION AFFIDAVIT.** Bidders must execute the following affidavit and submit the same with his/her bid:
23. **MATERIALS SUPPLIERS LIST.** Bidders and their subcontractors must complete the List of Materials Suppliers and Material Guarantee form provided with the Bid Forms and must submit the completed form with the Bid.

END OF INSTRUCTIONS TO BIDDERS

**NON-COLLUSION SUBMITTED WITH BID**

**BIDDER'S AFFIDAVIT OF NON-COLLUSION SUBMITTED WITH BID**

\_\_\_\_\_, [Contractor] hereby declares that:

He or she is \_\_\_\_\_ [title/position] of \_\_\_\_\_

\_\_\_\_\_, [company name] 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 or 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.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on \_\_\_\_\_ at \_\_\_\_\_

(DATE)

(PLACE)

\_\_\_\_\_  
SIGNATURE

Public Contract Code section 7106

Code of Civil Procedure section 2015.5

END OF BIDDER'S AFFIDAVIT OF NON-COLLUSION SUBMITTED WITH BID

LEVIN ACT DISCLOSURE STATEMENT SUBMITTED WITH BID

**BIDDER'S AFFIDAVIT OF LEVIN ACT DISCLOSURE STATEMENT**

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an Officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than \$250 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the Officer, or received by the Officer on behalf of any other Officer, or on behalf of any candidate for office or on behalf of any committee. The Levine Act also requires disclosure of such contributions by a party to be awarded a specified contract. Please refer to the attachment for the complete statutory language.

Current members of the AGENCY are:

Mayor, Devin Murphy

Mayor Pro Tem, Maureen Toms

Councilmember, Anthony Tave

Councilmember, Cameron N. Sasai

Councilmember, Norma Martinez-Rubin

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than \$250 to any member of the AGENCY in the 12 months preceding the date of the issuance of this request for proposal or request for qualifications?

YES  NO

If yes, please identify the Director(s): \_\_\_\_\_

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than \$250 to any member of the AGENCY in the three months following the award of the contract?

YES  NO

If yes, please identify the Director(s): \_\_\_\_\_

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

\_\_\_\_\_  
DATE

\_\_\_\_\_  
(SIGNATURE OF AUTHORIZED OFFICIAL)

\_\_\_\_\_  
(TYPE OR WRITE APPROPRIATE NAME, TITLE)

\_\_\_\_\_  
(TYPE OR WRITE NAME OF COMPANY)

## California Government Code Section 84308

(a) The definitions set forth in this subdivision shall govern the interpretation of this section.

(1) "Party" means any person who files an application for, or is the subject of, a proceeding involving a license, permit, or other entitlement for use.

(2) "Participant" means any person who is not a party but who actively supports or opposes a particular decision in a proceeding involving a license, permit, or other entitlement for use and who has a financial interest in the decision, as described in Article 1 (commencing with Section 87100) of Chapter 7. A person actively supports or opposes a particular decision in a proceeding if he or she lobbies in person the officers or employees of the agency, testifies in person before the agency, or otherwise acts to influence officers of the agency.

(3) "Agency" means an agency as defined in Section 82003 except that it does not include the courts or any agency in the judicial branch of government, local governmental agencies whose members are directly elected by the voters, the Legislature, the Board of Equalization, or constitutional officers. However, this section applies to any person who is a member of an exempted agency but is acting as a voting member of another agency.

(4) "Officer" means any elected or appointed officer of an agency, any alternate to an elected or appointed officer of an agency, and any candidate for elective office in an agency.

(5) "License, permit, or other entitlement for use" means all business, professional, trade and land use licenses and permits and all other entitlements for use, including all entitlements for land use, all contracts (other than competitively bid, labor, or personal employment contracts), and all franchises.

(6) "Contribution" includes contributions to candidates and committees in federal, state, or local elections.

(b) No officer of an agency shall accept, solicit, or direct a contribution of more than two hundred fifty dollars (\$250) from any party, or his or her agent, or from any participant, or his or her agent, while a proceeding involving a license, permit, or other entitlement for use is pending before the agency and for three months following the date a final decision is rendered in the proceeding if the officer knows or has reason to know that the participant has a financial interest, as that term is used in Article 1 (commencing with Section 87100) of Chapter 7. This prohibition shall apply regardless of whether the officer accepts, solicits, or directs the contribution for himself or herself, or on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

(c) Prior to rendering any decision in a proceeding involving a license, permit or other entitlement for use pending before an agency, each officer of the agency who received a contribution within the preceding 12 months in an amount of more than two hundred fifty dollars (\$250) from a party or from any participant shall disclose that fact on the record of the proceeding. No officer of an agency shall make, participate in making, or in any way attempt to use his or her official position to influence the decision in a proceeding involving a license, permit, or other entitlement for use pending before the agency if the officer has willfully or knowingly received a contribution in an amount of more than two hundred fifty dollars (\$250) within the preceding 12 months from a party or his or her agent, or from any participant, or his or her agent if the officer knows or has reason to know that the participant has a financial interest in the decision, as that term is described with respect to public officials in Article 1 (commencing with Section 87100) of Chapter 7. If an officer receives a contribution which would otherwise require disqualification under this section, returns the contribution within 30 days from the time he or she knows, or should have known, about the contribution and the proceeding involving a license, permit, or other entitlement for use, he or she shall be permitted to participate in the proceeding.

(d) A party to a proceeding before an agency involving a license, permit, or other entitlement for use shall disclose on the record of the proceeding any contribution in an amount of more than two hundred fifty dollars (\$250) made within the preceding 12 months by the party, or his or her agent, to any officer of the agency. No party, or his or her agent, to a proceeding involving a license, permit, or other entitlement for use pending before any agency and no participant, or his or her agent, in the proceeding shall make a contribution of more than two hundred fifty dollars (\$250) to any officer of that agency during the proceeding and for three months following the date a final decision is rendered by the agency in the proceeding. When a closed corporation is a party to, or a participant in, a proceeding involving a license, permit, or other entitlement for use pending before an agency, the majority shareholder is subject to the disclosure and prohibition requirements specified in subdivisions (b), (c), and this subdivision.

(e) Nothing in this section shall be construed to imply that any contribution subject to being reported under this title shall not be so reported.

For more information, contact the Fair Political Practices Commission, 1102 Q St #3000, Sacramento, CA 95811, (916) 322-5660.

LOBBYING CERTIFICATION SUBMITTED WITH BID

**LOBBYING CERTIFICATION SUBMITTED WITH BID**

The BIDDER certifies, to the best of its Knowledge and belief, that:

- (1) No Federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of a Federal department or agency, a Member of the U.S. Congress, an officer or employee of the U.S. Congress, or an employee of a Member of the U.S. Congress in connection With the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification thereof.
- (2) If any funds other than Federally appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement. the undersigned shall complete and submit Standard Form- LLL, "Disclosure Form to Report Lobbying," in accordance with its instruction, as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96).
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contractors, sub-grants, and contracts under grants, loans. and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

THE BIDDER, \_\_\_\_\_ CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF EACH STATEMENT OF ITS CERTIFICATION AND DISCLOSURE, IF ANY. IN ADDITION, THE PROPOSER OR BIDDER UNDERSTANDS AND AGREES THAT THE PROVISIONS OF 31 U.S.C. §§ 3801 ET SEQ. APPLY TO THIS CERTIFICATION AND DISCLOSURE, IF ANY.

\_\_\_\_\_  
(SIGNATURE OF BIDDER'S AUTHORIZED PERSON)

\_\_\_\_\_  
Name and Title of the BIDDER's Authorized Person

END OF LOBBYING CERTIFICATION SUBMITTED WITH BID

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION SUBMITTED WITH BID

**BIDDER'S EQUAL EMPLOYEMENT OPPORTUNITY CERTIFICATION**

The Bidder \_\_\_\_\_,

proposed subcontractor(s) \_\_\_\_\_, hereby certifies that he/she has \_\_\_\_\_, has not \_\_\_\_\_, participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filling requirements.

**Note:** The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on \_\_\_\_\_ at \_\_\_\_\_  
(DATE) (PLACE)

\_\_\_\_\_  
SIGNATURE

END OF BIDDER'S CERTIFICATION OF EQUAL EMPLOYMENT OPPORTUNITY SUBMITTED WITH  
BID



### **PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT**

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has \_\_\_\_\_, has not \_\_\_\_\_ been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

*Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.*

### **PUBLIC CONTRACT CODE 10232 STATEMENT**

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

*Note: The above Statement and Questionnaire are part of the Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.*

### **PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE**

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes \_\_\_\_\_ No \_\_\_\_\_

If the answer is yes, explain the circumstances in the following space or use an attachment.

## DEBARMENT AND SUSPENSION CERTIFICATION

### TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

---

(SIGNATURE OF BIDDER'S AUTHORIZED PERSON)

---

Name and Title of the BIDDER's Authorized Person

END OF BIDDER'S CERTIFICATION FOR PUBLIC CONTRACT CODE 10285.1, 10232, 10162 AND DEBARMENT AND SUSPENSION SUBMITTED WITH BID

**BID PROPOSAL CERTIFICATES**

**BID PROPOSAL CERTIFICATE**  
(if Corporation)

STATE OF CALIFORNIA        )  
  ) ss:  
COUNTY OF \_\_\_\_\_)

I HEREBY CERTIFY that a meeting of the Board of Directors of the \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

a corporation existing under the laws of the State of \_\_\_\_\_, held on \_\_\_\_\_, 20\_\_\_\_, the following resolution was duly passed and adopted:

“RESOLVED, that \_\_\_\_\_, as \_\_\_\_\_ President of the Corporation, be and is hereby authorized to execute the Bid Proposal dated \_\_\_\_\_, 20\_\_\_\_, for the \_\_\_\_\_ project, in the County of Contra Costa, and that his/her execution thereof, attested by the Secretary of the Corporation, and with the Corporate Seal affixed, shall be the official act and deed of this Corporation.”

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the corporation this \_\_\_\_\_, day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Secretary

(SEAL)

**BID PROPOSAL CERTIFICATE**

(if Partnership)

STATE OF CALIFORNIA        )  
  ) ss:  
COUNTY OF \_\_\_\_\_)

I HEREBY CERTIFY that a meeting of the Partners of the \_\_\_\_\_

\_\_\_\_\_

a partnership existing under the laws of the State of \_\_\_\_\_, held  
on \_\_\_\_\_, 20\_\_\_\_, the following resolution was duly passed and adopted:

“RESOLVED, that \_\_\_\_\_, as the General  
Partner of the Partnership, be and is hereby authorized to execute the Bid Proposal dated  
\_\_\_\_\_, 20\_\_\_\_, for the \_\_\_\_\_ project, in the County of Contra  
Costa, and that his/her execution thereof, attested by the \_\_\_\_\_ shall  
be the official act and deed of this Partnership.”

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_\_, day of  
\_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Partner

(SEAL)

**BID PROPOSAL CERTIFICATE**  
(if Joint Venture)

STATE OF CALIFORNIA        )  
  ) ss:  
COUNTY OF \_\_\_\_\_)

I HEREBY CERTIFY that a meeting of the Principals of the \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

a joint venture existing under the laws of the State of \_\_\_\_\_,  
held on \_\_\_\_\_, 20\_\_\_\_, the following resolution was duly passed and adopted:

“RESOLVED, that \_\_\_\_\_,  
as \_\_\_\_\_, of the joint venture, be and is hereby authorized to execute the Bid  
Proposal dated \_\_\_\_\_, 20\_\_\_\_, for the \_\_\_\_\_ project, in the County  
of Contra Costa, and that his/her execution thereof, attested by the  
\_\_\_\_\_ shall be the official act and deed of this Joint Venture.”

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_\_, day of  
\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Managing Partner

(SEAL)

**BIDS PROPOSAL**

**PROPOSAL**

To the City Council of the City of Pinole (CITY):

The undersigned declares that he/she has carefully examined the location of the proposed work, that he/she has examined the plans and specifications, and read the accompanying instructions to bidders, and hereby proposes to furnish all materials and do all the work required to complete the said work in accordance with said plans, specifications, and special provisions for the unit or lump sum prices set forth in the attached Bid Schedule.

It is understood and agreed that the undersigned shall complete the work of the contract within the time provided for in the Contract Documents and Specifications governing said work.

If awarded the contract, the undersigned hereby agrees to sign said contract and to furnish the necessary bonds, insurance certificates and agreements within five (5) working days after receipt of Notice of Award of said contract from the CITY.

The undersigned has examined the location of the proposed work and is familiar with the plans, specifications and other contract documents and the local conditions at the place where the work is to be done.

The undersigned has checked carefully all the figures on the attached Bid Schedule and understands that the CITY will not be responsible for any errors or omissions on the part of the undersigned in making up the bid.

Enclosed find bidder's bond, certified check, or cashier's check no. \_\_\_\_\_ of the \_\_\_\_\_ (Company) (Bank) for \_\_\_\_\_ Dollars (\$\_\_\_\_\_).

This project requires a Class A California State Contractor's License.

Contractor's License No. \_\_\_\_\_ License Class \_\_\_\_\_

Expiration Date of Contractor's License \_\_\_\_\_

This project requires registration with the California State Department of Industrial Relations.

Public Works Contractor Registration No. \_\_\_\_\_

Registration Date \_\_\_\_\_ Expiration Date \_\_\_\_\_

A bid submitted to a public agency by a contractor who is not licensed and not registered shall be considered non-responsive and shall be rejected by the public agency. The undersigned contractor declares that the contractor's license number, public work contractor registration number, and expiration dates stated herein are made under penalty of perjury under the laws of the State of California.

Contractor: \_\_\_\_\_

Signed by: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

END OF PROPOSAL

**6 BID SCHEDULE**

Item	Spec. Section	Item	Quantity	Unit	Unit Cost	Total Cost
1	<u>1-03</u>	Mobilization	1	LS		
2	1-08	Demolition/Clearing/Excavation/Off-haul	1	LS		
3	<u>1-05</u>	Stormwater Pollution Prevention	1	LS		
4	<u>1-04</u>	Sewage Bypass Pumping	1	LS		
5	<u>1-06</u>	Dewatering and Stormwater Management	1	LS		
6	<u>1-14</u>	29" x 45" Elliptical RCP	89	LF		
7	<u>1-14</u>	36" RCP	60	LF		
8	<u>1-12</u>	Storm Drain Structures	1	LS		
9	<u>1-13</u>	Sanitary Sewer Force Main	120	LF		
10	1-13	Steel Casing	20	LF		
11	1-17	Replace Existing Monument	1	EA		
12	1-17	Misc. Site Restoration	1	LS		
<b>PROJECT TOTAL</b>						

\*Note: In case of error in extension of price into the total price column, the unit price will govern.

Total Amount of Bid (written in words) is: \_\_\_\_\_

\_\_\_\_\_ Dollars and

\_\_\_\_\_ Cents.

In the event of discrepancy between words and figures, the words shall prevail.

\$ \_\_\_\_\_

Figures



\_\_\_\_\_  
Address of Bidder

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
City

\_\_\_\_\_  
Name of Bidder (Print)

\_\_\_\_\_  
Telephone Number of Bidder

\_\_\_\_\_  
Fax Number of Bidder

\_\_\_\_\_  
Contractor's License Number

\_\_\_\_\_  
License's Expiration Date

**Addendum Acknowledgement**

Addendum No. 1    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 2    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 3    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

Addendum No. 3    Signature Acknowledging Receipt: \_\_\_\_\_    Date: \_\_\_\_\_

**QUESTIONNAIRE AND FINANCIAL ASSURANCE STATEMENT**

The following statements as to experience and financial qualifications of the Bidder are submitted in conjunction with the proposal as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the Bidder.

The Bidder has been engaged in the contracting business under the present business for \_\_\_\_\_ years. Experience in work of a nature similar to that covered in the proposal extends over a period of \_\_\_\_\_ years.

The Bidder, as a contractor, has never failed to satisfactorily complete a contract awarded to contractor, except as follows:

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List all claims and lawsuits presented or filed in the last five (5) years, regardless of the form, regarding any public works project:

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The following contracts for work have been completed in the last three (5) years for the persons, firm or authority indicated and to whom reference is made:

Year	Type of Work-Size, Length and Contract Amount	Location and For Whom Performed
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

The following complaints have been made against the Bidder's contractor's license within the past ten (10) years:

Date: \_\_\_\_\_ Nature of Complaint: \_\_\_\_\_

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Reference is hereby made to the following bank or banks as to the financial responsibility of the bidder:

NAME OF BANK

ADDRESS

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Reference is hereby made to the following surety companies as to the financial responsibility and general reliability of the bidder:

NAME OF SURETY COMPANY:

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I, the undersigned, declare under penalty of perjury under the laws of the State of California, that the foregoing is true and correct.

\_\_\_\_\_  
SIGNATURE OF BIDDER

\_\_\_\_\_  
DATE

\_\_\_\_\_  
NAME OF BIDDER

END OF QUESTIONNAIRE AND FINANCIAL STATEMENT FORM

## LIST OF SUBCONTRACTORS

Pursuant to Section 4100 to 4113 of the Public Contract Code, and CITY instructions, each bidder shall complete and submit this form with his bid in accordance with the following instructions.

1. For each subcontract item to be performed by a subcontractor, the following shall be indicated herein: the name of the subcontractor, the portion of work to be performed, each subcontractor’s license number, and the location of the place of business.
2. Only one subcontractor shall be listed for each craft unless there is an alternate bid in which case a different subcontractor, when so designated, may be listed for the alternate work.
3. **All fields must be completed as specified or the bid proposal may be rejected as non-responsive.**

Name of Subcontractor	Portion of Contract (i.e. Electrical, Striping, etc.)	Subcontractor License Number	DIR Registration Number <sup>1</sup>	Dollar Amount of Work to Be Performed	Location of Business (City and State)

All general contractors and subcontractors must be registered with DIR in conformance with Labor Code Section 1725.5 and 1771.1. By requesting the DIR registration numbers of all subcontractors, bidders are put on notice that if they list a subcontractor without a DIR registration number at the time of bid opening, the County, in its sole discretion, may find the failure intentional and find the bid non-responsive. DIR registration number lookup is available online at <https://efiling.dir.ca.gov/PWCR/Search>

# SITE VISIT AFFIDAVIT

SITE VISIT AFFIDAVIT  
TO BE EXECUTED  
BY BIDDER, NOTARIZED AND SUBMITTED WITH BID

(To Accompany Bid)

State of California        )  
                                      ) ss.  
County of                     )

\_\_\_\_\_ **being first duly sworn**, deposes and says that he or she is  
(Contractor's Authorized Representative)

\_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing  
(Title of Representative)                                       (Contractor's Name)

bid, has visited the Site of the Work as described in the Contract and has examined and familiarized themselves with the existing conditions, as well as all other conditions relating to the construction which will be performed. The submitting of a bid shall be considered an acknowledgement on the part of the Bidder of familiarity with conditions at the site of Work. The Bidder further acknowledges that the site examination has provided adequate and sufficient information related to existing conditions which may affect cost, progress or performance of the Work.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Bidder

END OF SITE VISIT AFFIDAVIT

# LIST OF MATERIAL SUPPLIERS AND MATERIAL GUARANTEE

## LIST OF MATERIAL SUPPLIERS

The bidder is required to name the make and supplier of the material items listed below to be furnished under these specifications. The bidder shall name a manufacturer for each item and the supplier of the item if the supplier is not the manufacturer. The naming of more than one supplier for a single item or naming a supplier followed by the words "or equal" will not be acceptable. Substitution of any listed supplier following submission of this form with the Bid shall only be permitted as authorized by the ENGINEER pursuant to General Conditions Section 1-6.03.

Failure to complete this form and submit it with the bid proposal may cause the proposal to be rejected as being incomplete and not responsive to the solicitation.

Item	Supplier & Manufacturer	Address

## LIST OF MATERIAL SUPPLIERS

In addition to completion of the list of material suppliers on the Material Suppliers form, the bidder may be required to furnish prior to award of contract, a complete statement of the origin, composition and manufacturer of any or all materials to be used in the construction of the work, together with samples, which samples may be subjected to test, provided for in the specifications, the General Conditions or Special Provisions to determine their quality and fitness for the work.

Accompanying this proposal is BIDDER'S BOND in amount equal to at least ten percent of the total of the bid.

The names of all persons interested in the foregoing proposal as principals are as follows:

*IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a copartnership, state true name of firm, also names of all individual copartners composing firm; if bidder or other interested person is an individual, state first and last names in full.*

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Licensed in conformance with an act providing for the registration of Contractors,

License No. \_\_\_\_\_ Classification(s) \_\_\_\_\_

**ADDENDA**

This Proposal is submitted with respect to the changes to the contract included in addenda number/s

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(Fill in addenda numbers if addenda have been received and insert, in this Proposal, any Engineer's Estimate sheets that were received as part of the addenda.)

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Noncollusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification are true and correct.

Date:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title of Bidder

Place of Business \_\_\_\_\_

Place of Residence \_\_\_\_\_

**BIDDER'S BOND**

We, \_\_\_\_\_  
\_\_\_\_\_ as Principal, and  
\_\_\_\_\_

as Surety are bound unto City of Pinole, Pinole, State of California, hereafter referred to as "Obligee", in the penalsum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, jointly and severally,  
THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal is submitted to the Obligee, for \_\_\_\_\_  
\_\_\_\_\_  
*(Copy here the exact description of work, including location as it appears on the proposal)*

for which bids are to be opened at \_\_\_\_\_ on \_\_\_\_\_  
*(Insert place where bids will be opened) (Insert date of bid opening)*

NOW, THEREFORE, if the Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in conformance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials as provided by law, then this obligation shall be null andvoid; otherwise, it shall remain in full force.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurredby the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court.

Dated: \_\_\_\_\_, 20\_\_\_\_.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
*Principal*  
\_\_\_\_\_  
*Surety*  
By \_\_\_\_\_  
*Attorney-in-fact*

**CERTIFICATE OF ACKNOWLEDGEMENT**

State of California  
City/County of \_\_\_\_\_ SS

On this \_\_\_\_\_ day of \_\_\_\_\_ in the year 20\_\_\_\_ before me  
\_\_\_\_\_, personally appeared \_\_\_\_\_,  
*Attorney-in-fact*

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed tothis instrument as the attorney-in-fact of \_\_\_\_\_, and acknowledged to me that he (she) subscribed the name of the said company thereto as surety, and his (her) own name as attorney-in-fact.

(SEAL) \_\_\_\_\_  
*Notary Public*



**PAYMENT BOND**  
(Section 3247, Civil Code)

**WHEREAS, the** City of Pinole, hereafter referred to as "Obligee", has awarded to Contractor \_\_\_\_\_, hereafter designated as the "Principal", a contract for the work described as follows:

**AND WHEREAS,** said Principal is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, materialmen and other persons as provided by law.

**NOW, THEREFORE,** we the undersigned Principal and Surety are bound unto the Obligee in the sum of

\_\_\_\_\_ dollars

(\$ \_\_\_\_\_), for which payment, we bind ourselves, jointly and severally.

**THE CONDITION OF THIS OBLIGATION IS SUCH,**

That if said Principal or its subcontractors shall fail to pay any of the persons named in Civil Code Section 3181, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by such claimant, or any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board for the wages of employees of the Principal and his subcontractors pursuant to Section 18806 of the Revenue and Taxation Code, with respect to such work and labor, that the surety herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the surety will pay a reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of any of the persons named in Civil Code Section 3181 as to give a right of action to such persons or their assigns in any suit brought upon this bond.

Dated: \_\_\_\_\_, 20\_\_\_\_

Correspondence or claims relating to this bond should be sent to the surety at the following address:

\_\_\_\_\_

\_\_\_\_\_  
*Principal*

\_\_\_\_\_  
*Surety*

By \_\_\_\_\_

*Attorney-in-fact*

NOTE: Signatures of those executing for the surety must be properly acknowledged.

**CERTIFICATE OF ACKNOWLEDGEMENT**

State of California  
City/County of \_\_\_\_\_ SS

On this \_\_\_\_\_ day of \_\_\_\_\_ in the year 20\_\_\_\_ before me

\_\_\_\_\_, personally appeared \_\_\_\_\_,

*Attorney-in-fact*

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this instrument as the attorney-in-fact of \_\_\_\_\_, and acknowledged to me that he (she) subscribed the name of the said company thereto as surety, and his (her) own name as attorney-in-fact.

(SEAL)

\_\_\_\_\_

*Notary Public*

**PERFORMANCE BOND**  
(To Accompany Contract)

Bond No. \_\_\_\_\_

**WHEREAS**, the City of Pinole, has awarded to Contractor \_\_\_\_\_, hereafter designated as the "Contractor", a contract for the work described as follows:

**AND WHEREAS**, the Contractor is required to furnish a bond in connection with said contract, guaranteeing the faithful performance thereof:

**NOW, THEREFORE**, we the undersigned Contractor and Surety are held firmly bound to the City of Pinole in the sum of \$ \_\_\_\_\_ dollars (\$ \_\_\_\_\_), to be paid to said CITY OF PINOLE or its certain attorney, its successors and assigns: for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH,**

That if the above bound Contractor, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the foregoing contract and any alteration thereof made as therein provided, on his or their part to be kept and performed at the time and in the manner thereinspecified, and in all respects according to their intent and meaning, and shall indemnify and save harmless the City of Pinole its officers and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

**IN WITNESS WHEREOF**, We have hereunto set our hands and seals on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Correspondence or claims relating to this bond should be sent to the surety at the following address:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
*Contractor*

\_\_\_\_\_  
*Name of Surety*

By \_\_\_\_\_

\_\_\_\_\_  
*Attorney-in-fact*

NOTE: Signatures of those executing for the surety must be properly acknowledged.

**CERTIFICATE OF ACKNOWLEDGEMENT**

State of California  
City/County of \_\_\_\_\_ SS

On this \_\_\_\_\_ day of \_\_\_\_\_ in the year 20\_\_ before me

\_\_\_\_\_, personally appeared \_\_\_\_\_,  
*Attorney-in-fact*

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this instrument as the attorney-in-fact of \_\_\_\_\_, and acknowledged to me that he (she) subscribed the name of the said company thereto as surety, and his (her) own name as attorney-in-fact.

(SEAL)

\_\_\_\_\_  
*Notary Public*

## MAINTENANCE BOND

WHEREAS, the City of Pinole and \_\_\_\_\_  
\_\_\_\_\_, (hereinafter designated as "Principal") have entered into an agreement whereby Principal agrees to install and complete certain designated public improvements, which said agreement, dated \_\_\_\_\_, 20\_\_\_\_ and identified as project \_\_\_\_\_, is hereby referred to and made a part hereof; and,

WHEREAS, said Principal is required under the terms of said contract to furnish a maintenance bond for the correction of any defects due to defective materials or workmanship in the work performed under said agreement.

NOW, THEREFORE, we the Principal and \_\_\_\_\_  
as Surety, are held and firmly bound unto the City of Pinole in the penal sum of \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if, during a maintenance period of one (1) year from the date of acceptance of the contracted work, the Principal upon receiving written notice of a need for repairs which are directly attributable to defective materials or workmanship, shall diligently take the necessary steps to correct said defects within seven (7) days from the date of said notice, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

As part of this obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by the CITY OF PINOLE in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of this agreement or to the work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on \_\_\_\_\_, 20\_\_\_\_\_.

PRINCIPAL

SURETY

By \_\_\_\_\_

By \_\_\_\_\_

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone Number

###

NOTE: No substitution or revision to this bond form will be accepted. Be sure that all bonds submitted have a certified copy of the bonding agent's power of attorney attached. Also verify that Surety is an "Admitted Surety" (i.e., qualified to do business in California), and attach proof of verification (website printout from the California Department of Insurance website (<http://www.insurance.ca.gov/docs/index.html>) or certificate from County Clerk).

APPROVED AS TO AMOUNT:

APPROVED AS TO FORM:

\_\_\_\_\_  
City Manager

\_\_\_\_\_  
City Attorney

END OF MAINTENANCE BOND

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# CITY OF PINOLE GENERAL CONDITIONS

## 1 GENERAL CONDITIONS

### 1-1 DEFINITIONS

Whenever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated in this Section 1-1 which meanings are applicable to both the singular and plural thereof. If a word which is entirely in upper case in these definitions is found in lower case in the Contract Documents, then the lower-case word will have its ordinary meaning.

**Addenda** - Written or graphic instruments issued prior to the opening of Bids which make additions, deletions, or revisions to the Contract Documents.

**Agreement** - The written contract between the CITY and the CONTRACTOR covering the WORK to be performed; other documents are attached to the Agreement and made a part thereof as provided therein.

**Application for Payment** - The form accepted by the ENGINEER which is to be used by the CONTRACTOR to request progress payments or final payment and which is to be accompanied by such supporting documentations as is required by the Contract Documents.

**Asbestos** - Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

**Bid** - The offer or proposal of the bidder submitted on the prescribed form setting forth the price or prices for the WORK.

**Bonds** - Bid, Performance, and Labor and Materials, and Maintenance Bonds and other instruments of security.

**Change Order** - A document recommended by the ENGINEER, which is signed by the CONTRACTOR and the CITY, and authorizes an addition, deletion, or revision in the WORK, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

**CITY or alternatively City** - City of Pinole, acting through its City Council, officers, employees, City Engineer, and any other authorized representatives.

**Clarification** - A document issued by the ENGINEER to the CONTRACTOR that clarifies the requirements(s) and/or design intent of the Contract Documents, which may not represent an addition, deletion, or revision in the WORK or an adjustment in the Contract Price or the Contract Times.

**Contract Documents** - The Notice Inviting Bids, Instructions to Bidders, Bid Forms (including the Bid, Bid Schedule(s), Information Required of Bidder, Bid Bond, and all required certificates, affidavits and other documentation), Agreement, Performance Bond, Labor and Materials Bond, Maintenance Bond, General Conditions, Special Provisions, Specifications, Drawings, all Addenda, and Change Orders executed pursuant to the provisions of the Contract Documents. Shop Drawings are not Contract Documents.

**Contract Price** - The total monies payable by the CITY to the CONTRACTOR under the terms and conditions of the Contract Documents.

**Contract Times** - The number or numbers of successive calendar days or dates stated in the Contract Documents for the completion of the WORK.

**CONTRACTOR** - The individual, partnership, corporation, joint-venture, or other legal entity with whom the CITY has executed the Agreement.

**Day** - A calendar day of 24 hours measured from midnight to the next midnight.

**Defective Work** - Work that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents; or work that has been damaged prior to the ENGINEER's recommendation of final payment.

**Drawings** - The drawings, plans, maps, profiles, diagrams, and other graphic representations which indicate the character, location, nature, extent, and scope of the WORK and which have been prepared by the ENGINEER and are included and/or referred to in the Contract Documents. Shop Drawings are not Drawings as so defined. Project Plans and drawings used in the documents interchangeably.

**Effective Date of the Agreement** - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

**ENGINEER** - The City Engineer or his/her designee.

**Field Order** - A written order issued by the ENGINEER which may or may not involve a change in the WORK.

**Hazardous Waste** - The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 U.S.C. Section 6906) as amended from time to time.

**Laws and Regulations; Laws or Regulations** - Any and all applicable laws, rules, regulations, ordinances, codes, and/or orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

**Lien or Mechanic's Lien** - A form of security, an interest in real property, which is held to secure the payment of an obligation. When related to public works construction, Lien or Mechanic's Lien may be called Stop Notice.

**Milestone** - A principal event specified in the Contract Documents relating to an intermediate completion date of a separately identifiable part of the WORK or a period of time within which the separately identifiable part of the WORK should be performed prior to completion of all the WORK.

**Notice of Award** - The written notice by the CITY to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the condition's precedent enumerated therein within the time specified, the CITY will enter into an Agreement.

**Notice of Completion** - A form signed by the ENGINEER and the CONTRACTOR recommending to the CITY that the WORK is Complete and fixing the date of completion. After acceptance of the WORK by the Pinole City Council, the form is signed by the CITY and filed with the County Recorder. This filing starts the 30 day lien filing period on the WORK.

**Notice to Proceed** - The written notice issued by the CITY to the CONTRACTOR authorizing the CONTRACTOR to proceed with the WORK for the purpose for which it is intended prior to completion of all the WORK.

**Partial Utilization** - Use by the CITY of a completed part of the WORK for the purpose for which it is intended prior to completion of all the WORK.

**Petroleum** - Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Wastes and crude oils.

**Project** - The total construction project of which the WORK to be provided under the Contract Documents may be the whole, or as part as indicated elsewhere in the Contract Documents.

**Record Drawings** - Drawings generated by marking a set of Drawings to reflect all of the changes that have occurred during construction of the Project.

**Resident Project Representative** - The authorized representative of the ENGINEER who is assigned to the Site or any part thereof.

**Samples** - Physical examples of materials, equipment, or workmanship that are representative of some portion of the WORK and which establish the standards by which such portion of the WORK will be judged.

**Shop Drawings** - All drawings, diagrams, illustrations, schedules, and other data which are specifically prepared by or for the CONTRACTOR and submitted by the CONTRACTOR to illustrate some portion of WORK.

**Site** - Lands or other areas designated in the Contract Documents as being furnished by the CITY for the performance of the construction, storage, or access.

**Special Provisions** - Specific clauses setting forth conditions or requirements peculiar to the work and supplementary to the Standard Specifications.

**Specifications** - The directions, provisions and requirements set forth in the latest Caltrans Standard Specifications, Caltrans Standard Plans, Technical Specifications as supplemental and modified by the special provisions.

**Stop Notice** - A legal remedy for subcontractors and suppliers who contribute to public works, but who are not paid for their work, which secures payment from construction funds possessed by the CITY. In some states, for public property, the Stop Notice remedy is designed to substitute for a mechanic's lien.

**Subcontractor** - An individual, partnership, corporation, joint-venture, or other legal entity having a direct contract with the CONTRACTOR or with any other subcontractor for the performance of a part of the WORK at the Site.

**Supplementary General Conditions** - The part of the Contract Documents which make additions, deletions, or revisions to these General Conditions.

**Supplier** - A manufacturer, fabricator, distributor, materialman, or vendor having a direct contract with the CONTRACTOR or with any Subcontractor to furnish materials, equipment, or product to be incorporated in the WORK by the CONTRACTOR or any Subcontractor.

**Utilities** - All pipelines, conduits, ducts, cables, wires, tracks, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities which have been installed underground or above the ground to furnish any of the following services or materials; water, sewage, sludge, drainage, fluids, electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, traffic control, or other control systems.

**WORK** - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. WORK is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction,



and performing or furnishing services and furnishing documents, all as required by the Contract Documents.

**Working day** - Any day except Saturdays, Sundays and CITY holidays.

**You/Your** - Refers to the CONTRACTOR

## **1-2 PRELIMINARY MATTERS**

### **1-2.01 DELIVERY OF BONDS AND INSURANCE CERTIFICATES**

When the CONTRACTOR delivers the signed Agreement to the CITY, the CONTRACTOR shall also deliver to the CITY such Bonds and insurance policies and certificates as the CONTRACTOR may be required to furnish in accordance with the Contract Documents.

### **1-2.02 COPIES OF DOCUMENTS**

The CITY may furnish to the CONTRACTOR additional copies of the Contract Documents if requested for a fee based on cost of production.

### **1-2.03 COMMENCEMENT OF CONTRACT TIMES; NOTICE TO PROCEED**

The Contract Times will start to run on the commencement date stated in the Notice to Proceed.

### **1-2.04 STARTING THE WORK**

- A. The CONTRACTOR shall begin to perform the WORK on the commencement date stated in the Notice to Proceed, but no work shall be done at the Site prior to said commencement date.
- B. Before undertaking each part of the WORK, the CONTRACTOR shall review the Contract Documents in accordance with Section 1-3.03.

### **1-2.05 PRECONSTRUCTION CONFERENCE**

- A. The CONTRACTOR is required to attend a preconstruction conference. This conference will be attended by the CITY, ENGINEER, and others as appropriate in order to discuss the WORK.
- B. The CONTRACTOR's initial schedule submittals for shop drawings, obtaining permits, and Plan of Operation and CPM Schedule will be reviewed and finalized. At a minimum, the CONTRACTOR's representatives shall include its project manager, project superintendent and schedule expert. If the submittals are not finalized at the end of the meeting, additional meetings will be held so that the submittals can be finalized prior to the submittal of the first Application for Payment. No Application for Payment will be processed prior to receiving acceptable initial submittals from the CONTRACTOR.

## **1-3 INTENT AND USE OF CONTRACT DOCUMENTS**

### **1-3.01 INTENT**

- A. The Contract Documents comprise the entire agreement between the CITY and the CONTRACTOR concerning the WORK. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the State of California.
- B. It is the intent of the Contract Documents to describe the WORK, functionally complete, to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not called for specifically.
- C. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe work, materials, or equipment such words or phrases shall be

interpreted in accordance with that meaning unless a definition has been provided in Section 1-1 of the General Conditions.

### **1-3.02 REFERENCE TO STANDARDS**

Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specifications, standard plans; manual, code, or Laws or Regulations in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code shall be effective to change the duties and responsibilities of the CITY or the CONTRACTOR or any of their consultants, agents or employees, from those set forth in the CONTRACT Documents, nor shall it be effective to assign to CITY any duty or authority to direct the performance of the WORK or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

### **1-3.03 REVIEW OF CONTRACT DOCUMENTS**

If, during the performance of the WORK, CONTRACTOR discovers any conflict, error, ambiguity or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such Law or Regulation applicable to the performance of the WORK or of any such standard, specification, manual, or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once, and CONTRACTOR shall not proceed with the work affected thereby (except in an emergency as authorized by Section 1-6.13 until a Clarification, Field Order, or Change Order to the Contract Documents has been issued.

### **1-3.04 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS**

- A. Unless otherwise noted herein, conflicts or inconsistencies between parts of the Contract will be resolved by the ENGINEER with a Change Order or an Addendum, if required. Addenda and Change Orders bearing the most recent date shall prevail over Addenda or Change Orders bearing earlier dates. Any reference to addenda-changed specifications or drawings shall be considered to have been changed accordingly. In resolving conflicts resulting from errors or discrepancies in any of the Contract Documents, the order of precedence shall be as follows:
  - a. Change Orders/Addenda (most recent in time take precedence)
  - b. Agreement and Bond Forms
  - c. Special Provisions
  - d. Project Plans
  - e. Technical Specifications
  - f. General Conditions
  - g. Caltrans Standard Specifications 2018
  - h. Caltrans Standard Plans 2018
  - i. Federal clauses as referred or attached
  - j. Instructions to Bidders
  - k. Contractor's Bid (Bid Form)
  - l. Notice Inviting Bids
  - m. Permits from other agencies as may be required by law
- B. With reference to the Drawings the order of precedence is as follows:
  - a. Figures govern over scaled dimensions
  - b. Detail drawings govern over general drawings
  - c. Addenda/Change Order drawings govern over any other drawings
  - d. Drawings govern over standard drawings

### **1-3.05 AMENDING CONTRACT DOCUMENTS**

The Contract Documents may be amended to provide for additions, deletions, and revisions in the WORK or to modify the terms and conditions thereof by a Change Order (pursuant to Section 1-10).

### 1-3.06 REUSE OF DOCUMENTS

Neither the CONTRACTOR, nor any Subcontractor or Supplier, nor any other person or organization performing any of the WORK under a contract with the CITY shall have or acquire any title to or ownership rights in any of the Drawings, Technical Specifications, or other documents used on the WORK, and they shall no reuse any of them on the extensions of the Project or any other project without written consent of CITY.

## 1-4 SITE OF THE WORK

### 1-4.01 AVAILABILITY OF LANDS

The CITY will furnish, as indicated in the Contract Documents, the lands upon which the WORK is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the CITY, unless otherwise provided in the Contract Documents. Nothing contained in the Contract Documents shall be interpreted as giving the CONTRACTOR exclusive occupancy of the lands or rights-of-way provided. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment; provided, that the CONTRACTOR shall not enter upon nor use any property not under the control of the CITY until a written temporary construction easement agreement has been executed by the CONTRACTOR and the property owner, and a copy of said easement furnished to the ENGINEER prior to said use; and the CITY will not be liable for any claims or damages resulting from the CONTRACTOR's trespass on or use of any such properties. The CONTRACTOR shall provide the CITY with a signed release from the property owner confirming that the lands have been satisfactorily restored upon completion of the WORK.

### 1-4.02 REPORTS OF PHYSICAL CONDITIONS

- A. **Subsurface Explorations:** Reference is made to any Contract Documents for identification of those reports of explorations and tests of subsurface conditions at the Site that have been utilized by the ENGINEER in the preparation of the Contract Documents.
- B. **Existing Structures:** Reference is made to any Contract Documents for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except underground Utilities referred to in Section 1-4.03 herein) which are at or contiguous to the Site that have been utilized in the preparation of the Contract Documents.
- C. The CITY makes no representation as to the completeness of the reports or drawings referred to in Section 1-4.02 A or B above or the accuracy of any data or information contained therein. The CONTRACTOR may rely upon the accuracy of the technical data contained in such reports and drawings. However, the CONTRACTOR may not rely upon any interpretation of such technical data, including any interpolation or extrapolation thereof, or any non-technical data, interpretations, and opinions contained therein.

### 1-4.03 PHYSICAL CONDITIONS - UNDERGROUND UTILITIES

- A. **Indicated:** The information and data indicated in the Contract Documents with respect to existing underground Utilities at or contiguous to the Site are based on information and data furnished to the CITY or the ENGINEER by the owners of such underground Utilities or by others. Unless it is expressly provided in any Contract documents the CITY will not be responsible for the accuracy or completeness of any such information or data, and the CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all underground Utilities indicated in the Contract Documents, for coordination of the WORK with the owners of such underground Utilities during construction, for the safety and protection thereof and repairing any damage thereto resulting from the WORK, the cost of all of which are deemed to have been included in the Contract Price.
- B. **Not Indicated:** If an underground Utility is uncovered or revealed at or contiguous to the Site which was not indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been expected to be aware of, the CONTRACTOR shall identify the owner of

such underground Utility and give written notice thereof to that owner and shall notify the ENGINEER.

**1-4.04 DIFFERING SITE CONDITIONS**

- A. The CONTRACTOR shall notify the ENGINEER, in writing, of the following unforeseen conditions, hereinafter called differing Site conditions, promptly upon their discovery (but in no event later than 14 days after their discovery) and before they are disturbed:
  - a. Subsurface or latent physical conditions at the Site of the WORK differing materially from those indicated, described, or delineated in the Contract Documents, including those reports discussed in Sections 1-4.02, 4.03, and 4.05.
- B. The ENGINEER will review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto.
- C. If the ENGINEER concludes that because of newly discovered conditions a change in the Contract Documents is required, a Change Order will be issued as provided in Section 1-10 to reflect and document the consequences of the difference.
- D. In each such case, an increase or decrease in the Contract Price or an extension or shortening the Contract Times, or any combination thereof, will be allowable to the extent that they are attributable to any such difference. If the ENGINEER and the CONTRACTOR are unable to agree as to the amount or length thereof, a claim may be made therefor as provided in Sections 1-11 and 1-12.
- E. The CONTRACTOR's failure to give notice of differing Site conditions within 14 days of their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith, whether direct or consequential in nature.

**1-4.05 HAZARDOUS MATERIALS**

- A. CITY shall be responsible for any Asbestos, Hazardous Waste, Petroleum, or Radioactive Material uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the WORK and which may present a substantial danger to persons or property exposed thereto in connection with the WORK at the Site. CITY will not be responsible for any such material brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.
  - a. Upon discovery of any Asbestos, Hazardous Waste, Petroleum, or Radioactive Material, the CONTRACTOR shall immediately stop all work in any area affected thereby (except in an emergency as required by Section 1-6.13) and notify ENGINEER (and therefore confirm such notice in writing). CONTRACTOR shall not be required to resume any work in any such affected area until after CITY has obtained any required permits related thereto and delivered to CONTRACTOR special written notice. Such written notice will specify that such condition and any affected area is or has been rendered safe for the resumption of the work or specify any special conditions under which the work may be resumed safely. If ENGINEER and CONTRACTOR cannot agree as to entitlement to or the amount or extent of adjustment, if any, in Contract Price or Contract Times as a result of such work stoppage or such special conditions under which work is agreed by CONTRACTOR to be resumed, either party may make a claim therefor as provided in Sections 1-11 and 1-12.
  - b. If, after receipt of such special written notice, CONTRACTOR does not agree to resume such WORK based on a reasonable belief it is unsafe, or does not agree to resume such WORK under special conditions, ENGINEER may order such portion of the WORK that is in connection with such hazardous condition or in such affected area to be deleted from the WORK. If ENGINEER and CONTRACTOR cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of deleting such portion of the WORK then either party may make a claim therefor as provided in Sections 1-11 and 1-12. CITY may have such deleted portion of the WORK performed by CITY's own forces or others in accordance with Section 1-7.

- B. The provisions of Sections 1-4.02, 1-4.03, and 1-4.04 are not intended to apply to Asbestos, Petroleum, Hazardous Waste, or Radioactive Material uncovered or revealed at the Site.

#### **1-4.06 REFERENCE POINTS**

- A. The ENGINEER will provide the location and elevation of one benchmark, near or on the Site of the WORK, for use by the CONTRACTOR for alignment and elevation control. Unless otherwise specified, the CONTRACTOR shall furnish all other lines, grades, and benchmarks required for proper execution of the WORK.
- B. The CONTRACTOR shall preserve or replace any and all benchmarks, section corners, witness corners, stakes, and other survey marks, and in case of their removal or destruction by any party, the CONTRACTOR shall be responsible for the accurate replacement of such reference points by surveyor licensed under the applicable state codes governing land surveyors.

### **1-5 BONDS AND INSURANCE**

#### **1-5.01 BONDS**

- A. The CONTRACTOR shall furnish Performance and Labor and Materials Bonds, each in the amount of one hundred percent (100%) of the contract price, as security for the faithful performance and payment of all the CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date of completion, except as otherwise provided by Law or Regulation or by the Contract Documents. The CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.
- B. The CONTRACTOR shall guarantee the WORK to be free of defects in material and workmanship for a period of one (1) year following the CITY's acceptance of the WORK. The CONTRACTOR shall agree to make, at the CONTRACTOR's own expense, any repairs or replacements made necessary by defects in material or workmanship which become evident within the one-year guarantee period. The CONTRACTOR's guarantee against defects required by this provision shall be secured by a Maintenance Bond, in the amount of ten percent (10%) of the contract price, which shall be delivered by the CONTRACTOR to the CITY prior to acceptance of the WORK. The Maintenance Bond shall remain in force for one (1) year from the date of acceptance of the contracted WORK. The CONTRACTOR shall make all repairs and replacements within the time required during the guarantee period upon receipt of written order from the ENGINEER. If the CONTRACTOR fails to make the repairs and replacements within the required time, the CITY may do the work and the CONTRACTOR and the CONTRACTOR's surety for the Maintenance Bond shall be liable to the CITY for the cost. The expiration of the Maintenance Bond during the one-year guarantee period does not operate to waive or void the one-year guarantee, as set forth herein and in Section 6.16 of these General Conditions.
- C. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- D. If the surety on any Bond furnished by the CONTRACTOR is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the WORK is located, the CONTRACTOR shall within 7 days thereafter substitute another Bond and surety, which must be acceptable to the CITY.
- E. All Bonds required by the Contract Documents to be purchased and maintained by CONTRACTOR shall be obtained from surety companies that are duly licensed or authorized in the State of California to issue Bonds for the limits so required.

#### **1-5.02 INSURANCE**

##### **1-5.02A General**

CONTRACTOR and any subcontractor shall not commence work under this Agreement until CONTRACTOR shall have obtained all insurance required under this paragraph and such insurance

shall have been approved by the CITY Attorney as to form and carrier and the City Manager as to sufficiency, nor shall CONTACTOR allow any contractor or subcontractor to commence work on this contract or subcontract until all similar insurance required of the contractor and/or subcontractor shall have been so obtained and approved. All requirements herein provided shall appear either in the body of the insurance policies or as endorsements and shall specifically bind the insurance carrier.

CONTRACTOR shall procure and maintain for the duration of the contract all necessary insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, the Contractor's agents, representatives, employees or subcontractors.

**1-5.02B Minimum Scope of Insurance**

- A. Coverage shall be at least as broad as:
- B. Insurance Services Office Commercial General Liability coverage.
- C. Insurance Services Office form number CA covering Automobile Liability, code 1 (any auto).
- D. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
- E. [Optional] Such other insurance coverages and limits as may be required by the CITY as follows:  
\_\_\_\_\_.

**1-5.02C Minimum Limits of Insurance**

- A. CONTRACTOR shall maintain limits no less than:
- B. General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate liability is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- C. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
- D. Employer's Liability: Bodily Injury by Accident - \$1,000,000 each accident
  - a. Bodily Injury by Disease - \$1,000,000 policy limit
  - b. Bodily Injury by Disease - \$1,000,000 each employee

**1-5.02D Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by the CITY. At the option of the CITY, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the CITY, its officers, officials, employees, and volunteers; or the CONTRACTOR shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

**1-5.02E Other Insurance Provisions**

The required general liability and automobile policies are to contain, or be endorsed to contain the following provisions:

- A. The CITY, its officers, officials, employees, agents and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the CONTRACTOR; products and completed operations of the CONTRACTOR; premises owned, occupied or used by the CONTRACTOR; or automobiles owned, leased, hired or borrowed by the CONTRACTOR. The coverage shall contain no special limitations on the scope of protection afforded to the CITY, its officers, officials, employees, agents or volunteers.
- B. For any claims related to this project, the CONTRACTOR's insurance coverage shall be primary insurance as respects the CITY, its officers, officials, employees, agents and volunteers. Any insurance or self- insurance maintained by the CITY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.

- C. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the CITY, its officers, officials, employees, agents or volunteers.
- D. The CONTRACTOR's 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.
- E. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the CITY.

**1-5.02F Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII.

**1-5.02G Verification of Coverage**

CONTRACTOR shall furnish the CITY with original endorsements effecting coverage required by this clause. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by the CITY. All endorsements are to be received and approved by the CITY before work commences. As an alternative to the CITY's forms, the CONTRACTOR's insurer may provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications.

**1-6 CONTRACTOR'S RESPONSIBILITIES**

**1-6.01 COMMUNICATIONS**

Written communications with the CITY shall be only through or as directed by the ENGINEER.

**1-6.02 SUPERVISION AND SUPERINTENDENCE**

- A. The CONTRACTOR shall supervise, inspect, and direct the WORK competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the WORK in accordance with the Contract Documents. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction and all safety precautions and programs incidental thereto. The CONTRACTOR shall be responsible to see that the completed WORK complies accurately with the Contract Documents.
- B. The CONTRACTOR shall designate in writing and keep on the Site at all times during the performance of the WORK a technically qualified, English-speaking superintendent, who is an employee of the CONTRACTOR and who shall not be replaced without written notice to the ENGINEER. The superintendent will be the CONTRACTOR's representative at the Site and shall have authority to act on behalf of the CONTRACTOR. All communications given to the superintendent shall be as binding as if given to the CONTRACTOR.
- C. The CONTRACTOR's superintendent shall be present at the Site at all times while work is in progress and shall be available by phone for emergencies 24 hours per day, 7 days per week. Failure to observe this requirement shall be considered suspension of the WORK by the CONTRACTOR until such time as such superintendent is again present at the Site.

**1-6.03 LABOR, MATERIALS, AND EQUIPMENT**

- A. The CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the WORK and perform construction as required by the Contract Documents. The CONTRACTOR shall furnish, erect, maintain, and remove the construction plant and any required temporary works. The CONTRACTOR shall at all times maintain good discipline and order at the Site. Except in connection with the safety or protection of persons or the WORK or property at

the Site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all work at the Site shall be performed during regular working hours, and the CONTRACTOR will not permit overtime work or the performance of work on Saturday, Sunday, or any federally observed holiday without the CITY's written consent. The CONTRACTOR shall apply for this consent through the ENGINEER in writing a minimum of 24 hours in advance.

- B. Except as otherwise provided in this Section, the CONTRACTOR shall receive no additional compensation for overtime work, i.e., work in excess of 8 hours in any one calendar day or hours in any one calendar week, even though such overtime work may be required under emergency conditions and may be ordered by the ENGINEER in writing. Additional compensation will be paid to the CONTRACTOR for overtime work only in the event extra work is ordered by the ENGINEER and the Change Order specifically authorizes the use of overtime work and then only to such extent as overtime wages are regularly being paid by the CONTRACTOR for overtime work of a similar nature in the same locality.
- C. All increased costs of inspection and testing performed during overtime work by the CONTRACTOR which is allowed solely for the convenience of the CONTRACTOR shall be borne by the CONTRACTOR. The CITY has the authority to deduct the cost of all such inspection and testing from any partial payments otherwise due to the CONTRACTOR.
- D. Unless otherwise specified in the Contract Documents, the CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, lubricants, power, light, heat, telephone, water, sanitary facilities, and all other facilities, consumables, and incidentals necessary for the furnishing, performance, testing, start-up, and completion of the WORK.
- E. All materials and equipment incorporated into the WORK shall be of specified quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of the CITY. If required by the ENGINEER, the CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provisions of any such instructions will be effective to assign to the CITY or any of its consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 1-9.09 C.
- F. The work, unless otherwise permitted or approved by the ENGINEER, shall be completed with the incorporated use of equipment, materials, and/or products where such are specified. Substitutions and equal alternatives will be permitted as provided in this section; however, neither the request for substitution nor the offer of alternatives shall in any way by their submittal obligate the CITY to assent to any request or offer. Failure of the CONTRACTOR awarded the work to either submit requests for substitutions or to offer alternatives within the required times provided in this General Condition will be considered as evidence that the work shall be accomplished with trade-named equipment, materials, and/or products as identified in the Specifications and/or the Drawings.
- G. Unless otherwise provided elsewhere in the Contract, all equipment, materials, and/or products incorporated into the work shall be new and, where not specified, shall be of the highest quality of the respective kinds for the intended use, and all workmanship shall meet or exceed applicable construction industry standards and practices. If equipment, materials, and/or products are designated by listing named manufacturers of particular equipment, materials, and/or products followed by the words "or equal," then the CONTRACTOR may furnish the named equipment, materials, and/or products or any equal equipment, materials, and/or products. The first-named manufacturer of particular equipment, materials, and/or products is the basis for the design shown on the Project Drawings. A subsequently named manufacturer or particular equipment, materials, and/or products has been determined to be an acceptable substitution but may require



modifications in the Project's design and its ultimate construction to accommodate its use. If such subsequently named items are selected by the CONTRACTOR for incorporation into the work, the CONTRACTOR shall assume all costs required for modifications to the equipment, materials, and/or products, and Project design and construction as may be required for said items' use. Substitutions for an unnamed "equal" item of material shall be permitted upon compliance of the procedures set forth in Paragraph I of this section. If a CONTRACTOR makes use of an unnamed "equal" product as a substitute for a specifically named material or product, the CONTRACTOR shall assume all costs required to make the necessary revisions or modifications to accommodate the use of said unnamed product.

- H. Before beginning the work and within thirty-five (35) calendar days after award of the Contract, the CONTRACTOR shall submit a List of Materials to the ENGINEER for review. The List shall include all items of equipment, materials, and/or products to be incorporated into the work and the names of suppliers with whom purchase orders have been placed. The names on the List shall be arranged in the same order as in the specifications, and shall contain sufficient data to identify precisely the items of equipment, materials, and/or products the CONTRACTOR proposes to furnish. The List shall include Specifications or Drawing references. Once the submission is determined to be acceptable to the ENGINEER, it shall be returned to the CONTRACTOR.
  
- I. Substitution for those equipment, materials, and/or products specified shall only be permitted when the proposed unnamed "equal" product or material to be furnished is both equal in quality and utility and after the CONTRACTOR has complied with the following provisions: (1) All substitutions shall be reviewed by the ENGINEER. (2) The ENGINEER must approve such substitution in writing prior to its incorporation into the work. (3) Unless otherwise authorized in writing by the CITY, the CONTRACTOR shall, within thirty-five (35) calendar days of award and prior to placing any purchase orders, but at least thirty (30) calendar days before it requires approval of any such alternative item, submit to the CITY sufficient data, drawings, samples, literature, or other detailed information as will demonstrate to the ENGINEER that the proposed substitute is equal in quality and utility to the equipment, materials and/or products specified.
  - a. Within thirty (30) calendar days following receipt of all requested information from the CONTRACTOR, the ENGINEER will determine whether the proposed alternative is equal in quality and utility and meets the requirements of the Contract and will inform the CONTRACTOR in writing of such determination. The burden of substantiating the quality and utility of alternatives shall be upon the CONTRACTOR, and the CONTRACTOR shall furnish all necessary information requested and required by the ENGINEER. The ENGINEER will be the sole judge as to the quality and utility of alternative equipment, materials, and/or products, and the ENGINEER's decision shall be final. An acceptance by the ENGINEER of a substitution shall not relieve the CONTRACTOR from complying with the requirements of the Drawings and Specifications. Acceptance by the ENGINEER shall not relieve the CONTRACTOR from full responsibility for the efficiency, sufficiency, and quality and performance of the substitute equipment, materials, and/or products, in the same manner and degree as the equipment, materials, and/or products specified by name.
  - b. Failure of the CONTRACTOR to submit proposed substitutions for review in the manner described above and within the time prescribed shall be sufficient cause for rejection by the CITY of any other proposed substitutions.
  - c. In determining whether a proposed product is equal in quality and utility, the ENGINEER is not restricted to such basic issues as performance and durability, but may consider any other issues that the ENGINEER, in the discretion of the ENGINEER, deems appropriate. Said issues may, but are not required to include, nor are they limited to, such additional factors as comparable performance, reliability, efficiency of operation, ease of operation, adaptability, ease of maintenance, capital costs, life-cycle costs, operational characteristics, costs of training personnel, maintenance history, warranties, problems created by the resulting overall warranty system, availability of qualified service, availability of parts, the history of any supplier and compatibility with existing facilities.

- d. No one factor or group of factors, including such issues as savings on capital costs, shall be determinative of whether the proposed product or material is equal in quality and utility. The decision of the ENGINEER shall be based on those factors deemed by the ENGINEER to be relevant and any data, drawings, samples, literature, or other detailed information furnished by the CONTRACTOR with respect to the proposed substitution. Each decision as to whether a product or material is equal in quality and utility shall be made by the ENGINEER on a case-by-case basis.
- e. The CONTRACTOR shall be responsible for any and all costs, including consultant costs, incurred by the CITY with respect to the proposed substitution that exceed the costs inherent in the normal and reasonable review of drawings and other standard data, information, and documents concerning any proposed substitution. The CONTRACTOR shall be responsible for this cost, regardless of whether or not the substitution is approved by the ENGINEER.
- J. Unless otherwise provided in the Contract, the title and interest in the right to the use of all water, and the title to all soil, stone, gravel, sand, minerals, timber, and all other materials developed or obtained within the Project limits from operations by the CONTRACTOR or any of its subcontractors, of any of their representatives or employees, and the right to use or dispose of the same are hereby expressly reserved in the CITY; and neither the CONTRACTOR nor any of its subcontractors, nor any of their representatives or employees, shall have any right, title, or interest in or to any part thereof.
- K. All material used under the Contract after it has been attached or affixed to the work or soil and after partial payment has been made therefore shall become the property of the CITY.
- L. In the event that any Indian relics or items possessing archaeological or historical value are discovered by the CONTRACTOR or any of its subcontractors or any of their representatives or employees, the CONTRACTOR shall immediately notify the ENGINEER and await the ENGINEER's decision before proceeding with any work. The CONTRACTOR shall have no property right in such relics and items.
- M. The CONTRACTOR shall be satisfied as to the quantity of acceptable materials or products which may be produced or obtained at local sources, and the CITY will not assume any responsibility as to the quantities or quality of acceptable materials or products available.
- N. The CONTRACTOR, with the permission of the ENGINEER, may use in the proposed construction such stone, gravel, sand, or other material suitable in the opinion of the ENGINEER as may be found in excavation.
- O. Existing equipment, materials, and/or products to be salvaged shall remain the property of the CITY. Salvage to be reinstalled in the work shall be refurbished as required before reinstallation. Other work to be salvaged shall be carefully removed and handled in such a manner as to avoid damage and shall be delivered to storage at a location designated by the ENGINEER.

#### **1-6.04 SCHEDULE**

The CONTRACTOR shall comply with the schedule requirements in the Special Provisions or as otherwise provided in the Contract Documents.

#### **1-6.05 SUBSTITUTES OR "OR EQUAL" ITEMS**

The CONTRACTOR shall submit proposed substitutes or "or equal" items in accordance with the Bidding Requirements. No request for substitution of an "or equal" item will be considered by the ENGINEER after award of the Contract, except as provided in Paragraph 1-6.03.I herein.

#### **1-6.06 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS**

The CONTRACTOR shall be responsible to the CITY for the acts and omissions of its Subcontractors, Suppliers, and their employees to the same extent as CONTRACTOR is responsible for the acts and omissions of its own employees. Nothing contained in this Section shall create any contractual

relationship between any Subcontractor and the CITY nor relieve the CONTRACTOR of any liability or obligation under the Contract Documents. The CONTRACTOR shall include these General Conditions and the Special Provisions as part of all its subcontract and supply agreements.

**1-6.07 PERMITS**

Unless otherwise provided in these General Conditions, the CONTRACTOR shall obtain and pay for all constructions permits and licenses from the agencies having jurisdiction, including the furnishing of insurance and bonds if required by such agencies. The enforcement of such requirements shall not be made the basis for claims for additional compensation by CONTRACTOR. When necessary, the CITY will assist the CONTRACTOR, in obtaining such permits and licenses. The CONTRACTOR shall pay all charges of utility owners for inspection or connections to the WORK.

**1-6.08 PATENT FEES AND ROYALTIES**

The CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the WORK or the incorporation in the WORK of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the WORK and if to the actual knowledge of the ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed by the ENGINEER in the Contract Documents. The CONTRACTOR's indemnification obligation under this Section 1-6.08 A. for all claims and liabilities arising out of any infringement of patent rights or copyrights incident to the use in the performance of the WORK or resulting from the incorporation in the WORK of any invention, design, process, product or device not specified in the Contract Documents shall be in accordance with Section 1-6.17 of these General Conditions.

**1-6.09 LAWS AND REGULATIONS**

The CONTRACTOR shall observe and comply with all Laws and Regulations which in any manner affect those engaged or employed on the WORK, the materials used in the WORK, or the conduct of the WORK including, but not limited to, all applicable safety Laws and Regulations. If any discrepancy or inconsistency should be discovered between the Contract Documents and any such Laws or Regulations, the CONTRACTOR shall report the same in writing to the ENGINEER. Any particular Law or Regulation specified or referred to elsewhere in the Contract Documents shall not in any way limit the obligation of the CONTRACTOR to comply with all other provisions of federal, state, and local laws and regulations. The CONTRACTOR's indemnification obligations for all claims or liability arising from violation of any such law, ordinance, code, order, or regulation, whether by CONTRACTOR or by its employees, Subcontractors or Suppliers shall be in accordance with Section 1-6.16 of these General Conditions.

**1-6.10 TAXES**

The CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by the CONTRACTOR in accordance with the laws and regulations of the place of the Project which are applicable during the performance of the WORK.

**1-6.11 USE OF PREMISES**

The CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site, the land and areas identified in and permitted by the Contract Documents, and the other land and areas permitted by Laws and Regulations, rights-of-way, permits, and easements. The CONTRACTOR shall assume full liability and responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the WORK. Should any claim be made against the CITY by any such owner or occupant because of the performance of the WORK, the CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim through litigation at the CONTRACTOR's sole liability expense. The CONTRACTOR's indemnification obligations for all claims and liability, arising directly, indirectly, or consequentially out of any action, legal or equitable, brought by any such owner or occupant against the CITY, its consultants, sub consultants, and the officers, directors,

employees and agents of each and any of them to the extent caused by or based upon the CONTRACTOR's performance of the WORK shall be in accordance with Section 1-6.17 of these General Conditions.

#### **1-6.12 SAFETY AND PROTECTION**

- A. The CONTRACTOR shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR shall be responsible for the direction and control of the work assigned and for assuring that all workers on the project understand the hazards of the work involved and the safe work procedures required for each job. The CONTRACTOR shall assure that its subcontractors of all tiers shall, without expense to the CITY, comply with this safety responsibility. No work shall proceed until each worker and subcontractor understands the scope of the work and all safety rules and work procedures to be followed. The CONTRACTOR shall not allow a new employee or new subcontractor to begin work on CITY projects without a full and proper safety orientation. The CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage to prevent damage, injury or loss to:
  - a. All persons at the Site and other persons and organizations who may be affected thereby;
  - b. All the WORK and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  - c. Other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of the performance of the WORK.
- B. The CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property or to the protection of persons or property from damage, injury, or loss and shall erect and maintain all necessary safeguards for such safety and protection. The CONTRACTOR shall notify owners of adjacent property and utilities when prosecution of the WORK may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. CONTRACTOR'S duties and responsibilities for safety and for protection of the WORK shall continue until such time as all the WORK is completed and ENGINEER has issued a notice to the CONTRACTOR in accordance with Paragraph 1-14.07 B. that the WORK is acceptable.
- C. The CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.
- D. Materials that contain hazardous substances or mixtures may be required on the WORK. A Material Safety Data Sheet shall be made available at the Site by the CONTRACTOR for every hazardous product used.
- E. Material usage shall strictly conform to OSHA safety requirements and all manufacturer's warnings and application instructions listed on the Material Safety Data Sheet and on the product container label.
- F. The CONTRACTOR shall be responsible for the exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.
- G. The CONTRACTOR shall notify the ENGINEER if it considers a specified product or its intended use to be unsafe. This notification must be given to the ENGINEER prior to the product being ordered, or if provided by some other party, prior to the product being incorporated in the WORK.
- H. Before starting work, the CONTRACTOR shall submit a written safety program to the CITY. The objective of the safety program shall be accident prevention. Such program shall include, but not be limited to, the following:

- a. An organization chart and accompanying narrative which describes the responsibility for employee and public safety of those individuals who control each phase of operations and set forth in writing the policies and procedures to be followed by all personnel. The chart shall also show the CONTRACTOR's internal lines of communication (including subcontractors) for the program.
- b. A specific program for communication between the CONTRACTOR and CITY on safety matters. The CONTRACTOR shall also designate one person with whom official contact can be made by the CITY on safety matters.
- c. Evidence that the CONTRACTOR has become thoroughly familiar with the potential hazards of the work and applicable federal and state regulations.
- d. Specific safety procedures and guidelines for conduct of the Work.
- e. The CITY's review, comment upon, and/or acceptance of the CONTRACTOR's safety program and/or plan does not in any way negate the responsibilities of the CONTRACTOR for safety or place any responsibility upon the CITY for such safety. Such review comment and/or acceptance shall not be construed as limiting in any manner the CONTRACTOR's obligation to undertake any action which may be necessary or required to establish and maintain safe working conditions at the site.
- f. Contractor will follow County of Contra Costa, State of California and Center of Disease Control (CDC) specific COVID-19 safety procedures and guidelines for the entire duration of the CONTRACT.

#### **1-6.13 EMERGENCIES**

In emergencies affecting the safety or protection of persons or the WORK or property at the Site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER, is obligated to immediately act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the WORK or variations from the Contract Documents have been caused thereby. If ENGINEER determines that a change in the Contract Documents have been caused thereby. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Change Order will be issued to document the consequences of such action.

#### **1-6.14 SUBMITTALS**

- A. After checking and verifying all field measurements and after complying with applicable procedures specified in the Special Provisions, the CONTRACTOR shall submit to the ENGINEER for review all Shop Drawings and details of all structural and reinforcing steel, equipment, electrical controls, structural fabrications, pipe, pipe joints, special pipe sections, and other appurtenances in accordance with the accepted schedule of Shop Drawing submittals specified in the Special Provisions or as otherwise provided in the Contract Documents.
- B. The ENGINEER'S review will be only to determine if the items covered by the submittals will, after installation or incorporation in the WORK, generally conform to the Contract Documents and with the design concept of the completed Project. The ENGINEER's favorable review shall be obtained before any such items are manufactured or used in the work. The favorable review of Drawings by the ENGINEER shall apply in general design only and shall in no way relieve the CONTRACTOR from responsibility for errors or omissions contained therein. Favorable review by the ENGINEER shall not relieve the CONTRACTOR of its obligation to meet safety requirements and all other requirements of law. The ENGINEER will start reviewing the CONTRACTOR's submittals only after the Notice to Proceed is issued by the CITY with the exception of some unusual long lead items which may require submittals prior to issuing the Notice to Proceed.

- C. The CONTRACTOR shall also submit to the ENGINEER for review all Samples in accordance with the accepted schedule of Sample submittals specified in the Special Provisions or as otherwise provided in the Contract Documents.
- D. Before submittal of each Shop Drawing or Sample, the CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto and reviewed or coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the WORK and the Contract Documents. The CONTRACTOR shall provide submittals in accordance with the requirements of the Special Provisions or as otherwise provided in the Contract Documents.
- E. Shop-drawing submittal and coordination are the responsibility of the prime contractor; this responsibility shall not be delegated in whole or in part to subcontractors or suppliers. Any designation of work "by others," shown on Shop Drawings, shall mean that the work will be the responsibility of the CONTRACTOR rather than the subcontractor or supplier who has prepared the Shop Drawings.
- F. Submittals shall be prepared in such form that data can be identified with the applicable Specification paragraph. The data shall demonstrate clearly compliance with the Drawings and Specifications and shall relate to the specific equipment to be furnished. Where manufacturer's standard drawings are employed, they shall be marked clearly to show what portions of the data are applicable to this Project.
- G. Review of shop-drawing submittals by the ENGINEER has as its primary objective the completion for the CITY of a Project in full conformance with the Drawings and Specifications, unmarred by field corrections, and within the time provided. In addition to this primary objective, shop-drawing review as a secondary objective will assist the CONTRACTOR in its procurement of equipment that will meet all requirements of the Drawings and Specifications, will fit the structures detailed on the Drawings, will be complete with respect to piping, electrical, and control connections, will have the proper functional characteristics, and will become an integral part of a complete operating facility. Acceptance of Shop Drawings and submittals does not constitute a change order to the Contract requirements.
- H. Where the CONTRACTOR is required by these Specifications to make submittals, they shall be submitted to the ENGINEER with a letter of transmittal via electronic copies (pdf or other suitable format) to all parties needing to review. All required physical samples shall be delivered separately to the ENGINEER and will be retained by the ENGINEER. Unless specifically requested for a hardcopy by the ENGINEER, all submittals shall be submitted electronically.
- I. Within fifteen (15) calendar days of receipt by the ENGINEER of each of the CONTRACTOR's submissions and all appurtenant data required for their review, the appropriate number of copies will be returned to the CONTRACTOR with one of the following notations:
  - a. Reviewed, No exceptions taken
  - b. Reviewed as noted
  - c. Revise and Resubmit or
  - d. Rejected.
- J. When submittals are favorably reviewed, the ENGINEER will retain three (3) copies and will return all other copies to the CONTRACTOR. When submittals are not favorably reviewed, the ENGINEER will retain only two (2) copies and will return all others to the CONTRACTOR. It is considered reasonable that the CONTRACTOR shall make a complete and acceptable submission to the ENGINEER at least by the second submission of data. The CITY reserves the right to deduct monies from payments due the CONTRACTOR to cover additional costs of the ENGINEER's review beyond the second submission.

- K. Favorable review by the ENGINEER will not constitute acceptance by the ENGINEER of any responsibility for the accuracy, coordination, and completeness of the Shop Drawings or the items of equipment represented on the Drawings. Accuracy, coordination, and completeness of Shop Drawings shall be the sole responsibility of the CONTRACTOR, including responsibility to back check comments, corrections, and modifications from the ENGINEER's review before fabrication. Supplemental, specific requirements for Shop Drawings and details are contained in the applicable technical sections of these Specifications.
- L. Copies of schedules and Shop Drawings submitted to the ENGINEER for review shall be such as to provide three (3) copies for the ENGINEER's files, and such additional copies as the CONTRACTOR may desire for its own office files and/or for distribution by it to subcontractors or vendors. Exceptions will be noted in specific sections of Specifications. All Shop Drawings and supporting data, catalogs, and schedules shall be submitted as the instruments of the CONTRACTOR, who shall be responsible for their accuracy and completeness. These submittals may be prepared by the CONTRACTOR, subcontractors, or suppliers, but the CONTRACTOR shall ascertain that submittals meet all of the requirements of the Contract, while conforming to structural, space, and access conditions at the point of installation. The CONTRACTOR shall check all submittals before submitting them to the ENGINEER.
- M. CONTRACTOR may propose an electronic/online submittal system which the ENGINEER is familiar with. If the ENGINEER is agreeable to the electronic submittal system a process shall be agreed upon. The number days required for review by Engineer shall not change.
- N. The ENGINEER shall check and review schedules, drawings, etc., submitted by the CONTRACTOR only for general design conformance with the concept of the Project and compliance with the Contract. Shop Drawings shall not be used to order products' fabrication or delivery for construction or installation unless submitted to and favorably reviewed by the ENGINEER. Acceptance by the ENGINEER of any drawings, method of work, or any information regarding materials and equipment the CONTRACTOR proposes to furnish shall not relieve the CONTRACTOR of its responsibility for any errors therein and shall not be regarded as an assumption of risks or liability by the Design ENGINEER or the CITY, or any officer or employee thereof, and the CONTRACTOR shall have no recourse against the CITY under the Contract on account of the failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Such acceptance shall be considered to mean merely that the ENGINEER has no objection to the CONTRACTOR using, upon its own full responsibility, the plan or method of work proposed or furnishing the materials and equipment proposed.

#### **1-6.15 CONTINUING THE WORK**

The CONTRACTOR shall carry on the WORK and adhere to the progress schedule during all disputes or disagreements with the CITY. No WORK shall be delayed or postponed pending resolution of any disputes or disagreements, except as the CONTRACTOR and the CITY may otherwise agree in writing.

#### **1-6.16 CONTRACTOR'S GENERAL WARRANTY AND GUARANTEE**

- A. CONTRACTOR warrants and guarantees that all WORK will be in accordance with the Contract Documents and will not be defective. The CONTRACTOR represents that the WORK performed pursuant to the Contract shall be of the quality specified or of the highest quality if no quality is specified, and shall conform to the Contract Documents. The CONTRACTOR warrants all equipment, material, products, and workmanship furnished and all work performed under the Contract against defects for a period of one (1) year after final acceptance regardless of whether the same were furnished or performed by the CONTRACTOR or by any of its subcontractors or suppliers of any tier.
- B. The CONTRACTOR shall make, at its own expense, all repairs and/or replacements necessitated by defects in the equipment, materials, and/or products and in the workmanship provided by the CONTRACTOR or any of its subcontractors that become evident within the warranty period.

- C. Upon receipt of written notice from the CITY of any breach of warranty during the applicable warranty period, the affected item shall be redesigned, repaired, or replaced by the CONTRACTOR and the CONTRACTOR shall perform such tests as the CITY may require to verify that such redesign, repair, and replacement comply with the requirements of the Contract. The CITY shall have the right to operate and use such equipment, materials, and/or products until they can, without damage to the CITY, be taken out of service for correction or replacement by the CONTRACTOR. As to the redesigned, repaired, or replaced work, the CONTRACTOR warrants such redesigned, repaired, or replaced work against defective design, equipment, materials, products, and workmanship for a period of one (1) year from and after the date of satisfactory completion of such redesigned, repaired, or replaced work. The CITY reserves the right to require that the CONTRACTOR performs such repair or replacement work.
- D. The CITY also reserves the right to make such repairs or replacements, if, within seven (7) calendar days after the mailing of a notice in writing to the CONTRACTOR and Surety, the CONTRACTOR shall neglect to make or undertake with due diligence the aforesaid repairs or replacements and that Surety within seven (7) calendar days after mailing of a notice in writing of such negligence of the CONTRACTOR shall neglect to make or undertake with due diligence the aforesaid repairs or replacements itself, provided, however, that in the case of an emergency where in the opinion of the CITY delay would cause hazard to health or serious loss or damage, repair may be made without notice being sent to the CONTRACTOR or Surety, and the CONTRACTOR shall pay the cost thereof.
- E. All costs including workforce and materials incidental to such redesign, repair, replacement, and testing, including the removal, replacement, and reinstallation of equipment necessary to gain access and all other costs incurred as the result of a breach of warranty shall be borne by the CONTRACTOR whether performed by the CITY or the CONTRACTOR.
- F. Nothing in this section shall be construed to limit, relieve, or release the CONTRACTOR, subcontractor's, and equipment, materials, and/or products suppliers, and other service providers' liability to the CITY for damages sustained as the result of latent defects in the workmanship, equipment, materials, and/or products done and/or furnished by the CONTRACTOR, its subcontractors, suppliers and/or other service providers.
- G. The Performance Bond shall extend for a period of one (1) year after acceptance of the Contract by the CITY and shall cover the CONTRACTOR's obligations resulting from the warranty requirements herein specified.
- H. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:
  - a. Abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, or Suppliers, or other individual or entity for whom CONTRACTOR is responsible;
  - b. Normal wear and tear under normal usage.
- I. CONTRACTOR's obligation to perform and complete the WORK in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of WORK that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents:
  - a. Observations by ENGINEER;
  - b. Recommendation by ENGINEER or payment by CITY of any progress or final payment;
  - c. The issuance of a Certificate of Completion by the CITY;
  - d. Use or occupancy of the WORK or any part thereof by the CITY;
  - e. Any acceptance by CITY or any failure to do so;
  - f. Any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice or acceptability by ENGINEER pursuant to Paragraph 1-14.07B;
  - g. Any inspection, test, or approval by others; or
  - h. Any correction of Defective Work by CITY.



**1-6.17 INDEMNIFICATION**

- A. To the fullest extent permitted by law, the Contractor shall indemnify, defend with counsel acceptable to CITY, and hold harmless CITY, its officers, officials, employees, agents, and volunteers from and against any and all losses, claims, demands, damages, costs, expenses, attorney's fees, or liability of every nature arising out of or in any way connected with the performance or attempted performance of the provisions of this Contract, caused in whole or in part by any negligent or willful act or omission of the Contractor, its officers, employees, or agents, or anyone directly or indirectly acting on behalf of the Contractor, regardless of whether caused in part by a party indemnified hereunder. Nothing contained in the foregoing indemnity provisions shall be construed to require the Contractor to indemnify the indemnified party in contravention of Section 2782 of the Civil Code for the active or sole negligence or willful misconduct of that indemnified party.
- B. To the fullest extent permitted by law, the Contractor's duty to defend shall extend, without limitation, to any suit or action founded upon any losses, claims, demands, damages, costs, expenses, attorney's fees, or liability of every nature arising out of or in any way connected with the performance or attempted performance of the provisions hereof, or in any way arising out of or connected with this Contract.
- C. The defense and indemnity obligations expressly extend to and include any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of damages to adjacent property caused by the conduct of the Work.
- D. The defense and indemnity obligations expressly extend to and include any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of the violation by the Contractor, the Contractor's agents, employees, or independent contractors, Subcontractors or suppliers of any provisions of federal, State or local law, including applicable administrative regulations.
- E. The defense and indemnity obligations also expressly extend to and include any claims, demands, damages, costs, expenses, or liability occasioned by injury to or death of any person, or any property damage to property owned by any person while on or about the site or as a result of the Work, whether such persons are on or about the site by right or not, whenever the Work is alleged to have been a contributing cause in any degree whatsoever.
- F. In claims against any person or entity herein indemnified that are made by an employee of the Contractor or an employee of any of the Contractor's agents, independent contractors, Subcontractors or suppliers, a person indirectly employed by the Contractor or by any of the Contractor's agents, independent contractors, Subcontractors or suppliers, or anyone for whose acts the Contractor or any of the Contractor's agents, independent contractors, Subcontractors or suppliers may be liable, the defense and/or indemnification obligation herein shall not be limited by any limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or the Contractor's agents, independent contractors, Subcontractors or suppliers under workers' compensation acts, disability acts, or other employee benefit acts.
- G. The indemnification obligations herein shall not be limited by any assertion or finding that the person or entity indemnified is liable by reason of a non-delegable duty.
- H. The indemnities set forth herein shall not be limited by the insurance requirements set forth in the Contract Documents.
- I. The indemnification requirements herein set forth shall extend to claims occurring after this Contract is terminated as well as while it is in force.
- J. In the event the Contractor enters into any agreement with the owners of any adjacent property to enter upon or adjacent to such property for the purpose of performing this Contract, the Contractor shall fully indemnify, defend and save harmless such person, firm, or corporation, State or other governmental agency which owns or has any interest in the adjacent property. The form and content of the indemnification agreement shall be approved by CITY prior to commencement of any work on or about such property. The Contractor also shall indemnify

CITY and other indemnities identified in this Section as provided in the Contract. These provisions shall be in addition to any other requirements of the owners of adjacent property.

- K. Pursuant to California Public Contract Code Section 9201, CITY shall timely notify Contractor of receipt of any third-party claim relating to this Contract.

#### **1-6.18 CONTRACTOR'S DAILY REPORTS**

The CONTRACTOR shall complete a daily report indicating location worked, total manpower for each construction trade, major equipment on Site, each Subcontractor's manpower and equipment, weather conditions, and other related information involved in the performance of the WORK. These components will be decided by the ENGINEER.

#### **1-6.19 CONTRACT DOCUMENTS AND RECORD DRAWINGS**

- A. The CONTRACTOR shall keep on the work site a copy of the Contract Documents and shall at all times give the ENGINEER access thereto. Any drawings included in the Specifications shall be regarded as part thereto and of the Contract. Anything mentioned in these Specifications and not shown on the Project Drawings or shown on the Project Drawings and not mentioned in these Specifications, shall be of like effect as though shown or mentioned in both. The ENGINEER will furnish from time to time such detail drawings, plans, profiles, and information as he may consider necessary for the CONTRACTOR's guidance. It shall be the duty of the CONTRACTOR to see that the provisions of the Contract Documents are complied with in detail irrespective of the inspection given the work during its progress by the ENGINEER. Any failure on the part of the CONTRACTOR to observe the requirements contained in the Contract Documents will be sufficient cause for the rejection of the work at any time before its acceptance.
- B. The CONTRACTOR shall maintain, at the jobsite, one record set of Drawings in good order and clearly marked to show any deviations which have been made from the Drawings, including concealed construction and utility features which are revealed during the course of construction. Marked prints shall be updated at least once each week and shall be available to the ENGINEER for review as to currency prior to developing partial payment estimates. Upon completion of the work, the marked set of prints shall be delivered to the ENGINEER.
- C. In the case of those drawings which depict the detail requirement for equipment to be assembled and wired in the factory, such as motor control centers and the like, the Record Drawings shall be updated by indicating those portions which are superseded by change order drawings or final shop drawings, and by including appropriate reference information describing the change orders by number and the shop drawings by manufacturer, drawing, and revision numbers.
- D. Requests for partial payments will not be approved if the updated set of Drawings is not in good order or is not kept current. Request for final payment or bond release will not be approved until the complete and correct Record Drawings are delivered to the ENGINEER.

#### **1-6.20 CLEAN UP**

The CONTRACTOR shall, at all times, keep the premises, occupied by it in relation to this Contract, in a neat, clean, and safe condition and at all times provide reasonable access thereto. The CONTRACTOR shall, as a minimum, conduct daily inspections to verify that requirements of this Section are being met.

- A. During the progress of the WORK, the CONTRACTOR shall:
- a. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of material.
  - b. Provide adequate storage of all items awaiting removal from the jobsite, observing all requirements for fire protection and protection of the environment.
  - c. Remove any accumulation of scrap, debris, waste material, and other items not required for construction of this work.
  - d. Dispose of existing materials and equipment to be demolished and removed and all trash such as broken concrete, wood blocking, shipping containers, etc., resulting from the contract work off the premises occupied by the CONTRACTOR, including CITY property, at the CONTRACTOR's expense. CITY-leased dumpsters and other disposal containers on CITY's

- property, unless specifically provided by the CONTRACTOR, shall not be used by the CONTRACTOR.
- e. Maintain all excavation, embankments, haul roads, permanent access roads, Plant site, waste disposal areas, borrow areas, and all other work areas within contract work limits free from dust, as determined by the ENGINEER. Industry-accepted methods of dust control suitable for the area involved, such as sprinkling, chemical treatment, light bituminous treatment, or similar methods, will be permitted. No separate payment will be made to the CONTRACTOR for dust control.
- B. If the CONTRACTOR fails to comply with any of the foregoing, the CITY will transmit written notification of noncompliance. If, within five (5) calendar days of the written notification, the CONTRACTOR fails to comply, cleanup may be undertaken by the CITY at the expense of the CONTRACTOR.
- C. Upon completion of any portion of any WORK, the CONTRACTOR shall promptly remove all of its equipment, temporary structures, and surplus construction and other materials not to be used at or near the same location during later stages of work. Upon completion of any WORK and before final inspection is made, the CONTRACTOR shall unless otherwise specifically directed by the ENGINEER:
- a. Remove from the job site all plant, buildings, tools, surplus materials, equipment, forms, rubbish, scrap, debris, and waste
  - b. Clean all paved areas on the site. Completely remove all resultant debris.
  - c. Visually inspect all interior surfaces, and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only approved cleaning materials and equipment.
  - d. Restore any improved area used for the CONTRACTOR's work or material storage to its condition at the time the CONTRACTOR moved onto the site or to the satisfaction of the ENGINEER.
  - e. Schedule final cleaning and improvement restoration to enable the CITY to accept a completely clean and restored project.

## **1-6.21 STORM WATER POLLUTION PREVENTION**

### **1-6.21A General**

- A. Prevention - The CONTRACTOR shall prevent the pollution of storm drain systems and creeks on or near the construction project site(s) resulting from the construction operation. The CONTRACTOR shall keep pollution out of storm drains by reducing the possibility of accidental discharge of materials and wastes, by reducing erosion and sedimentation, and by any action as required. The CONTRACTOR shall train all employees and subcontractors on the storm water pollution prevention requirements contained in these Specifications and ensure that all employees and subcontractors are aware of the consequences as described in this section 1-6.21. The CONTRACTOR shall include appropriate subcontract provisions to ensure that these requirements are met by all subcontractors.
- B. Notification - If the CONTRACTOR causes or permits the spillage or overflow of any sewage, oil, or petroleum product, hazardous substance, contaminant, or waste that may result in the fluid or substance being discharged directly or indirectly into any storm drains, creeks, wetlands, or other manmade or natural waterways the CONTRACTOR shall notify the CITY as soon as possible to the extent notification can be provided without substantially impeding cleanup or other emergency measures. In no event shall such notification be later than one hour after knowledge of the occurrence.
- C. Cleanup - Immediately upon gaining knowledge of such spillage, overflow, or discharge, the CONTRACTOR shall eliminate the cause of the spillage, overflow, or discharge and take action to minimize any damages. The CONTRACTOR shall also immediately implement a cleanup program. The cleanup, including sampling and testing required by regulatory agencies to determine the nature and level of contamination shall be performed and completed to the

satisfaction of the various regulatory agencies involved and the CITY, at the expense of the CONTRACTOR. Any fines, penalties, and/or subsequent actions imposed upon the CITY and/or the CONTRACTOR by regulatory agencies related to the spillage, overflow, or discharge and any subsequent monitoring, testing, and reporting, as required by regulatory agencies, shall also be at the expense of the CONTRACTOR. The CONTRACTOR shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on site. The quantity of cleanup materials shall be appropriate in consideration of the risk of an occurrence of a spill, overflow or discharge.

**1-6.21B Management of Nonhazardous Material and/or Waste**

- A. Designated Area - The CONTRACTOR shall propose designated areas of the project site, for approval by the ENGINEER, suitable for material delivery, storage, and waste collection that to the maximum extent practicable are near construction entrances and away from catch basins, gutters, drainage courses, and creeks.
- B. Backfill or Excavated Material - The CONTRACTOR shall not allow backfill or excavated material to enter the storm drains or creeks. When rain is forecast within 24 hours or during wet weather, the CONTRACTOR may be required to cover such material with a tarpaulin and to surround the material with sand bags.
- C. Street Sweeping - At least once per week or more frequently as directed by the ENGINEER, the CONTRACTOR shall clean and sweep roadways and on-site paved areas of all materials attributed to or involved in the work. The CONTRACTOR shall not use water to flush down streets in place of street sweeping.
- D. Disposal - At the end of each working day, the CONTRACTOR shall collect all scrap, debris, and waste material, and dispose of such materials properly. The materials may be stored in the CONTRACTOR's yard in stockpiles or placed in dumpsters. The CONTRACTOR shall inspect dumpsters for leaks and replace or repair dumpsters that leak. The CONTRACTOR shall not discharge water from cleaning dumpsters on site. The CONTRACTOR shall arrange for regular waste collection before dumpsters overflow.

**1-6.21C Management of Hazardous Material and/or Waste**

- A. Storage - The CONTRACTOR shall label and store all hazardous materials, such as pesticides, paints, thinners, solvents, and fuels, and all hazardous wastes, such as waste oil and antifreeze in accordance with all applicable state and federal regulations. The CONTRACTOR shall store all hazardous materials and all hazardous wastes in accordance with secondary containment regulations. All such materials and wastes shall be covered, as needed, to avoid rainwater becoming polluted with hazardous constituents which could result in potential management of collected rain water as a hazardous waste. The CONTRACTOR shall keep an accurate, up-to-date inventory, including Material Safety Data Sheets (MSDSs), of hazardous materials and hazardous wastes stored on site.
- B. Usage - When rain is forecast within 24 hours or during wet weather, the CONTRACTOR shall refrain from applying chemicals in outside areas. The CONTRACTOR shall follow material manufacturer's instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals. The CONTRACTOR shall post warning signs in areas treated with chemicals.
- C. Disposal - The CONTRACTOR shall arrange for regular hazardous waste collection to comply with time limits on storage of hazardous wastes. The CONTRACTOR shall dispose of hazardous waste in accordance with all applicable local, state and federal regulations. The CONTRACTOR shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials. The CONTRACTOR shall report any hazardous materials spill to the CITY in accordance with Section 1-6.21A above.

**1-6.21D Vehicle/Equipment Cleaning, Maintenance, and Fueling**

- A. General - The CONTRACTOR shall inspect vehicles and equipment arriving on site for leaking fluids and shall promptly repair leaking vehicles and equipment. Drip pans shall be used to catch leaks until repairs are made. The CONTRACTOR shall comply with federal, state, and CITY requirements for aboveground storage tanks.
- B. Cleaning - The CONTRACTOR shall perform vehicle or equipment cleaning with water only in a designated, bermed area that will not allow rinse water to run off site into streets, gutters, storm drains, or creeks. Soaps, solvents, degreasers, steam-cleaning equipment, or equivalent methods shall not be allowed.
- C. Maintenance and Fueling - The CONTRACTOR shall perform maintenance and fueling of vehicles or equipment in areas that will not allow run-on of storm water or runoff of spills to storm drains and provide for confined clean-up. Examples are working in bermed areas or utilizing drip pans. The CONTRACTOR shall not contaminate the soils or groundwater with such maintenance and fueling activities.
- D. The CONTRACTOR shall use secondary containment, such as a drip pan, to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured, and shall clean up leaks and spills of vehicle or equipment fluids immediately and dispose of the waste and cleanup materials as hazardous waste, as described in Section 1-6.21C above.

**1-6.21E Dewatering Operations**

- A. Sediment Control - The CONTRACTOR shall route water through a control measure, such as a sediment trap, sediment basin, or Baker tank, to remove settleable solids prior to discharge to the storm drain system. Straw bales shall be placed in front of storm drain inlets as required. Filtration of the water following the control measure may be required on a case-by-case basis. Approval of the control measure shall be obtained in advance from the ENGINEER. If the ENGINEER determines that the dewatering operation would not generate an appreciable amount of settleable solids, the control measure requirement above may be waived.
- B. Contaminated Groundwater - If the project is within an area of known groundwater contamination or if contamination is found, water from dewatering operations shall be tested prior to discharge. If the water quality meets Regional Water Quality Control Board (RWQCB) standards, it may be discharged to a storm drain or creek. Otherwise, the water shall be hauled off site for proper disposal.

**1-6.21F Paving or Oiling Operations**

- A. When rain is forecast within 24 hours or during wet weather, the ENGINEER may prevent the CONTRACTOR from paving or oiling the street. The ENGINEER may direct the CONTRACTOR to protect drainage courses by using control measures, such as earth dike, straw bale, and sand bag, to divert runoff or trap and filter sediment.
- B. The CONTRACTOR shall prevent saw-cut slurry from entering catch basins and storm drains by limiting the area over which the slurry may spread.
- C. The CONTRACTOR shall cover catch basins and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- D. The CONTRACTOR shall not sweep or wash down excess sand (placed as part of a sand seal or to absorb excess oil) into gutters, storm drains, or creeks. The CONTRACTOR shall either collect the sand and return it to the stockpile or dispose of it in a trash container.

**1-6.21G Concrete, Grout, and Mortar Waste Management**

- A. Concrete Truck/Equipment Washout - The CONTRACTOR shall not wash out concrete trucks or equipment into streets, gutters, storm drains, or creeks. The CONTRACTOR shall perform washout of concrete trucks or equipment off site or in a designated area on site where the water

will flow onto dirt or into a temporary pit in a dirt area. The CONTRACTOR shall let the water percolate into the soil and dispose of the hardened concrete in a trash container. If a suitable dirt area is not available, the CONTRACTOR shall collect the wash water and remove it off site.

- B. Exposed Aggregate Concrete Wash Water - The CONTRACTOR shall avoid creating runoff by draining water from washing of exposed aggregate concrete to a dirt area. If a suitable dirt area is not available, the CONTRACTOR shall filter the wash water through straw bales or equivalent material before discharging to a storm drain. The CONTRACTOR shall collect sweepings from exposed aggregate concrete for disposal.

**1-6.21H Paint Disposal and Clean-up**

- A. Disposal of Unused Paint - The CONTRACTOR shall carefully use, store and dispose of paint, solvents, chemicals, and waste materials in compliance with all applicable state and federal regulations. The CONTRACTOR shall not dispose of paint to sanitary sewer systems or storm drains. The CONTRACTOR shall utilize other recycling and disposal services as follows:

- a. "Recycling Centers" and "Waste Disposals" as may be listed in the yellow pages.
- b. Local household hazardous waste facility if appropriate.

The CONTRACTOR may dispose of small amounts of leftover latex (water-based) paint by applying the paint to the surface of an item to be discarded and allowing it to dry thoroughly, then disposing of it in a dumpster.

The CONTRACTOR shall store these materials and conduct cleaning of painting equipment and tools in a designated area that will not allow run-on of storm water or runoff of spills. The CONTRACTOR shall not allow wash water from cleaning of painting equipment and tools into streets, gutters, storm drains, or creeks.

- B. Disposal of Paint Clean-up Waste - The CONTRACTOR shall remove as much excess paint as possible from brushes, rollers, and equipment before starting cleanup.

- a. The CONTRACTOR shall not discharge cleaning wastes from oil- based paints, buckets, brushes or tools to the sanitary sewer system. The CONTRACTOR shall retain a certified waste hauler to recycle or to dispose of cleaning wastes from oil-based paints at the CONTRACTOR's expense.
- b. The CONTRACTOR may discharge very small amounts of cleaning wastes from brushes, rollers, buckets, and tools contaminated with latex (water-based) paints to the sanitary sewer system provided they do not contain additives with pollutants of concern (e.g., mercury, tributyltin). Brushes, rollers, and tools containing latex paints may be washed over a sink with plenty of water. Buckets containing latex paints shall first be emptied into the original can or discarded as specified in paragraph 1 above. Should excessive amounts of paint or solvent be found in the wastewater discharged, the CONTRACTOR may be subject to enforcement action by the CITY in accordance with the CITY Codes.
- c. The CONTRACTOR shall not discharge any of these paint clean- up wastes to storm drains, streets, gutters, or creeks.

- C. Waste Disposal - The CONTRACTOR shall dispose of waste thinner, solvent, and sludge from cleaning of equipment and tools as hazardous waste, as described in this Section 1-6.21H. The CONTRACTOR shall dispose of excess thinners, solvents, and oil- and water-based paint as hazardous waste.

**1-6.21I Contaminated Soil**

If the project is within an area of known soil contamination or evidence of soil contamination is found, the CONTRACTOR shall comply with the requirements of all applicable local, state and federal regulations.

## **1-7 OTHER WORK**

### **1-7.01 RELATED WORK AT SITE**

- A. The CITY may perform other work related to the Project at the Site by the CITY's own forces, have other work performed by utility owners, or let other direct contracts for such other work. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to the CONTRACTOR prior to starting any such other work.
- B. The CONTRACTOR shall afford each person who is performing the other work (including the CITY's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the WORK with theirs. The CONTRACTOR shall do all cutting, fitting, and patching of the WORK that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. The CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will not only cut or alter their work with the written consent of the ENGINEER and the others whose work will be affected.
- C. If the proper execution or results of any part of the CONTRACTOR's work depends upon such other work by another, the CONTRACTOR shall inspect and report to the ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for such proper execution and results. The CONTRACTOR's failure to report such delays, defects, or deficiencies will constitute an acceptance of the other work as fit and proper for integration with the CONTRACTOR's work except for latent or nonapparent defects and deficiencies in the other work.

### **1-7.02 COORDINATION**

If the CITY contracts with others for the performance of other work at the Site, CITY will have sole authority and responsibility in respect of such coordination, unless otherwise provided in the Special Provisions.

## **1-8 CITY'S RESPONSIBILITIES**

### **1-8.01 COMMUNICATIONS**

Except as may be otherwise provided in these General Conditions, the CITY will issue all its communications to the CONTRACTOR through the ENGINEER.

### **1-8.02 PAYMENTS**

The CITY will make payments to the CONTRACTOR as provided in Section 1-14.

### **1-8.03 LANDS, EASEMENTS, AND SURVEYS**

The CITY's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Sections 1-4.01 and 1-4.06.

### **1-8.04 REPORTS AND DRAWINGS**

The CITY will identify and make available to the CONTRACTOR copies of reports of physical conditions at the Site and drawings of existing structures which have been utilized in preparing the Contract Documents as set forth in Section 1-4.02.

### **1-8.05 CHANGE ORDERS**

The CITY will execute Change Orders as indicated in Section 1-10.

### **1-8.06 INSPECTIONS AND TESTS**

The CITY'S responsibility for inspections and tests is set forth in Section 1-13.03.

### **1-8.07 SUSPENSION OF WORK**

The CITY's right to stop work or suspend work is set forth in Sections 1-13.04 and 1-15.01.

### **1-8.08 TERMINATION OF AGREEMENT**

The CITY's right to terminate services of the CONTRACTOR is set forth in Sections 1-15.02 and 1-15.03.

### **1-8.09 LIMITATION ON CITY'S RESPONSIBILITIES**

The CITY shall not supervise, direct or have control or authority over, nor be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the WORK. CITY will not be responsible for CONTRACTOR's failure to perform or furnish the WORK in accordance with the Contract Documents.

### **1-8.10 UNDISCLOSED HAZARDOUS ENVIRONMENTAL CONDITIONS**

CITY's responsibility in respect to an undisclosed hazardous environmental condition is set forth in Section 1-4.05.

## **1-9 ENGINEER'S STATUS DURING CONSTRUCTION**

### **1-9.01 CITY'S REPRESENTATIVE**

The ENGINEER will be the CITY'S representative during the construction period. The ENGINEER shall decide any and all questions which may arise as to the quality or acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all questions which arise as to the interpretation of the plans and specifications, the proposal and the contract documents therefor; all questions as to the acceptable fulfillment of the contract on the part of the CONTRACTOR; and all questions as to claim and compensation.

### **1-9.02 OBSERVATIONS ON THE SITE**

The ENGINEER will make observations on the Site during construction to monitor the progress and quality of the WORK and to determine, in general, if the WORK is proceeding in accordance with the Contract Documents. The ENGINEER will not be required to make exhaustive or continuous inspections to check the quality or quantity of the WORK.

### **1-9.03 PROJECT REPRESENTATION**

The ENGINEER may furnish a Resident Project Representative to assist in observing the performance of the WORK.

### **1-9.04 CLARIFICATIONS**

The ENGINEER will issue with reasonable promptness such written Clarifications of the requirements of the Contract Documents as the ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

### **1-9.05 AUTHORIZED VARIATIONS IN WORK**

The ENGINEER may authorize variations in the WORK from the requirements of the Contract Documents. These may be accomplished by a Field Order and will require the CONTRACTOR to perform the WORK involved in a manner that minimizes the impact to the WORK and the Contract Times. If the CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Times, the CONTRACTOR may make a claim therefor as provided in Section 1-11 or 1-12.

### **1-9.06 REJECTING DEFECTIVE WORK**

The ENGINEER will have authority to reject Defective Work and will also have authority to require special inspection or testing of the WORK as provided in Section 1-13.

### **1-9.07 CONTRACTOR SUBMITTALS, CHANGE ORDERS, AND PAYMENTS**

- A. In accordance with the procedures set forth in the General Conditions and Special provisions, the ENGINEER will review all CONTRACTOR submittals.



- B. The ENGINEER's responsibilities for Change Orders are set forth in Sections 1-10, 1-11, and 1-12.
- C. The ENGINEER's responsibilities for Applications for payment are set forth in Section 1-14.

**1-9.08 DECISIONS ON DISPUTES**

The ENGINEER will be the initial interpreter of the requirements of the Contract Documents and of the acceptability of the WORK thereunder. Claims, disputes, and other matters relating to the acceptability of the WORK and interpretation of the requirements of the Contract Document pertaining to the performance of the work shall be determined by the ENGINEER. Any claims in respect to changes in the Contract Price or Contract Times shall be resolved in accordance with the requirements set forth in Sections 1-10, 1-11, and 1-12.

**1-9.09 LIMITATIONS ON ENGINEER'S RESPONSIBILITIES**

- A. Neither the ENGINEER's authority to act under this Section 1-9 or other provisions of the Contract Documents nor any decision made by the ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the ENGINEER to the CONTRACTOR, any Subcontractor, any Supplier, any surety for any of them, or any other person or organization performing any of the WORK.
- B. Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as reviewed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," or "satisfactory," or adjectives of like effect or import are used to describe a requirement, direction, review, or judgment will be solely to evaluate the WORK for compliance with the requirements of the Contract Documents, and conformance with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents, unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to the ENGINEER any duty or authority to supervise or direct the performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of Section 1-9.09C.
- C. The ENGINEER will not supervise, direct, control, or have authority over or be responsible for the CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the CONTRACTOR to comply with Laws and Regulations applicable to the performance of the WORK. The ENGINEER will not be responsible for the CONTRACTOR's failure to perform the WORK in accordance with the Contract Documents. The ENGINEER will not be responsible for the acts or omissions of the CONTRACTOR nor of any Subcontractor, Supplier, or any other person or organization performing any of the WORK.

**1-10 CHANGES IN THE WORK**

**1-10.01 GENERAL**

- A. Without invalidating the Agreement and without notice to any surety, the CITY may at any time or from time to time, order additions, deletions, or revisions in the WORK. Such additions, deletions or revisions will be authorized by a Change Order or Field Order. Upon receipt of any such document, CONTRACTOR shall promptly proceed to implement the additions, deletions, or revisions in the WORK in accordance with the applicable conditions of the Contract Documents.
- B. The CONTRACTOR shall not be entitled to an increase in the contract Price nor an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented by Change Order, except in the case of an emergency and except in the case of uncovering work as provided in Sections 1-13.03.F and G.
- C. The CITY and the CONTRACTOR shall execute appropriate Change Orders covering:
  - a. Changes in the WORK which are ordered by the CITY pursuant to Section 1-10.01A.;
  - b. Changes required because of acceptance of Defective Work under Section 1-13.06; and

- c. Changes in the Contract Price or Contract Times which are agreed to by the parties under Sections 1-11 and/or 1-12, respectively.
- D. If notice of any change in the WORK is required to be given to a surety, the giving of any such notice shall be the CONTRACTOR's responsibility. If the change in the WORK affects the Contract Price, the CITY may require an adjustment to the amount of any applicable Bond and the amount of each applicable Bond shall be adjusted accordingly.
- E. If the CITY and CONTRACTOR agree as to the extent, if any, of an increase in the Contract Price or an extension or shortening of the Contract Times that should be allowed as a result of a Field Order, the CONTRACTOR shall proceed so as to minimize the impact on and delays to the WORK pending the issuance of a Change Order.
- F. If the CITY and the CONTRACTOR are unable to agree as to the extent, if any, of an increase in the Contract Price or an extension or shortening of the Contract Times that should be allowed as a result of a Field Order, the ENGINEER can direct the CONTRACTOR to proceed on the basis of time and materials so as to minimize the impact on and delays to the WORK, and the CONTRACTOR may make a claim as provided in Sections 1-11 and 1-12.

#### **1-10.02 ALLOWABLE QUANTITY VARIATIONS**

- A. In the event of an increase or decrease in the quantity of any bid item under a unit price contract, the total amount of work actually done or materials or equipment furnished will be paid for according to the unit price established for such work under the Contract Documents, wherever such unit price has been established; provided, that an adjustment in the Contract Price may be made for changes which result in an increase or decrease in excess of 25 percent of the estimated quantity of any unit price bid item of the WORK.
- B. In the event a part of the WORK is to be entirely eliminated and no lump sum or unit price is named in the Contract Documents to cover such eliminated work, the price of the eliminated work shall be agreed upon by the CITY and the CONTRACTOR by Change Order.

### **1-11 CHANGE OF CONTRACT PRICE**

#### **1-11.01 GENERAL**

- A. The Contract Price constitutes the total compensation payable to the CONTRACTOR FOR PERFORMING THE work. All duties, responsibilities, and obligations assigned to or undertaken by the CONTRACTOR to complete the WORK shall be at its expense without change in the Contract Price.
- B. The Contract Price may only be changed by a Change Order. The value of any work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:
  - a. Where the work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.
  - b. By mutual acceptance of a lump sum, which may include an allowance for overhead and profit not necessarily in accordance with Section 1-11.04; or
  - c. On the basis of the cost of work (determined as provided in Section 1-11.03) plus the CONTRACTOR's overhead and profit (determined as provided in Section 1-11.04).
- C. Any claim for an increase in the Contract Price shall be based on written notice delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 10 days) after the start of the event giving rise to the claim and shall state the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within 60 days after the start of such event (unless the ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the CONTRACTOR's written statement that the amount claimed covers all known amounts (direct, indirect, and consequential) to which the CONTRACTOR is entitled as a result of such event. All claims for adjustment in the Contract Price will be determined by the ENGINEER. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this Paragraph C.

### 1-11.02 COSTS RELATING TO WEATHER

The CONTRACTOR shall have no claims against the CITY for damages for any injury to work, materials, or equipment, resulting from the action of the elements. If, however, in the opinion of the ENGINEER, the CONTRACTOR has made all reasonable efforts to protect the materials, equipment, and work, the CONTRACTOR may be granted a reasonable extension of Contract Times to make proper repairs, renewals, and replacements of the work, materials, or equipment.

### 1-11.03 COST OF WORK (BASED ON TIME AND MATERIALS)

- A. **General:** The term "cost of work" means the sum of all costs necessarily incurred and paid by the CONTRACTOR for labor, materials, and equipment in the proper performance of extra work. Except as otherwise may be agreed to in writing by the CITY, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in Section 1-11.05.
- B. **Labor:** The costs of labor will be the actual cost for wages prevailing for each craft or type of workers performing the extra work at the time the extra work is done, plus employer payments of payroll taxes, workers compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from federal, state or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. Labor costs for equipment operators and helpers will be paid only when such costs are not included in the invoice for equipment rental. The labor costs for foremen shall be proportioned to all of their assigned work and only that applicable to extra work shall be paid. Nondirect labor costs including superintendence shall be considered part of the markup set out in Section 1-11.04.
- C. **Materials:** Materials must be specifically authorized by the ENGINEER. The cost of materials reported shall be at invoice or lowest current price at which materials are locally available and delivered to the Site in the quantities involved, plus the cost of freight, delivery and storage, subject to the following:
- a. All trade discounts and rebaters shall accrue to the CITY, and the CONTRACTOR shall make provisions so that they may be obtained;
  - b. For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by the ENGINEER. Except for actual costs incurred in the handling of such materials, markup will not be allowed;
  - c. Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on extra work items or the current wholesale price for such materials delivered to the Site, whichever price is lower; and
  - d. If in the opinion of the ENGINEER the cost of material is excessive, or the CONTRACTOR does not furnish satisfactory evidence of the cost of such material, then the cost shall be deemed to be the lowest current wholesale price for the quantity concerned delivered to the Site less trade discount. The CITY reserves the right to furnish materials for the extra work and no claim will be allowed by the CONTRACTOR for costs and profit on such materials.
- D. **Equipment:** The CONTRACTOR will be paid for the use of equipment at the rental rate listed for such equipment specified in the current California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates." Such rental rate will be used to compute payments for equipment whether the equipment is under the CONTRACTOR's control through direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment will be the rate resulting in the least total cost to the CITY for the total period of use. If it is deemed necessary by the CONTRACTOR to use equipment not listed in the above-referenced publication, an equitable rental rate for the equipment will be established by the ENGINEER. The CONTRACTOR may furnish cost data which might assist the ENGINEER in the establishment of the rental rate. Payment for equipment shall be subject to the following:

- a. All equipment shall, in the opinion of the ENGINEER, be in good working condition and suitable for the purpose for which the equipment is to be used;
  - b. Before construction equipment is used on the extra work, the CONTRACTOR shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to the ENGINEER, in duplicate, a description of the equipment and its identifying number;
  - c. Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer;
  - d. Individual pieces of equipment or tools having a replacement value of \$500 or less, whether or not consumed by use, will be considered to be small tools and no payment will be made therefore.
- E. **Equipment Rental Time:** The rental time to be paid for equipment on the Site will be the time the equipment is in productive operation on the extra work being performed and, in addition, will include the time required to move the equipment to the location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location; except, that moving time will not be paid if the equipment is used on other than the extra work, even though located at the Site of the extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made for loading and transporting costs when the equipment is used at the Site of the extra work on other than the extra work. Rental time will not be allowed while equipment is inoperative due to breakdowns. The rental time of equipment on the work Site will be computed subject to the following:
- a. When hourly rates are listed, any part of an hour less than 30 minutes of operation will be considered to be half-hour of operation, and any part of an hour in excess of 30 minutes will be considered one hour of operation;
  - b. When daily rates are listed, any part of a day less than 4 hours operation will be considered to be half-day of operation. When owner-operated equipment is used to perform extra work to be paid for on a time and materials basis, the CONTRACTOR will be paid for the equipment and operator, as set forth in Paragraphs c, d, and e, following;
  - c. Payment for the equipment will be made in accordance with the provisions in Section 1-11.03D, herein;
  - d. Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by the CONTRACTOR to other workers operating similar equipment already on the Site, or in the absence of such labor, established by collective bargaining agreements for the type of workmen and location of the extra work, whether or not the operator is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein accordance with the provisions of Section 1-11.03B, herein, which surcharge shall constitute full compensation for payments imposed by state and federal laws and all other payments made to or on behalf of workers other than actual wages; and
  - e. To the direct cost of equipment rental and labor, computed as provided herein, will be added the allowances for equipment rental and labor as provided in Section 1-11.04, herein.
- F. **Special Services:** Special work or services are defined as that work characterized by extraordinary complexity, sophistication, innovation, or a combination of the foregoing attributes which are unique to the construction industry. The ENGINEER will make estimates for payment for special services and may consider the following:
- a. When the ENGINEER and the CONTRACTOR, determine that a special service or work is required which cannot be performed by the forces of the CONTRACTOR or those of any of its Subcontractors, the special service or work may be performed by an entity especially skilled in the work to be performed. After validation of invoices and determination of market values by the ENGINEER, invoices for special services or work based upon the current fair market value thereof may be accepted without complete itemization of labor, material, and equipment rental costs;
  - b. When the CONTRACTOR is required to perform work necessitating special fabrication or matching process in a fabrication or a machine shop facility away from the Site, the charges

- for that portion of the work performed at the off-site facility may, by agreement, be accepted as a special service and accordingly, the invoices for the work may be accepted without detailed itemization; and
- c. All invoices for special services will be adjusted by deducting all trade discounts. In lieu of the allowances for overhead and profit specified in Section 1-11.04, herein, an allowance of 15 percent will be added to invoices for special services.
- G. **Sureties**; All work performed hereunder shall be subject to all provisions of the Contract Documents and the CONTRACTOR's sureties shall be bound with reference thereto as under the original Agreement. Copies of all amendments to Bonds or supplemental Bonds shall be submitted to the CITY for review prior to the performance of any work hereunder.

#### **1-11.04 CONTRACTOR'S OVERHEAD AND PROFIT**

- A. Extra work ordered on the basis of time and materials will be paid for at the actual necessary cost as determined by the ENGINEER, plus allowances for overhead and profit. No additional mark-ups and/or surcharges will be added to the cost. The allowance for overhead and profit will include full compensation for superintendence, taxes, field office expense, extended overhead, home office overhead, and all other items of expense or cost not included in the cost of labor, materials, or equipment provided for under Section 1-11.03. The allowance for overhead and profit will be made in accordance with the following schedule:

Overhead and Profit Allowance

Labor ..... 20 percent

Materials ..... 15 percent

Equipment... 15 percent

To the sum of the costs and markups provided for in this Section, an additional 2 percent of the sum will be added as compensation for Bonds and insurance.

- B. It is understood that labor, materials, and equipment for extra work may be furnished by the CONTRACTOR or by the Subcontractor on behalf of the CONTRACTOR. When all or any part of the extra work is performed by a Subcontractor, the allowance specified herein will be applied to the labor, materials, and equipment costs of the Subcontractor, to which the CONTRACTOR may add 5 percent of the Subcontractor's total cost for the extra work. Regardless of the number of hierarchical tiers of Subcontractors, the 5 percent increase above the Subcontractor's total cost which includes the allowances for overhead and profit specified herein may be applied one time only.

#### **1-11.05 EXCLUDED COSTS**

The term "cost of the work" shall not include any of the following:

- A. Payroll costs and other compensation of CONTRACTOR's officers, executives, proprietors, partners, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by CONTRACTOR whether at the Site or in CONTRACTOR's principal or a branch office for general administration of the WORK all of which are to be considered administrative costs covered by the CONTRACTOR's allowance for overhead and profit;
- B. Non-direct labor costs, including superintendence, shall be considered part of the markup for overhead and profit, and no additional payment will be allowed for such;
- C. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site;
- D. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the WORK and charges against CONTRACTOR for delinquent payments;
- E. Cost of premiums for all Bonds and for all insurance whether or no CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except as provided by Section 1-11.04 above);

- F. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied, and making good any damages to property; and
- G. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in Section 1-11.04.

### **1-11.06 CONTRACTOR'S EXTRA WORK REPORT**

In order to be paid for extra work, the CONTRACTOR must submit a daily extra work report on the form furnished by the ENGINEER. The form must be completely filled out based on the provisions of Sections 1-11.03 through 1-11.05 and signed by the CONTRACTOR and ENGINEER at the end of each work day. Failure to complete the form and obtain appropriate signatures by the next working day after the extra work of the previous day was completed will result in CONTRACTOR's costs for extra work being disallowed.

## **1-12 CHANGE OF CONTRACT TIMES**

### **1-12.01 GENERAL**

- A. The Contract Times may only be changed by a Change Order. Any claim for an extension of the Contract Times shall be based on written notice delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 10 days) after the start of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within 30 days after the start of such event (unless the ENGINEER allows an additional period of time for the submission of additional or more accurate data in support of the claim) and shall be accompanied by the CONTRACTOR's written statement that the adjustment claimed is the entire adjustment to which the CONTRACTOR is entitled as a result of said event. All claims for adjustment in the Contract Times will be determined by the ENGINEER. No claim for an adjustment in the Contract Times will be valid if not submitted in accordance with the requirements of this Paragraph 1-12.01 A. An increase in Contract Times does not mean that the CONTRACTOR is due an increase in Contract Price. Only compensable time extensions will result in an increase in Contract Price.
- B. All time limits stated in the Contract Documents are of the essence of the Agreement.
- C. When CONTRACTOR is prevented from completing any part of the WORK within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost on the critical path of the WORK due to such delay, if a claim is made therefor as provided in Paragraph 1-12.01.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by CITY; acts or neglect of those performing other work as contemplated by Section 1-7; and fires, floods, epidemics, abnormal weather conditions, or acts of God. Delays attributable to and within the control of any Subcontractor or Supplier shall be deemed to be delays within the control of the CONTRACTOR.
- D. In no event will CITY be liable to CONTRACTOR, any Subcontractor, any Supplier, any other person or organization, or to any surety for or employee or agent of any of them, for any increase in the Contract Price or other damages arising out of or resulting from the following:
  - a. Delays caused by or within the control of CONTRACTOR; or
  - b. Delays beyond the control of both CITY and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by those performing other work as contemplated by Section 1-7.

### **1-12.02 EXTENSIONS OF CONTRACT TIMES FOR DELAY DUE TO WEATHER**

- A. The CONTRACTOR's construction schedule shall anticipate delay due to unusually severe weather. The number of days of anticipated delay is **10 days** for this project.

- B. Contract Times may be extended by the ENGINEER because of delays in excess of the anticipated delay. The CONTRACTOR shall, within 10 days of the beginning of any such delay, notify the ENGINEER in writing and request an extension of Contract Times. The ENGINEER will ascertain the facts and the extent of the delay and extend the Contract Times when, in its judgment, the findings of the fact justify such an extension.

## **1-13 INSPECTIONS AND TESTS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

### **1-13.01 NOTICE OF DEFECTIVE WORK**

Prompt notice of Defective Work known to the ENGINEER will be given to the CONTRACTOR. All Defective Work, whether or not in place, may be rejected, corrected, or accepted as provided in this Section 1-13. Defective Work may be rejected even if approved by prior inspection.

### **1-13.02 ACCESS TO WORK**

ENGINEER and other representatives and personnel of CITY, independent testing laboratories, and governmental agencies with jurisdictional interests shall have access to the WORK at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

### **1-13.03 INSPECTIONS AND TESTS**

- A. The CONTRACTOR shall give the ENGINEER not less than 24 hours' notice of readiness of the WORK for all required inspections, tests, or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. The CITY shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
  - a. For inspection, tests, or approvals covered by Paragraphs 11-13.03C and 11-13.03D below;
  - b. That costs incurred in connection with tests or inspections conducted pursuant to Paragraph 1-13.03G. shall be paid as provided in said Paragraph 1-13.03G; and
  - c. As otherwise provided in the Contract Documents.
- C. If Laws and Regulations of any public body having jurisdiction require any WORK (or any part thereof) to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests or approvals; pay all costs in connection therewith; and furnish the ENGINEER the required certificates of inspection or approval.
- D. The CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for the ENGINEER's acceptance of materials or equipment to be incorporated in the WORK or acceptance of materials, mix designs, or equipment submitted for approval prior to the CONTRACTOR's purchase thereof for incorporation in the WORK. Such inspections, tests, or approvals shall be performed by organizations acceptable to the ENGINEER.
- E. The ENGINEER will make, or have made, such inspections and tests as the ENGINEER deems necessary to see that the WORK is being accomplished in accordance with the requirements of the Contract Documents. Unless otherwise specified, the cost of such inspection and testing will be borne by the CITY. In the event such inspections or tests reveal non-compliance with the requirements of the Contract Documents, the CONTRACTOR shall bear the cost of corrective measures deemed necessary by the ENGINEER, as well as the cost of subsequent reinspection and retesting. Neither observations by the ENGINEER nor inspections, tests, or approvals by others shall relieve the CONTRACTOR from the CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents.

- F. If any WORK (including the work of others) that is to be inspected, tested, or approved is covered without written concurrence of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for observation. Such uncovering shall be at the CONTRACTOR's expense unless the CONTRACTOR has given the ENGINEER not less than 24 hours notice of the CONTRACTOR's intention to perform such test or to cover the same and the ENGINEER has not acted with reasonable promptness in response to such notice.
- G. If any WORK is covered contrary to the written request of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER's observation and recovered at the CONTRACTOR's expense. If the ENGINEER considers it necessary or advisable that covered WORK be observed by the ENGINEER or inspected or tested by others, the CONTRACTOR, at the ENGINEER's request shall uncover, expose, or otherwise make available for observation, inspection, or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, material, and equipment. If it is found that such work is Defective Work, the CONTRACTOR shall bear all direct, indirect, and consequential costs and damages of such uncovering, exposure, observation, inspection, and testing and of satisfactory reconstruction, including but not limited to, fees and charges of engineers, architects, attorneys, and other professionals. However, if such work is not found to be Defective Work, the CONTRACTOR will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, the CONTRACTOR may make a claim therefor as provided in Sections 1-11 and 1-12.
- H. No acceptance of equipment, materials, or work shall be construed to result from such inspections by the ENGINEER. Any inspections or tests or waivers thereof shall not relieve the CONTRACTOR of its responsibility for meeting the requirement of the Contract.

**1-13.04 CITY MAY STOP THE WORK**

If Defective Work is identified, the ENGINEER may order the CONTRACTOR to stop performance of the WORK, or any portion thereof, until the cause for such order has been eliminated; however, this right of the ENGINEER to stop the WORK shall not give rise to any duty on the part of the ENGINEER to exercise this right for the benefit of the CONTRACTOR or any other party.

**1-13.05 CORRECTION OR REMOVAL OF DEFECTIVE WORK**

If required by the ENGINEER, the CONTRACTOR shall promptly either correct all Defective Work, whether or not fabricated, installed, or completed, or, if the work has been rejected by the ENGINEER, remove it from the Site and replace it with non-defective WORK. The CONTRACTOR shall bear all direct, indirect, and consequential costs and damages of such correction or removal, including but not limited to fees and charges of engineers, architects, attorneys, and other professionals made necessary thereby.

**1-13.06 ACCEPTANCE OF DEFECTIVE WORK**

If, instead of requiring correction or removal and replacement of Defective Work, the CITY prefers to accept the Defective Work, the CITY may do so. The CONTRACTOR shall bear all direct, indirect, and consequential costs attributable to the CITY's evaluation of and determination to accept such Defective Work. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK, and the CITY shall be entitled to an appropriate decrease in the Contract Price.

**1-13.07 CITY MAY CORRECT DEFECTIVE WORK**

- A. If the CONTRACTOR fails within a reasonable time after written notice from the ENGINEER to correct Defective Work, or to remove and replace Defective Work as required by the ENGINEER in accordance with Paragraph 1-13.05A., or if the CONTRACTOR fails to perform the WORK in accordance with the Contract Documents, or if the CONTRACTOR fails to comply with any other provision of the Contract Documents, the CITY may, after seven days written notice to the CONTRACTOR, correct and remedy any such deficiency.



- B. In exercising the rights and remedies under this paragraph, the CITY shall proceed with corrective and remedial action. In connection with such corrective and remedial action, the CITY may exclude the CONTRACTOR from all or part of the Site, take possession of all or part of the WORK, and suspend the CONTRACTOR's services related thereto and incorporate in the WORK all materials and equipment for which the CITY has paid the CONTRACTOR whether stored at the Site or elsewhere. The CONTRACTOR shall provide the CITY and its ENGINEER, access to the Site to enable CITY to exercise the rights and remedies under this paragraph.
- C. All direct, indirect, and consequential cost and damages incurred by the CITY in exercising the rights and remedies under this paragraph will be charged against the CONTRACTOR and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK; and the CITY shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, the CITY may make a claim therefor as provided in Section 1-11. Such claim will include, but not be limited to, all costs of repair or replacement of work of others, destroyed or damaged by correction, removal, or replacement of CONTRACTOR's Defective Work and all direct, indirect, and consequential damages associated therewith.
- D. The CONTRACTOR shall not be allowed an extension of Contract Times (or Milestones) because of any delay in the performance of the WORK attributable to the exercise by CITY of CITY's rights and remedies under this paragraph.

#### **1-13.08 CORRECTION PERIOD**

- A. The correction period for Defective Work shall be the longer of:
  - a. One year after the date of final acceptance;
  - b. Such time as may be prescribed by Laws and Regulations;
  - c. Such time as specified by the terms of any applicable special guarantee required by the Contract Documents; or
  - d. Such time as specified by any specific provision of the Contract Documents.
- B. If, during the correction period as defined in Paragraph 1-13.08A above, any work is found to be Defective Work, the CITY shall have the same remedies as set forth in Sections 1-13.05, 1-13.06, and 1-13.07 above.
- C. Where Defective Work (and damage to other work resulting therefrom) has been corrected, removed, or replaced under this paragraph, the correction period hereunder with respect to such work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

#### **1-14 PAYMENTS TO CONTRACTOR AND COMPLETION**

##### **1-14.01 SCHEDULE OF VALUES (LUMP SUM PRICE BREAKDOWN)**

The schedule of values or lump sum price breakdown established as provided in the General Conditions shall serve as the basis for progress payments and shall be incorporated into a form of "Application for Payment acceptable to the ENGINEER.

##### **1-14.02 UNIT PRICE BID SCHEDULE**

Progress payments on account of unit price work will be based on the number of units completed.

##### **1-14.03 APPLICATION FOR PROGRESS PAYMENT**

- A. Unless otherwise prescribed by law, on the 25th of each month, the CONTRACTOR shall submit to the ENGINEER for review, the Application for Payment filled out and signed by the CONTRACTOR covering the WORK completed as of the Application for Payment and accompanied by such supporting documentation as is required by the Contract Documents.
- B. The Application for Payment shall identify, as a subtotal, the amount of the CONTRACTOR total earnings to date; plus the value of materials stored at the Site which have not yet been

incorporated in the WORK; and less a deductive adjustment for materials installed which were not previously incorporated in the WORK, but for which payment was allowed under the provisions for payment for materials stored at the Site, but not yet incorporated in the WORK.

- C. The net payment due the CONTRACTOR shall be the above-mentioned subtotal from which shall be deducted the amount of retainage specified in these General Conditions and the total amount of all previous payments made to the CONTRACTOR.
- D. At the discretion of the ENGINEER, if requested by the Contractor a payment for materials stored at the Site may be considered. The said amount shall be based upon the value of all acceptable materials and equipment not incorporated in the WORK but delivered and suitably stored at the Site or at another location agreed to in writing; provided, each such individual item has a value of more than \$5,000 and will become a permanent part of the WORK. The Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that the CONTRACTOR has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect the CITY's interest therein, all of which will be satisfactory to the CITY. In no case payment for the materials stored at site will be made for an amount more than 70% of the bid item or agreed schedule of values the specific item, where the material is supposed to be incorporated.
- E. A **Five percent (5%)** retention of payment amount shall be held by the CITY from the amount of each Application for Payment.
- F. **OPTIONAL:** Partial payments for mobilization/demobilization costs shall be as follows:
  - a. Thirty-five percent (35%) of the amount bid for mobilization/ demobilization or 1.75 percent of the original Contract Price, whichever is less, shall be paid in each of the first two progress payments.
  - b. The balance of the amount bid for mobilization/demobilization shall be paid upon completion of all WORK on the project.

#### **1-14.04 CONTRACTOR'S WARRANTY OF TITLE**

The CONTRACTOR warrants and guarantees that title to all WORK, materials, and equipment covered by an Application for Payment, whether incorporated in the WORK or not, will pass to the CITY no later than the time of payment, free and clear of all Liens.

#### **1-14.05 REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT**

- A. The ENGINEER will, within 7 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the application to the CITY, or return the application to the CONTRACTOR indicating in writing the ENGINEER'S REASONS FOR REFUSING TO RECOMMEND PAYMENT. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the application. If the ENGINEER still disagrees with a portion of the application, it will submit the application recommending the undisputed portion of the application to the CITY for payment and provide reasons for recommending non-payment of the disputed amount. Thirty days after presentation of the Application for Payment with the ENGINEER'S recommendation, the amount recommended will (subject to the provisions of Paragraph 1-14.05B.) become due and when due will be paid by the CITY to the CONTRACTOR.
- B. The ENGINEER, in its discretion, may refuse to recommend the whole or any part of any payment. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER'S opinion to protect CITY from loss because:
  - a. The work is Defective Work or the completed WORK has been damaged requiring correction or replacement.
  - b. The Contract Price has been reduced by written amendment or Change Order.

- c. The CITY has been required to correct Defective Work or complete WORK in accordance with Section 1-13.07.
  - d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in Sections 1-15.01 through 15.04 inclusive.
  - e. Third party claims filed or reasonable evidence indicating probable filing of such claims; or
  - f. Failure of the Contractor to make payments properly to subcontractors or for labor, materials, or equipment; or
  - g. Reasonable evidence that the work cannot be completed for the unpaid balance of the contract sum; or
  - h. Failure of the Contractor to submit an acceptable construction schedule or failure to update the schedule; or
  - i. Damage to the CITY or another contractor; or
  - j. Reasonable evidence that the work will not be completed within the time provided for in the Contract; or Contractor's failure or inability to obtain or maintain insurance coverage and bonds as required by the Contract throughout the course of the job; or
  - k. Persistent failure to carry out the work in accordance with the Contract; or
  - l. Failure to deliver copies of certified payrolls, as specified in Section 1-17.11, General Conditions.
  - m. In addition, the CITY may deduct from any such payments due the Contractor any amounts the CITY may be currently or in the future authorized to retain pursuant to federal, state, or local laws or regulations, any amounts due the CITY from the Contractor, and any other amounts which the CITY is otherwise authorized to retain as specified in Special Provisions.
- C. The CITY may refuse to make payment of the full amount recommended by the ENGINEER because:
- a. Claims have been made against CITY on account of CONTRACTOR's performance or furnishing of the WORK.
  - b. Liens have been filed in connection with the WORK, except where CONTRACTOR has delivered a specific Bond satisfactory to CITY to secure the satisfaction and discharge of such Liens.
  - c. There are other items entitling CITY to set-off against the amount recommended, or
  - d. CITY has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.05B. through 14.05C and Sections 15.01 through 15.04 inclusive.

The CITY must give the CONTRACTOR immediate written notice stating the reasons for such action and promptly pay the CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by CITY and CONTRACTOR, when CONTRACTOR corrects to CITY's satisfaction the reasons for such action.

#### **1-14.06 COMPLETION**

When the CONTRACTOR considers the WORK ready for its intended use, the CONTRACTOR shall notify the ENGINEER in writing that the WORK is complete. The CONTRACTOR shall attach to this request a list of all work items that remain to be completed and a request that the ENGINEER prepare a Notice of Completion. Within a reasonable time thereafter, the CONTRACTOR, and the ENGINEER shall make an inspection of the WORK to determine the status of completion. If the ENGINEER considers the WORK complete, the ENGINEER will prepare and execute and deliver for City Council approval and recordation the Notice of Completion signed by the ENGINEER and CONTRACTOR, which shall fix the date of completion.

#### **1-14.07 PARTIAL UTILIZATION**

- A. The CITY shall have the right to utilize or place into service any item of equipment or other usable portion of the WORK prior to completion of the WORK. Whenever the CITY plans to exercise said right, the CONTRACTOR will be notified in writing by the ENGINEER, identifying the specific portion or portions of the WORK to be so utilized or otherwise placed into service.
- B. It shall be understood by the CONTRACTOR that until such written notification is issued, all responsibility for care and maintenance of all of the WORK shall be borne by the CONTRACTOR.

Upon issuance of said written notice of Partial Utilization, the CITY will accept responsibility for the protection and maintenance of all such items or portions of the WORK described in the written notice.

- C. The CONTRACTOR shall retain full responsibility for satisfactory completion of the WORK, regardless of whether a portion thereof has been partially utilized by the CITY prior to completion of the WORK.

**1-14.08 FINAL APPLICATION FOR PAYMENT**

After the CONTRACTOR has completed all of the remaining work items referred to in Sections 1-14.06 and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in the General Conditions), and other documents, all as required by the Contract Documents, and after the ENGINEER has indicated that the WORK is acceptable, the CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to the CITY) of all Liens arising out of or filed in connection with the WORK.

**1-14.09 FINAL PAYMENT AND ACCEPTANCE**

- A. If, on the basis of the ENGINEER's observation of the WORK during construction and final inspection, and the ENGINEER's review of the final Application for Payment and accompanying documentation, all as required by the Contract Documents, the ENGINEER is satisfied that the WORK has been completed and the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the ENGINEER will, within 14 days after receipt of the final Application for Payment, indicate in writing the ENGINEER's recommendation of payment and present the application to the CITY for payment.
- B. After acceptance of the WORK by the City Council, the CITY will make final payment to the CONTRACTOR of the amount remaining after deducting all prior payments and all amounts to be kept or retained under the provisions of the Contract Documents, including the following items:
  - a. Liquidated damages, as applicable;
  - b. Amounts withheld by CITY under Paragraph 1-14.05B. and C. which have not been released; and
  - c. In accordance with Section 1-17.06, one-and-one-half times the value of outstanding items of correction work or punch list items yet uncompleted or uncorrected, as applicable. All such work shall be completed or corrected to the satisfaction of the ENGINEER as required by the Contract Documents, otherwise the CONTRACTOR does hereby waive any and all claims to all monies withheld by the CITY to cover the value of all such uncompleted or uncorrected items.
- C. Prior to final payment by the CITY, the CONTRACTOR must provide the CITY a fully-executed Conditional Waiver and Release Upon Final Payment in accordance with California Civil Code Section 3262.

**1-15 SUSPENSION OF WORK AND TERMINATION**

**1-15.01 SUSPENSION OF WORK BY CITY**

The CITY may, at any time and without cause, suspend the WORK or any portion thereof for a period of not more than 90 days by notice in writing to the CONTRACTOR. The CONTRACTOR shall resume the WORK on receipt of a notice of resumption of work. The CONTRACTOR will be allowed an increase in the Contract Price or an extension of the Contract Time, or both directly attributable to any suspension if the CONTRACTOR makes an approval claim therefor as provided in Sections 1-11 and 1-12.

**1-15.02 TERMINATION OF AGREEMENT BY ENGINEER FOR DEFAULT**

- A. In the event of default by the CONTRACTOR, the ENGINEER may give seven days written notice to the CONTRACTOR and the CONTRACTOR's surety of CITY's intent to terminate the

Agreement and provide the CONTRACTOR an opportunity to remedy the conditions constituting the default within a specified period of time. It will be considered a default by the CONTRACTOR whenever CONTRACTOR shall:

- a. Declare bankruptcy, become insolvent, or assign its assets for the benefit of its creditors;
  - b. Disregard or violate the Laws or Regulations of any public body having jurisdiction;
  - c. Fail to provide materials or workmanship meeting the requirements of the Contract Documents;
  - d. Disregard or violate provisions of the Contract Documents or ENGINEER's instructions;
  - e. Fail to prosecute the WORK according to the approved progress schedule;
  - f. Fail to provide a qualified superintendent, competent workmen, or materials or equipment meeting the requirements of the Contract Documents;
  - g. Disregard the authority of the ENGINEER; or
  - h. Assign or subcontract any part of the work without the ENGINEER's consent.
- B. If the CONTRACTOR fails to remedy the conditions constituting default within the time allowed, the ENGINEER may then issue the notice of termination.
- C. In the event the Agreement is terminated in accordance with Paragraph 1-15.02A., herein, the CITY may take possession of the WORK and may complete the WORK by whatever method or means the CITY may select. The cost of completing the WORK will be deducted from the balance which would have been due the CONTRACTOR had the Agreement not been terminated and the WORK completed in accordance with the Contract Documents. If such cost exceeds the balance which would have been due, the CONTRACTOR shall pay the excess amount to the CITY. If such cost is less than the balance which would have been due, the CONTRACTOR shall not have claim to the difference.

#### **1-15.03 TERMINATION OF AGREEMENT BY CITY FOR CONVENIENCE**

- A. Upon seven days' written notice to the CONTRACTOR, the CITY may, without cause and without prejudice to any other right or remedy of the CITY, elect to terminate the Agreement. In such case, the CONTRACTOR shall be paid (without duplication of any items):
- a. For completed and acceptable WORK executed in accordance with the Contract Documents, prior to the effective date of termination, including fair and reasonable sums for overhead and profit of such WORK;
  - b. For expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted WORK, plus fair and reasonable sums or overhead and profit on such expenses;
  - c. For all reasonable claims, costs, losses, and damages incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
  - d. For reasonable expenses directly attributable to termination.
- B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

#### **1-15.04 TERMINATION OF AGREEMENT BY CONTRACTOR**

- A. The CONTRACTOR may terminate the Agreement upon 14 days written notice to the ENGINEER whenever:
- a. The WORK has been suspended under the provisions of Section 1-15.01, herein, for more than 90 consecutive days through no fault or negligence of the CONTRACTOR, and notice to resume work or to terminate the Agreement has not been received from the ENGINEER within this time period; or
  - b. The CITY should fail to pay the CONTRACTOR any monies due him in accordance with the terms of the Contract Documents and within 60 days after presentation to the ENGINEER by the CONTRACTOR of a request therefor, unless within said 14-day period the CITY shall have remedied the condition upon which the payment delay was based.

- B. In the event of such termination, the CONTRACTOR shall have no claims against the CITY except for those claims specifically enumerated in Section 1-15.03, herein, and as determined in accordance with the requirements of said paragraph.

## **1-16 GENERAL TERMS**

### **1-16.01 GIVING NOTICE**

Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

### **1-16.02 TITLE TO MATERIALS FOUND ON THE WORK**

The CITY reserves the right to retain title to all soils, stone, sand, gravel, and other materials developed and obtained from excavations and other operations connected with the WORK. Unless otherwise specified in the Contract Documents, neither the CONTRACTOR nor any Subcontractor shall have any right, title, or interest in or to any such materials. The CONTRACTOR will be permitted to use in the WORK, without charge, any such materials which meet the requirements of the Contract Documents.

### **1-16.03 RIGHT TO AUDIT**

If the CONTRACTOR submits a claim to the ENGINEER for additional compensation, the CITY shall have the right, as a condition to considering the claim, and as a basis for evaluation of the claim, and until the claim has been settled, to audit the CONTRACTOR's books to the extent they are relevant. This right shall include the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to discovery and verify all direct and indirect costs of whatever nature claimed to have been incurred or anticipated to be incurred and for which the claim has been submitted. The right to audit shall include the right to inspect the CONTRACTOR's plant or such parts thereof, as may be or have been engaged in the performance of the WORK. The CONTRACTOR further agrees that the right to audit encompasses all subcontracts and is binding upon Subcontractors. The rights to examine and inspect herein provided for shall be exercisable through such representatives as the CITY deems desirable during the CONTRACTOR's normal business hours at the office of the CONTRACTOR. The CONTRACTOR shall make available to the ENGINEER for auditing, all relevant accounting records and documents, and other financial data, and upon request, shall submit true copies of requested records to the ENGINEER.

### **1-16.04 SURVIVAL OF OBLIGATIONS**

All representations, indemnifications, warranties, and guaranties made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the WORK or termination or completion of the Agreement.

### **1-16.05 CONTROLLING LAW**

This Agreement is to be governed by the law of the state in which the Project is located.

### **1-16.06 SEVERABILITY**

If any term or provision of this Agreement is declared invalid or unenforceable by any court of lawful jurisdiction, the remaining terms and provisions of the Agreement shall not be affected thereby and shall remain in full force and effect.

### **1-16.07 WAIVER**

The waiver by the CITY of any breach or violation of any term, covenant or condition of this Agreement or of any provision, ordinance, or law shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, or law or of any subsequent breach or violation of the same or of any other term, covenant, condition, ordinance, or law. The subsequent payment of any monies or fee by the CITY which

may become due hereunder shall not be deemed to be a waiver of any preceding breach or violation by CONTRACTOR or any term, covenant, condition of this Agreement or of any applicable law or ordinance.

## **1-17 CALIFORNIA STATE REQUIREMENTS**

### **1-17.01 STATE WAGE DETERMINATIONS**

- A. As required by Section 1770 and following, of the California Labor Code, the CONTRACTOR shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of such prevailing rate of per diem wages available file at the office of the CITY Clerk, which copies shall be made available to any interested party on request. The CONTRACTOR shall post a copy of such determination at each job site.
  
- B. In accordance with Section 1775 of the California Labor Code, the CONTRACTOR shall, as a penalty to the CITY, forfeit not more than **\$200.00** for each calendar day or portion thereof, for each worker paid less than the prevailing rates as determined by the Director for the work or craft in which the worker is employed for any public work done under the contract by him or her or by any subcontractor under him or her.

### **1-17.02 WORKERS' COMPENSATION**

- A. In accordance with the provisions of Section 3700 of the California Labor Code, the CONTRACTOR shall secure the payment of compensation to its employees.
  
- B. Prior to beginning work under the Contract, the CONTRACTOR shall sign and file with the ENGINEER the following certification:

"I am aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the WORK of this Contract."
  
- C. Notwithstanding the foregoing provisions, before the Contract is executed on behalf of the CITY, a bidder to whom a contract has been awarded shall furnish satisfactory evidence that it has secured in the manner required and provided by law the payment of workers' compensation.

### **1-17.03 APPRENTICES ON PUBLIC WORKS**

The CONTRACTOR shall comply with all applicable provisions of Section 1777.5 of the California Labor Code relating to employment of apprentices on public works.

### **1-17.04 WORKING HOURS**

The CONTRACTOR shall comply with all applicable provisions of Section 1810 to 1815, inclusive, of the California Labor Code relating to working hours. The CONTRACTOR shall, as a penalty to the CITY, forfeit \$25.00 for each worker employed in the execution of the Contract by the CONTRACTOR or by any subcontractor for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week, unless such worker receives compensation for all hours worked in excess of 8 hours at not less than 1-1/2 times the basic rate of pay.

### **1-17.05 CONTRACTOR NOT RESPONSIBLE FOR DAMAGE RESULTING FROM CERTAIN ACTS OF GOD**

As provided in Section 7105 of the California Public Contract Code, the CONTRACTOR shall not be responsible for the cost of repairing or restoring damage to the WORK which damage is determined to have been proximately caused by an act of God, in excess of 5 percent of the contracted amount, provided, that the WORK damaged was built in accordance with accepted and applicable building standards and the plans and specifications of the CITY. The CONTRACTOR shall obtain insurance to indemnify the CITY for any damage to the WORK caused by an act of God if the insurance premium is a separate bid item in the bidding schedule for the WORK. For purposes of this Section, the term "acts of

God” shall include only the following occurrences or conditions and effects: earthquakes in excess of a magnitude of 3.5 on the Richter Scale and tidal waves.

#### **1-17.06 NOTICE OF COMPLETION**

In accordance with the Sections 3086 and 3093 of the California Civil Code, within 10 days after date of acceptance of the WORK by THE PINOLE CITY COUNCIL, the ENGINEER will file, in the County Recorder’s office, a Notice of Completion of the WORK.

#### **1-17.07 UNPAID CLAIMS**

If, at any time prior to the expiration of the period for service of a stop notice, there is served upon the CITY a stop notice as provided in Sections 3179 and 3210 of the California Civil Code, the CITY shall, until the discharge thereof, withhold from the monies under its control so much of said monies due or to become due to the CONTRACTOR under this Contract as shall be sufficient to answer the claim stated in such stop notice and to provide for the reasonable cost of any litigation thereunder; provided, that if the ENGINEER shall, in its discretion, permit CONTRACTOR to file with the ENGINEER the bond referred to in Section 3196 of the Civil Code of the State of California, said monies shall not thereafter be withheld on account of such stop notice.

#### **1-17.08 RETAINAGE FROM MONTHLY PAYMENTS**

- A. Pursuant to Section 22300 of the California Public Contract Code, the CONTRACTOR may substitute securities for any money withheld by the CITY to insure performance under the Contract. At the request and expense of the CONTRACTOR, securities equivalent to the amount withheld shall be deposited with the CITY or with a state or federally chartered bank in California as to the escrow agent, who shall return such securities to the CONTRACTOR upon satisfactory completion of the Contract.
- B. Alternatively, the CONTRACTOR may request and the CITY shall make payment of retentions earned directly to the escrow agent at the expense of the CONTRACTOR. At the expense of the CONTRACTOR, the CONTRACTOR may direct the investment of the payments into securities and the CONTRACTOR shall receive the interest earned on the investments upon the same terms provided in Section 22300 of the Public Contract Code securities deposited by the CONTRACTOR. The CONTRACTOR shall be responsible for paying all fees for the expenses incurred by the escrow agent in administering the escrow account and all expenses of the CITY. These expenses and payment terms shall be determined by the CITY’s Finance Director or his/her designee and the escrow agent. Upon satisfactory completion of the Contract, the CONTRACTOR shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from the CITY, pursuant to the terms of Section 22300 of the Public Contract Code. The CONTRACTOR shall pay to each subcontractor, not later than 20 days of receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each subcontractor, on the amount of retention withheld to insure the performance of the CONTRACTOR.
- C. Securities eligible for investment under Section 22300 shall be limited to those listed in Section 16430 of the Government Code and to bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the CONTRACTOR and the CITY.

#### **1-17.09 PUBLIC WORKS CONTRACTS; ASSIGNMENT TO AWARDING BODY**

In accordance with Section 7103.5 of the California Public Contract Code, the CONTRACTOR and Subcontractors shall conform to the following requirements. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the CONTRACTOR or subcontractor offers and agrees to assign to the CITY all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the



awarding body tenders final payment to the CONTRACTOR, without further acknowledgment by the parties.

**1-17.10 PAYROLL RECORDS; RETENTION; INSPECTION; NONCOMPLIANCE PENALTIES; RULES AND REGULATIONS**

- A. In accordance with Section 1776 of the California Labor Code the CONTRACTOR and each Subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:
  - a. The information contained in the payroll record is true and correct.
  - b. The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.
- B. The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of the CONTRACTOR on the following basis:
  - a. A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request as well as submitted electronically online to the Department of Industrial Relations Labor Commissioner: <https://www.dir.ca.gov/Public-Works/Certified-Payroll-Reporting.html>.
  - b. A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
  - c. A certified copy of all payroll records shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the CONTRACTOR, Subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the CONTRACTOR.
- C. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.
- D. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the CONTRACTOR awarded the contract or performing the contract shall not be marked or obliterated.
- E. The CONTRACTOR shall inform the ENGINEER of the location of the records including the street address, CITY and County, and shall, within 5 working days, provide a notice of change of location and address.
- F. The CONTRACTOR shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the CONTRACTOR must comply with this Section. In the event that the CONTRACTOR fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty-five dollars (\$25.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then

due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

#### **1-17.1 CULTURAL RESOURCES**

The CONTRACTOR's attention is directed to the provisions of the Clean Water Grant Program Bulletin 76A which augments the National Historic Preservation Act of 1966 (16 U.S.C. 470) as specified under Section 01560 - Temporary Environmental Controls, of the General Conditions.

#### **1-17.12 PROTECTION OF WORKERS IN TRENCH EXCAVATIONS**

- A. As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches 5 feet or more in depth, the CONTRACTOR shall submit for acceptance by the ENGINEER, to whom authority to accept has been delegated, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation, of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Occupational Safety and Health, the plan shall be prepared by a registered civil or structural engineer employed by the CONTRACTOR, and all costs therefore shall be included in the price named in the Contract for completion of the WORK as set forth in the Contract Documents. Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this Section shall be construed to impose tort liability on the CITY or any of its officers, agents, representatives, or employees.
- B. Excavation shall not start until the CONTRACTOR has obtained a permit from the California Division of Industrial Safety and has posted it at the site.

#### **1-17.13 CONCRETE FORMS, FALSEWORK, AND SHORING**

The CONTRACTOR shall comply fully with the requirements of Section 1717 of the Construction Safety Orders, State of California, Department of Industrial Relations, regarding the design of concrete forms, falsework and shoring, and the inspection of same prior to placement of concrete. Where the said Section 1717 requires the services of a civil engineer registered in the State of California to approve design calculations and working drawings of the falsework or shoring system, or to inspect such system prior to placement of concrete, the CONTRACTOR shall employ a registered civil engineer for these purposes, and all costs therefore shall be included in the price named in the Contract for completion of the WORK as set forth in the Contract Documents.

#### **1-17.14 REMOVAL, RELOCATION, OR PROTECTION OF EXISTING UTILITIES**

- A. In accordance with the provisions with the provisions of Section 4215 of the California Government Code, the CITY shall assume the responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities located on the site of any construction project that is a subject of the Contract, if such utilities are not identified by the CITY in the plans and specifications made a part of the invitation for bids. The CITY will compensate CONTRACTOR for the costs of locating, repairing damage not due to the failure of the CONTRACTOR to exercise reasonable care, and removing or relocating such utility facilities not indicated in the plans and specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work.
- B. The CONTRACTOR shall not be assessed liquidated damages for delay in completion of the project, when such delay was caused by the failure of the public agency or the owner of the utility to provide for removal or relocation of such utility facilities. Nothing herein shall be deemed to require the public agency to indicate the presence of existing service laterals or appurtenances when the presence of such utilities on the site of the construction project can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of construction; provided however, nothing herein shall relieve the public agency from identifying main or trunklines in the plans and specifications.

- C. If the CONTRACTOR while performing the Contract discovers utility facilities not identified by the public agency in the Contract Documents it shall immediately notify the public agency and utility in writing.
- D. The public utility, where they are the owner, shall have the sole discretion to perform such repairs or relocation work or permit the CONTRACTOR to do such repairs or relocation work at a reasonable price.

**1-17.15 CONTRACTOR LICENSE REQUIREMENTS**

- A. In accordance with Section 7028.15 of the California Business and Professions Code:
- B. It is a misdemeanor for any person to submit a bid to a public agency in order to engage in the business or act in the capacity of a contractor within this state without having a license therefor, except in any of the following cases:
  - a. The person is particularly exempted from this chapter.
  - b. The bid is submitted on a state project governed by Section 10164 of the Public Contract Code or any local agency project governed by Section 20103.5 of the Public Contract Code.
- C. If a person has previously been convicted of the offense described in this section, the court shall impose a fine of 20 percent of the price of the contract under which the unlicensed person performed contract work, or four thousand five hundred dollars (\$4,500), whichever is greater, or imprisonment in the county jail for not less than 10 days nor more than six months, or both.
- D. In the event the person performing the contracting work has agreed to furnish materials and labor on an hourly basis, "the price of the contract" for the purpose of this subdivision means the aggregate sum of the cost of materials and labor furnished and the cost of completing the work to be performed.
- E. This section shall not apply to a joint venture license, as required by Section 7029.1 of the California Business and Professions Code. However, at the time of making a bid as a joint venture, each person submitting the bid shall be subject to this section with respect to his or her individual licensure.
- F. This section shall not affect the right or ability of a licensed architect, land surveyor, or registered professional engineer to form joint ventures with licensed contractors to render services within the scope of their respective practices.
- G. Unless one of the foregoing exceptions applies, a bid submitted to a public agency by a contractor who is not licensed in accordance with this chapter shall be considered nonresponsive and shall be rejected by the public agency. Unless one of the foregoing exceptions applies, a local public agency shall, before awarding a contract or issuing a purchase order, verify that the contractor was properly licensed when the contractor submitted the bid. Notwithstanding any other provision of law, unless one of the foregoing exceptions applies, the registrar may issue a citation to any public officer or employee of a public entity who knowingly awards a contract or issues a purchase order to a contractor who is not licensed pursuant to this chapter. The amount of civil penalties, appeal, and finality of such citations shall be subject to Sections 7028.7 and 7028.13 inclusive of the California Business and Professions Code. Any contract awarded to, or any purchase order issued to, a contractor who is not licensed pursuant to this chapter is void.
- H. Any compliance or noncompliance with subdivision (G) of this paragraph shall not invalidate any contract or bid awarded by a public agency during which time that subdivision was in effect.
- I. A public employee or officer shall not be subject to a citation pursuant to this section if the public employee, officer, or employing agency made an inquiry to the City for the purposes of verifying the license status of any person or contractor and the City failed to respond to the inquiry within three business days. For the purposes of this section, a telephone response by the City shall be deemed sufficient.

**1-17.16 DIGGING TRENCHES OR EXCAVATIONS; NOTICE ON DISCOVERY OF HAZARDOUS WASTE OR OTHER UNUSUAL CONDITIONS; INVESTIGATIONS; CHANGE ORDERS; EFFECT ON CONTRACT**

If this Contract involves digging trenches or other excavations that extend deeper than four feet below the surface, the following shall apply:

- A. The CONTRACTOR shall promptly, and before the following conditions are disturbed, notify the ENGINEER in writing, of any:
  - a. Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
  - b. Subsurface or latent physical conditions at the site differing from those indicated.
  - c. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.
  - d. The ENGINEER shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the CONTRACTOR'S cost of, or the time required for, performance of any part of the work shall issue a change order the procedures described in the Contract.
  - e. In the event that a dispute arises between the ENGINEER and the CONTRACTOR whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the CONTRACTOR'S cost of, or time required for, performance of any part of the work, the CONTRACTOR shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The CONTRACTOR shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

**1-17.17 RETENTION PROCEEDS; WITHHOLDING; DISBURSEMENT**

In accordance with Section 7107 of the Public Contract Code with respects to all contracts entered into on or after January 1, 1993 relating to the construction of any public work of improvement the following shall apply:

- A. The retention proceeds withheld from any payment by the CITY from the original CONTRACTOR, or by the original CONTRACTOR from any subcontractor, shall be subject to this Section 1-17.17.
- B. Within 60 days after the date of completion of the WORK, including any punch-list WORK, the retention withheld by the CITY shall be released. In the event of a dispute between the ENGINEER and the original CONTRACTOR, the CITY may withhold from the final payment an amount not to exceed 150 percent of the disputed amount. For the purposes of this paragraph, "completion" means any of the following:
  - a. The occupation, beneficial use, and enjoyment of a work of improvement, excluding any operation only for testing, startup, or commissioning, by the CITY, accompanied by cessation of labor on the work of improvement.
  - b. The acceptance by the Pinole City Council of the work of improvement.
  - c. After the commencement of a work of improvement, a cessation of labor on the work of improvement for a continuous period of 100 days or more, due to factors beyond the control of the CONTRACTOR.
  - d. After the commencement of a work of improvement, a cessation of labor on the work of improvement for a continuous period of 30 days or more, if the ENGINEER files for record a notice of cessation or a notice of completion.

Subject to Section 1-17.17, within 10 days from the time that all or any portion of the retention proceeds are received by the original CONTRACTOR, the original CONTRACTOR shall pay each of its subcontractors from whom retention has been withheld, each subcontractor's share of the

retention received. However, if a retention payment received by the original CONTRACTOR is specifically designated for a particular subcontractor, payment of the retention shall be made to the designated subcontractor, if the payment is consistent with the terms of the subcontract.

- C. The original CONTRACTOR may withhold from a subcontractor its portion of the retention proceeds if a bona fide dispute exists between the subcontractor and the original CONTRACTOR. The amount withheld from the retention payment shall not exceed 150 percent of the estimated value of the disputed amount.
- D. In the event that retention payments are not made within the time periods required by this paragraph 17.18, the CITY or original CONTRACTOR shall be subject to a charge of 2 percent per month on the improperly withheld amount, in lieu of any interest otherwise due. Additionally, in any action for the collection of funds wrongfully withheld, the prevailing party shall be entitled to attorney's fees and costs.
- E. Any attempted waiver of the provisions of this section shall be void as against the public policy of this state.

#### **1-17.18 TIMELY PROGRESS PAYMENTS; INTEREST; PAYMENT REQUESTS**

- A. If the CITY fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from the CONTRACTOR, the CITY shall pay interest to the CONTRACTOR equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.
- B. Upon receipt of a payment request, the ENGINEER shall act in accordance with both of the following:
  - a. Each payment request shall be reviewed by the ENGINEER as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.
  - b. Any payment request determined not to be a proper payment request suitable for payment shall be returned to the CONTRACTOR as soon as practicable, but not later than seven days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.
- C. The number of days available to the CITY to make a payment without incurring interest pursuant to this paragraph shall be reduced by the number of days by which the CITY exceeds the seven-day requirement set forth above.
- D. For purposes of this paragraph:
  - a. A "progress payment" includes all payments due the CONTRACTOR, except that portion of the final payment designated by the contract as retention earnings.
  - b. A payment request shall be considered properly executed if funds are available for payment of the payment request, and payments is not delayed due to an audit inquiry by the financial officer of the CITY.

#### **1-17.19 PREFERENCE FOR MATERIAL**

In accordance with Section 3400 of the California Public Contract Code, the CONTRACTOR will be provided a period prior to award of the contract for submission of data substantiating a request for a substitution of "as equal" item.

#### **1-17.20 RESOLUTION OF CONSTRUCTION CLAIMS**

- A. In accordance with Section 20104 et Seq. of the California Public Contract Code. This paragraph applies to all claims of \$375,000 or less which arise between the CONTRACTOR and the CITY under this Contract for:
  - a. A time extension;
  - b. Payment of money or damages arising from work done by or on behalf of, the CONTRACTOR pursuant to this CONTRACT and payment of which is not otherwise expressly provided for or the CONTRACTOR is not otherwise entitled to; or
  - c. An amount the payment of which is disputed by the ENGINEER.

- B. For any claim set out under Paragraph A above, the following requirements apply:
- a. The claim shall be in writing and include the documents necessary to substantiate the claim and be accompanied by the following certification:

“CONTRACT PROVISION REQUIRING PERSONAL CERTIFICATION OF ALL CLAIMS:

I, \_\_\_\_\_, BEING THE \_\_\_\_\_  
(MUST BE AN OFFICER) OF \_\_\_\_\_ (GENERAL CONTRACTOR), DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA, AND DO PERSONALLY CERTIFY AND ATTEST THAT: I HAVE THOROUGHLY REVIEWED THE ATTACHED CLAIM FOR ADDITIONAL COMPENSATION AND/OR EXTENSION OF TIME, AND KNOW ITS CONTENTS, AND SAID CLAIM IS MADE IN GOOD FAITH; THE SUPPORTING DATA IS TRUTHFUL AND ACCURATE; THAT THE AMOUNT REQUESTED ACCURATELY REFLECTS THE CONTRACT ADJUSTMENT FOR WHICH THE CONTRACTOR BELIEVES THE CITY IS LIABLE; AND, FURTHER THAT I AM FAMILIAR WITH CALIFORNIA PENAL CODE SECTION 12650, ET SEQ. PERTAINING TO FALSE CLAIMS, AND FURTHER KNOW AND UNDERSTAND THAT SUBMISSION OR CERTIFICATION OF A FALSE CLAIM MAY LEAD TO FINES, IMPRISONMENT AND/OR OTHER SEVERE LEGAL CONSEQUENCES.”

Claims must be filed on or before the date of final payment. Nothing herein is intended to extend the time limit or supersede notice requirements otherwise provided by Contract for the filing of claims.

The claim must include an actual cost documentation, including hours of work performed, equipment operation costs, and labor and overhead costs, which should be established at a standard percentage. Any overhead costs listed when paid, shall provide full and complete payment for any and all overhead, including jobsite overhead, home office overhead, as well as additional costs arising from disruption, resequencing or acceleration. A notice of POTENTIAL CLAIM shall be submitted in advance of the performance of any work, regardless of type, in which the CONTRACTOR may claim an additional cost. CONTRACTOR shall provide prompt notification of any disagreement in quantities of work performed along with a detailed accounting by means of a schedule update demonstrating any delays incurred.

- b. For claims of less than fifty thousand dollars (\$50,000), the ENGINEER shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the CITY may have against the CONTRACTOR.

If additional information is thereafter required, it shall be requested and provided upon mutual agreement of the ENGINEER and the CONTRACTOR.

The ENGINEER's written response to the claim, as further documented, shall be submitted to the CONTRACTOR within 15 days after receipt of further documentation or within a period of time no greater than that taken by the CONTRACTOR in producing the additional information, whichever is greater.

- c. For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the ENGINEER shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the CITY may have against the CONTRACTOR.

If additional information is thereafter required, it shall be requested and provided upon mutual agreement of the ENGINEER and the CONTRACTOR.

The ENGINEER's written response to the claim, as further documented, shall be submitted to CONTRACTOR within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the CONTRACTOR in producing the additional information or requested documentation, whichever is greater.

- d. If the CONTRACTOR disputes the ENGINEER's written response, or the ENGINEER fails to respond within the time prescribed, the CONTRACTOR may notify the ENGINEER, in writing, either within 15 days of receipt of the ENGINEER's response or within 15 days of the ENGINEER's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the ENGINEER shall schedule a meet and confer conference within 30 days for settlement of the dispute.
  - e. Following the meet and confer conference, if the claim or any portion remains in dispute, the CONTRACTOR may file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time CONTRACTOR submits its written claim pursuant to subdivision (a) until the time the claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.
- C. The following procedures are established for all civil actions filed to resolve claims subject to this article:
- a. Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.
  - b. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of Article 1.5 of Chapter 1 of Part 3 of Division 2 of the California Public Contract Code shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

In addition to Chapter 2.5 (commencing with Section 1141.10 of Title 3 of Part 3 of the Code of Civil Procedure any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees of the other party arising out of the trial de novo.

- c. The CITY shall not fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in this Contract.







## **SECTION IV. TECHNICAL SPECIFICATIONS HAZEL STREET STORM DRAIN IMPROVEMENTS, PROJECT SW1901**

The Technical Specifications contained herein have been prepared by or under the direction of Benjamin L. Shick, a registered professional engineer.

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Date: 04/05/2023

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## TECHNICAL SPECIFICATIONS

### SECTION 1-01. SUMMARY OF WORK

#### 1-01.1 PROJECT DESCRIPTION

The Project is located in the City of Pinole, California. Facilities constructed under these Contract Documents will be owned and operated by the City of Pinole. The work shall include:

- A. Construction of a new storm drain with connections to existing storm water facilities on Hazel Street in the City of Pinole and existing site improvement plans.
- B. Demolition of existing storm water facilities.
- C. Execution of a Storm Water Pollution Prevention Plan.
- D. Construction of a new HDPE Force Main connection to an existing Asbestos Cement force main at an existing sewage lift station, and improvements to the existing force main within the existing lift station.
- E. Construction of precast concrete vaults associated with the existing storm drain improvements.

#### 1-01.2 BASIC REQUIREMENTS

- A. These Specifications are intended to be sufficiently detailed to provide adequate definition of the work to be performed and to ensure the quality of that Work.
  - 1. The Contractor shall make himself thoroughly familiar with the provisions and the content of these Specifications.
- B. The Specifications are composed of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto. The interpretation of any section or of differences between sections shall be made by the Engineer.
  - 1. When a conflict occurs between or within standards, specifications, or drawings, an interpretation shall be made by the Engineer.
  - 2. All items and work not covered by these specifications shall be discussed with the Engineer, and the Contractor shall receive approval from the Engineer, in writing, prior to commencing the work.

#### 1-01.3 SPECIFICATION DOCUMENTS

- A. Definitions:
  - 1. Owner: City of Pinole.
  - 2. Engineer: Schaaf and Wheeler.
  - 3. Contractor: The corporation, association, partnership, or individual who has entered into an Agreement with the Owner to perform the work.
  - 4. Construction Inspector: Authorized representative of the Owner, who is assigned to make observations for contract performances, standards, and contract compliance.
  - 5. Drawings: Detailed and working drawings, including plan, profile, and detail sheets of proposed improvements, approved by the Engineer.
  - 6. Project Record Drawings: Detailed drawings which show actual construction and contain field dimensions, elevations, details, changes made to the construction drawings by modification, details which were

not included on the construction drawings, and horizontal and vertical locations of underground utilities.

7. Or an Approved Equal: As approved to being equal by the Engineer.
8. Provide: Furnish and install complete in place.
9. Remove: Demolish and dispose in accordance with applicable laws, rules, regulations and ordinances.
10. Shall: A mandatory condition.
11. Work: The entire completed construction or the various separately identifiable parts required to be furnished. Work is the result of performing services, furnishing the labor and furnishing the incorporating materials and equipment into the construction.
12. AWWA: American Water Works Association.
13. ACI: American Concrete Institute.
14. ASTM: American Society for Testing and Materials.
15. ANSI: American National Standards Institute.
16. Green Book: The Standard Specifications for Public Works Construction.

B. Interpretation:

1. These Specifications contain many command sentences which are directed at the Contractor unless otherwise stated.
2. The Contractor shall request clarification, in writing, of all apparent conflicts by contacting the Engineer. The Engineer will not be responsible for any explanations, interpretations, or supplementary data provided by others.

#### 1-01.4 PROJECT COORDINATION

- A. The Contractor is responsible for coordinating the work and schedules with all affected parties which will minimize avoidable conflicts.
- B. Connections to existing facilities:
  1. All connections to existing facilities shall be made at a time authorized by the Owner, which will minimize unnecessary inconveniences and interruptions.

#### 1-01.5 WORK SEQUENCE

Contractor shall coordinate the sequence of activities, taking into account work by others; Local, State, and Federal permit requirements; and Owner's other activities.

#### 1-01.6 NOTIFICATIONS

- A. Contractor shall contact the Engineer, all utilities, and other concerned agencies at least 48 hours (exclusive of holidays and weekends) prior to working in areas near underground utilities.
- B. Contractor shall have all existing utilities field located.
- C. Contractor shall give the Engineer 24 hours' notice (exclusive of holidays and weekends) for inspections and testing requests.

#### 1-01.7 SAFETY AND PROTECTION

- A. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to damage, injury or loss to:
  3. Employees on the work and other persons who may be affected.
  4. The work and materials or equipment to be incorporated therein, whether in storage on or off the site.

5. Other property at the site or adjacent thereto, including, but not limited to trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.
- B. Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

#### 1-01.8 CONSTRUCTION HOURS

Reference Special Provisions Section SP27-Hours of Work.

#### 1-01.9 WATCHMAN

Contractor shall be solely responsible for the safety of his work, materials, equipment, tools, etc., on the site and shall, if he deems it necessary or expedient, employ at his own expense the services of a competent watchman. The Owner and Engineer will not be responsible for any expenses caused by theft or vandalism of Contractor equipment.

#### 1-01.10 ACCESS ROADS

Access shall be established by the Engineer and shall be limited to necessary routes to perform the work.

#### 1-01.11 PARKING AREAS

Construction and employee vehicle parking shall be established by the Engineer. Vehicles, materials, or equipment blocking access to the site or in restricted areas will be promptly removed by the Contractor.

#### 1-01.12 TRAFFIC CONTROL

- A. Keep traffic areas free of excavated material, construction equipment, pipe, and other materials and equipment and conduct operations in a manner to avoid unnecessary interference with public and roads.
- A. Furnish properly equipped flagmen where necessary to provide for public safety. All flagmen shall be certified for traffic control in accordance with California Department of Transportation.
- B. Warning Signs and Lights.
  1. Provide barricades and warning signs for open excavations, parked equipment, and soil stockpiles.
  2. Illuminate by means of warning lights all barricades and obstructions from sunset to sunrise.
  3. Comply with "Manual on Uniform Traffic Control Devices," U.S. Dept. of Transportation and the requirements of the California Department of Transportation.
- C. Provide suitable parking areas for the use of all construction workers and others performing work in furnishing services in connection with the Project so as to avoid

interference with construction activities.

- D. Reference Special Provisions Section SP-12 Maintaining Traffic.

**PAYMENT** – All items included in this section shall be included in the various bid items and shall include full compensation for providing all labor, materials, tools, equipment and incidentals and for doing all the work involved in this section, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

## **SECTION 1-02. SUBMITTALS**

The Contractor shall provide submittals in an electronic format to the Engineer for review and approval. The Contractor shall not proceed with procuring materials or commencing work until the submittal receives a favorable review by the Engineer. The Engineer shall have at least five working days to review all submittals. Prior to the Pre-Construction Meeting, the Contractor shall furnish the following:

1. Designation of Project Superintendent.
2. 24-hour contact information.
3. Primary and Secondary Notification
4. Construction schedule
5. Progress Reports
6. Shop Drawings for all proposed materials
7. Proposed Products List and complete product submittals for all materials to be used on the project
8. Asbestos Cement Pipe Removal and Disposal Plan
9. Vehicular and Pedestrian Traffic Control Plan for each phase of the work
10. Dewatering Plan
11. Sanitary Sewer Bypass Pumping Plan
12. Storm Water Pollution Prevention Plan

The City reserves the right to require additional submittals from the Contractor that are not specifically identified above. Reference the Special Provisions for additional submittals required.

### **1-02.1 CONSTRUCTION SCHEDULES**

- A. Submit the proposed daily construction hours to the Engineer for approval. Work hours are otherwise limited by Special Provisions Section SP-27 HOURS OF WORK.
- B. Submit construction schedule to Engineer for review at the preconstruction conference.

### **1-02.2 PROGRESS REPORTS**

- A. A progress report and the progress schedule shall be brought up to date and submitted to Engineer at the end of each month or at such other times the Engineer may request. Also forward to Engineer, at the end of each month, an itemized report of the delivery status of major and critical items of purchased equipment and material, including shop drawings and the status of shop and field fabricated work.
- B. If the completion of any part of the work or the delivery of materials is behind the approved schedule, submit a plan acceptable to the Engineer for bringing the work up to schedule. Owner shall have the right to withhold progress payments for the work if Contractor fails to update and submit the progress schedule and report as

specified.

### 1-02.3 SHOP DRAWINGS

- A. Include the following pertinent information for each submittal.
  - 1. Field dimensions, clearly identified as such.
  - 2. Applicable standards, such as ASTM or AWWA.
  - 3. Material and accessories options for couplings and pressure gage.
  - 4. Pressure ratings for pipe and pipe accessories.
- B. Manufacturer's standard drawings, schematics and diagrams:
  - 5. Clearly mark each copy to identify pertinent products and models and to describe exactly which parts of the drawings apply to the equipment being furnished.
  - 6. Delete information not applicable to the Work.
- C. Reproductions or copies of portions of Contract Documents are not acceptable as complete fabrication or erection drawings. However, they may be used as a drawing upon which to indicate information on erection or to identify detail drawings.
- D. Format
  - 7. Minimum sheet size: 8 1/2 x 11 inches.
  - 8. Identify each submission with the following:
    - a. Date of submission.
    - b. Project title and number.
    - c. Names of Contractor, Supplier, and Manufacturer.
    - d. Specification section number, intended use of item in the work and equipment designation.
    - e. Identify details by reference to sheet, detail, schedule, or room numbers shown in the Contract Documents.
    - f. Deviations from Contract Documents.
    - g. Revisions on resubmittals.
    - h. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and the Contract Documents.

### 1-02.4 PROPOSED PRODUCTS LIST

- A. Within 15 days after date of Notice to Proceed, submit complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.



- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

#### 1-02.5 PRODUCT DATA

- A. Provide a submittal for every product proposed for the project. The product has been reviewed and approved before installing. Products installed without approval will be rejected and replaced at Contractor's cost.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this project. Submittals shall include manufacturer warranties, and test results of specific tests required in the specifications.

#### 1-02.6 SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- B. Include identification on each sample, with full Project information.
- C. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

#### 1-02.7 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing.
- B. Identify conflicts between manufacturers' instructions and Contract Documents.

#### 1-02.8 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification Sections, submit manufacturers' certificate to Engineer for review.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Engineer.

#### 1-02.9 SUBMITTAL REQUIREMENTS

- A. Provide complete copies of required submittals as follows:
  - 1. Construction progress schedule:
    - a. Four copies of initial schedule.
    - b. Four copies of each revision.
  - 2. Shop drawings: One Electronic copy in pdf format.
  - 3. Test results: One Electronic copy in pdf format.
  - 4. Other required submittals:
    - a. One Electronic copy in pdf format.
- B. Deliver required copies of submittals to Engineer.
- C. Identify in writing all deviations of submittals from Contract Documents.

#### 1-02.10 REVIEW OF SUBMITTALS

- A. A minimum of fourteen (14) days will be required for Engineer to review each submittal or resubmittal following the receipt of in Engineer's office of all information required for review of the submittal. Engineer will notify Contractor when the review time must be extended in order to correlate the submittal with other forthcoming submittals or for any other reason which prevents Engineer's timely review.
- B. Engineer will review submittals, affix a stamp and initials or signature will indicate subsequent action to be taken and will return the submittals to Contractor for distribution. The review actions listed on Engineer's stamp are defined as follows:
1. No Exception Taken - Signifies material or equipment represented by the submittal conforms to the design concept and complies with the information given in the Contract Documents. Contractor is to proceed with fabrication or procurement of the items and with related work.
  2. Make Corrections Noted - Signifies material or equipment represented by the submittal conforms with the design concept, and complies with the information given in the Contract Documents and in accordance with Engineer's notations. Contractor is to proceed with the work in accordance with Engineer's notations.
  3. Revise and Resubmit - Signifies material or equipment represented by the submittal conforms to the basic design concept, however, it does not comply with the information given in the Contract Documents. Contractor is to submit a revised submittal responsive to the notations marked on the returned submittal and to the information in the Contract Documents.
  4. Rejected - Signifies material or equipment represented by the submittal does not conform to the design concept or comply with the information given in the Contract Documents and is not acceptable for use in the work. Contractor is to submit material or equipment responsive to the Contract Documents.
  5. Submit Specified Item - Signifies material or equipment represented by the submittal is not the item specified in the Contract Documents and is not to be incorporated into the work. Contractor is to submit only the material or equipment specified in the Contract Documents.

**PAYMENT** – Full compensation for conforming to this section shall be considered as included in the prices paid for the various items of work and no additional compensation will be allowed therefor.

END OF SECTION

## **SECTION 1-03. MOBILIZATION & CONSTRUCTION STAGING AREAS**

### 1-03.1 AREA

- A. Mobilization consists of preparatory work and coordination necessary for the movement of personnel, equipment, supplies and incidentals to the project site for the establishment of facilities necessary for work on the Project. All other work operations and coordination which must be performed or costs incurred prior to beginning of work on the various contract items.
- B. The area for construction staging for the Contractor is shown on the Plans. No other locations shall be utilized for construction staging unless approved by the City.
- C. Contractor shall maintain construction site and area in the vicinity of the Project clear of debris and equipment. Contractor shall maintain access to the sanitary sewer lift station at all times.
- D. Contractor shall demobilize from the site once the project is substantially complete. Work shall include: removal of traffic control devices, restoring ground surface drainage, removing storm water pollution prevention devices, removing trash and construction material and equipment from the project site, reestablishing access to sidewalks, drive isles and site access through the Project site for adjacent property owner.

### 1-03.2 RELATED SECTIONS

- A. Section 01- Summary of the Work.
- B. Section 04 - Construction Sequencing Procedures

### 1-03.3 SUBMITTALS

- A. Prior to site mobilization, Contractor shall prepare and submit for review by the Engineer a site plan indicating detailed layout of Contractor Staging Area, including:
  - 1. Temporary utilities
  - 2. Temporary fencing and gates
  - 3. Temporary offices and sheds
  - 4. Construction aids
  - 5. Vehicular access ways, haul routes and on-site parking
  - 6. Temporary barriers and enclosures
  - 7. Storm water pollution prevention measures
  - 8. Shoring Plan
  - 9. Dewatering and Bypass Pumping Plan

#### 1-03.4 CONTRACTOR STAGING AREA REQUIREMENTS

- A. Contractor Staging Areas: Refer to reference drawings included in the set of Contract Drawings for location of Contractor Staging Areas.
  - 1. Contractor shall use only site areas designated on the Plans.
  - 2. Contractor Staging Area for the Project shall be clearly indicated by use of signage, delineators or other means acceptable to clearly identify the area. Contractor shall remove equipment placed or located outside of areas designated for Contractor Staging Area to within Contractor Staging Area at no change in Contract Time and Contract Sum.
  - 3. Contractor shall keep access to Contractor Staging Areas and other construction access ways and thoroughfares clear at all times. Contractor shall provide traffic and parking control signage acceptable to the Engineer.
  - 4. Contractor shall not impede access to/from any designated fire truck or emergency vehicle access lane at any time.
- B. Cleanliness: Contractor shall keep Contractor Staging Area clear of trash and debris and in neat order. Contractor shall be responsible for cleanliness and order of assigned Contractor Staging Areas, as acceptable to University's Representative. Contractor shall clean and organize the area at no additional cost.

#### 1-03.5 REMOVAL OF CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

- A. Removal of Construction Facilities and Temporary Controls: Unless otherwise mutually agreed by the Engineer and Contractor, Contractor shall remove temporary materials, equipment, services, and construction prior to Contract Completion review. Contractor shall coordinate removal with the Engineer.
- B. Cleaning and Repairs: Contractor shall clean and repair damage caused by installation or use of temporary facilities on public and private rights-of-way to the level of finish that was existing prior to the installation of temporary facilities. If there is no record of the prior condition, the finish shall be considered as new.
- C. Removal of Temporary Utilities and Restoration: Contractor shall remove temporary underground utility installations. Backfill, compact and regrade site as necessary to restore areas or to prepare for indicated paving and landscaping.

**PAYMENT** – All items included in this specification section shall be paid for under Bid Item 1 Mobilization. Payment for this bid item shall include full compensation for furnishing all labor materials, tools equipment and incidentals for performing the work to conform to this this section. This also includes demobilizing of personnel and equipment, completing construction as shown on Project Plans, as specified in the Standard Specifications, and as directed by the Engineer.

END OF SECTION

## **SECTION 1-04. CONSTRUCTION SEQUENCING PROCEDURES**

### **1-04.1 GENERAL**

The construction sequence shall be closely coordinated with the Engineer, who will coordinate with the City of Pinole. Construction will involve connection to existing facilities that need to remain in reliable operation throughout construction. It shall be the Contractor's responsibility to coordinate with the Engineer and ensure no unauthorized disruption of existing facilities, and to immediately inform the Engineer if alarms are activated at the existing sewage lift station, or if the station is overflowing.

### **1-04.2 CONSTRUCTION SCHEDULE**

The Contractor shall submit a detailed construction schedule within one week of the Notice to Proceed. The schedule shall clearly indicate milestones that affect existing facilities, such as the connections to the existing pump station force main and connection and modification to the existing storm drain. The schedule shall be submitted to the Engineer, as specified in Section 1-02 of the technical specifications.

### **1-04.3 SEWAGE BYPASS PUMPING**

- A. The Contractor shall prepare and submit a detailed sanitary sewer bypass plan prior to construction. The bypass system shall be rated for a minimum of 350 gpm at 60' TDH. Flows shall be handled such that the gravity sewer system upstream of the pump station are not surcharged at any time during construction.
- B. The Contractor shall phase the work such that bypass pumping is not required outside of normal working hours. Bypass pumping requirements during normal working hours include:
  1. An engine-driven self-priming sewage pump shall be used to prevent surcharging and overflows of the pump station wet well and upstream gravity system as necessary to complete the work. Engine exhaust quality and noise emissions shall meet City standards. The engine shall be equipped with telemetry to ensure that the Contractor is aware of any malfunction and responds to the malfunction immediately to prevent sanitary sewer overflows.
  2. Contractor shall have a backup redundant pump available on site at all times during bypass pumping.
  3. A high-level sensor and alarm shall be installed within the wet well to send the Contractor an alarm in the event that the wetwell becomes surcharged.
  4. The bypass pumping system shall be piped into the existing force main with restrained couplings or shall be extended to the downstream gravity sewer system. The force main piping and fittings shall be preassembled to minimize the required duration of bypass pumping.
  5. Depending on the Contractor's proposed bypass system and phasing of the work, vector trucks may also be necessary to adequately dewater the sewer system and convey flows.

#### 1-04.4 STORM WATER POLLUTION PREVENTION

The Contractor shall be responsible for implementing stormwater pollution prevention measures, as shown on the Plans and as specified in section 1-05 of the Technical Specifications. Contractor shall submit an implementation plan to the Engineer in accordance with Section 1-02 of the Technical Specifications.

#### 1-04.5 STRUCTURES

- A. Limit clearing and grubbing before actual need. Protect vegetation where possible.
- B. Install terraces, diversions, or level spreaders, including stable outlets:
  - 1. Above and below borrow areas
  - 2. Above storage areas
- C. Control access and haul roads:
  - 1. Contour roads and grade surfaces away from slopes and toward controlled outlets.
  - 2. Dust control with water and/or chemicals.
  - 3. Erosion control by installing turnouts and culverts and by stabilizing road ditches.
  - 4. Vegetate disturbed areas.
  - 5. Surface roughening or pitting.
- D. Shape and control borrow areas. Reduce area and duration of exposed areas.
- E. Install debris basins, brush dams, straw bale barriers, and geotextile fences.
- F. Locate, shape, size, and protect by-pass channel:
  - 1. Use coffer dams.
  - 2. Pump extra water across construction area.
- G. Sectional construction.
- H. Timely installation of all structural and stabilization practices.
- I. Control work sequence.
- J. Good housekeeping practices, to prevent water or air pollution, in use at the work site at all times.
- K. Prevent pollution by chemicals and lubricants.

**PAYMENT** – Sewage Bypass Pumping shall be paid for under **Bid Item # 4**. This bid item includes the development and implementation of a Bypass Pumping Plan, and includes compensation for facilitating and providing necessary pumps, piping, and other equipment required for bypassing sewage during any scheduled shutdown of the sanitary sewer force main and/or pump station as outlined in the Project Plans, Standard Specifications, and as directed by the Engineer.

END OF SECTION

## **SECTION 1-05. STORMWATER POLLUTION PREVENTION**

### 1-05.1 Summary

- A. The Contractor shall prevent the pollution of storm water runoff on this construction project by keeping pollution out of storm drains, reducing the exposure and discharge of material and wastes to stormwater, and by reducing erosion and sedimentation through the use of Best Management Practices.
- B. General Requirements:
  - 1. Non-hazardous material and waste management
  - 2. Hazardous material and waste management
  - 3. Spill prevention and control
  - 4. Vehicle and equipment maintenance
  - 5. Contractor training and awareness
- C. Activity Specific Requirements:
  - 1. Dewatering Operations
  - 2. Paving operations
  - 3. Saw cutting
  - 4. Contaminated soil management
  - 5. Concrete, grout, and mortar waste management
  - 6. Painting
  - 7. Earthwork
- D. Related Sections:
  - 1. 1-02. Submittals
  - 2. 1-07 Site Cleanup
  - 3. 1-03 Mobilization

### 1-05.2 SUBMITTALS

- A. The Contractor shall submit a copy of the BMP Handbook with each BMP to be utilized check marked to show compliance or marked to show deviation.
- B. The entire plan shall be kept and maintained by the Contractor on the construction site during the duration of the project.
- C. The Contractor shall be responsible for taking the proper actions to prevent contaminants and sediments from entering the storm sewer drainage system should any unforeseen circumstance occur. The Contractor shall take immediate action if directed by the Engineer, or if the Contractor observes contaminants and/or sediments entering the storm drainage system, to prevent further stormwater from entering the system.



### 1-05.3 REGULATORY REQUIREMENTS

- A. The Contractor shall comply with the SWRCB, RWQCB, City, County, and other local agency requirements regarding stormwater discharges and management.
- B. All construction shall conform to the requirements of the City of Pinole’s Municipal Code, Chapter 14.04, “Storm Water Management and Discharge Control” and the California Regional Water Quality Board Municipal Regional Stormwater Permit.
- C. Construction sites must maintain year-round effective erosion control, run-on and runoff control, sediment control, good site management, and non-stormwater management through all phases of construction. Contractor shall submit a plan containing construction BMPs to the City for approval prior to mobilization.
  - 1. The plan must comply with Section 13, “Water Pollution Control,” of the Standard Specifications and must include the staging area to comply with these special conditions.
  - 2. Contractor shall submit a plan containing construction BMPs to the Engineer for approval prior to mobilization.
  - 3. Contractor shall identify an individual who will oversee and ensure that BMPs are in-place and adhered to throughout the prosecution of work under this Contract.
- D. The Contractor shall comply with the following prohibitions and limitations, which are contained in the State of California General Construction Activity Stormwater Permit (General Permit):
  - 1. Discharge prohibitions:
    - a. Discharges of materials other than storm water, which are not otherwise regulated by a NPDES permit, to a separate storm water sewer system or water of the nation are prohibited.
    - b. Storm water discharges shall not cause or threaten to cause pollution, contamination (including sediment) or nuisance.
    - c. Storm water discharges regulated by this general permit shall not contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and 40 CFR Part 302.
  - 2. Receiving Water Limitations:
    - a. Storm water discharges to any surface or groundwater shall not adversely impact human health or the environment.
    - b. Storm water discharge shall not cause or contribute to a violation of any applicable water quality standards contained in the California Ocean Plan, Inland Surface Waters and Enclosed Bays and Estuaries Plan, or the applicable RWQCB’s Basin Plan.
- E. Requirements:
  - 1. In order to comply with the permit mandates, San Mateo County has developed a county-wide Water Pollution Prevention which includes Best Management Practices

(BMPs). BMPs are measures or practices used to reduce the amount of pollution entering surface water. BMPs may take the form of a process, activity, or physical structure. No additional compensation shall be made for implementation of BMPs.

#### 1-05.4 NONHAZARDOUS MATERIAL AND WASTE MANAGEMENT

- A. Designated Area: The Contractor shall propose designated areas of the project site, for approval by the Engineer, suitable for material delivery, storage, and waste collection that, to the maximum extent practicable, are near construction entrances and away from catch basins, gutters, drainage courses, and creeks.
- B. Granular Material
  - 1. The Contractor shall store granular material at least ten feet away from catch basin and curb returns.
  - 2. The Contractor shall not allow granular material to enter the storm drains or creeks.
  - 3. When rain is forecast within 24 hours or during wet weather, the Engineer may require the Contractor to cover granular material with a visqueen and to surround the material with sand bags.
- C. Dust Control: The Contractor shall use reclaimed water to control dust on a daily basis or as directed by the Engineer.
- D. Street Sweeping: At the end of each working day or as directed by the Engineer, the Contractor shall clean and sweep roadways and on-site paved areas of all materials attributed to or involved in the work.
  - 1. The Contractor shall not use water to flush down streets in place of street sweeping.
- E. Recycling: The Contractor shall recycle asphalt concrete and Portland cement concrete and reuse or recycle any useful construction materials generated during the project to the maximum extent practicable.
  - 1. At the end of each working day, the Contractor shall collect all scrap, debris, and waste material, and dispose of such materials properly.

#### 1-05.5 HAZARDOUS MATERIAL AND WASTE MANAGEMENT

- A. Comply with all requirements of General Conditions Section 1-4.05.
- B. Spill prevention and control: The Contractor shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on-site. The Contractor shall immediately contain and prevent leaks and spills from entering storm drains, and properly clean up and dispose of the waste and cleanup materials. If the waste is hazardous, the Contractor shall handle the waste as described in General Conditions Section 1-4.05.
- C. The Contractor shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials. The Contractor shall immediately report any hazardous materials spill to City of Pinole at (510) 724-8949.

#### 1-05.6 VEHICLE AND EQUIPMENT MAINTENANCE

- A. The Contractor shall not perform vehicle or equipment cleaning on-site or in the street using soaps, solvents, degreasers, steam cleaning equipment, or equivalent methods. The Contractor shall perform vehicle or equipment cleaning, with water only, in a designated, bermed area that will not allow rinse water to run off-site or into streets, storm drains, or creeks.
- B. Vehicle and equipment maintenance and fueling:
  - 1. The Contractor shall perform maintenance and fueling of vehicles or equipment over a drip pan that will not allow run-on of storm water or runoff of spills or take other reasonable measures to minimize spills and their effects. The Contractor shall use secondary containment, such as a drip pan, to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured. The Contractor shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on-site.
  - 2. The Contractor shall clean up leaks and spills of vehicle or equipment fluids immediately and dispose of the waste and cleanup materials as hazardous waste, as described in Section 1-06. The Contractor shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials. The Contractor shall report any hazardous materials spill to City of Pinole at (510) 724-8949.
  - 3. The Contractor shall inspect vehicles and equipment arriving on-site for leaking fluids and shall promptly repair leaking vehicles and equipment. Drip pans shall be used to catch leaks until repairs are made.
  - 4. The Contractor shall recycle waste oil and antifreeze, to the maximum extent practicable. The Contractor shall comply with Federal, State, and City requirements for aboveground storage tanks.

#### 1-05.7 CONTRACTOR TRAINING AND AWARENESS

- A. The Contractor shall train all employees /subcontractors on the storm water pollution prevention requirements contained in these Specifications.
- B. The Contractor shall inform subcontractors of the storm water pollution prevention contract requirements and include appropriate subcontract provisions to ensure that these requirements are met.
- C. The Contractor shall post warning signs in areas treated with chemicals.

#### 1-05.8 ACTIVITY SPECIFIC REQUIREMENTS

- A. Dewatering Operations
  - 1. Sediment Control
    - a. The Contractor shall route water through a control measure, such as a sediment trap, sediment basin, or Baker tank, to remove settleable solids prior to discharge to the storm drain system.

- b. Approval of the control measure shall be obtained in advance from the Engineer.
  - c. Filtration of the water following the control measure may be required on a case-by-case basis.
2. If the Engineer determines that the dewatering operation would not generate an appreciable amount of settleable solids, the control measure requirement in 1) above may be waived.
  3. The Contractor shall reuse water for other needs, such as dust control or irrigation, to the maximum extent practicable.
  4. Contaminated Groundwater
    - a. The project is not within an area of known groundwater contamination; therefore, monitoring shall only be required if directed by the Engineer. Testing of groundwater prior to disposal shall be performed as necessary to meet the associated permit requirements. Reference Technical Specification Section 1-06 Dewatering and Stormwater Management.
    - b. The Contractor shall follow General Conditions Section 1-4.05 if contamination is found.
    - c. If the project is found to be within an area of groundwater contamination not identified by the City in these specifications, a change order will be negotiated to cover additional work performed by the Contractor.

#### B. Paving Operations

1. Project site management: When rain is forecast within 24 hours or during wet weather, the Engineer may prevent the Contractor from paving. The Engineer may direct the Contractor to protect drainage courses by using control measures, such as earth dike, straw bale, and sand bag, to divert runoff or trap and filter sediment. The Contractor shall place drip pans or absorbent material under paving equipment when not in use. The Contractor shall cover catch basins and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
2. Paving waste management: The Contractor shall not sweep or wash down excess sand (placed as part of a sand seal or to absorb excess oil) into gutters, storm drains, or creeks. Instead, the Contractor shall collect the sand and return it to the stockpile, or dispose of it in a trash container. The Contractor shall not use water to wash down fresh asphalt concrete pavement.

#### C. Saw Cutting

1. The Contractor shall collect by wet vacuum and remove from the work area all slurry and debris resulting from sawcut operations and/or exposed aggregate treatments prior to moving to the next location or at the end of each working day, whichever is sooner.
2. The Contractor shall employ a two (2) person crew minimum for all sawcut operations. The crew shall be equipped with a wet vacuum, sandbags and filter fabric at all times.

3. The Contractor shall not wash slurry into or allow slurry to enter catch basins and other components of the storm drainage system. The Contractor shall cover or barricade catch basins using control measures, such as filter fabric or sand bags, to keep slurry out of the storm drain system. The Contractor shall shovel, absorb, or vacuum saw cut slurry and pick up the waste prior to moving to the next location or at the end of each working day, whichever is sooner. If saw cut slurry enters catch basins, the Contractor shall remove the slurry from the storm drain system immediately.
4. The Contractor shall not allow slurry to pond or stand in sidewalks, driveways, gutters or other areas where it can be tracked by or present a hazard to vehicles, bicycles or pedestrians.
5. The Contractor shall dispose of all slurry in conformance with all applicable Federal, State, and local laws and regulations.

#### D. Contaminated Soil Management

1. The Contractor shall manage site soils so as not to discharge contaminated materials to the storm drain system or a receiving water.
2. The Contractor shall conform to General Conditions Section 1-4.05 with respect to the handling of contaminated soil during the prosecution of its Work.

#### E. Concrete, Grout, and Mortar Waste Management

1. Material management: The Contractor shall store concrete, grout, and mortar away from drainage areas and ensure that these materials do not enter the storm drain system or creek.
2. Concrete truck and equipment wash out: The Contractor shall not wash out concrete trucks or equipment into streets, gutters, storm drains, or creeks. The Contractor shall perform washout of concrete trucks or equipment off-site or in a designated area on-site where the water will flow onto dirt or into a temporary pit in a dirt area. The Contractor shall let the water percolate into the soil and dispose of the hardened concrete in a trash container. If a suitable dirt area is not available, then the Contractor shall collect the wash water and remove it off-site.
3. Exposed aggregate concrete wash water and sweepings: The Contractor shall avoid creating runoff by draining water from washing of exposed aggregate concrete to a dirt area. If a suitable dirt area is not available, then the Contractor shall filter the wash water through straw bales or equivalent material before discharging to the storm drain. The Contractor shall collect and remove any sweepings from exposed aggregate concrete.

#### F. Painting

1. Painting cleanup: (Designated area) The Contractor shall conduct cleaning of painting equipment and tools in a designated area that will not allow run-on of storm water or runoff of spills. The Contractor shall not allow wash water from cleaning of painting equipment and tools into streets, gutters, storm drains, or creeks.

- a. Water-based paint: The Contractor shall remove as much excess paint as possible from brushes, rollers, and equipment before starting cleanup. The Contractor shall dispose of wash water from aqueous cleaning of equipment and tools to the sanitary sewer consistent with the Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) standards for General Permittees.
  - b. Oil-based paint: The Contractor shall remove as much excess paint as possible from brushes, rollers, and equipment before starting cleanup. The Contractor shall filter paint thinner and solvents for reuse consistent with the BAT and BCT standards for General Permittees. The Contractor shall dispose of waste thinner and solvent, and sludge from cleaning of equipment and tools as hazardous waste, as specified herein.
2. Material and waste management: The Contractor shall dispose of excess thinners, solvents, oil-and water-based paint as hazardous waste. The Contractor shall dispose of dry, empty paint cans/buckets, rollers, rags, and drop cloths in the trash.
- G. Earthwork The Contractor shall maximize the control of erosion and sediment by using the best management practices for erosion and sedimentation in the California Storm Water Best Management Practice Handbook - Construction Activity.

#### 1-05.9 STORMWATER QUALITY PROTECTION

- A. Contractor shall prevent sediment from flowing off the work area to storm drains, creeks, or the Bay. Contractor shall control dust migration, deploy wattles/fiber rolls, and install drain inlet filters to prevent sediments from migrating from the project site. Loose debris shall be swept from surfaces rather than be washed down with water.
- B. Contractor shall practice best management techniques to avoid exposing disturbed soils to rain, either by limiting excavation work during rain or deploying covers. Contractor must have adequate erosion control materials on site and shall deploy these materials effectively to prevent stormwater run-on and runoff.
- C. Contractor shall control the runoff of stormwater from the construction site. Contractor shall practice best management techniques and have adequate materials on site to deploy to prevent stormwater run-on and runoff.
- D. Contractor shall identify storm drains and drainage channels that could be impacted by the construction activities and ensure those facilities are protected. Construction material shall be stored out of the rain. Demolition waste shall be sorted in accordance with the Waste Diversion Plan and the materials shall be promptly removed from the site for recycling or disposal. While on site, wastes shall be covered to prevent contact with stormwater.
  - a. Contractor shall promptly clean up leaks or spills of construction materials that could pollute stormwater. Debris containers shall be covered to prevent rain intrusion.

**PAYMENT** - Stormwater Pollution Prevention (**Bid Item #3**) shall be measured and paid on a Lump Sum (LS) basis. The contract unit price shall include full compensation for providing all labor, materials, tools, equipment, and appurtenances required for implementing BMPs in accordance with the Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END OF SECTION

## **SECTION 1-06. DEWATERING AND STORMWATER MANAGEMENT**

### **1-06.1 SUMMARY**

- A. The Work specified in this Section includes the requirements for the design, procurement, location, permitting, installation, maintenance, operation, and removal of dewatering systems, and all Work necessary to control, handle, satisfactorily treat, and dispose of groundwater and surface water, and all other water that may be encountered, as required for performance of the Work.

Contractor shall furnish all labor, materials, equipment, facilities, transportation and services for all dewatering necessary to work in the dry.

This Section consists of all Work necessary to remove water from the project site and nuisance water from whatever source (the City's storm drain system, groundwater, surface runoff, or rainwater) that interferes with the progress of the Work. Also included are all equipment and construction necessary for dewatering including pumps, pipe, valves, and suction and discharge appurtenances.

Related Sections:

1. Technical Specification Section 1-02 - Submittals
2. Technical Specification Section 1-11 - Earthwork

### **1-06.2 REFERENCES**

- A. Except as otherwise indicated, the current editions of the following Specifications and Standards apply to the Work of this Section:
1. Environmental Protection Agency (EPA)
    - a. 40 CFR 136 – Guidelines Establishing test Procedures for the Analysis of Pollutants
    - b. 40 CFR 261 – Identification and Listing of Hazardous Waste
    - c. 40 CFR 403 – General Pretreatment Regulations for Existing and New Sources of Pollution
  2. Occupational Safety and Health Act (OSHA).

### **1-06.3 SUBMITTALS**

- A. Water Control Plan: Working drawings, design data, and descriptions of proposed dewatering facilities for each location where these facilities are proposed, including:
1. The proposed types of dewatering or groundwater control system, including a description of the methods, equipment, standby equipment, and power supply, pollution and sediment control facilities, and discharge locations to be utilized.
  2. Arrangement, location, depth, and elevations of the components of the proposed system with a complete description of the equipment to be used with associated installation, operation, and maintenance procedures.
  3. Description of the proposed treatment system, including number and locations of settling tanks and filtration system.



4. Location and size of sumps, berms, dikes, sediment pits, discharge lines, and any other proposed dewatering installations, including their relation to existing drainage facilities.
  5. Estimates of pumping rate for the dewatering system and duration of the dewatering pumping period.
  6. A schedule for the installation of the system, procedures for the installation start-up protocols and removal of each system.
- B. The Water Control Plan shall include Cofferdam Plans. Contractor shall incorporate his overall working schedule into the Water Control Plan.
  - C. Calculations demonstrating the adequacy of the proposed dewatering and/or groundwater control systems and equipment.
  - D. Resubmit if the system is modified during installation or operation.
  - E. Daily reports and records as specified herein.
  - F. Working drawings for excavation and groundwater treatment and disposal, including proposed discharge locations.
  - G. A copy of the approved discharge permit from RWQCB or Regional Water Quality Control Plan (if permit is required).
  - H. The CITY's review of Water Control Plan or any other Plan shall not relieve the Contractor from his obligation to meet these Specifications, applicable OSHA and Cal OSHA requirements for excavation safety, or any other worker safety provisions.

#### 1-06.4 QUALITY CONTROL

- A. Contractor shall be able to provide the following replacement equipment within two (2) days of an equipment failure or malfunction: standby equipment, machinery, piping, power, and pumps in good working condition and of adequate capacity to continue dewatering operations at all sites where dewatering is in progress.
- B. Sufficient pumping equipment for immediate use shall be on the project site at all times, including standby pumps for use in case other pumps become inoperable. Water shall be disposed of so as to cause no injury to public or private property, or to be a menace to the public health.
- C. Install the complete dewatering system prior to the need for that system on the construction schedule. In the presence of the Engineer, or designee, test the system as required to demonstrate its adequacy. Test by running the system as long as necessary to obtain stabilized flow rate and to provide representative samples of dewatering effluent. Continue system testing until the effluent is in compliance with the discharge requirements.

#### 1-06.5 PROJECT CONDITIONS

- A. Repair, subject to the Engineer's acceptance, any damage, disruption, or interference resulting directly or indirectly from dewatering operations.

- B. Make dewatering facilities accessible to the Owner at any time for monitoring purposes.

#### 1-06.6 DESIGN CRITERIA

- A. Design dewatering systems to satisfy the following objectives:
  - 1. Effectively control water to provide a dewatered and stable work area required to safely complete the Work.
  - 2. Provide continuous control of water and the safety of dewatered areas at all times during the course of construction, including weekends and holidays and during periods of work stoppages.
  - 3. Provide adequate backup systems to provide for (1) and (2), above.
  - 4. If the Contactor chooses to use electric driven pumping equipment, a backup power source shall be provided. Should the Contractor choose to use engine driven pumps, he shall maintain, on site, sufficient fuel reserves to operate the pumps for a period of at least 8 hours.
  - 5. Meet the requirements of all applicable legislative statutes, judiciary decisions, codes, ordinances, and regulations, including those pertaining to the local noise ordinances.
- B. Design Flow Rates
  - 1. During the dry season (April 15th – October 15th) contractor shall anticipate a constant flow in the existing storm drain system of 100 gallons per minute (gpm) regardless of precipitation.
  - 2. During the wet season (October 15th – April 15th) contractor shall maintain full flow capacity of the existing storm drain system. Temporary storm drain piping and/or pumping may be required. Stormwater shall not be permitted to flow through open channels and ditches that have been disturbed/excavated.
  - 3. Contractor shall maintain existing storm drain system capacity at all times.
- C. Include the monitoring and recording system in the design, and criteria for achievement or objectives.
- D. Include proof that design is viable and not expected to create problems.
- E. Treatment of the groundwater and excavation water will be required to limit the turbidity below the threshold of the receiving City storm drain system. All sediment or other matter removed during treatment shall be properly disposed of. Contractor is responsible to limit dewatering turbidity below that of permit requirements (if permit is needed). Contractor shall make adjustments to dewatering system as directed by Engineer to comply with permit requirements. A settling tank and filtration system will be required at a minimum.
- F. Water originating from the storm drain system does not need to be treated and can be bypassed back into the storm drain culvert downstream of the project site.
- G. Temporary dewatering structures shall consist of clean washed gravel, sandbags, or

other non-erodible material and shall be completely removed from the work area at project completion.

- H. Due to clay deposits and high water table, dewatering shall not be done by point wells.
- I. Contractor shall design the dewatering system to limit lowering of the water table and prevent settlement of surrounding improvements.

#### 1-06.7 EQUIPMENT

- A. Provide a Section of clear piping, a minimum of 12 inches long, for observation of turbidity in the discharge piping. Maintain as necessary to allow for observation of flow.
- B. Equipment shall be suitable for the work to be done and shall be in good operating condition. Equipment operators and workmen are to be skilled in such operations and shall be competently supervised.
- C. For surface runoff and/or rainwater management, see Technical Specification Section 1-05 – Stormwater Pollution Prevention.

#### 1-06.8 SITE CONDITIONS

- A. Prior to bidding on the Work, the Contractor shall familiarize himself with project site conditions. No allowance will be made by the Owner for any unfavorable conditions or events which should have been foreseen from a thorough examination of the Contract Documents and the site and working conditions.
- B. Contractor shall control site water so that work may be done in the dry in a safe working environment according to relevant provisions of the Safety Orders.
- C. The Contractor shall prevent water from any source from flooding the project site.
- D. The Contractor shall remove all water which accumulates in grading areas during the progress of work so that all work can be done in the dry. Excavated areas shall be kept free from water while new infrastructure is constructed.

#### 1-06.9 INSTALLATION

- A. Install piping, fittings, equipment, and materials in accordance with the approved Water Control Plan.

#### 1-06.10 DISCHARGE OF GROUNDWATER AND EXCAVATION WATER

- A. Groundwater will be encountered and the site will likely have to be continuously dewatered for the removal of groundwater during the Work.
- B. Contractor shall secure all applicable permits for discharge of water, as required to accomplish Work.
- C. Perform dewatering to the extent required to lower groundwater levels in the excavations to facilitate the work and to provide a stable, dewatered subgrade for the execution of the project Work.
- D. Contractor shall make adequate provisions for the removal of sediment from

groundwater and excavation water prior to discharge. Water discharged shall not have a turbidity level (as measured using Nephelometric Turbidity Units, NTU) greater than 10 percent of the receiving water, or 250 NTU, whichever is less.

1. Flow originating from the existing storm drain system can be bypassed downstream of the project site to the storm drain culvert without requiring additional treatment.
  2. A minimum of one (1) baker settling tank shall be provided at the site. Additional tanks shall be provided as needed to meet the turbidity requirements.
  3. If necessary, the Contractor shall provide filtration in addition to the settling tank(s) to reduce turbidity to the levels stated above.
  4. Dewatering devices shall be adequately filtered to prevent the removal of fines from the soil.
- E. A water sample of the groundwater and excavation discharge water must be collected and analyzed for constituents. Constituent sampling and frequency of analysis will depend on what type of discharge permit or authority is granted, i.e. temporary discharge permit to the sanitary sewer, discharge to the storm system as a conditionally exempt discharge per the MRP, or discharge to the storm system under the Groundwater General or Fuel Contaminated NPDES permit issued by the RWQCB.
1. Water can be discharged into storm drain if results show very low levels of contaminants as determined by the NPDES Municipal Regional Permit (MRP).
    - a. Discharge water shall be conveyed back into the existing storm drain system. Contractor to verify storm drain system capacity to receive the dewatering discharge rate without causing flooding downstream.
  2. Water can be discharged into storm drain if results exceed contaminant level determined by the MRP and permit approval is received from the RWQCB. This option is for groundwater and excavation discharge water that is contaminated and needs treatment before discharge.
  3. Water can be discharged into the sanitary sewer if results exceed contaminant level determined by the MRP and a temporary discharge permit is obtained from the City.
  4. Contractor is responsible for performing all discharge water sampling and obtaining all discharge permits at no additional cost to the City.
  5. Contractor shall sample the effluent water and provide the results to the City any time contractor's dewatering operations have changed or at the request of the City.
- F. Provide a method of disposal that satisfies the requirements of the authority having jurisdiction. The City may also conduct quality assurance testing and determine sediment levels independently.
- G. Discharge conveyance through onsite storm water pipes, structures, pump station and any other facilities must not cause flooding by overloading or blocking the flow in the drainage facilities. Leave the facilities unrestricted and as clean as originally found. Repair or restore any damage to existing facilities as directed by the Engineer or the authority having jurisdiction.

- H. Manage dewatering effluent in a manner that prevents releasing hazardous substances to surface or subsurface soil or groundwater.
- I. Discharge of pumped water to the ground surface around the work site is not permitted.
- J. Promptly repair any damage caused by dewatering operations.

1-06.11 OPERATION

- A. Maintain dewatering systems as necessary to complete the Work or until authorized by the Engineer to be removed.
- B. Maintain and operate the dewatering system on a continuous basis. Provide a qualified person on site at all times to oversee the operation of the system or as otherwise approved by the Engineer.
- C. Immediately repair any leaks or spills in a dewatering system and clean up the spill, in accordance with Technical Specification Section 1-05 – Stormwater Pollution Prevention.
- D. The Contractor will need to provide dewatering pumps, hoses, and appurtenances to completely dewater the project site.
- E. Water removed from the project site excavation using pumps provided by the Contractor shall at a minimum be treated for sediment using a weir tank and filtration system.
- F. Based on the Contractor's pumping rate and weir tank and filtration system performance, additional treatment methods or equipment may be required. They include but are not limited to additional weir tanks, additional sand media particulate filters, and upstream cartridge filters. Additional treatment methods shall be discussed in the Water Control Plan.

1-06.12 DEWATERING EQUIPMENT REMOVAL

- A. After dewatering is no longer necessary, all dewatering pumps and appurtenances shall be removed by the Contractor.

1-06.13 HAZARDOUS MATERIALS

- A. Hazardous materials encountered during dewatering shall be disposed of in accordance with applicable county, state, and federal laws. Reference General Conditions Section 1-4.05.

**PAYMENT** - Dewatering and Stormwater Management (**Bid Item #5**) shall be measured and paid on a Lump Sum (LS) basis. Payment shall include full compensation for providing all labor, material, tools, equipment, and appurtenances for all work necessary for sampling, monitoring, testing, reporting, maintaining a dry working condition within excavations; cofferdam installation, plan, monitoring and removal; handling and properly disposing collected water, permit fees to protect excavations from groundwater, stormwater, and surface water, and meeting discharge permit requirements, in accordance with the Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END OF SECTION

## **SECTION 1-07. SITE CLEANUP**

### **1-07.1 GENERAL**

- A. Site cleanup shall be executed during the progress of the work, and at the completion of the work.

### **1-07.2 EXECUTION**

- A. Construction materials shall be neatly stored.
- B. Containers shall be provided for the collection of waste material and debris.
  - 1. Containers shall be stored out of the right-of-way.
- C. Volatile wastes shall be stored in clearly marked, covered metal containers and removed daily.
- D. Construction material, equipment, waste containers, construction buildings, parking, etc. shall only be allowed within the limits of the construction easement.
  - 1. Any off-site storage of construction material, equipment, waste containers, construction buildings, parking, etc. shall be allowed only after Contractor has obtained the written permission of the Owner.
- E. Upon completion of the construction, the job site shall be restored to its original condition.
  - 1. Contractor shall restore any land which will not be paved with asphalt or concrete to its original condition.
    - a. All topsoil shall be restored to its original quality.
    - b. Any areas which are stripped of vegetation prior to or during construction shall be reseeded.
  - 2. All exterior paved surfaces shall be broom cleaned, and left in good repair.

### **1-07.3 DISPOSAL**

- A. In order to maintain an orderly site, waste material and debris shall be removed periodically.
- B. All wastes shall be removed in accordance with applicable laws, regulations, rules and ordinances.

**PAYMENT** – All items included in this section shall be included in the various bid items and shall include full compensation for providing all labor, materials, tools, equipment and incidentals and for doing all the work involved in this section, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

## **SECTION 1-08. PROJECT RECORD DRAWINGS**

### **1-08.1 RECORDING OF DRAWINGS**

- A. Project Record Drawings shall be provided to the Engineer by the Contractor.
- B. Each drawing shall be labeled "DRAWINGS OF RECORD" in neat large printed letters.
- C. Construction information shall be recorded concurrently with construction progress.
- D. Project Record Drawings shall be marked legibly and with red indelible ink pen.
- E. Project Record Drawings shall record actual construction and contain the following:
  - 1. Field dimensions, elevations, and details.
  - 2. Changes which are made by a modification.
  - 3. Details which are not on the original Construction Drawings.
  - 4. Horizontal and vertical locations of underground utilities and appurtenances, referenced to a minimum of three permanent surface improvements.
  - 5. Depths of various elements of work in relation to project datum.

### **1-08.2 MAINTENANCE OF PROJECT RECORD DRAWINGS DURING CONSTRUCTION**

- A. Project Record Drawings shall be stored apart from the documents used for construction.
- B. Project Record Drawings shall be maintained in a clean, dry, legible condition and in good order.
  - 6. Project Record Drawings and any documents used for the preparation of said Drawings shall not be used for construction purposes.
- C. Project record drawings shall be available to the Engineer upon 24 hours' notice.

### **1-08.3 SUBMITTAL**

- A. Project Record Drawings shall be submitted to the Engineer with a transmittal letter, in duplicate, containing:
  - 7. Date.
  - 8. Project title.
  - 9. Contractor's name, address and telephone number.
  - 10. Title and number of each Record Document.
  - 11. The signature of the Contractor.
- B. Project Record Drawings shall be submitted on 24" x 36" blue-line drawings with information marked with indelible red ink pen. In addition, the drawings shall be scanned and submitted to the Engineer in pdf format.

- C. Reference Special Provisions Section SP-28 RECORD (“AS-BUILT”) DRAWINGS for additional requirements and constraints.

**PAYMENT** – Payment for producing project record drawings shall be included in the various bid items and shall include full compensation for providing all labor, materials, tools, equipment and incidentals and for doing all the work involved in this section, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefore.

Reference Special Provisions Section SP-28 RECORD (“AS-BUILT”) DRAWINGS for monetary penalty for failing to provide the City with acceptable record drawings.

END OF SECTION



## **SECTION 1-09. DEMOLITION**

### **1-09.1 SUMMARY**

- A. The Contractor shall furnish all tools, equipment, materials, and supplies and shall perform all labor as required for the demolition and removal of structures and facilities as indicated on the Drawings and specified herein.
- B. The work of this section shall include, but shall not be limited to:
  - 1. Clearing, grubbing, removal and disposal of top soil and vegetation.
  - 2. Demolition of concrete slabs, culverts and other features as required and backfilling of resulting voids.
  - 3. Removal and salvage of existing facilities and equipment as indicated on the drawings and as specified.
  - 4. Demolition of existing structures or portions thereof, as specified.
- C. Related Technical Specification Sections:
  - 1. Section 1-01 – Summary of Work
  - 2. Section 1-12 – Concrete Structures
  - 3. Section 1-11 – Earthwork
  - 4. Section 1-10 – AC Pipe Removal and Disposal

### **1-09.2 SUBMITTALS**

- A. Submit the following in accordance with Section 1-02 of these Specifications:
  - 1. Demolition plan and schedule.
  - 2. Disposal means and locations.

### **1-09.3 DEMOLITION COORDINATION**

- A. The Contractor shall carefully coordinate the extent of demolition in areas where existing utility services shall be disconnected and reconnected to new facilities, where existing facilities shall remain operational, and where vegetation and curb and gutter shall be restored.
- B. In the case of existing utilities where only a portion is to be demolished, the Contractor shall cap, seal, or repair the utility at the point of disconnection such that the remainder of the system can remain in service.
- C. In the case of existing ductwork or piping where a portion will be demolished followed by future connection to new construction, the Contractor shall cleanly cut the duct or pipe and promptly cap it to protect it during construction
- D. Environmental Requirements:
  - 1. Conform to existing environmental requirements and regulations regarding noise, dust, and vibration.

E. Existing Conditions:

1. Verify that utility services are disconnected.

1-09.4 SEQUENCING AND SCHEDULING

A. Sequencing

1. See Section 1-04 of these specifications for construction sequencing procedures.

1-09.5 REPAIR OF DAMAGE

A. Any damage to personal property, and to other existing facilities to remain, as caused by the Contractor's operations shall be repaired at the Contractor's expense.

B. Damaged items shall be repaired or replaced with new materials as required to restore damaged items or surfaces to a condition equal to or better than that existing prior to damage or start of work of this contract.

1-09.6 BURNING

A. The use of burning for the disposal of refuse, debris, and waste materials resulting from demolition and site clearing operations will not be permitted.

1-09.7 EXAMINATION

A. Verify existing conditions pertaining to demolition work.

1-09.8 PREPARATION

A. Utilities:

1. Disconnect any remaining utility services that will no longer be active.
2. Remove all disconnected utilities within the site.
3. Repair utility mains as necessary in conformance with City and Caltrans Standards.

B. Protection:

1. Provide berms and other means acceptable to Engineer to keep drainage from demolition areas.

1-09.9 DEMOLITION

A. Disposal of all materials shall be performed in compliance with all applicable local, state, and federal codes and requirements.

B. Asphalt concrete pavement, concrete pavement, and concrete curb and gutter shall be removed as necessary to perform the specified work. The limits of removal shall be saw cut. When the required improvements have been constructed, new asphalt concrete pavement, concrete pavement, and concrete curb and gutter shall be constructed as specified and shown.

**PAYMENT** - Demolition and Off-haul (**Bid Item # 2**) shall be measured and paid on a Lump Sum (LS) basis. The contract unit price shall include full compensation for providing all labor, materials, tools, equipment, and appurtenances for demolishing and disposing of all existing structures,

force mains, storm drain pipes and culverts, and surface features, and excavated materials in accordance with the Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END OF SECTION

## **SECTION 1-10. AC PIPE REMOVAL AND DISPOSAL**

### 1-10.1 DESCRIPTION

- A. The project requires cutting, removing, and disposing of existing asbestos cement pipe (ACP) during the prosecution of this work. The Contractor shall remove and dispose of ACP in accordance with State of California requirements, and the Contract Documents.
- B. The Contractor shall follow the AWWA guidelines for handling, removing and disposing of ACP as stated in the applicable sections of AWWA Standards C400, C401, C402, and C403 covering Asbestos-Cement Transmission and Distribution Pipe.

### 1-10.2 SUBMITTALS

- A. Asbestos Cement Pipe Removal and Disposal Plan: The Contractor shall complete and submit an Asbestos Cement Pipe Removal and Disposal Plan for review and approval prior to construction. The Contractor shall clearly describe his proposed methods for the removal and disposal of ACP that ensures no exposure to airborne asbestos by the Contractor's personnel or by the public.
- B. The Contractor shall submit documentation certifying that all ACP was transported to, accepted, and properly disposed of, at a legal disposal facility.

### 1-10.3 EQUIPMENT

- A. Snap cutting tools shall be used for the removal of asbestos cement pipe whenever the removal of intact pipe sections is not possible. Power "Cut-Off" saws, hand-saws, and other devices and methods that result in the release of asbestos fibers into the air shall not be used for the removal of ACP.

### 1-10.4 CAPSULANT

- A. If during the removal of ACP broken edges occur, the broken edges shall be encapsulated with Certane 1000 Post Removal Encapsulant, or approved equal.

### 1-10.5 GENERAL

- A. The Contractor shall perform all cutting and handling of asbestos cement pipe in accordance with State of California requirements. The Contractor shall provide sufficient supervision and perform monitoring to assure conformance with State requirements. Under no circumstances shall the Contractor utilize methods of removal that result in the release of asbestos fibers into the air.

### 1-10.6 REMOVAL

- A. The Contractor shall, whenever possible, accomplish the removal of ACP by removing intact pipe sections.
- B. Snap cutting tools shall be used for the removal of ACP whenever the removal of intact pipe sections is not possible. The pipe shall be wetted prior to the snapping operation being performed. Use of a hammer and chisel to gradually split an ACP coupling lengthwise may only be performed if the "Asbestos Cement Pipe Removal

and Disposal Plan” developed by the Contractor incorporates measures to prevent the release of asbestos fibers into the air and is approved by the City. Power “Cut-Off” saws, hand-saws, and other devices and methods that result in the release of asbestos fibers into the air shall not be used for the removal of ACP.

- C. The Contractor shall continuously wet the ACP around the snap cutting tool during the removal operation. All personnel handling the ACP shall wear properly fitted respirators during the removal and bagging operation and shall be trained in the use of the respirator equipment. All pedestrian traffic shall be rerouted to maintain 30 feet clear of the ACP work area.
- D. All removed sections or pieces of ACP shall be bagged and prepared for disposal immediately after removal as described below. If during the removal of ACP broken edges occur, the broken edges shall be encapsulated with Certane 1000 Post Removal Encapsulant, prior to bagging, in accordance with the manufacturer’s recommendations.

#### 1-10.7 DISPOSAL

- A. The Contractor shall transport and dispose of all sections and pieces of ACP in accordance with State requirements at a legally operating landfill that accepts ACP. All sections or pieces of ACP shall be wetted and double wrapped or bagged with polyethylene wrap immediately after removal. The minimum thickness of polyethylene wrap shall be 6 mils. The outer wrap shall be securely held in place with tape in a manner to prevent the release of airborne asbestos fibers.
- B. The Contractor shall submit documentation certifying that all ACP was transported to, accepted, and properly disposed of, at a legal disposal facility.

**PAYMENT** – Payment for handling, removal and disposal of ACP shall be included in Bid Item 2 Demolition/Clearing/Off-haul. Payment shall include full compensation for providing all labor, materials, tools, equipment, and appurtenances for demolishing and properly disposing of all ACP in accordance with the Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END SECTION

## **SECTION 1-11. EARTHWORK**

### 1-11.1 SCOPE

Section Includes:

- A. Pumping and draining of excavations
- B. Backfilling and bedding for pipe trenches
- C. Site Preparation
- D. Filter Fabric and Geotextiles
- E. Structural Fill
- F. Excavation Support and Protection
- G. Trenching
- H. Dewatering

Related Technical Specifications Sections:

- A. Section 1-02 - Submittals
- B. Section 1-08 – Project Record Drawings
- C. Section 1-12 – Concrete Structures
- D. Section 1-13 – Sanitary Sewer Piping
- E. Section 1-14 – Reinforced Concrete Pipe

### 1-11.2 REFERENCES

- B. Associated General Contractors (AGC):
  - 1. Manual of Accident Prevention in Construction
- C. American Society for Testing and Materials (ASTM):
  - 1. C 131 - Test Method for Resistance to Degradation of Small-Size Course Aggregate by Abrasion and Impact in the Los Angeles Machine.
  - 2. C 136 - Test Method for Sieve Analysis of Fine and Course Aggregates.
  - 3. D 422 - Standard Test Method for Particle - Size Analysis of Soils.
  - 4. D 1556 - Test Method for Density and Unit Weight of Soil in Place by the Sand Cone Method.
  - 5. D 1557 - Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m).

6. D 2419 - Test Method for Sand Equivalent Value of Soils and Fine Aggregate.
  7. D 2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
  8. D 3017 - Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
  9. D 4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- D. Division of Industrial Safety (DIS).
- E. Institute of Makers of Explosives (IOMOE).
- F. Occupational Safety and Health Act (OSHA).
- G. State of California Department of Transportation (Caltrans).

### 1-11.3 DEFINITIONS

- A. Excavation: Consists of satisfactory loosening, removing, loading, transporting, depositing, and compacting in final location, wet and dry materials, necessary to be removed for purposes of construction, or as required for ditches, grading, roads, and such other purposes as are indicated on the Drawings.
- B. Backfill Adjacent to Structure: Is backfill around the exterior surfaces of a structure from the bottom of the excavation to finish grade.
- C. In-Place Density of Compacted Backfill: Is density determined in accordance with ASTM D 1556, or with ASTM D 2922 and ASTM D 3017.
- D. Maximum Density: Is maximum density obtained in laboratory when tested in accordance with ASTM D 1557.
- E. Definitions Related to Compaction of Coarse Fill:
1. One Pass: Defined as one movement of roller over area being compacted.
  2. Measurement Of Pass Width: Measure width of pass between centers of outside tires or outside edge of roller wheel.
- F. Optimum Moisture Content: Is the optimum content at the maximum density when tested in accordance with ASTM D 1557.

### 1-11.4 SYSTEM DESCRIPTION

- A. Performance Requirements:
1. General:
    - a. Obtain acceptable material from other sources if surplus or borrow materials obtained within project site do not conform to specified

requirements or are not sufficient in quantity for structural backfill.

- b. No extra compensation will be made for hauling of fill materials nor for water required to compact fills.

2. Subgrade Preparation:

- a. Where mud or other soft or unstable material is encountered, remove such material to a minimum of 12 inches. The bottom of the over-excavation should then be completely covered with geotextile and backfilled with Class 2 aggregate base. The stabilization fabric should be wrapped around the backfill up to the bottom of the excavation.

3. Structural Backfill:

a. Material for Backfill:

- Use Class 2 Aggregate Base material to backfill below-grade retaining walls and concrete structures.
- Backfill material under other concrete structures, under pavement, or where heavy compaction equipment, such as a pneumatic tired roller, cannot be used satisfactorily shall consist of aggregate base course, except areas indicated on the Drawings as control density fill, lightweight aggregate or concrete encasement.
- Backfill in any area under concrete structures, shall extend from undisturbed native soil or rock to the bottom surface of the structure.

4. Embankments and Roadway Fills:

- a. Material for Fills: Unless otherwise specified or indicated on the Drawings, material shall be Caltrans Class 2 aggregate base within roadways and may be surplus material from excavation for structures or other construction for embankments or, if accepted by the CITY, borrow material excavated from source within Project site may be used for embankments.
- b. Whatever source is used, provide fill material conforming with specified requirements.
- c. Obtain acceptable material from other sources if surplus or borrow materials obtained within Project site do not conform to specified requirements or are not sufficient in quantity for construction of embankments.

5. Compacted Fills:

- a. Provide specified compaction for backfill, fill, and other earthwork.
- b. Perform confirmation tests to verify and confirm that work has



complied, and is complying at all times, with requirements specified in this Section concerning initial compaction demonstration, and field quality control testing.

6. Borrow Area:
  - a. Where borrow material is required, provide such material from source selected by the Contractor, subject to acceptance by the Engineer, but not necessarily from within project site.
  - b. Use of imported borrow shall not cause additional cost to the Contract.

B. Environmental Requirements:

1. Keep excavations reasonably free from water.
2. Provide standby power to ensure continuous dewatering in case of power failure.

#### 1-11.5 SUBMITTALS

- A. General: Submit in accordance with Technical Specification 1-02
- B. Property Owner's Permission Agreements: Submit copy of property owner's agreements to allow placement of surplus material on their property.
- C. Product Data: Submit material source, gradation, and testing data for all materials, including imported and on-site materials.
- D. Excavation Plan: Submit proposed excavation plan.
- E. Test Reports: Submit certified test reports of all tests specified to be performed by the Contractor. Test reports shall be signed and sealed by a registered geotechnical engineer in the state of California.
- F. Dewatering Plan: Proposed dewatering plan including arrangement, location, and depths of system components, type, and sizes of filters, and required permits.

#### 1-11.6 QUALITY ASSURANCE

- A. Initial Compaction Demonstration:
  1. Adequacy of Compaction Equipment and Procedures: Demonstrate adequacy of compaction equipment and procedures before exceeding any of following amounts of earthwork quantities:
    - a. 200 linear feet of trench backfill.
    - b. 50 cubic yards of structural backfill.
    - c. 100 cubic yards of embankment work.
    - d. 50 cubic yards of base material.

2. Compaction Sequence Requirements: Until specified degree of compaction on previously specified amounts of earthwork is achieved, do not perform additional earthwork of the same kind.
  3. After satisfactory conclusion of initial compaction demonstration and at any time during construction, provide confirmation tests as specified under "FIELD QUALITY CONTROL."
- B. Regulatory Requirements: Assume responsibility for obtaining water discharge permits for any dewatering activities.
- C. Dispose of water from dewatering in such manner as not to be a menace to public health.

#### 1-11.7 SEQUENCING AND SCHEDULING

- A. Schedule earthwork operations to meet requirements as provided in this Section for excavation and uses of excavated material.
- B. If necessary, stockpile excavated material in order to use it in specified locations in accordance with Section 13 Special Provisions
- C. Excavation and Filling: Perform excavation and filling, during construction, in manner and sequence that provides drainage at all times.

#### 1-11.8 MATERIALS

- A. Water for Compacting Fills: Use water from source acceptable to Engineer.
- B. Fill Materials:
1. General:
    - a. Provide aggregate base course, select material, bedding, engineered fill and native material, where required for fill and backfill.
    - b. Obtain material for fills from cut sections or from borrow sources.
    - c. Provide non-corrosive material having maximum particle size not exceeding 1 inch and that is free of trash, lumber, debris, leaves, grass, roots, stumps, and other vegetable matter.
    - d. Fill materials provided shall be free of environmental contaminants.
    - e. Materials derived from processing demolished or removed asphalt concrete are not acceptable.
  2. Crushed Rock: Crushed rock used for mat foundation underlayment and where necessary to stabilize excavation bottoms shall be a clean, durable uniformly graded rock between ½ inch and 1½ inch size.
  3. Aggregate Base Course: As specified in Technical Specifications, Section 1-15

- 4. Native Material:
  - a. Sound, earthen material passing 1 inch sieve.
  - b. Percent of material by weight passing Number 200 sieve shall not exceed 30 when tested in accordance with ASTM C 136.
  - c. Expansion index less than 35.
  - d. The use of Bay Mud as a fill material is unacceptable.

5. Pipe Bedding Material:

- a. Class 2 Aggregate base

6. Engineered Fill:

- a. Engineered fill shall meet the following requirements:

Sieve Size	Percent by Weight Passing Sieve
1 inch	100
3/4 inch	80-100
No. 4	20-100
No. 40	10-80
No. 200	10-60

- Plasticity Index (PI) ≤ 12 in accordance with ASTM D4318.
  - Liquid Limit (LL) ≤ 40 in accordance with ASTM D4318.
  - Expansion Index (UBC 18-2): Less than 50.
  - Minimum pH range > 6.
  - Saturated resistivity > 2,500 ohm-cm.
  - Total water soluble chloride concentration < 300 mg/kg.
  - Total water soluble sulfate concentration < 1,000 mg/kg.
- b. All engineered fill shall have a soil moisture content of 2 percent over optimum moisture content as determined by ASTM Test Method D1557.
  - c. Embankment slopes shall be overbuilt and then trimmed back to expose compacted engineered fill. Compaction by track walking of slopes shall not be allowed.

- d. A sample of all proposed imported fill from alternative borrow sources shall be submitted for compliance testing at least four weeks prior to the proposed date of import. Consideration will also be given to the environmental characteristics of imported soils as specified herein.

C. Geotextile:

Geotextile for stabilization of subgrade beneath diversion and treatment device structures - One of the Following or Equal:

1. Mirafi, 600X Geofabric
2. Amoco, Style 2006

1-11.9 EXAMINATION

A. Verification of Conditions:

1. Character and Quantity of Material:

- a. Verify character and quantity of rock, gravel, sand, silt, water, and other inorganic or organic materials to be encountered in work to be performed.
- b. Determine gradation and shrinkage of excavation and fill material, and suitability of material for use intended in work to be performed.
- c. Determine quantity of material, and cost thereof, required for construction of excavations and fills, whether from on-site excavations, borrow areas, or imported materials. Include in cost of work to be performed.
- d. Include wasting of excess material, if required, in cost of work to be performed.
- e. All excavated soils will need to be segregated, cleaned, and/or screened prior to re-use as embankment fill (engineered fill). Fills used for embankments shall be composed of clean soils free of oversize material, construction debris, organics and contamination and shall meet the specified gradation and quality requirements for engineered fill.

B. Owner's Geotechnical Engineer shall approve of all sources of fill at least three days before their use at the site.

1. Contractor shall furnish analytical test results and environmental documentation indicating imported fill is free of hazardous materials at least three working days before placement at the site.
2. If this data is unavailable, allow two weeks for Geotechnical Engineer to perform analytical testing on proposed import material.

1-11.10 PREPARATION

A. Clearing:

1. Clear areas where construction is to be performed and other areas as indicated on the Drawings or specified in this Section of pavement, fences, lumber, walls, stumps, brush, roots, weeds, trees, shrubs, rubbish, and other objectionable material of any kind which, if left in place, would interfere with proper performance or completion of the work, would impair its subsequent use, or form obstructions therein.
2. Do not incorporate organic material from clearing and grubbing operations in fills and backfills.
3. Contractor's Construction Facilities: Fill or remove pits, fill, and other earthwork required for erection of facilities, upon completion of the work, and level to meet existing contours of adjacent ground.

B. Grubbing:

1. From Excavated Areas: Grub stumps, roots, and other obstructions 1 inch or over in diameter to depth of not less than 36 inches below finish grade.
2. Backfill and compact cavities left below subgrade elevation by removal of stumps or roots to density of adjacent undisturbed soil.

C. Stripping:

1. Remove soil material containing sod, grass, or other vegetation to depth of 6 inches from areas to receive fill or pavement and from area within 5 feet outside foundation walls.
2. Deposit stripped material in accordance with following requirements:
  - a. At locations designated as temporary spoils area.
  - b. Reuse accepted material in top 6 inches of areas to be used for future planting.

- D. Install a dewatering system to lower and control all sources of water in order to permit the execution of work to be performed under dry conditions as specified herein.

1-11.11 OPERATION

- A. Prior to any excavation or any other work below the ground water table, place system into operation to lower water table as required and operate it continuously 24 hours a day, 7 days a week until utilities and structures have been satisfactorily constructed, which includes the placement of backfill materials and dewatering is no longer required.

- B. Place an adequate weight of backfill materials to prevent buoyancy prior to discontinuing operation of the system.

1-11.12 WATER DISPOSAL

- A. Dispose of water removed from channels, excavation or other structures in such a manner as:
1. Will not endanger portions of work under construction or completed.
  2. Will cause no inconvenience to Operations or others working near site.
  3. Will comply with the stipulations of required permits for disposal of water.
  4. Will comply with City of Pinole Regulations, SWPPP, and other applicable discharge limitations.
  5. Will Control Runoff: The Contractor shall be responsible for control of runoff in all work areas including but not limited to excavations, access roads, parking areas, lay down, and staging areas. The Contractor shall provide, operate, and maintain all ditches, basins, sumps, culverts, site grading, and pumping facilities to divert, collect, and remove all water from the work areas. All water shall be removed from the immediate work areas and shall be disposed of in accordance with applicable permits.
- B. Excavation Dewatering:
1. The Contractor shall be responsible for providing all facilities required to divert, collect, control, and remove water from all construction work areas and excavations.
  2. Drainage features shall have sufficient capacity to avoid flooding work areas.
  3. Drainage features shall be so arranged altered as required to avoid degradation of the final excavated surface(s).
  4. The Contractor shall utilize all necessary erosion and sediment control measures as described herein to avoid construction related degradation of the natural water quality.

1-11.13 CORRECTIVE ACTION

- A. If dewatering requirements are not satisfied due to inadequacy or failure of the dewatering system (loosening of the foundation strata, or instability of slopes, or damage to foundations or structures), perform work necessary for reinstatement of foundation soil and damaged structure resulting from such inadequacy or failure by Contractor at no additional cost to the City.

1-11.14 DAMAGES

- A. Immediately repair damages to adjacent facilities caused by dewatering operations.

1-11.15 REMOVAL

- A. Ensure compliance with all conditions of regulating permits and provide such information to the Engineer. Obtain written approval from the Engineer before discontinuing operation for dewatering system.

1-11.16 PRESERVATION OF PROPERTY

- A. The project area shall be cleared and grubbed **only** to the extent necessary to accommodate the work in conformance with the notes and details shown on the plans. Trees or growth shall not be trimmed back unnecessarily.
- B. Contractor shall take extreme care not to damage shrubs, trees, fences, irrigation systems and other improvements of adjacent property owners.
- C. All existing improvements not specifically designated on the plans to be removed or relocated shall remain in their original condition and location undisturbed. However, upon written permission by the Engineer, existing improvements may, for the convenience of the Contractor, and at his expense, be removed and temporarily relocated during construction and shall be replaced in their original location in as good or better condition as when the Contractor entered upon the work site
- D. Surface Preparation:
  - 1. Preparing Ground Surfaces for Fill or Concrete:
    - a. After clearing, grubbing and stripping is completed, scarify entire areas which underlie fill sections or structures to a depth of 6 inches and until surface is free of ruts, hummocks, and other features which would prevent uniform compaction by equipment to be used.
    - b. Moisture condition and recompact areas to density specified in "Compacted Fills" before placing of fill material or concrete.
    - c. Where cemented rock, cobbles, or boulders compose a large portion of foundation material underlying structures, slabs, or paved areas, it may not be advisable to scarify the top 6 inches prior to compaction.
      - If the Engineer deems it advisable not to scarify existing natural ground, then moisten the native soil and compact it as specified in "Compaction of Coarse Fill."
    - d. Where subgrade stabilization is required, scarification and compaction of native soils is not practical. In these instances stabilize the subgrade by placing geotextile and crushed rock as shown on the plans and/or specified herein.
    - e. Finished compacted subgrade shall be firm and non-yielding under the weight of compaction equipment. If the relative compaction of the subgrade is less than specified, or the surface of the subgrade exhibits significant yielding, over-excavate the area and rebuild or

rework the area until the subgrade compaction conforms to this specification.

2. Preparing Sloped Surfaces for Fill or Foundations:
  - a. Foundations for Fill Having Slopes in Excess of One Vertical to Four Horizontal:
    - Bench or terrace to adequately key existing ground and fill built thereon.
  - b. Slopes of Original Hillside and Old Fills: Bench minimum of 4 feet horizontally as fill is placed.
  - c. Provision of New Benches:
    - Start new bench wherever vertical cut of next lower bench intersects existing ground.
    - Recompact material thus cut out along with new embankment material at no additional cost to the Contract.
3. Preparing for Structural Backfill:
  - a. After completion of foundation footings and walls and other construction below the elevation of the final grades and prior to backfilling, all forms shall be removed and excavation shall be cleaned of all trash and debris.
  - b. After inspection of foundation, walls, and pipes, backfill shall be placed symmetrically to prevent eccentric loading upon or against structures.
  - c. To prevent damage to structures, structural backfill shall be placed with equipment which does not exceed H-20 loading, within a distance of  $1/2$  to  $1/3$  h (h being the vertical distance from the level being compacted down to the surface on the opposite side of the wall). Outside this distance, normal compaction equipment may be used.
  - d. All backfill shall be compacted per Compaction of this specification.

#### 1-11.17 APPLICATION

##### A. General:

1. Dispose of excavated materials which are not required or unsuitable for fill and backfill in lawful manner.
2. Dispose of surplus material on private property only when written permission agreement is furnished by owner of property. Submit copies of such agreements.



3. Obtain material required for fills in excess of that produced by excavation from borrow areas subject to the fill material requirements specified herein.
4. Rocks, broken concrete, or other solid materials larger than 4 inches in greatest dimension shall not be placed in fill areas, but removed from project site at no additional cost to the Owner.
5. Stabilization of Subgrade: Provide materials used or perform work to stabilize subgrade so it can withstand loads which may be placed upon it by Contractor's equipment.
6. The upper 24 inches of the subgrade in pavement areas shall be compacted to 95 percent relative compaction.
7. No material larger than 1 inch shall be placed in the first two feet below subgrade.

B. Excavation:

1. Excavations for Buildings and Structures:
  - a. All excavations shall comply with Section 1-01 Earthwork
  - b. Dimensions and Elevations of Excavations: Provide excavations conforming to dimensions and elevations indicated on the Drawings for each building and structure, including trenching for adjacent piping and all work incidental thereto.
  - c. Soil of Unsuitable Bearing Value: Where soil is encountered having unsuitable bearing value, Engineer may direct in writing that excavation be carried to elevations above or below those indicated on the Drawings.
  - d. Unless directed by the Engineer, excavations shall not be carried below elevations indicated on the Drawings.
  - e. Where excavations are made below elevations indicated on the Drawings, adjust elevations of excavations in accordance with requirements following:
    - Under Slabs: Restore to proper elevation in accordance with procedure specified for backfill in this Section.
    - Under Footings: Restore to proper elevation in accordance with procedure specified for backfill in this Section.
  - f. Excavation Width: Extend excavations at least 24 inches clear from walls and footings to allow for placing and removal of forms, installation of services, and inspection. Undercutting of slopes will not be permitted.
  - g. Bottom of Excavations for Structures: Consist of native material with top 6 inches compacted to 95 percent of maximum density and graded to conform to outside limits of structures as indicated on the

Drawings, except where otherwise indicated on the Drawings or specified.

- h. Difficulty of Excavation: No extra compensation will be made for removal of rock or any other material due to difficulty of excavation.
- i. Location of Structures on Different Substrates: Where structure will be located partially on fill and partially on undisturbed or natural material, over-excavate entire area to depth of 6 inches below elevations indicated on the Drawings and recompact to 95 percent maximum density.

2. Necessary Over Excavation:

a. General:

- Where it becomes necessary to excavate beyond normal lines of excavation in order to remove boulders or other interfering objects, backfill voids remaining after removal as specified in Backfilling of Voids, or as acceptable to the Engineer.
- Perform necessary excavation beyond normal lines as specified above and backfill such voids.

b. Backfilling of Voids:

- Fill voids with suitable material acceptable to the Engineer, placed in manner and to same uniform density as surrounding material.
- With acceptance of the Engineer, concrete of same mix as used in concrete channel may be used.

C. Compaction:

1. Compacted Fills:

a. Lines and Grades:

- Construct fills, embankments, and backfills, designated herein as fills, at locations and to lines and grades indicated on the Drawings.

2. Where required, Contractor shall provide necessary imported fill material from outside sources.

a. Compacted Fill Shape and Sections: Provide completed fill that corresponds to shape of typical sections indicated on the Drawings or that meets requirements for particular case.

b. Preparation of Areas Designated to Receive Fill Material: Scarify to minimum depth of 6 inches, unless otherwise indicated on the

Drawings, and recompact to density of fill material as specified in following Article.

c. Fills and Backfills and Upper 6 Inches in Cuts: Compact to percentage of maximum density as follows and as determined by ASTM D1557:

- Backfill adjacent to structures: 95 percent.
- Under present and future structures: 95 percent.
- Under roadways and parking areas subject to traffic loading: 95 percent to three feet under subgrade.
- Under paved areas not subject to traffic loading, curbs, and sidewalks: 90 percent.
- Other areas: 85 percent.
- Compacted embankments: 90 percent.
- Demolition areas: 95 percent.

d. Placing Compacted Fills:

- Placement: Place loose material in successive layers that do not exceed 8 inches in thickness after compaction.
- Moisture Content: Bring each layer to specified moisture content for maximum density before compaction by rolling.
- Each successive lift shall be firm and non-yielding under the weight of construction equipment.
- Defective Compacted Fills: Remove and recompact.

3. Compaction of Embankments and Roadway Fills:

a. Construction and Compaction of Fills:

- Construct in layers of thickness specified above.
- Compact by rolling with power rollers, tamping rollers, vibrating rollers or pneumatic tire rollers.
- Moisture Content:
  - Where the moisture content of fill is too low to permit the specified degree of compaction, water shall be added before or during spreading, at the Contractor's expense, until the moisture content is satisfactory to achieve the required compaction requirements.

- Where the moisture content of fill is too high to permit the specified degree of compaction, the material shall be dried, at the Contractor's expense, until the moisture content is satisfactory to achieve the required compaction requirements.
- The final soil moisture content after wetting or drying shall be no less than 2 percent over optimum moisture content as determined by ASTM D 1557.

1-11.18 FIELD QUALITY CONTROL

A. Tests:

1. Confirmation Tests:

- a. Contractor shall accomplish specified compaction for backfill, fill, and other earthwork.
- b. Contractor may, at his option, arrange for conformation testing through his own forces or a testing laboratory.
- c. Confirmation testing is only for the Contractor's benefit and shall not substitute for Compliance Tests as specified herein.
- d. Control operations in response to confirmation tests and Owner Compliance Testing to verify that compaction work complies, and is complying at all times, with requirements specified in this Section concerning compaction, control, and testing.
- e. Cost of Confirmation Tests: Paid for by the Contractor.
- f. Confirmation Test submittals are not required.

2. Compliance Tests:

- a. Compliance tests will be made by the Engineer to verify that compaction is meeting requirements specified herein.
- b. Owner's retained Testing Laboratory will perform confirmation testing as acceptable to the Engineer.
- c. Contractor shall coordinate with Engineer regarding the frequency of Compliance Testing and testing results.
  - Compliance Testing will be performed not less than as follows:
    - For embankment and structure backfill, no less than 1 test for every 2 feet of vertical fill thickness and no less than 1 test for every 200 cubic yards of fill placed for embankment fill and 100 cubic yards of fill placed for structure backfill.

- For base material, no less than 1 test for every 100 cubic yards of base placed.
    - Copies of Compliance Test Reports will be submitted promptly to the Engineer for disbursement to Contractor.
  - d. Coordination with Engineer Testing: Remove overburden above level at which the Engineer wishes to test and backfill and recompact excavation after testing is completed.
  - e. If compaction fails to meet specified requirements, perform remedial work by one of the following methods:
    - Remove and replace backfill at proper density.
    - Bring density up to specified level by other means acceptable to the Engineer.
  - f. Retesting:
    - Costs of Retesting: Costs of retesting required to confirm and verify that remedial work has brought compaction within specified requirements shall be borne by the Contractor.
    - Owner's Compliance Tests During Performance of Remedial Work will be performed as follows:
      - Tests will be performed in a manner acceptable to the Engineer.
      - Frequency: Double amount specified for initial confirmation tests.
- B. Tolerances:
1. Finish Grading of Excavations, Backfill and Fills:
    - a. Perform fine grading under concrete structures such that finished surfaces are never above established grade or approved cross section and are never more than 0.10 feet below.
    - b. Provide finish surface areas outside of structures that are not more than 0.10 feet above or below established grade or accepted cross section.
  2. Of Areas Which Are Not under Structures, Concrete, Asphalt, Roads, Pavements, Walks, Dikes and Similar Type Items:
    - a. Provide finish graded surfaces of either undisturbed natural soil, or cohesive material not less than 6 inches deep.
    - b. Intent of preceding is to avoid sandy or gravelly areas.
  3. Finished Grading Surfaces:

- a. Reasonably smooth, compacted, and free from irregular surface changes.
- b. Provide degree of finish that is ordinarily obtainable from blade grader operations, except as otherwise specified.
- c. Uniformly grade areas which are not under concrete.
- d. Finish gutters and ditches so that they drain readily.

1-11.19 WET WEATHER AND WET SOIL CONDITIONS

- A. To the maximum extent possible within schedule constraints, major excavation should take place during periods of suitable weather conditions.
- B. When the moisture content of fill materials is significantly above optimum:
  1. Scarify and air dry until fill materials have a suitable moisture content for compaction; or
  2. Over-excavate the fill and replace with suitable on-site or import materials with an appropriate moisture content; or
  3. Install a geotextile or geogrid to reinforce soft fill; and/or
  4. Chemically treat with lime, kiln-dust, or cement to reduce the moisture content and increase the strength of the fill.

1-11.20 ADJUSTING

- A. Finish Grades of Excavations, Backfilling and Fill:
  1. Repair and reestablish grades to required elevations and slopes due to any settlement or washing way that may occur from action of the elements or any other cause prior to final acceptance.

1-11.21 PROTECTION

- A. Finish Grades of Excavations, Backfilling and Fill:
  1. Protect newly graded areas from action of the elements.
- B. Ditches and Gutters:
  1. Maintain ditches and gutters excavated free from detrimental quantities of debris that might inhibit drainage until final acceptance.

**PAYMENT** – All items included in this section shall be included in the various bid items and shall include full compensation for providing all labor, materials, tools, equipment and incidentals and for doing all the work involved in this section, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

## **SECTION 1-12. CONCRETE STRUCTURES**

### 1-12.1 SCOPE

- A. Provide all labor, materials, equipment, facilities, transportation, and services necessary for the installation of concrete structures as shown on the Drawings and specified herein.
- B. Work Included: The work includes, but is not necessarily limited to the following:
  - 1. Storm drain inlets.
  - 2. Storm drain manholes.
- C. Related Technical Specifications Sections:
  - 1. Section 1-02 - Submittals.
  - 2. Section 1-08 – Project Record Drawings.
  - 3. Section 1-11 - Earthwork.

### 1-12.2 QUALITY ASSURANCE

- A. Comply with California Building Code, latest edition.
- B. Comply with American Concrete Institute (ACI), Building Code Requirements for Reinforced Concrete.
- C. Comply with Caltrans Standard Specifications, latest edition.

### 1-12.3 REFERENCE STANDARDS

- A. Standards listed herein are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of listed standards, the requirements of this section shall prevail. Where two or more standards are at variance the most restrictive requirement shall apply.
- B. American Concrete Institute (ACI):
  - 1. 318 - Building Code Requirements for Structural Concrete
  - 2. Manual of Concrete Practice.
  - 3. Recommended Practices.
- C. American Society for Testing and Materials (ASTM):
  - 1. C 33 - Specification for Concrete Aggregates
  - 2. C 94 - Specification for Ready-Mixed Concrete
  - 3. C 150 - Specification for Portland Cement

4. C478 - Precast Reinforced Concrete Manhole Sections
5. C858 - Underground Precast Concrete Utility Structures
6. C913 - Precast Concrete Water/Wastewater Structures

#### 1-12.4 SUBMITTALS

- A. Submittals shall be prepared for all concrete inlets, manholes, and accessories and submitted to the Engineer in accordance with the requirements of the Section 1-02, entitled "Submittals" of these Specifications. Information shall include layout drawings, wall thickness calculations, reinforcement sizing and location, and verification that manholes are suitable for H20 traffic load.

#### 1-12.5 PRECAST CONCRETE STRUCTURES

- A. Where shown on the plans, the Contractor may use reinforced concrete structures that are cast at an off-site location. In general these structures include the catch basins and manholes. Precast concrete structures shall conform to ASTM C478, C858 and C913.
- B. All precast concrete structures shall be manufactured in a plant especially designed for that purpose. Standard products may be used wherever feasible as long as they conform to these plans and specifications.
- C. Precast structures shall be capable of withstanding the loading conditions shown on the Drawings and described in the referenced geotechnical reports.

#### 1-12.6 MATERIALS

- A. Portland cement concrete shall conform to Section 90 "Concrete", of the California Department of Transportation's Standard Specifications, although concrete compressive strength and reinforcement yield strength may be at the discretion of the manufacturer. Lightweight concrete shall not be used. Reference additional requirements listed on the manhole and inlet details included on the plans.

#### 1-12.7 JOINT SEALERS

- A. All joints between precast concrete sections shall be made water-tight by using a preformed plastic material that is permanently self-adhering and flexible. Compound shall be "Ram-Nek" as manufactured by K.T. Snyder Company, Houston, Texas or approved equal. ("Ram-Nek" is distributed locally by Hanson Concrete Products of Milpitas.) Follow manufacturer's recommended installation procedures.
- B. Where cast-in-place concrete is poured against an existing concrete structure, a pre-formed rubber hydrophilic water stop with adhesive back shall be installed on the precast side of the joint prior to the pour. Water stop shall be Adeka Ultra Seal MC-2010M (Gates Unlimited, Santa Clara) or equivalent. Follow manufacturer's recommended installation procedures.



#### 1-12.8 NON-SHRINK GROUT

- A. Grout used to seal pipe penetrations and support base plates shall be nonmetallic, non-corrosive, non-staining grouting compound containing silica sands, Portland cement, shrinkage compensating agents and water reducing agents. Acceptable Products include Five Star Grout, Masterflow, and Upcon Nonshrink.

#### 1-12.9 2.5 COATINGS

- A. Exterior surfaces of buried precast concrete structures shall be coated in conformance with Section 07 16 16 of these Specifications, after the precast structure is placed to final grade, but before structural backfill.

#### 1-12.10 CASTING

- A. No concrete shall be cast until all submittals have been favorably reviewed by the Engineer and returned to the Contractor.
- B. Precast concrete structures shall be cured at the plant following manufacturer's procedures. Structures shall not be shipped to the site until fully cured.

#### 1-12.11 STORAGE, HANDLING AND DELIVERY

- A. Precast structures shall be fully braced (with temporary struts if necessary) until the structures have been delivered to the project site, installed, leveled and anchored into place as shown on the plans.
- B. After cure, structures may be stored on the project site at the Contractor's own risk. Contractor is responsible for coordinating the delivery of precast concrete structures, and all trades required for their installation and anchorage.

#### 1-12.12 INSTALLATION

- A. Precast concrete structures shall be installed as shown on the plans, according to manufacturer's recommendations.
- B. Joint sealers shall be used as specified herein for a water-tight installation.

#### 1-12.13 DEFECTIVE CONCRETE AND REPAIRS

- A. Concrete shall be considered defective for the following reasons:
  - 2. Failure of finished concrete profiles to conform to the plans within tolerance.
  - 3. Failure to meet the specified cylinder strength requirements.
  - 4. Concrete showing cracks, rock pockets, voids, spalls, or defects that adversely affect the structural adequacy of the concrete.
- B. Defective concrete that results from improper casting or curing shall be repaired or replaced at the plant prior to shipment; damaged concrete that results from transportation, handling, or storage after the piece leaves the plant shall be repaired or replaced at no expense to the City.

- C. Repairing and Patching: Immediately after removing forms, all concrete surfaces shall be inspected and any pour joints, voids, rock pockets, tie holes, except as specified, etc., shall be patched at once. Defective areas shall be chipped away to a depth of about one inch with the edges perpendicular to the surface.

**PAYMENT** – Concrete structures shall be paid for under the Lump Sum Bid Item #8 Storm Drain Structures. The contract unit price shall include full compensation for providing all labor, materials, tools, equipment, and appurtenances for procurement, delivery and installation of the Storm Drain junction structures, Installation includes procurement and installation of bedding material and backfilling. All work shall be completed in accordance with the Standard Specifications, the Standard Plans, project Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END OF SECTION

## SECTION 1-13. SANITARY SEWER PIPING

### 1-13.1 DOCUMENTS

The General Conditions and all other Contract Documents for this project are complementary and applicable to this section of the Specifications.

### 1-13.2 SCOPE OF WORK

- A. Work Included: Pipe, fittings, connections, supports, anchors and all other necessary appurtenances as shown, specified, and/or required.

### 1-13.3 REFERENCE STANDARDS

Standards listed below are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of listed standards, the requirements of this section shall prevail.

- A. ANSI B16.1            *Cast Iron Pipe Flanges and Flanged Fittings*
- B. AWWA C104           *Cement-Mortar Lining for Ductile Iron Pipe and Fittings*
- C. AWWA C110           *Ductile Iron and Gray Iron Fittings, 3-inch through 48-inch*
- D. AWWA C111           *Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings*
- E. AWWA C115           *Flanged Ductile Iron Pipe with Ductile Iron or Gray Iron Threaded Flanges*
- F. AWWA C116           *Protective Fusion-bonded Epoxy Coatings for the Interior and Exterior Surfaces of Ductile Iron and Gray Iron Fittings*
- G. AWWA C151           *Ductile Iron Pipe, Centrifugally Cast*
- H. AWWA C207           *Steel Pipe Flanges for Waterworks Service*
- I. AWWA C906           *HDPE Pressure Pipe*

### 1-13.4 QUALITY ASSURANCE

- A. The Contractor shall furnish all labor necessary to assist the Engineer in inspecting pipe upon delivery. The Contractor shall remove rejected pipe immediately.
- B. All pipe of any manufacturer may be rejected if there are unsatisfactory joint assembly operations, even if the pipe conforms to ANSI and AWWA Specifications. The Contractor shall remove all unsatisfactory pipe of that manufacturer of same shipment from work and shall furnish pipe from another manufacturer conforming to these specifications.
- C. All tests shall be made in conformance with methods prescribed by ASTM and AWWA specifications, and acceptance or rejection is based on the test results.

### 1-13.5 SUBMITTALS

- A. Product Data: The Contractor shall submit shop plans, manufacturer's product data and installation instructions demonstrating that the proposed pipe and fittings are in compliance with the referenced standards as well as the intended service. If plans are returned disapproved or not stamped, they shall be revised or corrected as necessary and resubmitted for review, approval, and stamping.
- B. Certification: Certified test reports with each delivery that pipe complies with this specification.

### 1-13.6 PIPE AND TUBE

- A. General: Pipe sizes are nominal inside diameter unless otherwise noted. All sizes shall be as called out on the plans and specified herein. All pipe and fittings delivered to the job site shall be clearly marked to identify the material, class, thickness, and manufacturer. All material shall be new and free of blemishes.

The Contractor is responsible for furnishing and installing all items necessary to make a complete and workable piping system. These include, but are not limited to, valve boxes, manholes, insulating couplings and gaskets, piping specialties and all other items required by the nature of the installation. Any item not specified herein but required by the nature of the installation shall be of the first quality and equal in grade to similar materials specified herein.

- B. HDPE Pipe: All HDPE pipe shall be pressure class DR 11. All material shall be manufactured from a PE 4710 resin listed with the Plastic Pipe Institute (PPI) as TR-4. The resin material shall meet the specifications of ASTM D 3350 with a minimum cell classification of 445474C. HDPE pipe and fittings shall contain no recycled compounds except that generated in the manufacturer's own plant from resin of the same specification from the same raw material. HDPE products shall be homogeneous throughout and free of visible cracks, holes, foreign inclusions, voids, or other injurious defects.
- C. Ductile Iron Pipe: All ductile iron pipe shall be pressure class 350. ANSI/AWWA C115, Class 53 ductile iron pipe with threaded flanges. Straight sections of pipe may have "push-on" type joints with dimensions and gaskets as specified in AWWA C111. Flanges shall be factory assembled. All ductile iron pipe shall be prepared per the National Association of Pipe Fabricators Standard NAPF 500-03 and coated with an exterior protective pipe coating incorporating high solids amine cured epoxy for maximum protection of the exterior of ductile iron pipe. Coating shall be Tnemec Series 141 at a minimum of 16 mils dry film thickness, or US Pipe Ceramawrap at a minimum dry film thickness of 20 mils.
- D. Steel: Schedule 40. All steel pipe shall be coated and lined with bitumastic coating encasement. Bituminous asphalt coating shall meet ANSI-A21.4 and AWWA C104 requirements for potable water.

### 1-13.7 FITTINGS

- A. Ductile Iron Fittings: Fittings for ductile iron pipe shall conform to AWWA C110. All ductile iron fittings shall be fusion bond epoxy lined and coated at the factory in conformance with AWWA C116.

- B. Pattern: All fittings shall be flanged to ANSI B16.1 Class 125 standard pattern.
- C. HDPE Butt Fusion Fittings: Fittings shall be made of HDPE material with a minimum material designation code of PE4710 and with a minimum Cell Classification as noted in 2.01.A. Fittings shall have a minimum pressure rating equal to or greater than the pipe to which they are joined unless otherwise specified on the plans or accepted by owner/engineer. All fittings shall meet the requirements of AWWA C901 or C906.
- D. HDPE Pipe End Stiffeners: HDPE Pipe End Stiffeners shall be used in all locations where pipe fittings or couplings are used to connect to HDPE pipe. Shall be 316 stainless steel and shall be designed specifically for the HDPE pipe size and dimension ratio.

#### 1-13.8 PLASTIC FILM WRAP

All ductile-iron pipe and fittings buried underground shall be protected with plastic film wrap in accordance with AWWA C105, unless noted otherwise below. Wrap shall be a loose 8-mil-thick polyethylene tube. All joints between plastic tubes shall be wrapped with 2-inch-wide polyethylene adhesive tape, Polyken 900, Scotch wrap 50, or approved equal.

#### 1-13.9 PIPE JOINTS

- A. Ductile Iron Discharge pipe shall be joined by flanged, mechanical joints as shown on the Drawings.
- B. HDPE Pipe Electrofusion Couplings – The use of electrofusion couplings shall be approved by the engineer prior to construction. Fittings shall be made of HDPE material with a minimum material designation code of PE 4710. Electrofusion Fittings shall have a manufacturing standard of ASTM F1055 for use with pipe conforming to ASTM D2513/3035. Fittings shall have a minimum pressure rating equal to or greater than the pipe to which they are joined unless otherwise specified on the plans. Shall be tested and supplied in accordance with AWWA C906 specification and supplied with a 24 digit ISO compliant barcode label which facilitates the fusion of electrofusion fitting with other manufacturer's processors.
- B. Flanged Joints: Provide full face gaskets per AWWA C111.
- C. Flanged Coupling Adapters: Flange coupling adapters shall be provided as shown on the Drawings or as deemed necessary by the Contractor for pipe assembly. Couplings shall be EBAA Megaflange Series 2100 for plain end pipe, or approved equal. Adapter material shall be ductile iron coated with fusion bond epoxy in conformance with AWWA C116.
- D. Thrust Restraint Glands: All fittings, joints, and connections shall be restrained against thrust. Thrust restraint glands shall be EBAA Iron MEGALUG Series 1100 or approved equal. Cast gland bodies shall be coated with MEGA-BOND or approved equal. The wedge assemblies and all nuts and bolts shall be coated with Xylan Fluoropolymer coating.
- E. Coupling Adapters: As specified on the Plans.
- F. Gaskets, Bolts and Nuts: Gaskets shall be rated for wastewater service, made of synthetic rubber such as Buna-N not less than one-eighth (1/8) inch thick. All gaskets shall be the full width of the flange to which applied. Bolts and nuts shall be ASTM A316 stainless steel, and shall have sound well-fitting threads. Bolts shall be provided with hexagonal chamfered

heads and nuts. The underside of all bolt heads and nuts shall have true surfaces at right angles to the axis of the bolts. The lengths of the bolts shall be such that after joints are made up, the bolts shall protrude through the nuts, but in no case shall they protrude more than one-half (1/2) inch. Anti-galling compound shall be used in installation.

#### 1-13.10 SUPPORTS, ANCHORS, AND SEALS

- A. Support for the pump discharge piping shall be provided as detailed on the Drawings.
- B. Link-seal shall be used as shown on the Drawings.

#### 1-13.11 MISCELLANEOUS APPURTENANCES

Miscellaneous appurtenances shall be provided as shown on the plans and specified herein. This includes but is not limited to the installation of a new pressure gauge.

#### 1-13.12 PREPARATION

Foreign material, scale and dirt, inside and outside, shall be removed from pipe and fitting materials before assembly.

#### 1-13.13 CONNECTIONS

- A. Pipe connections shall be made in accordance with applicable standards and manufacturer's recommendations.
- B. Non-conducting connections shall be provided wherever jointing dissimilar metals.

#### 1-13.14 INSTALLATION

- A. General: Pipe shall be installed in accordance with good trade practice and AWWA C600. The methods employed in the handling and placing of pipe, fittings, and equipment shall be such as to insure that after installation and testing they are in good condition. Should damage occur to the pipe, fittings, or equipment, repairs satisfactory to the City shall be made at no additional cost to the City.
- B. Handling and Storage of Pipe: During loading, transportation, and unloading, every precaution shall be taken to prevent pipeline damage. Any damaged pipe shall be replaced or repaired to the satisfaction of the City. Where pipe is placed in stockpiles, it shall be neatly piled and blocked with strips between tiers.

#### 1-13.15 TESTING

- A. Reference section 1-15 for pipe testing requirements.

**Payment** – Payment for all items included in this specification section shall be paid for under Bid Item # 9 Sanitary Sewer Force Main. The contract unit price shall include full compensation for providing all labor, materials, tools, equipment, and appurtenances for procurement, delivery, and installation of the new 6-inch (HDPE and Ductile Iron) Sanitary Sewer Force Main pipe and steel casing. This bid item includes procurement and installation of required bedding material and backfilling, installation of piping and appurtenances within existing lift station, pressure gage, thrust block, and all testing requirements. All work shall be completed in accordance with the

Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END OF SECTION

## **SECTION 1-14. REINFORCED CONCRETE PIPE**

### **1-14.1 SCOPE**

- A. This section provides the specifications for elliptical reinforced concrete storm pipe, and includes all labor, acceptable materials, equipment, and construction practices which are to be used in the installation of concrete storm pipe.
- B. Relate Work Specified Elsewhere:
  - 1. Section 1-11 - Earthwork

### **1-14.2 QUALITY ASSURANCE**

- A. The CONTRACTOR furnish elliptical reinforced concrete pipe in accordance with the standards referenced herein.
- B. Each reinforced concrete pipe length shall be clearly marked with the pressure rating, thickness class, dimensions, net weight, and name of the manufacturer.

### **1-14.3 REFERENCES**

- A. American Association of State Highway and Transportation Officials (AASHTO):
  - 1. AASHTO M170 – Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe.
  - 2. AASHTO M242 – Reinforced Concrete Culvert, Storm Drain, and Sewer Pipes.
- B. American Society for Testing and Materials (ASTM):
  - 1. ASTM C33 – Standard Specification for Concrete Aggregates
  - 2. ASTM C76 – Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
  - 3. ASTM C150 – Standard Specification for Portland Cement
  - 4. ASTM C361 – Standard Specification for Reinforced Low-Head Pressure Pipe
  - 5. ASTM C443 – Standard Specification for Circular Concrete sewer and Culvert Pipe, Using Rubber Gaskets.
  - 6. ASTM C506 – Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain and Sewer Pipe
  - 7. ASTM C507 – Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer Pipe
  - 8. ASTM C655 – Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain and Sewer Pipe
  - 9. ASTM C877 - Specifications for External Sealing Bands for Noncircular Concrete Sewer, Storm Drain and Culvert Pipe
  - 10. ASTM C990 - Specification for Joints for Concrete Pipe, Manholes and Precast Box Sections using Preformed Flexible Joint Sealants
  - 11. ASTM C1433 – Specifications for Precast Reinforced Concrete Box Sections for Culverts, Storm Drains and Sewers.



12. ASTM E329 – Standard Practice for Use in the Evaluation of Testing and Inspection Agencies as Used in Construction.
  13. ASTM C1577 – Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains and Sewers Designed according to ASSHTO LRFD.
  14. ASTM C1677 – Standard Specification for Joints for Concrete Box, using Rubber Gaskets.
- C. Where reference is made to one of the above standards, the latest revision shall apply.

#### 1-14.4 SUBMITTALS:

- A. Submit to the Engineer, in accordance with Section 1-02 Submittals, information for the elliptical reinforced concrete pipe, including demonstration of compliance with the standard referenced herein and verification of the size shown on the Drawings.
- B. The manufacturer's recommendations for storage, handling, and installation of the pipe.

#### 1-14.5 PRODUCT DELIVERY, STORAGE AND HANDLING

##### A. Handling

1. Deliver and handle pipe in a manner which will prevent damage to the pipe.
2. Do not drop pipe or fittings.
3. Care must be taken to prevent damage to the pipe and fittings from bending, compression or abrasion.
4. Do not install damaged pipe or fittings.

##### B. Storage

1. Do not store or handle lubricant in a manner which will cause contamination to the lubricant.
2. Store rubber gaskets in a location which protects them from deterioration or damage.
3. Store pipe in accordance with the manufacturer's specifications.
4. Store pipe on a surface which provides even support for the pipe barrel.
  - a. Do not store pipe in such a way that it will be supported by the bell.

#### 1-14.6 REINFORCED CONCRETE PIPE (RCP)

- A. 29" X 45" elliptical gravity storm drainage pipe, as shown on Drawings. This pipe shall have elliptical cross section.
- B. All elliptical pipe shall conform to ASTM C507 and be minimum Class HE-III or HE-IV.

C. 36" reinforced concrete pipe

1-14.7 JOINTS

- A. All joints shall be tongue and groove with a double layer of flexible joint seal compound standard with the pipe manufacturer and as accepted by the Inspector.
1. As water tight gasket technology evolves to a point where two (2) or more manufacturers offer a water tight gasket manufactured in accordance with ASTM C443, all arch and elliptical pipe shall contain a water tight gasket and the double layer of flexible joint seal compound shall no longer be allowed.
  2. Use the pipe manufacturer specified lubricant or pre-lubricated gasket with the water tight gasket.

1-14.8 REINFORCED CONCRETE END SECTIONS

Precast reinforced concrete end sections shall have:

- A. At least one line of reinforcement conforming to the requirements of AASHTO M170 equivalent to the square inches per linear foot for elliptical reinforcement in circular pipe, Class II, Wall B, or
- B. Synthetic Macro Fiber Reinforcement: Monofilament polypropylene/polyethylene fibers conforming to ASTM C1116, Type III having an aspect ratio between 65 and 70 and a minimum tensile strength of 80 KSI. The macro fiber lengths shall be between 2.0 and 2.5 inches long. The macro fiber quantity shall be 5.0 pounds/cubic yard.

1-14.9 TRENCHING, BACKFILLING AND COMPACTING:

- A. The Drawings and Section 1-10 specifies trenching, backfilling and compacting of pipe.

1-14.10 INSTALLATION:

Pipe shall be installed in strict accordance with the manufacturer's recommendations.

1-14.11 TESTING

- A. Reference section 1-15 for pipe testing requirements.

**PAYMENT** – Payment for all items included in this specification section shall be included under Bid Items # 6 (29" x 45" Elliptical RCP) and 7 (36" RCP). The contract unit price shall include full compensation for providing all labor, materials, tools, equipment, appurtenances for procurement, and delivery and installation of storm drain piping. This bid item includes procurement and installation of required bedding material and backfilling. All work shall be completed in accordance with the Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END OF SECTION

## **SECTION 1-15. PIPE LEAK TESTING**

### **1-15.1 SUBMITTALS**

- A. Contractor shall prepare and submit a pipe testing plan for each segment of pipe to be tested. The plan shall detail all temporary fittings, blind flanges, testing pressures, and testing procedures.

### **1-15.2 PRESSURE PIPING**

- A. The new sanitary sewer force main piping and fittings shall be pressure tested prior to connecting to existing piping. Contractor shall install blind flanges as necessary to isolate new piping for testing as specified herein.
- B. Testing of new force main carrier pipe shall be in accordance with ASTM F2164. Contractor shall provide all equipment and personnel necessary to properly test. Testing shall be done in the presence of the City inspector.
- C. Testing shall be done after the pipe has been fused, installed, and backfilled. Ensure thrust restraints have been installed and allow sufficient time for any required concrete thrust blocks to achieve required sufficient strength. Ensure fused joints have sufficiently cooled.
- D. Testing shall not be done only when the temperature of pipe is 80 degree Fahrenheit or less.
- E. Testing against closed valves is not recommended. Contractor shall blind flange before the closed valve.
- F. Testing Procedure:
  - 1. Fill the pipeline with water at a maximum velocity of 10-feet per minute and bleed off any trapped air.
  - 2. Gradually increase the pressure so the lowest element in the system achieves a test pressure that is 1.5 times the pipe design pressure or 150 psi, whichever is less. Monitor pipe for any leaks.
  - 3. Provide additional water to maintain sufficient test pressure. After the pipe has been pressurized at test pressure for 4 hours, testing can begin.
  - 4. To test, reduce test pressure by 10 psi and stop adding test liquid. Monitor the pressure for 1 hour. Test pressure shall remain within 5% of the target value, and no visual leakage shall occur. If pipe does not pass these requirements, contractor shall repair leaks and retest the pipe.
- G. Under no circumstance shall the pipe be pressurized over the design pressure for more than 8 hours. If the test is not complete within this time limit, the pipeline shall be depressurized at or below the design pressure and allowed to "relax" for at least 8 hours before testing.

### **1-15.3 GRAVITY PIPING**

- A. After completion of any section of gravity piping, the grades, joints, and alignment

shall be true to line and grade. Joint surfaces shall be smooth. There shall be no visual leakage and the pipe shall be completely free from any cracks and from protruding joint materials, deposits of sand, mortar, or other materials on the inside.

- B. Any leakage, including active seepage, shall be corrected by removal and replacement of pipe or joint where such leakage exists until the pipelines meet the requirements of the allowable leakage specifications.
- C. Gravity piping installed under this contract will be subject to television inspection by the City. It is the intent to televise all sewers which are suspected to contain defects in order to ensure that all installation is water tight. The City reserves the right to perform this work and will furnish all equipment and materials for such inspection.
- D. If the television work is performed by the City the Contractor shall provide access for the City's crews and equipment for the television inspection and shall have his representative present during inspection.
- E. The television work, if performed by the City, shall be scheduled so as to take advantage of the time when the groundwater table is most likely to cause infiltration. Work shall be scheduled during or after rainy periods rather than after prolonged periods of dry weather. Logs and/or tapes of the inspections will be made available to the Contractor. Otherwise, the Contractor shall perform the work and furnish tapes and logs to the City and the Engineer.
- F. All gravity piping shall be tested using low pressure air testing in accordance with the procedures and standards listed below.
  - 1. Clean pipe to be tested by propelling a snug-fitting inflated rubber ball through pipe with water.
  - 2. Plug all pipe outlets with suitable test plugs. Brace each plug securely to prevent blowouts. As a safety precaution, pressurizing equipment shall include a regulator set at slightly above test pressure to avoid over pressurizing and damaging an otherwise acceptable line. No one shall be allowed in the manhole during testing.
  - 3. A plug shall be installed in one end of the pipe to be tested. A second plug with a 1/2" opening to allow for the introduction of air into the portion of pipe to be tested shall be put in place in the other end of the pipe.
  - 4. Add air slowly to the portion of the pipe installation under test until the internal air pressure is raised to 4.0 psig greater than the average back pressure of any groundwater above the pipe (0.43 psi per foot of groundwater above the pipe invert), but not greater than 9.0 psig.
  - 5. After an internal pressure of 4.0 psig is obtained, allow at least two minutes for air temperature to stabilize, adding only the amount of air required to maintain pressure.
  - 6. When pressure decreases to 3.5 psig, start stopwatch. Determine the time in seconds that is required for the internal air pressure to reach 3.0 psig.

Minimum permissible pressure holding times for runs of single pipe diameter are indicated in the table in seconds.

#### 1-15.4 MANHOLES/STRUCTURES

- A. Manholes and concrete junction structures will be visually inspected by the City during construction. All manholes and junction structures shall be constructed to be water tight.
- B. Observed leaks (infiltration or exfiltration) at any time during construction or within the project warranty period shall be cause for rejection. The leakage shall be repaired or the structure shall be replaced as deemed necessary by the City.

**PAYMENT** – All items included in this section shall be included in the various bid items and shall include full compensation for providing all labor, materials, tools, equipment and incidentals and for doing all the work involved in this section, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

## **SECTION 1-16. AGGREGATE BASE COURSE**

### 1-16.1 SUMMARY

- A. Section Includes: Aggregate base course
- B. Related Sections:
  - 1. Section 1-11 - Earthwork

### 1-16.2 REFERENCES

- A. American Society of Testing and Materials (ASTM):
  - 1. C 117 - Test Method for Material Finer than 75 mm (Number 200) Sieve in Mineral Aggregate by Washing.
  - 2. C 136 - Method for Sieve Analysis of Fine and Coarse Aggregates.
  - 3. D 4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- B. State of California Department of Transportation.
  - 1. CALTRANS - Standard Specifications.

### 1-16.3 SUBMITTALS

- A. Product Data:
  - 1. Source, gradation, and testing data for aggregate base course.
- B. Quality Control:
  - 1. Test Reports: Reports for tests required by Sections of CALTRANS Standard Specifications.
  - 2. Certificates of Compliance: Certificates as required by Sections of CALTRANS Standard Specifications.

### 1-16.4 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection: Protect from segregation and excessive moisture during delivery, storage, and handling.

### 1-16.5 MATERIALS

- A. Aggregate Base Course:
  - 1. Class 2, 3/4-inch maximum aggregate size free from vegetable matter and other deleterious substances, and of such nature that aggregate can be compacted readily under watering and rolling to form a firm, stable base.

2. Materials derived from processing demolished or removed asphalt concrete are not acceptable.
3. Coarse aggregate material retained in Number 4 sieve shall consist of material of which at least 25 percent by weight shall be crushed particles when tested in accordance with California Test 205.
4. Aggregate shall not be treated with lime, cement, or other chemical material before the Durability Index test is performed.
5. Aggregate grading and sand equivalent tests shall be performed to represent not more than 500 cubic yards or one day's production of material, whichever is smaller.
6. Grade within the limits and conform to quality requirements as follows when tested in accordance with California Test 202:

Sieve (Square Openings)	Sizes	Percent Passing Sieve	by Weight
1 inch		100	
3/4 inch		90-100	
Number 4		35-55	
Number 30		10-30	
Number 200		2-9	

Quality Requirements		
Description	California Test	Minimum Test Result
Resistance (R Value)	301	78
Sand Equivalent	217	22
Durability Index	229	35

#### 1-16.6 EXAMINATION

- A. Verification of Conditions: Examine conditions upon which the work specified in this Section depends for defects that may influence installation and performance.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected.

#### 1-16.7 PREPARATION

- A. Subgrade Preparation: Prepare as specified in Section 1-09, "Earthwork."

#### 1-16.8 INSTALLATION

- A. Furnish, spread, and compact aggregate base course material to the lines, grades, and dimensions indicated on the Drawings.
  - 1. Spreading: Spread in accordance with sections of CALTRANS Standard Specifications.
  - 2. Compacting: Compact in accordance with sections of CALTRANS Standard Specifications.

#### 1-16.9 FIELD QUALITY CONTROL

- A. Tests: Perform field tests as required by sections of CALTRANS Standard Specifications.

**PAYMENT** – All items included in this section shall be included in the various bid items and shall include full compensation for providing all labor, materials, tools, equipment and incidentals and for doing all the work involved in this section, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION



## **SECTION 1-17. SITE RESTORATION**

### **GENERAL**

#### **1-17.1 SUMMARY**

**A. Section Includes:**

1. Resurfacing roads and paved surfaces in which surface is damaged by construction equipment or construction activities. All new paving shall meet City and/or County standard details and specifications.
2. Replacement of existing curbs, sidewalks or gutters damaged by construction equipment or construction activities. All new concrete curbs, gutters and sidewalks shall meet City and/or County standard details and specifications.
3. Site surface grading shall be restored to match existing drainage patterns, or be regraded to drain to new inlet structures as directed by the Engineer. All disturbed unpaved surfaces shall be seeded with Hedgrow Bay Area Native Erosion Control seed mix or approved equal. Seed mix to be applied per recommended guidance.
4. Existing Monument shall be replaced in-kind by the contractor.

**B. Related Sections:**

1. Technical Specifications Section 1-16 – Aggregate Base Course

**C. References:**

1. Caltrans Standard Specification Section 84 – Markings
2. Caltrans Standard Specification Section 39 – Asphalt Concrete

#### **1-17.2 SYSTEM DESCRIPTION**

**A. Performance Requirements:**

5. Contractor shall protect pavement to remain
  - a. Contractor shall replace all pavement damaged as part of the work, including areas damaged by the movement of construction equipment to the satisfaction of the City Engineer. Contractor shall bear the cost of all damaged pavement replacement.
6. Site Grading shall drain to existing or new storm drain inlets. Contractor shall conform to existing grade along boundary of undisturbed ground and open trench. Contractor to establish Native Seed Mix on all disturbed surfaces shown on Drawings.
7. Contractor shall remove and replace existing Monument as identified on the Drawings.

### 1-17.3 SUBMITTALS

- A. Mix Designs:
  - 1. Prior to placement of asphalt concrete, submit full details, including design and calculations for the asphalt concrete mix proposed.
  - 2. Submit gradation of aggregate base.
  - 3. Submit proposed mix design of portland cement concrete.
- B. Native Erosion Control Seed Mix
  - 1. Prior to seeding disturbed surfaces contractor shall submit native seed mix and installation procedures per seed mix manufacturer guidance.

### 1-17.4 MATERIALS

- A. Aggregate Base Course: As specified in Technical Specifications Section 1-16.
- B. Portland Cement Concrete Replacement Material: As specified in the Caltrans Standard Specification Section 90 - Concrete. Sidewalk concrete shall include color and finish to match existing.

### 1-17.5 EQUIPMENT

- A. Roads, Pavements, Parking Areas, and Walks:
  - 1. Equipment Requirements: Good condition, capable of performing work intended in satisfactory manner.

### 1-17.6 ACCESSORIES

- A. Material for Painting Asphalt Concrete Pavement: as specified in Caltrans Standard Specifications Section 84.

### 1-17.7 INSTALLATION

- A. Aggregate Surface Removal Replacement:
  - 1. When trench cut is in aggregate surfaced areas, replace aggregate base course material with material matching existing material compacted to 95 percent of its maximum density. Depth of aggregate base course shall match depth of existing aggregate base course or shall be a minimum of 6 inches, whichever is greater, unless otherwise indicated on the Drawings.
- B. Asphalt Pavement Replacement:
  - 1. Replace asphalt pavement to same thickness as adjacent pavement and match as nearly as possible adjacent pavement in texture, unless otherwise indicated on the Drawings.

2. Cut existing asphalt pavements to be removed for trenches or other underground construction by wheel cutter, clay spade, or other device capable of making neat, reasonably straight, and smooth cut without damaging adjacent pavement. Cutting device operation shall be subject to acceptance of ENGINEER.
  3. Cut and trim existing pavement after placement of required aggregate base course and just prior to placement of asphalt concrete for pavement replacement, and paint trimmed edges with material for painting asphalt concrete pavement immediately prior to constructing new abutting asphalt pavements. No extra payment will be made for these items, and all costs incurred in performing this work shall be incidental to pipe laying or pavement replacement.
  4. Conform replacement of asphalt pavement to contour of original pavement.
  5. Asphalt Pavement shall be fog sealed to match existing.
- C. Curb & Gutter Replacement:
1. Per Caltrans Standard Specification Section 73 – Concrete Curbs and Sidewalks.
- D. Pavement Matching:
1. Trim existing asphalt pavements which are to be matched by pavement widening or pavement extension to neat true line with straight vertical edges free from irregularities with saw specifically designed for this purpose. Minimum allowable depth of cut shall be 1-1/2 inches.
  2. Cut and trim existing pavement after placement of required aggregate base course and just prior to placement of asphalt concrete for pavement widening or extension, and paint trimmed edges with material for painting asphalt concrete pavement immediately prior to constructing new abutting asphalt concrete pavements. No extra payment will be made for these items and all costs incurred in performing this work shall be incidental to widening or pavement extension.
- E. All costs for removal and replacement of AC and PCC must be paid by contractor.
- F. Existing Monument shall removed and replaced, new monument shall be surveyed and existing location shall be reestablished.

#### 1-17.8 STREET MONUMENTS

- A. The Contractor shall replace existing street monuments as shown on the plans and as specified herein. Contractor is responsible for replacing all street monuments that are disturbed or damaged during construction. Street monument replacement shall include surveying to tie out the monument, monument removal, monument replacement, surveying of the new monument, and recording the new monument with a record of survey. Surveying shall be performed by a professional land surveyor licensed in the state of California.

## 1-17.9 FIELD QUALITY CONTROL

### A. Tests:

1. Asphalt concrete as specified in Caltrans Standard Specifications Section 39 - Asphalt Concrete.

### B. Inspection:

1. Asphalt Concrete:
  - a. Lay 10-foot straightedge parallel to centerline of trench when the trenches run parallel to street and across pavement replacement when trench crosses street at angle.
  - b. Remove and correct any deviation in cut pavement replacement greater than 1/4 inch in 10 feet.
2. Portland Cement Concrete Replacement Pavement:
  - a. Lay 10 foot straightedge either across pavement replacement or longitudinal with centerline of gutter or ditch.
  - b. Remove and correct any deviation in cut pavement replacement greater than 0.01 inch in 10 feet.

**PAYMENT** – Payment for items included in this specification section shall be included under the following bid items:

Replace Existing Monument (**Bid Item # 11**) Shall be measured and paid on a Lump Sum (LS) basis. The contract unit price shall include full compensation for providing all labor, materials, tools, equipment, and appurtenances for procurement, delivery and installation of the Survey Monument . All work shall be completed in accordance with the Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

Misc. Site Restoration (**Bid Item # 12**) Shall be measured and paid on a Lump Sum (LS) basis. The contract unit price shall include full compensation for providing all labor, materials, tools, equipment, for Miscellaneous items and Site Restoration including replacement of damaged roadway Asphalt, damaged concrete curb, gutters and/or sidewalks, restoring surface grading to drain into existing or new drainage facilities, and seeding all disturbed surfaces with native erosion control seed mix per manufacturer recommendations. All work shall be completed in accordance with the Standard Specifications, the Standard Plans, the Special Provisions, these Technical Specifications, and as directed by the Engineer.

END OF SECTION

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**CONSTRUCTION SERVICES AGREEMENT BETWEEN  
THE CITY OF PINOLE AND**

This agreement for Construction Services ("Agreement") is entered into on \_\_\_\_\_, 2023 between the CITY OF PINOLE, a municipal corporation, with offices located at 2131 Pear Street, Pinole, California ("City") and \_\_\_\_\_. ("Contractor") (together sometimes referred to as the "Parties").

WITNESSTH:

WHEREAS, Contractor and Contractor's Surety are providing the bonds attached hereto and incorporated by this reference; and

WHEREAS, City desires to contract with Contractor to perform the construction services detailed in this Agreement; and

In consideration of the mutual covenants and conditions set forth herein, the Parties agree as follows:

1. **CONTRACT DOCUMENTS.** The Contract Documents referred to herein are incorporated herein by reference as if set forth in full in this Agreement. Work called for in any one Contract Document and not mentioned in another is to be performed and executed as if mentioned in all Contract Documents. The Contract Documents shall include the Notice Inviting Bids, Instructions to Bidders, Bid Forms (including the Bid, Bid Schedule(s), Information Required of Bidder, Bid Bond, and all required certificates, affidavits and other documentation), this Agreement, Performance Bond, Labor and Materials Bond, Maintenance Bond, General Conditions, any Supplementary General Conditions, Special Provisions, Specifications, Drawings, all Addenda, and Change Orders executed pursuant to the provisions of the Contract Documents. The General Conditions shall mean and refer to the current General Conditions of the City which are incorporated herein by this reference as if set forth herein. This Agreement, and the Contract Documents, includes the exhibits to this Agreement, including Exhibit A Required Federal-Aid Contract Language (For Local Assistance Construction Projects) (Includes Form FHWA-1273 from Bid Documents), and Exhibit B Minimum Wage Rates (Federal and State Prevailing Wage Rates from Bid Documents.)
2. **AGREEMENT CONTROLS.** In the event of a conflict between the terms and conditions as set forth in this Agreement and the terms and conditions set forth in other Contract Documents, the terms and conditions set forth in this Agreement shall prevail. Unless otherwise specifically provided herein, all works and phrases defined in the General Conditions shall have the same meaning and intent in this Agreement.
3. **INDEPENDENT CONTRACTOR.** It is specifically understood and agreed by all parties hereto that Contractor is, for the purposes of this Agreement, an independent contractor and not an employee of the City. Accordingly, Contractor shall not be deemed the City's employee for any purpose whatsoever. Contractor shall not incur or have the power to incur any debt, obligation or liability whatever for or against the City.
4. **ASSIGNMENT.** This Agreement may not be assigned by Contractor, in whole or in part, without prior written consent of the City.
5. **TERMINATION.** This Agreement may not be canceled by the City at any time without penalty upon thirty (30) days' written notice. In the event of termination without fault of Contractor, the City shall pay Contractor for all services rendered prior to date of termination, and such payment shall be in full satisfaction of all services rendered hereunder.

6. **SCOPE OF CONTRACT.** Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor and material and transportation necessary to perform and complete in a good and workman like manner to the satisfaction of the City, all the work called for, and in the manner designated in, and in strict conformity with the Project entitled:

Project Name:

Project No.:

Federal Project No.:

7. **CONTRACT AMOUNT AND PAYMENTS.** The City agrees to pay and Contractor agrees to accept, in full payment for the above work, \_\_\_\_\_ (\$ \_\_\_\_\_) as stipulated sum price which Contractor bid in its Bid Form, subject to additions and deductions by Change Order(s) as provided in the General Conditions. Contractor is solely responsible for the payment of employment taxes incurred under this Agreement and any similar federal or state taxes.

8. **PROGRESS AND FINAL PAYMENTS.** Progress and final payments shall be in accordance with the General Conditions.

9. **RETENTION OF SUMS CHARGED AGAINST CONTRACTOR.** When, under the provisions of this Contract, the City is authorized to charge any sum of money against Contractor, the City may deduct and retain the amount of such charge from the amount of the next succeeding progress estimate, or from any other moneys due or that may become due to the Contractor from the City. If, on completion or termination of the Contract, sums due contractor are insufficient to pay the City's charges against Contractor, the City shall have the right to recover the balance from Contractor or his sureties.

10. **TIME OF COMPLETION.** The entire work shall be completed to the satisfaction of the City within \_\_\_\_\_ (\_\_\_\_\_) working days, commencing on the date of issuance of the Notice to Proceed. Failure to complete the entire work by the completion date and in the manner provided for by the Contract Documents shall subject Contractor to liquidated damages as hereinafter provided in this Agreement. Time is of the essence in these Contract Documents.

11. **PROJECT SITE.** Contractor shall perform the Services in such a manner as to cause a minimum of interference with City's operations and the operations of other contractors at each Project site and to protect all persons and property thereon from damage or injury. Upon completion of the Services at a Project site, Contractor shall leave such Project site clean and free of all tools, equipment, waste materials and rubbish. Each Project site may include all buildings, offices, and other locations where Services are to be performed, including any access roads. Contractor shall be solely responsible for the safe transportation and packing in proper containers and storage of any equipment required for performing the Services, whether owned, leased or rented. City will not be responsible for any such equipment which is lost, stolen or damaged or for any additional rental charges for such equipment. Equipment left or stored at a Project site, with or without permission, is at Contractor's sole risk. City may assume that anything left on the work site an unreasonable length of time after said work is completed has been abandoned. Any transportation furnished by City shall be solely as an accommodation and City shall have no liability therefore. Contractor acknowledges and agrees that it shall assume the risk and is solely responsible for its use of any City owned equipment and property provided by City for the performance of Services. City shall have no liability to Contractor therefore. In addition, Contractor further acknowledges and agrees that it shall assume the risk and is solely responsible for its owned, non-owned and hired automobiles, trucks or

other motorized vehicles as well as any equipment, tools, or other property which is utilized by Contractor on each Project site.

**12 INSURANCE REQUIREMENTS.** Before beginning any work under this Agreement, Contractor, at its own cost and expense, shall procure the types and amounts of insurance listed below for the period covered by the Agreement.

**12.1 Workers' Compensation.** If Contractor employs any person, Contractor shall maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Contractor with limits of not less than One Million Dollars (\$1,000,000.00) per accident.

California Labor Code Sections 1860 and 3700 provide that every contractor will be required to secure the payment of compensation to its employees. In accordance with the provisions of California Labor Code Section 1861, the Contractor hereby certifies as follows:

"I am aware of the provisions of Section 3700 of the Labor Code which require 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 I will comply with such provisions before commencing the performance of the work of this contract."

**12.2 General Liability Insurance.** General liability insurance including, but not limited to, protection for claims of bodily injury and property damage liability, personal and advertising injury liability and product and completed operations liability.

- a) Coverage shall be at least as broad as Insurance Services Office Commercial General Liability coverage form CG 0001 (occurrence).
- b) Claims-made coverage is not acceptable.
- c) The limits of liability shall not be less than:

Each occurrence:	TWO Million Dollars (\$2,000,000)
Products & Completed Operations:	One Million Dollars (\$1,000,000)
Personal & Advertising Injury:	One Million Dollars (\$1,000,000)
- d) If a general aggregate limit of liability is used, the minimum general aggregate shall be twice the 'each occurrence' limit or the policy shall contain an endorsement stating that the general aggregate limit shall apply separately to the project that is the subject of the contract.
- e) If a products and completed operations aggregate limit of liability is used, the minimum products and completed operation aggregate shall be twice the 'each occurrence' limit or the policy shall contain an endorsement stating that the products and completed operations aggregate limit shall apply separately to the project which is the subject of the contract.
- f) If the Contractor maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.





contain no special limitations on the scope of protection afforded to City or its officers, employees, agents, or volunteers.

A certified endorsement shall be attached to all policies stating that coverage is primary insurance with respect to the City and its officers, officials, employees and volunteers, and that no insurance or self-insurance maintained by the City shall be called upon to contribute to a loss under the coverage.

**12.5.5 Deductibles and Self-Insured Retentions.** Consultant shall disclose to and obtain the approval of City for the self-insured retentions and deductibles before beginning any of the services or work called for by any term of this Agreement.

During the period covered by this Agreement, only upon the prior express written authorization of Contract Administrator, Consultant may increase such deductibles or self-insured retentions with respect to City, its officers, employees, agents, and volunteers. The Contract Administrator may condition approval of an increase in deductible or self-insured retention levels with a requirement that Consultant procure a bond, guaranteeing payment of losses and related investigations, claim administration, and defense expenses that is satisfactory in all respects to each of them.

**12.5.6 Subcontractors.** Consultant shall include all subcontractors as insureds under its policies or shall furnish separate certificates and certified endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

**12.5.7 Variation.** The City may approve a variation in the foregoing insurance requirements, upon a determination that the coverage, scope, limits, and forms of such insurance are either not commercially available, or that the City's interests are otherwise fully protected.

**12.5.8 Remedies.** In addition to any other remedies City may have if Consultant fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, City may, at its sole option exercise any of the following remedies, which are alternatives to other remedies City may have and are not the exclusive remedy for Consultant's breach:

- Obtain such insurance and deduct and retain the amount of the premiums for such insurance from any sums due under the Agreement;
- Order Consultant to stop work under this Agreement or withhold any payment that becomes due to Consultant hereunder, or both stop work and withhold any payment, until Consultant demonstrates compliance with the requirements hereof; and/or
- Terminate this Agreement.

- 12.6 **Waiver of Subrogation.** Contractor agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of City for all work performed by Contractor, its employees, agents and subcontractors.
- 13 **NO WAIVER OF REMEDIES.** Neither the inspection by the City or its agents, nor any order or certificate for the payment of money, nor any payment for, nor acceptance of the whole or any part of the work by the City, nor any extensions of time, nor any position taken by the City or its agents shall operate as a waiver of any provision of this Agreement or of any power herein reserved to the City or any right to damages herein provided, nor shall any waiver of any breach of the Agreement be held to be a waiver of any other or subsequent breach. All remedies provided in this Agreement shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided, and the City shall have any and all equitable and legal remedies which it would in any case have.
- 14 **DETERMINATION OF DAMAGES.** The actual fact of the occurrences of damages and the actual amount of the damages which the City would suffer if the work were not completed within the specified times set forth are dependent upon many circumstances and conditions and, it is impracticable and extremely difficult to fix the actual damages. Damages which the City would suffer in the event of delay include loss of the use of the project, and, in addition, expenses of prolonged employment of an architectural and engineering staff; costs of administration, inspection, and supervision; and the loss suffered by the public within the City by reasons of the delay in the completion of the project to serve the public at the earliest possible time. Accordingly, the parties hereto agree, and by execution of this Agreement, Contractor acknowledges that he/she understands, has ascertained and agrees, that the amounts set forth herein as liquidated damages shall be presumed to be that amount of damages sustained by the failure of Contractor to complete the entire work within the times specified.
- 15 **LIQUIDATED DAMAGES.** The amount of the liquidated damages to be paid by Contractor to the City for failure to complete the entire work in the specified number of Working or Calendar Days (as extended, if applicable) will be five hundred (\$500.00) for each **Calendar Day**, continuing to the time at which the work is completed. Such amount is the actual cash value agreed upon as the loss to the City resulting from Contractor's delay.
- 16 **TERMINATION AFTER ALLOTTED WORKING OR CALENDAR DAYS.** In addition to any rights it may have, the City may terminate this Contract at any time after the allotted number of Working or Calendar Days as adjusted by any extensions of time for excusable delays that may have been granted. Upon such termination, Contractor shall not be entitled to receive any compensation for services rendered by him before or after such termination, and he shall be liable to the City for liquidated damages for all periods of time beyond such termination date until the work is completed.
- 17 **CONTRACT BANKRUPT.** If Contractor should commence any proceeding under the Bankruptcy Act, or if Contractor be adjudged a bankrupt, or if Contractor should make any assignment for the benefit of creditors, or if a receiver should be appointed on account of Contractor's insolvency, then the City may, without prejudice to any other right or remedy,

terminate the Contract and complete the work by giving notice to Contractor and his surety according to the provisions of Section 1-15 of the General Conditions. The City shall have the right to complete, or cause completion of the work, all as specified in the General Provisions of the Standard Specifications.

**18**

**PERFORMANCE AND PAYMENT BONDS.** The Contractor shall, before beginning said work, file two bonds with the City, each made payable to the City. These bonds shall be issued by a Surety Company authorized to do business in the State of California, and shall be maintained during the entire life of the Contract at the expense of the Contractor.

- a) One bond shall be in the amount of one hundred percent (100%) of the Contract and shall guarantee the Faithful Performance of the Contract.
- b) The second bond shall be the Payment Bond required by Part 4, Title 15, Chapter 7, Division Three of the Civil Code of the State of California and shall be in the amount of one hundred percent (100%) of the Contract.

Any alteration or alterations made in any provision of this Contract shall not operate to release any surety from liability on any bond required hereunder and the consent to make such alterations is hereby given, and any surety on said bonds hereby waives the provisions of Section 2819 of the Civil Code.

Bonds shall only be accepted from an "Admitted surety insurer," which means an insurer to which the Insurance Commissioner has issued a certificate of authority to transact surety insurance in this state. **Contractor must submit** the original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws or other instrument entitling or authorizing the person who executed the bond to do so.

All bonds submitted shall include the following:

1. Full name and address of the Contractor Surety, and the City;
2. Contract Date;
3. Exact Contract Sum;
4. Project Name and Address;
5. Signature of the Contractor
6. Corporate Seal, if applicable;
7. Signature of Authorized Surety Representative;
8. Notarization of the Contractor and Surety;
9. Power of Attorney; and
10. Local contact for surety, with name, phone number, and address to which legal notices may be sent.

**19**

**SUBSTITUTION OF SECURITIES OF MONEY WITHHELD.** At any time prior to final payment, Contractor may request substitution of securities for any money withheld by the City to ensure performance of the Contract. At the expense of the Contractor, securities equivalent to the money withheld may be deposited with the City or with an approved financial institution as escrow agent according to a separate Security Agreement. Securities eligible for substitution shall include those listed in Section 16430 of the Government Code or bank or savings and loan certificates of deposit.

**20**

**GENERAL LIABILITY OF THE CONTRACTOR.** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, light, heat, utilities, transportation and other facilities and services necessary for the execution and completion of the Work in accordance with the Contract Documents and any applicable code or statute, whether or not specifically described herein, as long as same is reasonably inferable therefrom as being necessary to produce the intended results, whether temporary or permanent, and whether or not incorporated or to be incorporated in the Work. The mention of any specific duty or liability of Contractor and, any reference to any specific duty or liability shall be construed to be for the purpose of explanation.

**21**

**AUTHORITY OF THE CITY.** The City will decide all questions regarding the quality and acceptability of materials furnished, work performed, and rate of progress of the Work. The City will decide all questions regarding the interpretation and fulfillment of the Contract on the part of the Contractor, and all questions as to the rights of different prime contractors involved with the Work. The City will determine the amount and quality of the Work performed and materials furnished for which payment is to be made under the Contract.

The City will administer its authority through a duly designated representative identified at the pre-construction conference. The Contractor and City's designated representative (the Owner's Representative) shall make good faith attempts to resolve disputes that arise during the performance of the Work.

Any order given by the City not otherwise required by the Contract to be in writing shall be given or confirmed by the City in writing at the Contractor's request. Such request shall state the specific subject of the decision, order, instruction, or notice and, if it has been given orally, its date, time, place, author and recipient.

Any plan or method suggested to the Contractor by the ENGINEER, or any of the Owner's Representative, but not specified or required in writing, if adopted or followed in whole or in part by the Contractor, shall be used at the risk and responsibility of the Contractor. The City assumes no responsibility.

**22**

**RESPONSIBILITY OF THE CONTRACTOR** The Work shall be under the Contractor's responsible care and charge until completion and final acceptance, and the Contractor shall bear the entire risk of injury, loss, or damage to any part by any cause. The Contractor shall rebuild, repair, restore, and make good all injuries, losses or damage to any portion of the Work or the materials occasioned by any cause, and shall bear the entire expense.

The mention herein of any specific duty or responsibility imposed upon the Contractor shall not be construed as a limitation or restriction of any other responsibility or duty imposed upon the Contractor by the Contract, said reference being made herein merely for the purpose of explaining the specific duty or responsibility.

The Contractor shall do all of the work and furnish all labor, materials, tools, equipment, and appliances, except as otherwise herein expressly stipulated, necessary or proper for performing and completing the Work herein required, including any change order work or

disputed work directed by the City in conformity with the true meaning and intent of the Contract Documents, within the time specified.

**23** **INDEMNIFICATION AND CONTRACTOR'S RESPONSIBILITIES.** To the fullest extent permitted by law, the Contractor shall indemnify, defend with counsel acceptable to the City, and hold harmless the City, its officers, officials, employees, agents, and volunteers from and against any and all losses, claims, demands, damages, costs, expenses, attorney's fees, or liability of every nature arising out of or in any way connected with the performance or attempted performance of the provisions of this Contract, caused in whole or in part by any negligent or willful act or omission of the Contractor, its officers, employees, or agents, or anyone directly or indirectly acting on behalf of the Contractor, regardless of whether caused in part by a party indemnified hereunder. Nothing contained in the foregoing indemnity provisions shall be construed to require the Contractor to indemnify the indemnified party in contravention of Section 2782 of the Civil Code for the active or sole negligence or willful misconduct of that indemnified party

To the fullest extent permitted by law, the Contractor's duty to defend shall extend, without limitation, to any suit or action founded upon any losses, claims, demands, damages, costs, expenses, attorney's fees, or liability of every nature arising out of or in any way connected with the performance or attempted performance of the provisions hereof, or in any way arising out of or connected with this Contract.

The defense and indemnity obligations expressly extend to and include any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of damages to adjacent property caused by the conduct of the Work.

The defense and indemnity obligations expressly extend to and include any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of the violation by the Contractor, the Contractor's agents, employees, or independent contractors, Subcontractors or suppliers of any provisions of federal, State or local law, including applicable administrative regulations.

The defense and indemnity obligations also expressly extend to and include any claims, demands, damages, costs, expenses, or liability occasioned by injury to or death of any person, or any property damage to property owned by any person while on or about the site or as a result of the Work, whether such persons are on or about the site by right or not, whenever the Work is alleged to have been a contributing cause in any degree whatsoever.

In claims against any person or entity herein indemnified that are made by an employee of the Contractor or an employee of any of the Contractor's agents, independent contractors, Subcontractors or suppliers, a person indirectly employed by the Contractor or by any of the Contractor's agents, independent contractors, Subcontractors or suppliers, or anyone for whose acts the Contractor or any of the Contractor's agents, independent contractors, Subcontractors or suppliers may be liable, the defense and/or indemnification obligation herein shall not be limited by any limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or the Contractor's agents, independent contractors, Subcontractors or suppliers under workers' compensation acts, disability acts, or other employee benefit acts.

The indemnification obligations herein shall not be limited by any assertion or finding that the person or entity indemnified is liable by reason of a non-delegable duty.

The indemnities set forth herein shall not be limited by the insurance requirements set forth in the Contract Documents.

The indemnification requirements herein set forth shall extend to claims occurring after this Contract is terminated as well as while it is in force.

In the event the Contractor enters into any agreement with the owners of any adjacent property to enter upon or adjacent to such property for the purpose of performing this Contract, the Contractor shall fully indemnify, defend and save harmless such person, firm, or corporation, State or other governmental agency which owns or has any interest in the adjacent property. The form and content of the indemnification agreement shall be approved by the City prior to commencement of any work on or about such property. The Contractor also shall indemnify the City and other indemnities identified in this Section as provided in the Contract. These provisions shall be in addition to any other requirements of the owners of adjacent property.

## **24 LEGAL REQUIREMENTS.**

- 24.1 Governing Law.** The laws of the State of California shall govern this Agreement.
- 24.2 Compliance with Applicable Laws.** Contractor and any subcontractors shall comply with all laws applicable to the performance of the work in connection with this Agreement.
- 24.3 Licenses and Permits.** Contractor represents and warrants to City that Contractor and its employees, agents, and any subcontractors have all licenses, permits, qualifications, and approvals of whatsoever nature that are legally required to practice their respective professions.
- 24.4 Nondiscrimination and Equal Opportunity.** In compliance with federal, state and local laws, Contractor shall not discriminate, on the basis of a person's race, religion, color, national origin, age, physical or mental handicap or disability, medical condition, marital status, sex, or sexual orientation, against any employee, applicant for employment, subcontractor, bidder for a subcontract, or participant in, recipient of, or applicant for any services or programs provided by Contractor under this Agreement.
- 24.5 Work Requiring Payment of Prevailing Wages.** The City affirmatively identifies this project as a "public work" as that term is defined by California Labor Code § 1720, and the project is, therefore, subject to prevailing wages under California Labor Code § 1771. In accordance with California Labor Code § 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which these services are to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in the California Labor Code shall be paid to all workers engaged in performing the services under this Agreement. Contractor and its subcontractors shall fully comply with all the provision of the California Labor Code governing the performance of public works contracts including, but not limited to, payment of prevailing wages, limitations on time worked, compliance with apprentice requirements, maintenance of payroll records, posting of wages at job site and prohibitions against discrimination.

**24.6 Unfair Competition.** The following provision is included in this agreement pursuant to California Public Contract Code §7103.5.

"In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assigning to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties."

**24.7 INCIDENTAL BENEFICIARIES.** It is expressly understood and agreed that the enforcement of these terms and conditions shall be reserved to the City and Contractor. Nothing contained in the Agreement shall give or allow any claim or right of action whatsoever by any third person. It is the express intent of the City and Contractor that any such person or entity, other than the City and Contractor, receiving services or benefits under this Agreement shall be deemed an incidental beneficiary.

## **25 MODIFICATION.**

**25.1 Amendments.** Any modification or amendment of any provision of this agreement shall be in writing and must be executed by both parties hereto.

**25.2 Assignment.** Contractor may not assign this Agreement or any interest therein without the prior written approval of the City.

**25.3 Subcontracting.** Contractor shall not subcontract any portion of the performance contemplated and provided for herein without prior written approval of the City. Where written approval is granted by the City, Contractor shall supervise all work subcontracted by Contractor in performing the Services; shall be responsible for all work performed by a subcontractor as if Contractor itself had performed such work; the subcontracting of any work to subcontractors shall not relieve Contractor from any of its obligations under this Agreement with respect to the Services; and Contractor is obligated to ensure that any and all subcontractors performing any Services shall be fully insured in all respects and to the same extent as set forth under Section 5, to City's satisfaction.

**25.4 Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between City and Contractor shall survive the termination of this Agreement.

**25.5 Options upon Breach by Contractor.** If Contractor materially breaches any of the terms of this Agreement, City's remedies shall include, but not be limited to, the following:

**25.5.1** Immediately terminate the Agreement;

**25.5.2** Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Contractor in accordance with this Agreement;



25.5.3 Retain a different Contractor to complete the Services not finished by Contractor;  
or

25.5.4 Charge Contractor the difference between the costs to complete the work at the time of breach and the amount that City would have paid Contractor if Contractor had completed the Work.

## 26 KEEPING AND STATUS OF RECORDS.

26.1 **Records Created as Part of Contractor's Performance.** All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Contractor prepares or obtains in accordance with this Agreement and that relate to the matters covered under the terms of this Agreement shall be the property of the City.

26.2 **Contractor's Books and Records.** Contractor shall maintain any and all records or documents evidencing or relating to charges for services or expenditures and disbursements charged to the City under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Contractor to this Agreement.

26.3 **Confidential Information and Disclosure.** During the term of this Agreement, either party (the "Disclosing Party") may disclose confidential, proprietary or trade secret information (the "Information"), to the other party (the "Receiving Party"). The Receiving Party shall hold the Disclosing Party's Information in confidence and shall take all reasonable steps to prevent any unauthorized possession, use, copying, transfer or disclosure of such Information. Contractor understands that City is a public City and is subject to the laws that may compel it to disclose information about Contractor's business.

## 27 MISCELLANEOUS PROVISIONS.

27.1 **Attorneys' Fees.** If a Party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing Party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that Party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.

27.2 **Venue.** In the event that either Party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Contra Costa or in the United States District Court for the Northern District of California.

27.3 **Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect.

27.4 **Binding.** This Agreement shall bind and inure to the heirs, devisees, assignees and successors in interest of Contractor and to the successors in interest of the City in the same manner as if such parties had been expressly named herein.

- 27.5 **Survivorship.** Any responsibility of Contractor for warranties, insurance, indemnity, record keeping or compliance with laws with respect to this Agreement shall not be invalidated due to the expiration, termination or cancellation of this Agreement.
  
- 27.6 **No Implied Waiver of Breach.** In the event that either the City or Contractor shall at any time or times waive any breach of this Agreement by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this Agreement, whether of the same or any other covenant, condition or obligation. Waiver shall not be deemed effective until and unless signed by the waiving party.
  
- 27.7 **Contract Administration.** This Agreement shall be administered by the City Manager or her designee, who shall act as the City's representative. All correspondence shall be directed to or through the representative.
  
- 27.8 **Notices.** Any written notice to Contractor shall be sent to:  
  
 [INSERT CONTRACTOR CONTACT INFORMATION] Any  
  
 written notice to City shall be sent to:  
  
 Andrew Murraray, City Manager  
 City of Pinole  
 2131 Pear Street  
 Pinole, CA 94564
  
- 27.9 **Integration; Incorporation.** This Agreement, including all the exhibits attached hereto, represents the entire and integrated agreement between City and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral. All exhibits attached hereto are incorporated by reference herein.
  
- 27.10 **Authority to Execute.** The person or persons executing this Agreement on behalf of the parties hereto warrants and represents that he/she/they has/have the authority to execute this Agreement on behalf of their entity and has/have the authority to bind their party to the performance of its obligations hereunder.
  
- 27.11 **Counterparts.** This agreement may be executed in one or more counterparts, each of which shall be deemed an original, and will become effective and binding upon the parties at such time as all of the signatories hereto have signed a counterpart of this Agreement. All counterparts so executed shall constitute one Agreement binding on all of the parties hereto, notwithstanding that all of the parties are not signatory to the same counterpart.

The Parties have executed this Agreement as of the date signed by the City.

CITY OF PINOLE

CONTRACTOR

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
**Andrew Murray**  
**City Manager**

Dated: \_\_\_\_\_

Attest:

\_\_\_\_\_  
Heather Bell  
City Clerk

Dated: \_\_\_\_\_

Approved as to Form:

\_\_\_\_\_  
Eric Casher  
City Attorney

Dated: \_\_\_\_\_

\_\_\_\_\_  
[Insert Name of Signatory]  
[Insert Name of Contractor]

Dated: \_\_\_\_\_



CITY OF PINOLE

# HAZEL STREET STORM DRAIN IMPROVEMENTS PROJECT SW1901

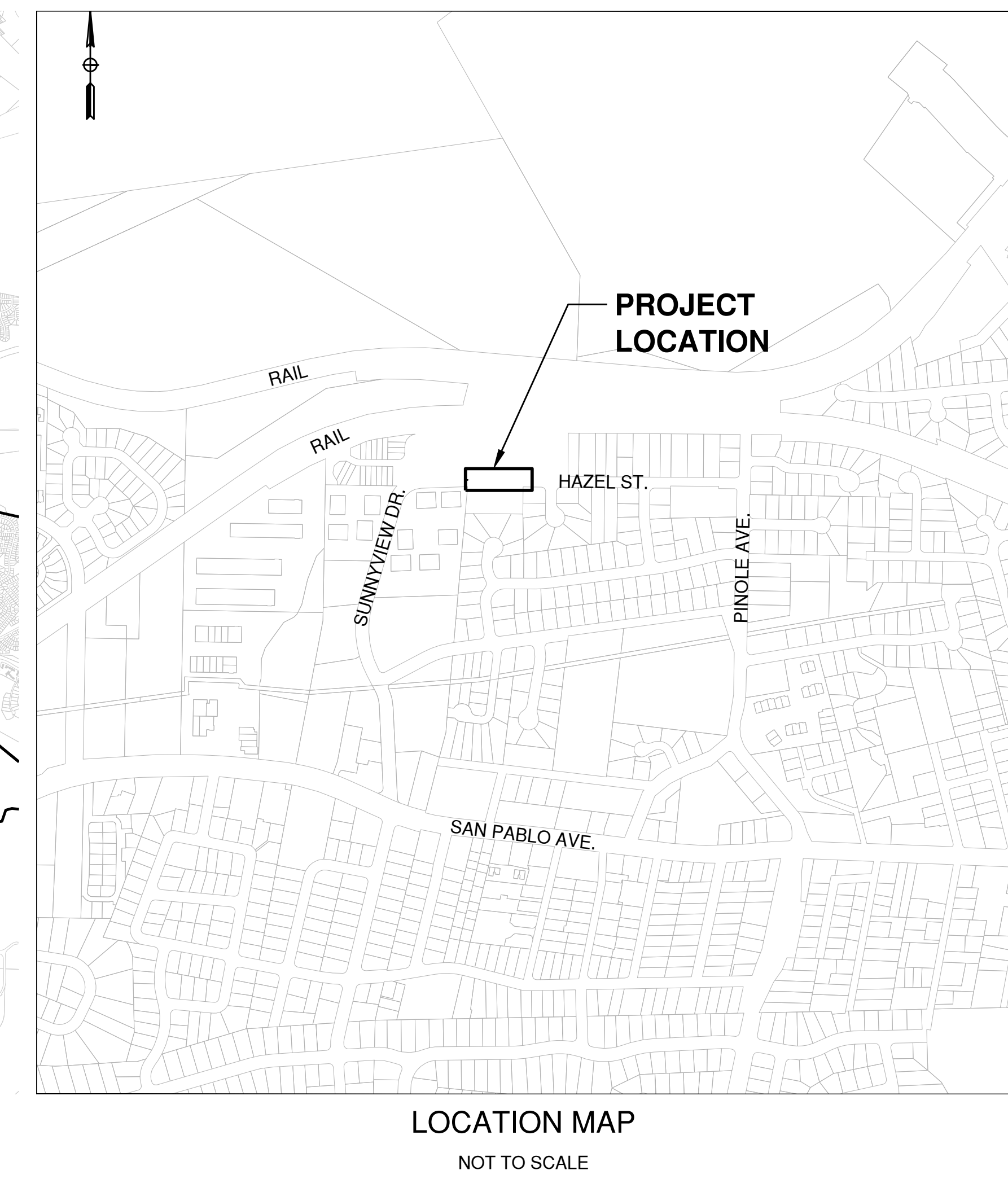
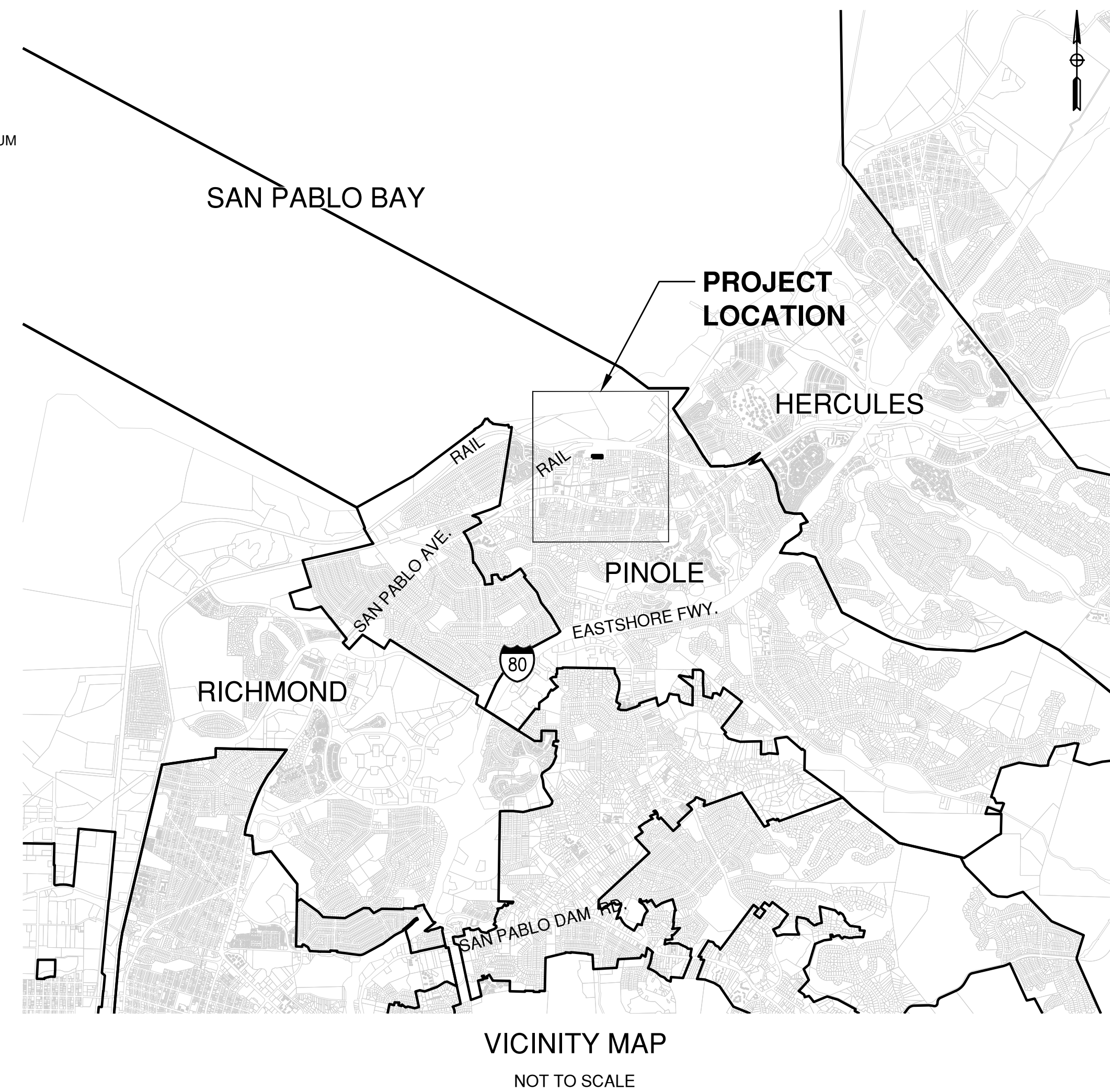
DRAWING INDEX	
SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	GENERAL CONSTRUCTION NOTES
3	POLLUTION PREVENTION PLAN
4	CONTROL PLAN
5	EXISTING SITE AND DEMOLITION PLAN
6	SITE IMPROVEMENT PLAN - 1
7	SITE IMPROVEMENT PLAN - 2
8	CIVIL DETAILS - 1
9	CIVIL DETAILS - 2
10	CIVIL DETAILS - 3
11	CIVIL DETAILS - 4
12	CIVIL DETAILS - 5

## LEGEND

FOUND MONUMENT AS NOTED	
WALKWAY LIGHT	
LIGHT	
STREET LIGHT	
TRANSFORMER	
FIRE HYDRANT	
MANHOLE	
CLEANOUT	
UTILITY POLE W/ GUY WIRE	
VALVE	
BACKFLOW PREVENTER	
CATCH BASIN / DROP INLET	
WATER METER	
FIRE DEPARTMENT CONNECTION	
BACK FLOW PREVENTER	
POST INDICATOR VALVE	
AUTOMATIC SPRINKLER RISER	
MONITORING WELL	
UTILITY BOX (SIZE VARIES)	
SIGN	
POST	
BOLLARD	
SPOT ELEVATION	
AERIAL SPOT ELEVATION	
STREET ADDRESS	
(E) GROUND	
BACKFILL	
CURB	
PROPERTY LINE	
CENTERLINE	
MONUMENT LINE	
EASEMENT	
CURB & GUTTER	
SIDEWALK	
BACKFILL	
FENCE	
EDGE OF PAVEMENT	
SINGLE TREE	
TREES AND BRUSH	
SANITARY SEWER	
STORM DRAIN	
WATER	
RECLAIMED WATER	
GAS	
ELECTRICAL LINE	
TELEPHONE	
OVERHEAD	
IRRIGATION LINES	
UNDERDRAIN	

## ABBREVIATIONS

(E) EXISTING	MIN MINIMUM
(MT) MULTI-TRUNK TREE	N NORTH
(N) NEW	NAVD NORTH AMERICAN VERTICAL DATUM
AB AGGREGATE BASE	O.C ON CENTER
AC ASPHALTIC CONCRETE, ASBESTOS	O.A. OUTSIDE DIAMETER
CEMENT	OG ORIGINAL GRADE
ALT ALTERNATE	OH OVERHEAD
APPROX APPROXIMATE	O.R. ORIGINAL RECORD
AVE AVENUE	PCC PORTLAND CEMENT CONCRETE
BKF BACKFILL	PL PROPERTY LINE
BS BOTTOM OF STEP	PE PROFESSIONAL ENGINEER
BW BACK OF WALK	PSE PUBLIC SERVICE EASEMENT
CA CALIFORNIA	PUE PUBLIC UTILITY EASEMENT
CCCPCWD CONTRA COSTA COUNTY PUBLIC WORKS	PV PAVEMENT
DEPARTMENT	PVAW PRIVATE VEHICLE ACCESS WAY
CI CAST IRON	PVC POLYVINYL CHLORIDE
CL CENTER LINE	R RADIUS
CLR CLEAR	RC RELATIVE COMPACTION
CIR CIRCULAR	RCP REINFORCED CONCRETE PIPE
CMP CORRUGATED METAL PIPE	RD ROAD
COMMS COMMUNICATIONS	R/W RIGHT OF WAY
CONC CONCRETE	S SOUTH
CP CONTROL POINT	SD STORM DRAIN
CY CUBIC YARDS	SDE STORM DRAIN EASEMENT
EI ELEVATION	SDMH STORM DRAIN MANHOLE
DET DETAIL	SPEC SPECIFICATION
DI DRAIN INLET	SS SANITARY SEWER, STAINLESS STEEL
E EAST	STA STATION
EA EACH	STE SUITE
ED EXISTING DIAMETER	TCD THRU CURB DRAIN
EL ELEVATION	THRU THROUGH
EP EDGE OF PAVEMENT	TOC TOP OF CURB
EASMT EASEMENT	T.O.P. TOP OF PIPE
EW EDGE OF WALK	TPZ TREE PROTECTION ZONE
EXC EXCAVATION	TS TOP OF SLAB
FG FINISHED GRADE	TW TOP OF WALL
FL FLOW LINE, FLANGED	TYP TYPICAL
FM FORCE MAIN	UB UTILITY BOX
FWY FREEWAY	VCP VITRIFIED CLAY PIPE
HDPE HIGH-DENSITY POLYETHYLENE	VER VERTICAL
HGL HYDRAULIC GRADE LINE	W WIDTH
HOR HORIZONTAL	' FOOT
HMA HOT MIX ASPHALT	" INCH
ID INSIDE DIAMETER	# NUMBER
INV INVERT	
IRR IRRIGATION	
L/S LANDSCAPE	
LIP LIP OF GUTTER	
MH MANHOLE	
MJ MECHANICAL JOINT	
MJR MECHANICAL JOINT RESTRAINT	



NO	REVISION	DATE	APPR
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CITY OF PINOLE, CALIFORNIA  
DEVELOPMENT SERVICES DEPARTMENT  
2131 PEAR STREET, PINOLE, CA 94504

APPROVED FOR CONSTRUCTION:

DEVELOPMENT SERVICES DIRECTOR/  
CITY ENGINEER

DATE

**Schaaf & Wheeler**  
CONSULTING CIVIL ENGINEERS  
4699 OLD IRONSIDES DRIVE, STE 350  
SANTA CLARA, CA 95054  
(408) 246-4848



HAZEL STREET STORM DRAIN IMPROVEMENTS

TITLE SHEET

DATE: 9/16/2022  
SCALE: AS SHOWN  
DESIGN: BLS  
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SHEET  
1  
OF  
12

## GENERAL

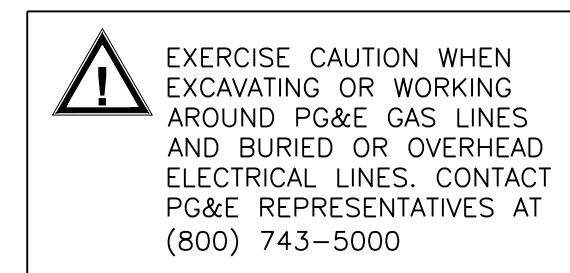
1. NO CHANGE TO THE PROJECT IMPROVEMENT PLANS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY THE LICENSED CIVIL ENGINEER ON RECORD OR CITY ENGINEER.
2. ALL WORK, UNLESS OTHERWISE SPECIFIED, SHALL BE DONE IN ACCORDANCE WITH THE 2018 CALTRANS STANDARD SPECIFICATIONS AND THE CONTRA COSTA COUNTY STANDARD PLANS.
3. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY THE CITY OF PINOLE AND HOLD HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONJUNCTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT TO THE EXTENT ARISING FROM THE NEGLIGENCE OF THE CITY OF PINOLE.
4. CONTRACTOR SHALL CONFORM TO THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS PERTAINING TO EXCAVATION AND TRENCHING. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR EXCAVATION SHORING DESIGN AND INSTALLATION.
5. INFORMATION CONCERNING EXISTING UTILITIES IS NOT GUARANTEED. LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL REQUEST THAT UNDERGROUND FACILITIES BE LOCATED AND MARKED IN THE FIELD A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION BY CALLING UNDERGROUND SERVICE ALERT (U.S.A.) AT 800-642-2444.
6. CONTRACTOR SHALL NOTIFY THE CITY OF PINOLE AT LEAST 48 HOURS IN ADVANCE OF THE START OF ANY CONSTRUCTION ACTIVITY. ANY TEMPORARY SUSPENSION OF THE WORK OR SUBSEQUENT RESUMPTION OF WORK REQUIRES NOTIFICATION TO THE CITY AND THE ENGINEER.
7. CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG MEN, CONES OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH THE SPECIFICATIONS.
8. CONTRACTOR SHALL REPLACE, AT ITS OWN EXPENSE, SITE UTILITIES WHICH ARE TO REMAIN INTACT BUT HAVE BEEN REMOVED OR DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL NOT REMOVE OR DAMAGE EXISTING STRUCTURES LOCATED WITHIN CITY PROPERTY OR ADJACENT PROPERTIES WITHOUT WRITTEN PERMISSION FROM THE CITY.
9. WRITTEN PERMISSION FROM APPROPRIATE PROPERTY OWNERS MUST BE OBTAINED PRIOR TO REMOVING ANY EXISTING STRUCTURE NOT IDENTIFIED FOR DEMOLITION OR OUTSIDE THE LIMITS OF WORK SHOWN.
10. PERMANENT IMPROVEMENTS REMOVED OR DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL LOCATION AND CONDITION BY THE CONTRACTOR USING NEW MATERIALS AS DIRECTED BY THE ENGINEER.
11. CONTRACTOR TO PROVIDE TEMPORARY FENCING AND GATES TO PROTECT THE WORK SITE AND WHENEVER AND WHEREVER EXISTING GATES ARE REMOVED FOR CONSTRUCTION PURPOSES.
12. STORAGE OF SURPLUS AND UNSUITABLE MATERIAL SHALL NOT BE PERMITTED WITHIN PUBLIC RIGHTS OF WAY OR ON ADJACENT PRIVATE PROPERTY WITHOUT WRITTEN CONSENT BY THE CITY OF PINOLE AND THE OWNER.
13. CONTRACTOR SHALL PERFORM CONSTRUCTION AND OPERATION IN A MANNER WHICH WILL NOT ALLOW HARMFUL POLLUTANTS TO ENTER THE STORM DRAIN SYSTEM OR SAN PABLO BAY. TO ENSURE COMPLIANCE, THE CONTRACTOR SHALL IMPLEMENT THE APPROPRIATE BEST MANAGEMENT PRACTICE (BMP) AS OUTLINED IN THE POLLUTION PREVENTION BROCHURE ISSUED BY THE CONTRA COSTA CLEAN WATER PROGRAM. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT WITHIN THE STREET RIGHT-OF-WAY SHALL NOT BE PERMITTED.
14. CONTRACTOR SHALL CONTROL DUST ACCORDING TO THE CONSTRUCTION PERMIT REQUIREMENTS SET FORTH BY THE CITY OF PINOLE.
15. CONTRACTOR SHALL COORDINATE AND HIRE A REGISTERED LAND SURVEYOR TO REPLACE ALL STREET MONUMENTS, LOT CORNER PIPES, AND GRADE STAKES DISTURBED DURING THE PROCESS OF CONSTRUCTION.
16. CONTRACTOR SHALL HAND DIG FOR ALL EXCAVATION WITHIN 5-FEET OF ANY UTILITIES.
17. THE CONTRACTOR SHALL KEEP AND MAKE AVAILABLE A COPY OF THE APPROVED PLANS AT THE JOB SITE AT ALL TIMES WHEN WORK IS IN PROGRESS.
18. THE CONTRACTOR SHALL HIRE A CERTIFIED TESTING LABORATORY, APPROVED BY THE CITY, TO PERFORM COMPACTION TESTS OF AGGREGATE BASE, AGGREGATE SUB-BASE AND SUB-GRADE TO THE SATISFACTION OF THE CITY.
19. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA AND SHALL HAVE AND MAINTAIN A VALID CITY BUSINESS LICENSE.
20. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS, LICENSES OR OTHER AUTHORIZATIONS APPLICABLE TO THE WORK WITH RESPECT TO THE ENVIRONMENTAL QUALITY ACT.
21. ALL WORK SHALL BE PLANNED AND CARRIED OUT SO THAT THERE WILL BE THE LEAST POSSIBLE INCONVENIENCE TO THE TRAVELING PUBLIC, AND TRAFFIC SHALL NOT BE UNREASONABLY DELAYED PER CALTRANS STANDARD SPECIFICATION 7-1.03. DRIVEWAY ACCESS SHALL BE MAINTAINED TO EACH PROPERTY AT ALL TIMES.
22. THE CONTRACTOR SHALL INSTALL AND MAINTAIN FENCES, BARRIERS, LIGHTS AND SIGNS THAT ARE NECESSARY TO GIVE ADEQUATE WARNING TO THE PUBLIC AT ALL TIMES IN ACCORDANCE WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) OF TRANSPORTATION'S TRAFFIC CONTROL MANUAL.
23. IN ORDER TO LIMIT DISTURBING NOISES, CONSTRUCTION WORK SHALL OCCUR ONLY BETWEEN THE HOURS OF 7:30 A.M. AND 5:00 P.M., MONDAY THROUGH FRIDAY, EXCLUDING HOLIDAYS. WORK OUTSIDE OF THESE HOURS IS PROHIBITED, UNLESS THE CITY GRANTS AN EXCEPTION. EXCEPTIONS WILL BE CONSIDERED ONLY WHEN, IN THE OPINION OF THE PUBLIC WORKS DIRECTOR, CONSTRUCTION DURING NORMAL CONSTRUCTION HOURS WOULD INCONVENIENCE THE PUBLIC AND NEIGHBORING RESIDENTS MORE THAN WORKING OUTSIDE OF THESE HOURS. EXCEPTIONS WILL NOT BE GRANTED MERELY TO EXPEDITE THE CONSTRUCTION WORK.
24. IF ENTRY INTO PRIVATE PROPERTY IS REQUIRED, THE CONTRACTOR MUST OBTAIN AN APPROVED RIGHT OF ENTRY FROM THE CITY OF PINOLE AND THE OWNER.

## NOTIFICATION

25. IF ANY DAMAGE OCCURS TO AN UNDERGROUND FACILITY THAT RESULTS IN THE ESCAPE OF ANY FLAMMABLE, TOXIC OR CORROSIVE GAS OR LIQUID OR ENDANGERS LIFE, HEALTH, OR PROPERTY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER AND CALL THE 911 EMERGENCY TELEPHONE NUMBER TO NOTIFY LOCAL PUBLIC SAFETY OFFICIALS.
26. CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 642-2444 AT LEAST TWO WORKING DAYS BUT NOT MORE THAN 14 DAYS PRIOR TO COMMENCING EXCAVATION WORK TO VERIFY EXISTING UNDERGROUND UTILITIES, PER CHAPTER 3.1, DIVISION 5, TITLE 1 OF THE CALIFORNIA GOVERNMENT CODE.
27. CONTRACTOR SHALL NOTIFY ALL PUBLIC OR PRIVATE UTILITY OWNERS FORTY-EIGHT HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY.
28. CONTRACTOR SHALL NOTIFY THE ADJACENT RESIDENCES AND BUSINESS IN WRITING DESCRIBING THE NATURE OF THE WORK, SCHEDULE OF THE WORK, WHEN PARKING WILL BE PROHIBITED (IF ANY), AND WHO TO CALL AT THE CONTRACTOR'S OFFICE IF THEY HAVE QUESTIONS ABOUT THE WORK. THE CITY PRIOR TO ITS DISTRIBUTION MUST APPROVE THE NOTICE. THE CONTRACTOR MUST DISTRIBUTE THE NOTICE TO THE ADJACENT RESIDENCES AND BUSINESS AT LEAST 7 DAYS PRIOR TO THE START OF THE CONSTRUCTION WORK.
29. WHERE PRACTICABLE AS DETERMINED BY THE CITY, THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS ALONG WALKWAYS, INCLUDING PUBLIC SIDEWALKS, AT ALL TIMES. THE CITY'S PUBLIC WORKS INSPECTOR MUST APPROVE SIDEWALK CLOSURES IN ADVANCE. WALKWAYS SHALL BE REOPENED AT THE END OF EACH WORKING DAY OR A TEMPORARY WALKWAY RE-ROUTE MUST BE IN PLACE. WELL-COMPACTED BASE ROCK MAY BE USED AS A TEMPORARY WALKING SURFACE.
30. ALL CITY APPURTENANCES MUST BE INSPECTED BY THE CITY PRIOR TO BACKFILLING ANY TRENCHES OR POURING ANY CONCRETE.
31. AT THE END OF THE EACH WORK DAY, ALL EXCAVATIONS WITHIN THE STREET AND TRAVEL WAY SHALL BE: (1) BACKFILLED AND PAVED WITH TEMPORARY PAVING SUCH THAT THE FINISHED SURFACE IS FLUSH WITH THE EXISTING PAVEMENT, (2) ADEQUATELY COVERED WITH STEEL PLATE BRIDGING, OR (3) BACKFILLED AND PAVED WITH PERMANENT PAVING. IF STEEL PLATE BRIDGING IS USED, THE STEEL PLATE BRIDGING MUST BE REMOVED WITHIN 48 HOURS AFTER ITS INSTALLATION. CONTROL DENSITY FILL SHALL NOT BE USE AS TEMPORARY AC PAVING
32. FOR EXCAVATIONS WITHIN PAVED AREAS THAT ARE MORE THAN 8 FEET WIDE, THE AC SURFACING SHALL BE INSTALLED WITH AN AC PAVING MACHINE.
33. CONTRACTOR SHALL PROTECT EXISTING AC PAVEMENT AND STRIPING FROM DAMAGE BY THE CONSTRUCTION VEHICLES. ALL DAMAGED PAVEMENT AND STRIPING SHALL BE REPLACED IN KIND.
34. CONTRACTOR SHALL SUBMIT SAFETY PLAN FOR WORKING AROUND OPEN TRENCH. OPEN TRENCH SHALL BE FENCED OFF AND LOCKED AT END OF WORKING DAY AND SHALL HAVE SIGNS THAT READ, "DANGER OPEN TRENCH".
35. THE CONTRACTOR SHALL RETURN PRIVATE YARDS, SIDEWALKS, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES, PUBLIC OR PRIVATE, DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITION THAT EXISTED PRIOR TO COMMENCEMENT OF THE WORK. THE CONTRACTOR SHALL MAKE A REASONABLE EFFORT TO RESTORE EACH PRIVATE YARD DISTURBED BY THE WORK WITHIN ONE WEEK AFTER THE WORK IS COMPLETED ON THE SAME YARD EXCEPT WHERE THE CITY'S INSPECTOR AGREES THAT FOR CONSTRUCTION REASONS, THE 1 WEEK REQUIREMENT MAY BE EXTENDED.

## PROJECT SPECIFIC NOTES

36. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UTILITIES PRIOR TO START OF CONSTRUCTION WITH THE APPROPRIATE AGENCIES OR BY POTHOLING. UTILITIES AND SERVICES SHALL BE PROTECTED DURING CONSTRUCTION. IF REQUIRED BY CONSTRUCTION ACTIVITIES, UTILITIES SHALL BE RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANIES. BRACING, SHORING AND SUPPORT FOR EXISTING UTILITIES SHALL BE APPROVED BY THE APPLICABLE UTILITY ENGINEER. UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CITY AND UTILITY COMPANY.
37. THE CITY'S STORM DRAIN CULVERT SERVES AS AN OUTLET FOR APPROXIMATELY 2.42 ACRE WATERSHED. CONTRACTOR SHALL EXPECT CONTINUOUS INFLOW THROUGH THE ARCH CULVERT. PIPE INFLOW SHALL BE ANTICIPATED EVEN DURING THE DRY SEASON AND PERIODS OF NO RAIN. THE CONTRACTOR SHALL DESIGN A DEWATERING AND STORMWATER CONTROL SYSTEM TO BYPASS FLOW FROM THE STORM DRAINAGE SYSTEM TO DISCHARGE DOWNSTREAM. CONTRACTOR SHALL HANDLE ALL STORMWATER AND GROUNDWATER PER CALTRANS STANDARD SPECIFICATION 13-4.03G AS DRY WEATHER FLOW ASSUMED TO BE 100 GPM.
38. CONTRACTOR SHALL PROTECT EXISTING AC PAVEMENT FROM DAMAGE BY THE CONSTRUCTION VEHICLES. ALL DAMAGED PAVEMENT SHALL BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE.
39. ELEVATIONS SHOWN ARE NORTH AMERICAN VERTICAL DATUM 1988.
40. CONTRACTOR TO MAINTAIN CITY OPERATIONS AND MAINTENANCE ACCESS TO SEWER LIFT STATION THROUGHOUT PROJECT DURATION. SANITARY SEWER BYPASS PUMPING RATE OF 350 GPM IS REQUIRED WHILE FORCEMAIN IS NON OPERATIONAL. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING BYPASS PUMPING. ALL TIE-INS SHALL BE COORDINATED WITH CITY ENGINEER PRIOR TO CUTTING ANY FORCEMAIN PIPING.
41. ALL WORK ON ASBESTOS CEMENT (AC) PIPE SHALL COMPLY WITH CURRENT CAL-OSHA STANDARDS (TITLE 8, SECTION 1529) AND AWWA STANDARD C603-05. CONTRACTOR SHALL PROPERLY DISPOSE OF ASBESTOS CONTAINING MATERIAL IN ACCORDANCE WITH CAL-EPA REGULATIONS. CONTRACTOR SHALL MAINTAIN AND PROVIDE A MANIFEST OF PIPE DISPOSAL TO THE CITY. REFERENCE TECHNICAL SPECIFICATIONS SECTION 1-10.
42. LOW OVERHEAD ELECTRICAL LINES EXIST AT SOME LOCATIONS WITHIN THE PROJECT AREA, CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO WORK SAFELY UNDER LOW OVERHEAD CLEARANCES AT NO ADDITIONAL COST TO THE CITY.
43. 6-INCH FORCE MAIN SLOPE SHALL NOT EXCEED - 5% FROM STA 0+00 TO 0+13.



NO	REVISION	DATE	APPR	APPROVED FOR CONSTRUCTION:	<b>Schaaf &amp; Wheeler</b> CONSULTING CIVIL ENGINEERS 4699 OLD IRONSIDES DRIVE, STE 350 SANTA CLARA, CA 95054 (408) 246-4848		HAZEL STREET STORM DRAIN IMPROVEMENTS	DATE: 9/16/2022	SHEET
△				DEVELOPMENT SERVICES DIRECTOR/ CITY ENGINEER					GENERAL CONSTRUCTION NOTES
△				DATE				BLS	OF
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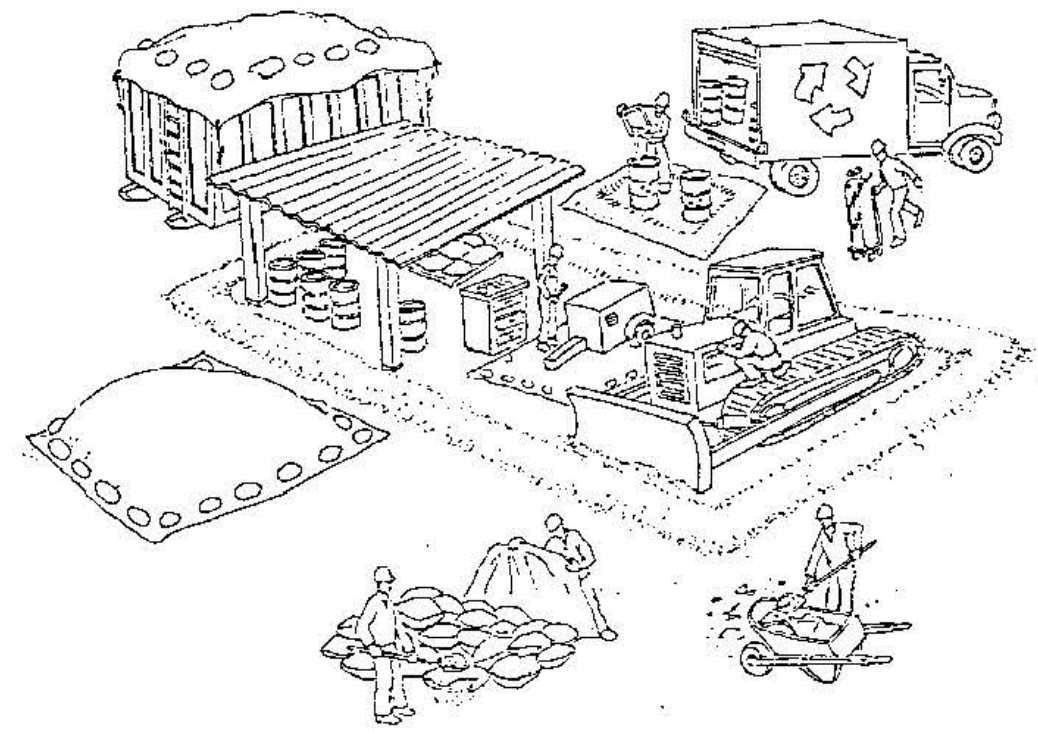
CITY OF PINOLE, CALIFORNIA  
DEVELOPMENT SERVICES DEPARTMENT  
2131 PEAR STREET, PINOLE, CA 94564

# Contra Costa Clean Water Program

Program Participants: Antioch, Brentwood, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek, Contra Costa County and Contra Costa County Flood Control and Water Conservation District

# Pollution Prevention — It's Part of the Plan

## Make sure your crews and subs do the job right!



Runoff from streets and other paved areas is a major source of pollution in San Francisco Bay and Delta. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines will help ensure your compliance with local agency stormwater ordinance requirements.

### Materials storage & spill cleanup

#### Non-hazardous materials management

- ✓ Sand, dirt, and similar materials must be stored at least 10 feet from catch basins, and covered with a tarp during wet weather or when rain is forecast.
- ✓ Use (but don't overuse) reclaimed water for dust control as needed.
- ✓ Sweep streets and other paved areas daily. Do not wash down streets or work areas with water!
- ✓ Recycle all asphalt, concrete, and aggregate base material from demolition activities.
- ✓ Check dumpsters regularly for leaks and to make sure they don't overflow. Repair or replace leaking dumpsters promptly. Cover dumpsters during wet weather.

#### Hazardous materials management

- ✓ Label all hazardous materials and wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with local agency, state, and federal regulations.
- ✓ Store hazardous materials and wastes in secondary containment and cover them during wet weather.
- ✓ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ✓ Be sure to arrange for appropriate disposal of all hazardous wastes.

#### Spill prevention and control

- ✓ Keep a stockpile of spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- ✓ When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- ✓ Report any hazardous materials spills immediately!

### Vehicle and equipment maintenance & cleaning

- ✓ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ✓ Fuel and maintain vehicles on-site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ✓ If you must clean vehicles or equipment on-site, clean with water only in a bermed area that will not allow rinsewater to run into gutters, streets, storm drains, or creeks.
- ✓ Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.



### Earthwork & contaminated soils

- ✓ Keep excavated soil on the site where it is least likely to collect in the street. Transfer to dump trucks should take place on the site, not in the street.
- ✓ Use straw bales, silt fences, or other control measures to minimize the flow of silt off the site.



- ✓ Avoid scheduling earth moving activities during the rainy season if possible. If grading activities during wet weather are allowed in your permit, be sure to implement all control measures necessary to prevent erosion.
- ✓ Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- ✓ If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, seed with fast-growing grasses or other appropriate erosion control measures.

- ✓ If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call the local agency.

### Dewatering operations

- ✓ Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.
- ✓ Be sure to call the local agency before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ✓ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the local agency to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.



### Saw cutting

- ✓ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, straw bales, sand bags, or fine gravel dams to keep slurry out of the storm drain system.
- ✓ Shovel, absorb, or vacuum saw cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ✓ If saw cut slurry enters a catch basin, clean it up immediately.

### Concrete, grout, and mortar storage & waste disposal

- ✓ Be sure to store concrete, grout, and mortar under cover and away from drainage areas. These materials must never reach a storm drain.
- ✓ Wash out concrete equipment/trucks off-site or designate an on-site area for washing where water will flow onto dirt or into a temporary pit in a dirt area. Let the water seep into the soil and dispose of hardened concrete with trash.



- ✓ If a suitable dirt area is not available, collect the wash water and remove it for appropriate disposal off-site.
- ✓ Divert water from washing exposed aggregate concrete to a dirt area where it will not run into a gutter, street, or storm drain. If a suitable dirt area is not available, filter the wash water before discharging to a storm drain.

### Paving/asphalt work

- ✓ Do not pave during wet weather or when rain is forecast.
- ✓ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ✓ Place drip pans or absorbent material under paving equipment when not in use.
- ✓ Protect gutters, ditches, and drainage courses with straw bales, sand bags, or earthen berms.
- ✓ Do not sweep or wash down excess sand from sand sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.
- ✓ Do not use water to wash down fresh asphalt or concrete pavement.



### Painting

- ✓ Never rinse paint brushes or materials in a gutter or street!
- ✓ Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink. If you can't use a sink, direct wash water to a dirt area and spade it in.
- ✓ Paint out excess oil-based paint before cleaning brushes in thinner.
- ✓ Filter paint thinners and solvents for reuse whenever possible. Dispose of oil-based paint sludge and unusable thinner as hazardous waste.



Local Agencies: Antioch (925) 779-7035; Brentwood (925) 516-5420; Clayton (925) 673-7300; Concord (925) 671-3127; Danville (925) 314-3300; El Cerrito (510) 215-4382; Hercules (510) 799-8242; Lafayette (925) 284-1951; Martinez (925) 372-3515; Moraga (925) 376-2590; Oakley (925) 625-7003; Orinda (925) 253-4231; Pinole (510) 724-8949; Pittsburg (925) 252-4920; Pleasant Hill (925) 671-5264; Richmond (510) 307-8091; San Pablo (510) 215-3066; San Ramon (925) 973-2610; Walnut Creek (925) 943-5834; Contra Costa County (925) 313-2259; Contra Costa Clean Water Program (925) 313-2392

**Storm drain polluters may be liable for fines of up to \$10,000 per day plus \$10 per gallon!**

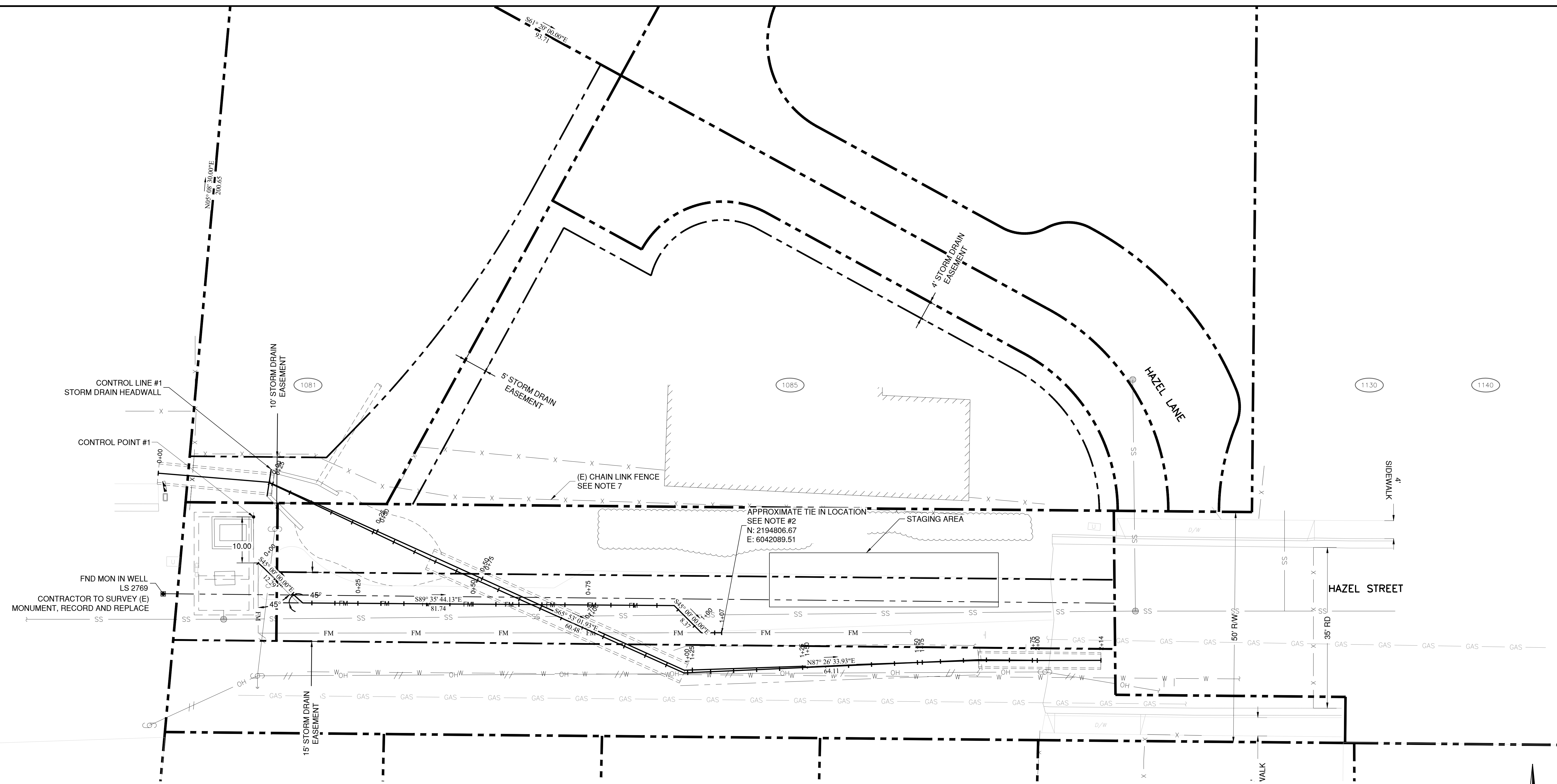
City of Pinole  
 Building Department 510-724-8912  
 Fire Department 510-724-8970  
 Public Works 510-724-9010

NO	REVISION	DATE	APPR	APPROVED FOR CONSTRUCTION:	SCHAAF & WHEELER CONSULTING CIVIL ENGINEERS 4699 OLD IRONSIDES DRIVE, STE 350 SANTA CLARA, CA 95054 (408) 246-4848	HAZEL STREET STORM DRAIN IMPROVEMENTS  POLLUTION PREVENTION PLAN	DATE:	SHEET
△				DEVELOPMENT SERVICES DIRECTOR/ CITY ENGINEER			9/16/2022	
△				DATE		OF		
△						12		
△						CHECKED: BLS		

CITY OF PINOLE, CALIFORNIA  
 DEVELOPMENT SERVICES DEPARTMENT  
 2131 PEAR STREET, PINOLE, CA 94564



DATE: 9/16/2022  
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PLAN  
SCALE: 1" = 10'

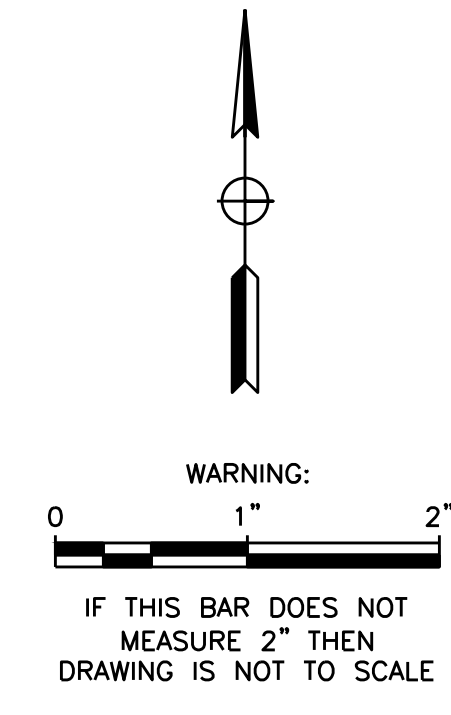
STORM DRAIN CONTROL TABLE			
CL #	DESCRIPTION	STARTING LOCATION	BEARING
1	STORM DRAIN CONTROL LINE	SOUTHWEST CORNER OF EXISTING STORM DRAIN HEADWALL	N 08° 53' 26.87" E

SANITARY SEWER CONTROL TABLE			
CP #	DESCRIPTION	NORTHING	EASTING
1	EXISTING SANITARY SEWER LIFT STATION CORNER	2194832	6041988

NOTES

1. BASIS OF BEARINGS: THE BEARING OF NORTH 00° 31' 50" EAST TAKEN ON THE MONUMENT LINE OF DUTRA COURT AS SHOWN ON THAT CERTAIN SUBDIVISION MAP NUMBER 3319 FILED FOR RECORD ON MAY 19, 1965, IN BOOK 104 OF MAPS AT PAGE 39, OFFICIAL RECORDS OF CONTRA COSTA COUNTY WAS TAKEN AS THE BASIS FOR ALL BEARINGS SHOWN HEREON.
2. NORTHING AND EASTING HAVE BEEN TRANSLATED FROM K&W SURVEY. LOCATIONS ARE PLUS/MINUS BASED ON THE ACCURACY OF COUNTY PARCEL DATA.
3. ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).



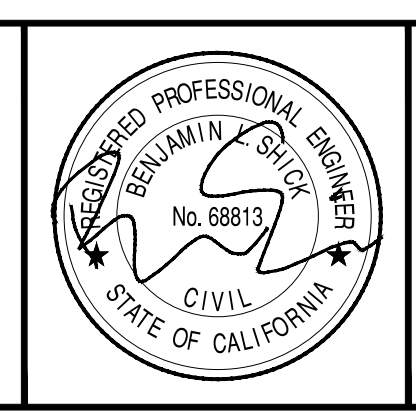
**EXERCISE CAUTION WHEN EXCAVATING OR WORKING AROUND PG&E GAS LINES AND BURIED OR OVERHEAD ELECTRICAL LINES. CONTACT PG&E REPRESENTATIVES AT (800) 743-5000**

NO	REVISION	DATE	APPR

CITY OF PINOLE, CALIFORNIA  
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2131 PEAR STREET, PINOLE, CA 94564

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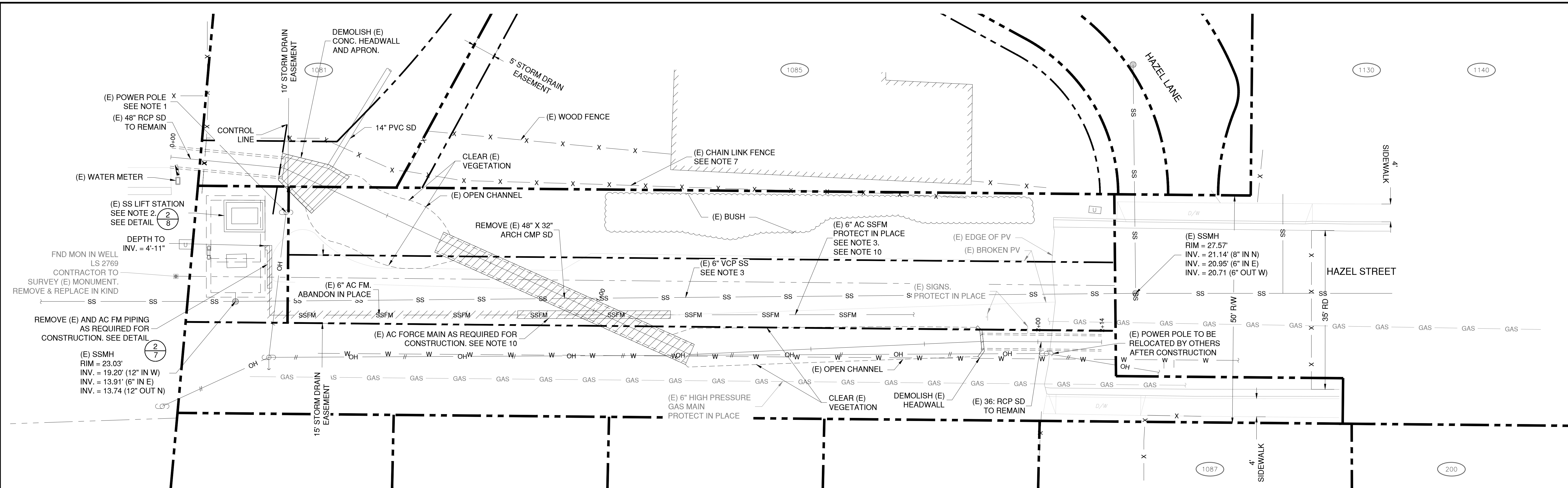
**Schaaf & Wheeler**  
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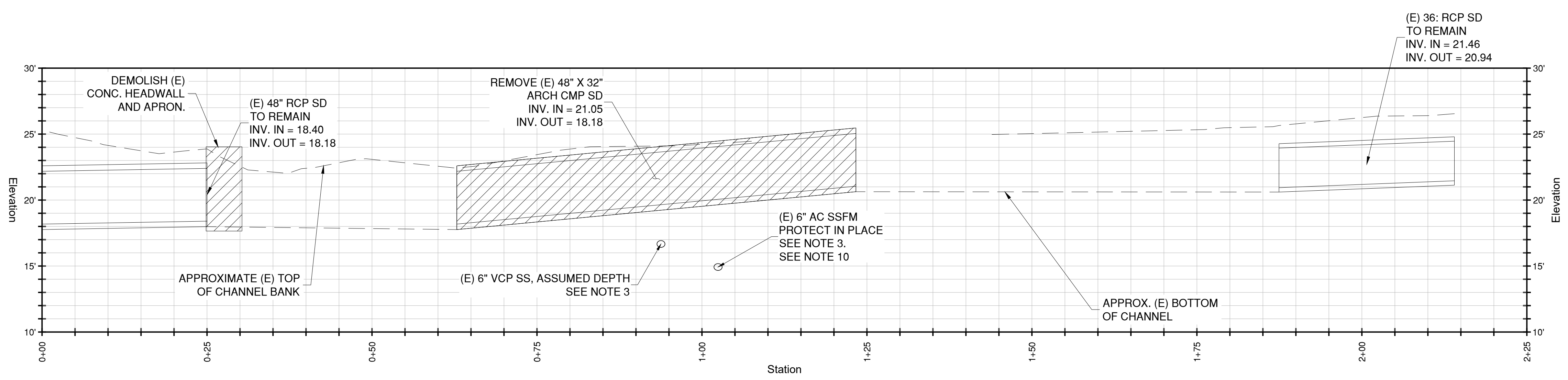
HAZEL STREET STORM DRAIN IMPROVEMENTS  
  
CONTROL PLAN

DATE: 9/16/2022  
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SHEET  
4  
OF  
12



PLAN  
SCALE: 1" = 10'



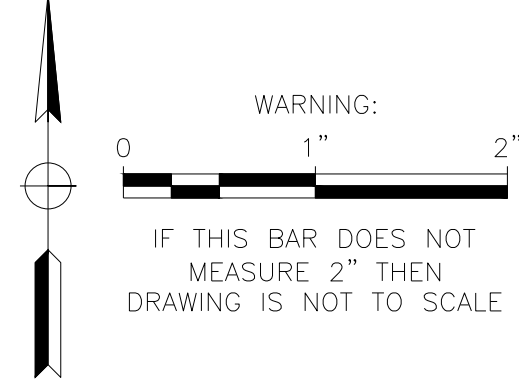
PROFILE  
HORIZONTAL SCALE: 1" = 10'  
VERTICAL SCALE: 1" = 4'

- NOTES
- CONTRACTOR SHALL PROTECT (E) PUMP STATION UTILITY POLE IN PLACE. DO NOT TRENCH WITHIN TWO FEET OF THE (E) UTILITY POLE. COORDINATE WITH UTILITY COMPANY AS NECESSARY.
  - CONTRACTOR SHALL PROTECT (E) SEWER PUMP STATION IN PLACE.
  - CONTRACTOR SHALL VERIFY DEPTHS OF (E) UTILITY CROSSINGS PRIOR TO INSTALLING PIPELINE, AND SHALL PROTECT ALL UTILITIES IN-PLACE DURING CONSTRUCTION.
  - ALL WORK SHALL BE CONTAINED WITHIN EXISTING CITY RIGHT-OF-WAY AND WITHIN EXISTING STORM DRAIN EASEMENTS.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY, LOCATE, AND PROTECT ALL MONUMENTS PRIOR TO ANY DEMOLITION. CONTRACTOR SHALL NOTIFY THE CITY IF ANY MONUMENTS REQUIRE REMOVAL AND REPLACEMENT PRIOR TO CONSTRUCTION. SEE GENERAL NOTES FOR MONUMENT REPLACEMENT REQUIREMENTS.
  - EXISTING CHAIN LINK FENCE SHALL BE PROTECTED IN-PLACE. FENCE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN-KIND.
  - PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
  - CONTRACTOR TO NOTIFY RESIDENTS ON HAZEL STREET AND HAZEL LANE 48 HOURS PRIOR TO START OF CONSTRUCTION.
  - CONTRACTOR TO PROVIDE BYPASS PUMPING CAPACITY OF UP TO 350 GPM FOR SANITARY SEWER FLOWS DURING THE FM OUTTAGE. FM DISCHARGE LOCATION IS LOCATED AT THE INTERSECTION OF HAZEL STREET AND PINOLE AVENUE APPROXIMATELY 1,200 LF OF THE TIE IN LOCATION. FM DEMOLITION SHALL BE COORDINATED WITH THE CITY. CONTRACTORS SHALL NOT CUT EXISTING FM UNTIL CONTRACTOR HAS OBTAINED WRITTEN APPROVAL FROM THE CITY TO PROCEED.



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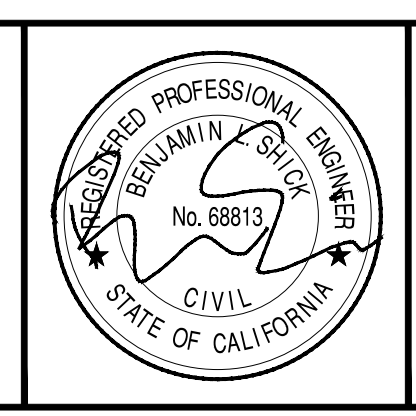


NO	REVISION	DATE	APPR

CITY OF PINOLE, CALIFORNIA  
DEVELOPMENT SERVICES DEPARTMENT  
2131 PEAR STREET, PINOLE, CA 94564

APPROVED FOR CONSTRUCTION:  
  
DEVELOPMENT SERVICES DIRECTOR/  
CITY ENGINEER  
  
DATE

**Schaaf & Wheeler**  
CONSULTING CIVIL ENGINEERS  
4699 OLD IRONSIDES DRIVE, STE 350  
SANTA CLARA, CA 95054  
(408) 246-4848

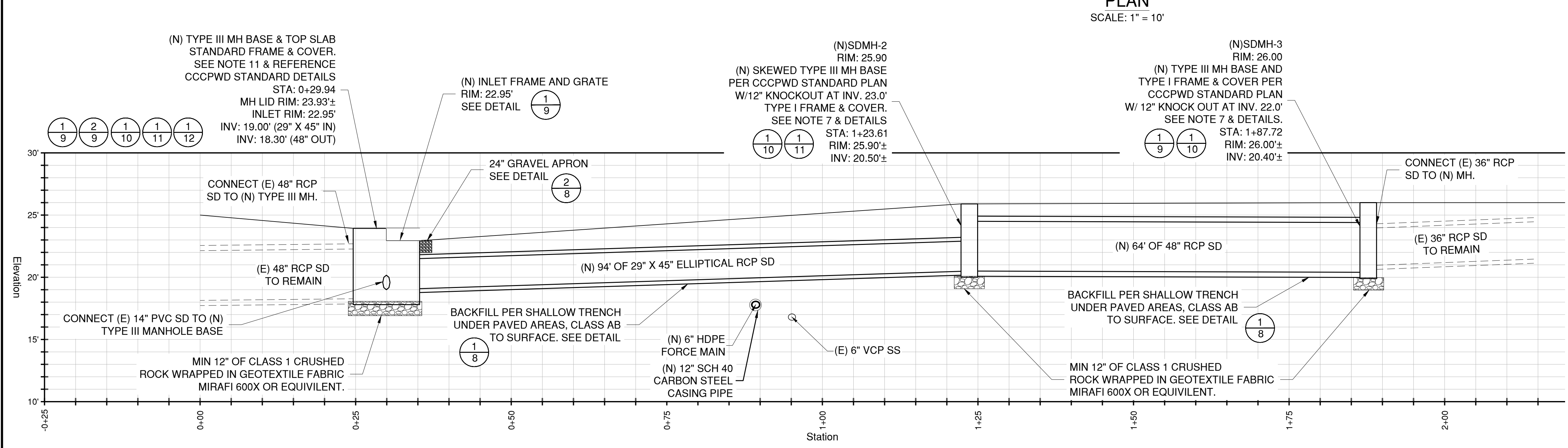
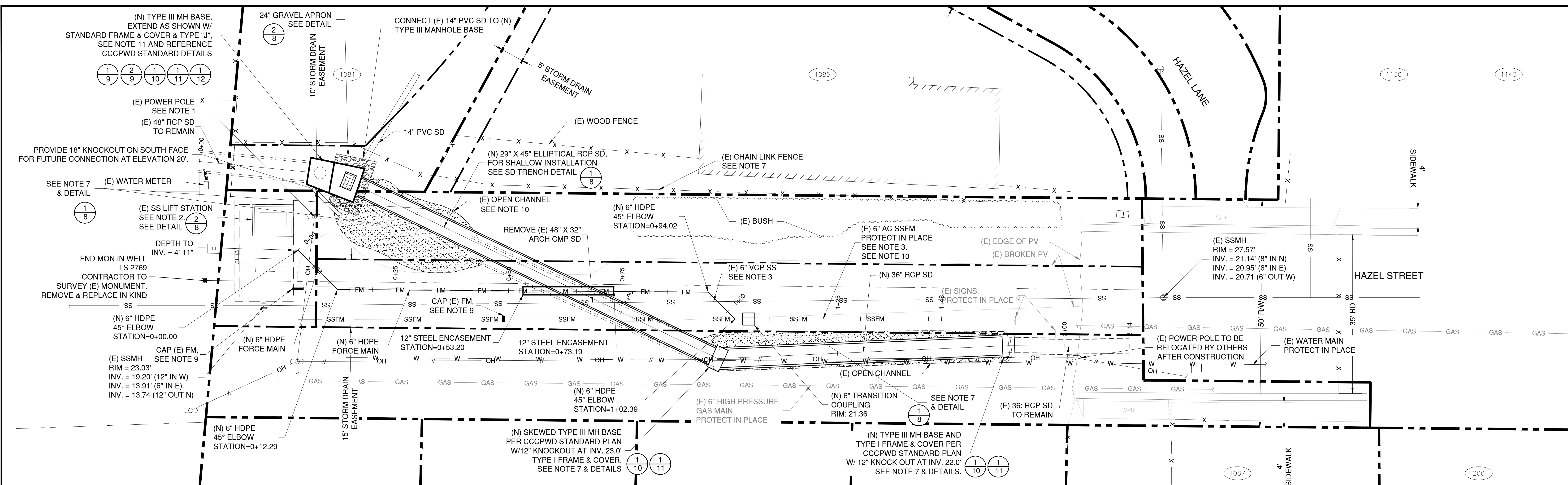


HAZEL STREET STORM DRAIN IMPROVEMENTS  
  
EXISTING SITE AND DEMOLITION PLAN

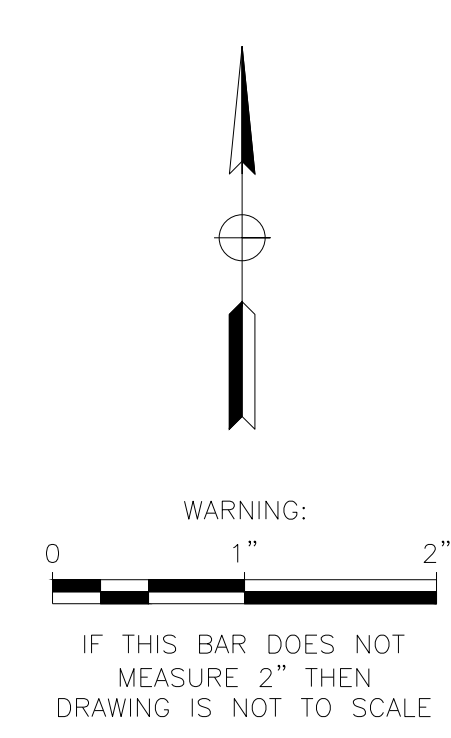
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SCALE: AS SHOWN  
DESIGN: BLS  
DRAWN: VOB  
CHECKED: BLS

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OF  
12





- NOTES
- CONTRACTOR SHALL PROTECT (E) SANITARY SEWER PUMP STATION UTILITY POLE IN PLACE. DO NOT TRENCH WITHIN TWO FEET OF THE (E) UTILITY POLE.
  - CONTRACTOR SHALL PROTECT (E) SANITARY SEWER PUMP STATION IN PLACE.
  - CONTRACTOR SHALL VERIFY DEPTHS OF (E) UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING PROPOSED PIPES, MANHOLES, AND INLETS. CONTRACTOR SHALL NOTIFY THE CITY OF ANY POTENTIAL CONFLICTS.
  - ALL WORK SHALL BE CONTAINED WITHIN EXISTING CITY RIGHT-OF-WAY AND WITHIN EXISTING STORM DRAIN EASEMENTS.
  - CONTRACTOR SHALL POTHOLE ALL UTILITIES ALONG ALIGNMENT OF NEW PIPELINE PRIOR TO CONSTRUCTION.
  - CONTRACTOR TO PROVIDE KNOCKOUT ON SOUTH FACE OF JUNCTION STRUCTURE FOR FUTURE 12-INCH STORM DRAIN CONNECTION.
  - BACKFILL APPROXIMATELY 120 CY. FOR SHALLOW TRENCH UNDER PAVED AREAS, CLASS 2 AB TO SURFACE. CONFORM TO ADJACENT GRADE. CONTRACTOR SHALL APPLY EROSION CONTROL SEED MIX TO ALL DISTURBED SOIL SURFACES WITHIN WORK AREA, HEDGEROW BAY AREA NATIVE AFTER FIRE EROSION CONTROL SEED MIX OR APPROVED EQUAL. TO BE APPLIED PER RECOMMENDED GUIDANCE.
  - CONTRACTOR TO PROVIDE KNOCKOUT ON SOUTH FACE OF MANHOLE STRUCTURE FOR FUTURE 18-INCH STORM DRAIN CONNECTION.
  - CONTRACTOR TO GROUT FILL (E) 6" AC FORCE MAIN TO BE ABANDONED IN PLACE.
  - BACKFILL AND GRADE SITE TO DRAIN TO NEW INLET.
  - INSTALL TYPE III MH BASE WITH EXTENDED DIMENSIONS TO CONNECT TO (E) 48" RCP, (E) 14" PVC, AND (N) 29" X 45" RCP. APPROXIMATE LENGTH OF REQUIRED STRUCTURE IS 10 FEET. INSTALL STANDARD FRAME & COVER & TYPE "J" INLET AT ELEVATIONS SHOWN, CONSTRUCT STEP IN TOP SLAB TO ADJUST ELEVATION PER DETAIL.



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NO	REVISION	DATE	APPR

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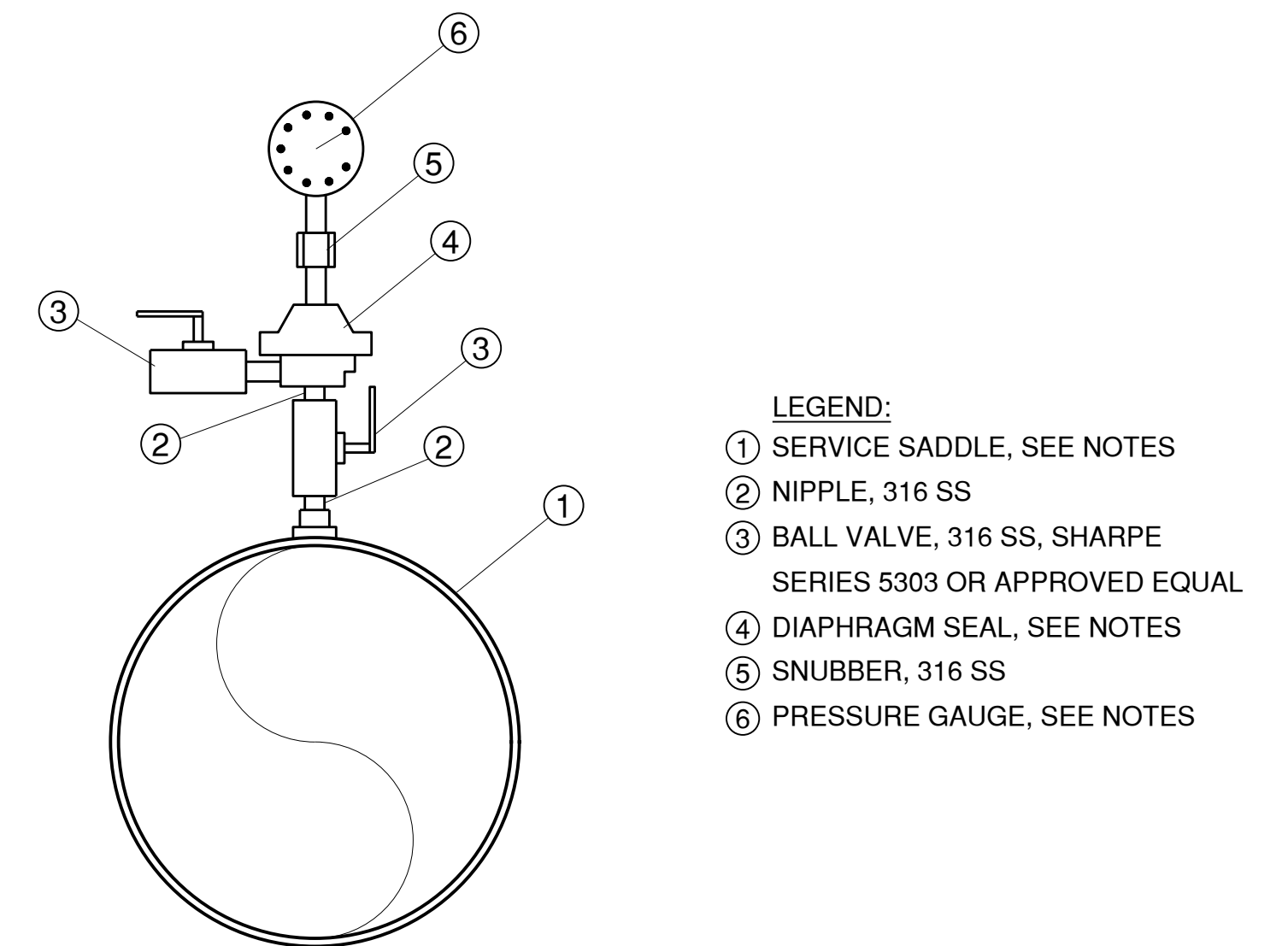
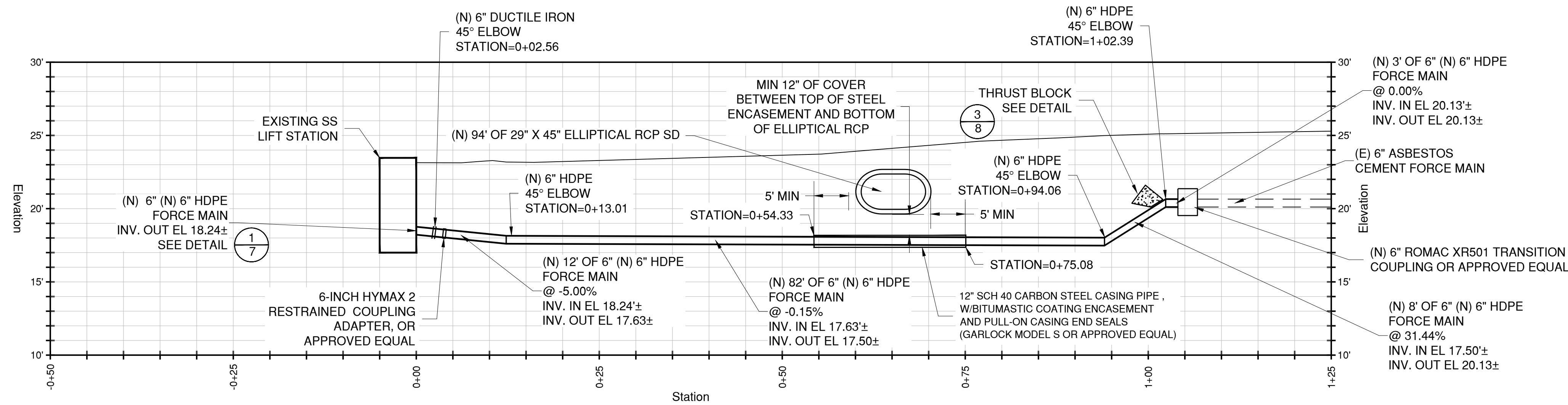
DEVELOPMENT SERVICES DIRECTOR/  
CITY ENGINEER

DATE

CITY OF PINOLE, CALIFORNIA  
DEVELOPMENT SERVICES DEPARTMENT  
2131 PEAR STREET, PINOLE, CA 94564

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CONSULTING CIVIL ENGINEERS  
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(408) 246-4848

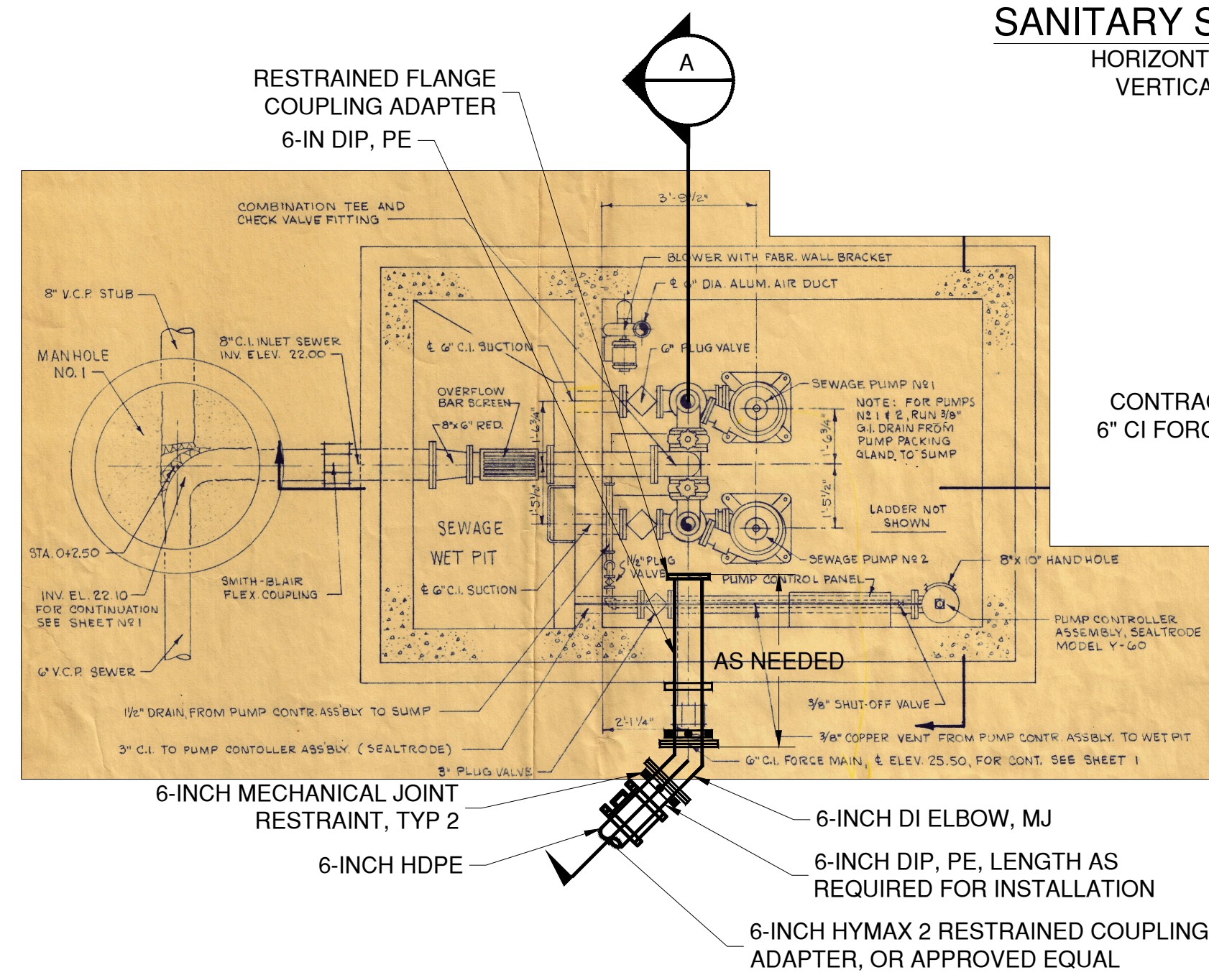
HAZEL STREET STORM DRAIN IMPROVEMENTS		DATE: 9/16/2022	SHEET 6 OF 12
SITE IMPROVEMENT PLAN - 1		SCALE: AS SHOWN	
		DESIGN: BLS	
		DRAWN: VOB	
		CHECKED: BLS	



- LEGEND:
- ① SERVICE SADDLE, SEE NOTES
  - ② NIPPLE, 316 SS
  - ③ BALL VALVE, 316 SS, SHARPE SERIES 5303 OR APPROVED EQUAL
  - ④ DIAPHRAGM SEAL, SEE NOTES
  - ⑤ SNUBBER, 316 SS
  - ⑥ PRESSURE GAUGE, SEE NOTES
- NOTES:
1. SERVICE SADDLE SHALL BE SMITH BLAIR 317 WITH DOUBLE STAINLESS STEEL STRAP OR APPROVED EQUAL. NUTS AND BOLTS SHALL BE 316 SS WITH XYLAND FLUOROPOLYMER COATING.
  2. DIAPHRAGM SEAL SHALL BE 316 SS WITH BLEEDING CONNECTION, SIEMENS 7MF4861 OR APPROVED EQUAL
  3. PRESSURE GAUGE SHALL BE ASHCROFT 1279 OR APPROVED EQUAL. GAUGE SHALL BE LIQUID FILLED WITH A RANGE OF 0 TO 60 PSI.

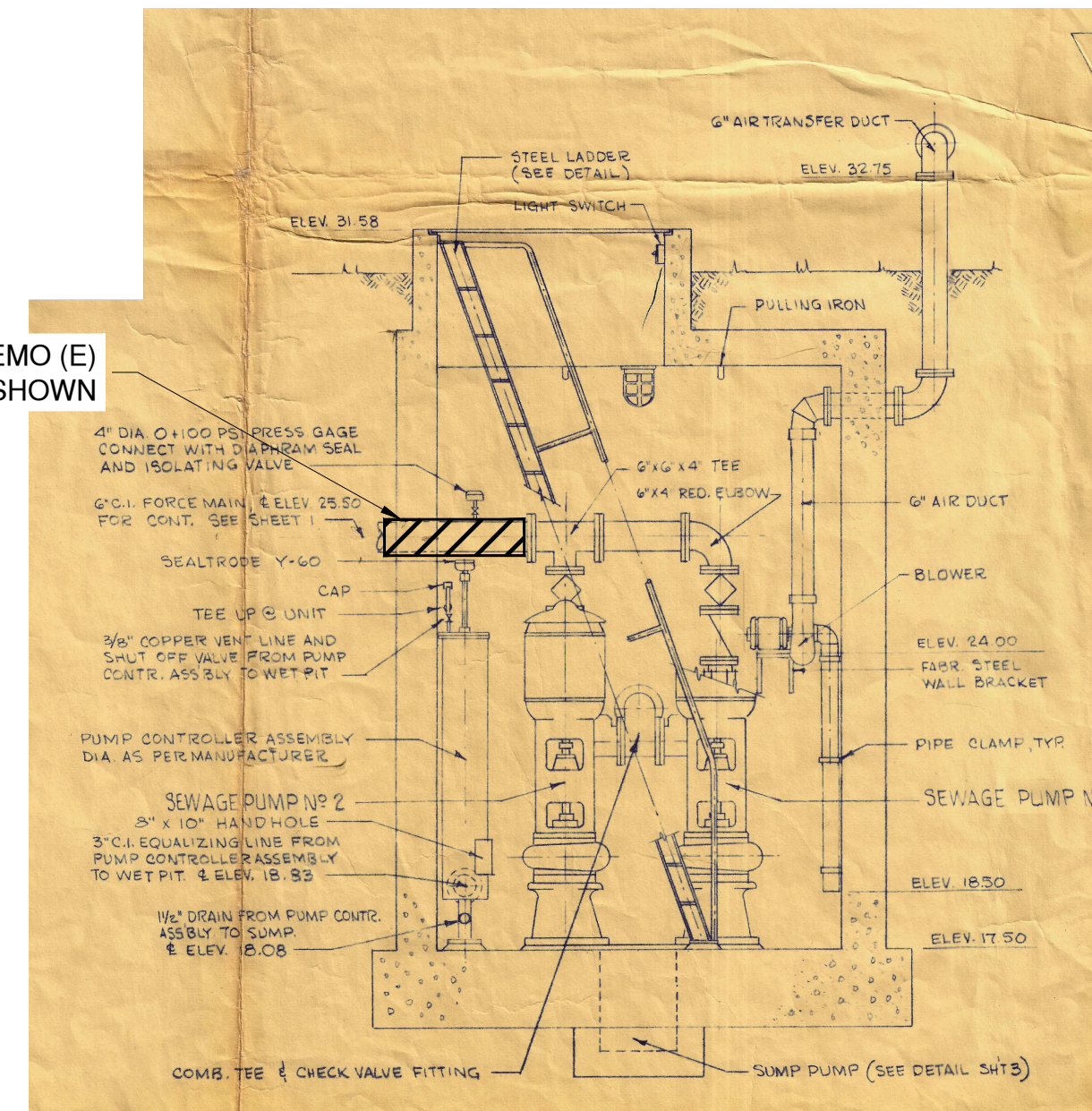
**SANITARY SEWER PROFILE**

HORIZONTAL SCALE: 1" = 10'  
VERTICAL SCALE: 1" = 4'

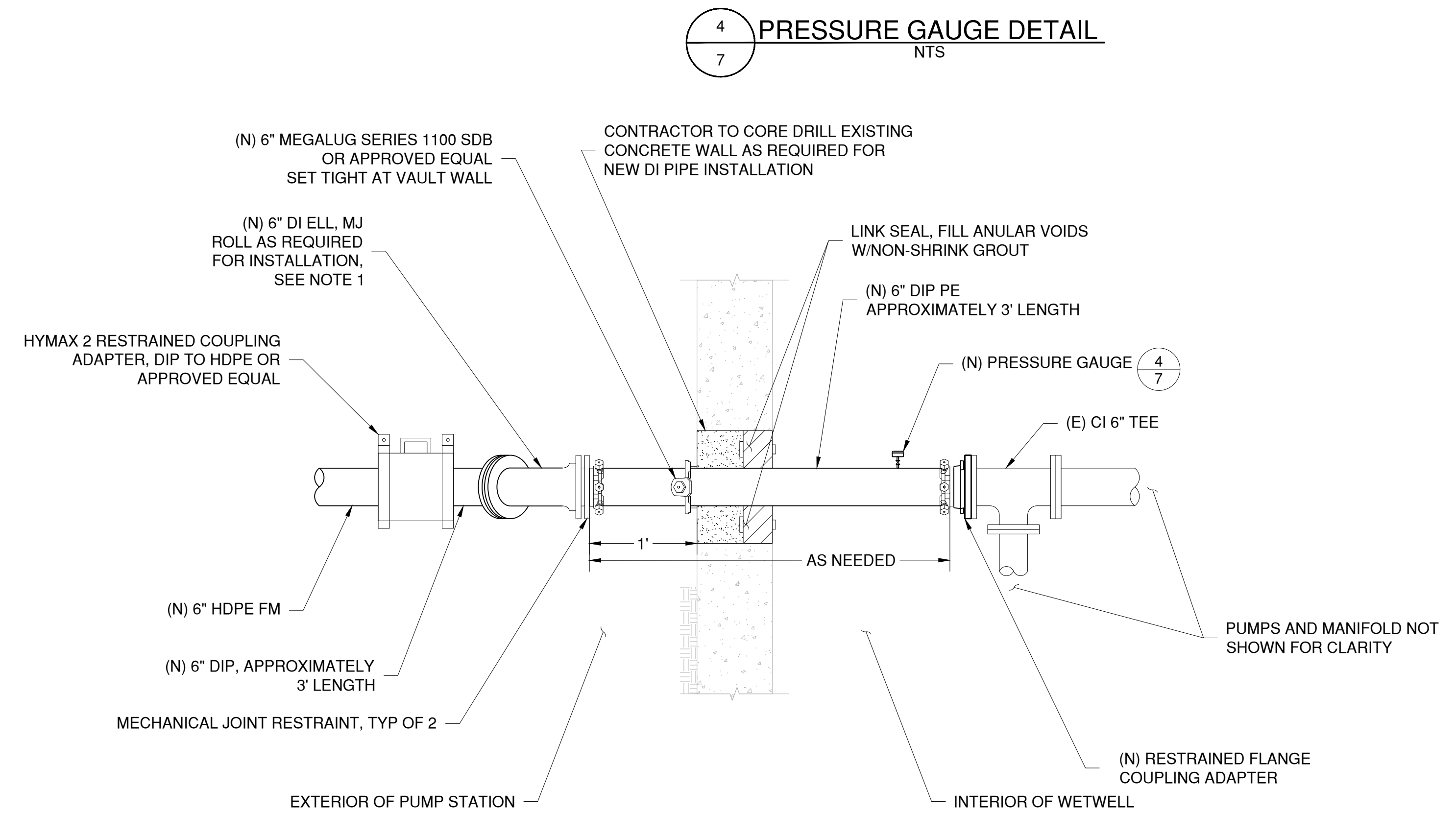


① LIFT STATION DETAIL  
NTS

- NOTES:
1. CONTRACTOR TO COORDINATE LIFT STATION SHUTOFF WITH THE CITY ENGINEER
  2. ALL WORK WITHIN LIFT STATION DRYWELL IS CONSIDERED CONFINED SPACE ENTRY, CONTRACTOR SHALL ADHERE TO ALL OSHA SAFETY REQUIREMENTS ASSOCIATED WITH CONFINED SPACE WORK
  3. CONTRACTOR SHALL SUBMIT SEWAGE DIVERSION PLAN FOR REVIEW PRIOR TO LIFT STATION SHUTOFF AND CUTTING OF THE EXISTING FM
  4. WORK INVOLVING LIFT STATION SHUTOFF SHALL BE CONDUCTED IN THE MIDDLE OF THE NIGHT WHEN SEWAGE FLOWS ARE LOWEST
  5. CONTRACTOR SHALL BE RESPONSIBLE FOR DRAINING SEWAGE IN EXISTING FM



② SECTION A - DEMO  
NTS



④ PRESSURE GAUGE DETAIL  
NTS

NOTE:

1. NEW FORCE MAIN SHALL NOT EXCEED -5% SLOPE

③ SECTION A - IMPROVEMENTS  
NTS



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NO	REVISION	DATE	APPR

CITY OF PINOLE, CALIFORNIA  
DEVELOPMENT SERVICES DEPARTMENT  
2131 PEAR STREET, PINOLE, CA 94564

APPROVED FOR CONSTRUCTION:

DEVELOPMENT SERVICES DIRECTOR/  
CITY ENGINEER

DATE

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(408) 246-4848

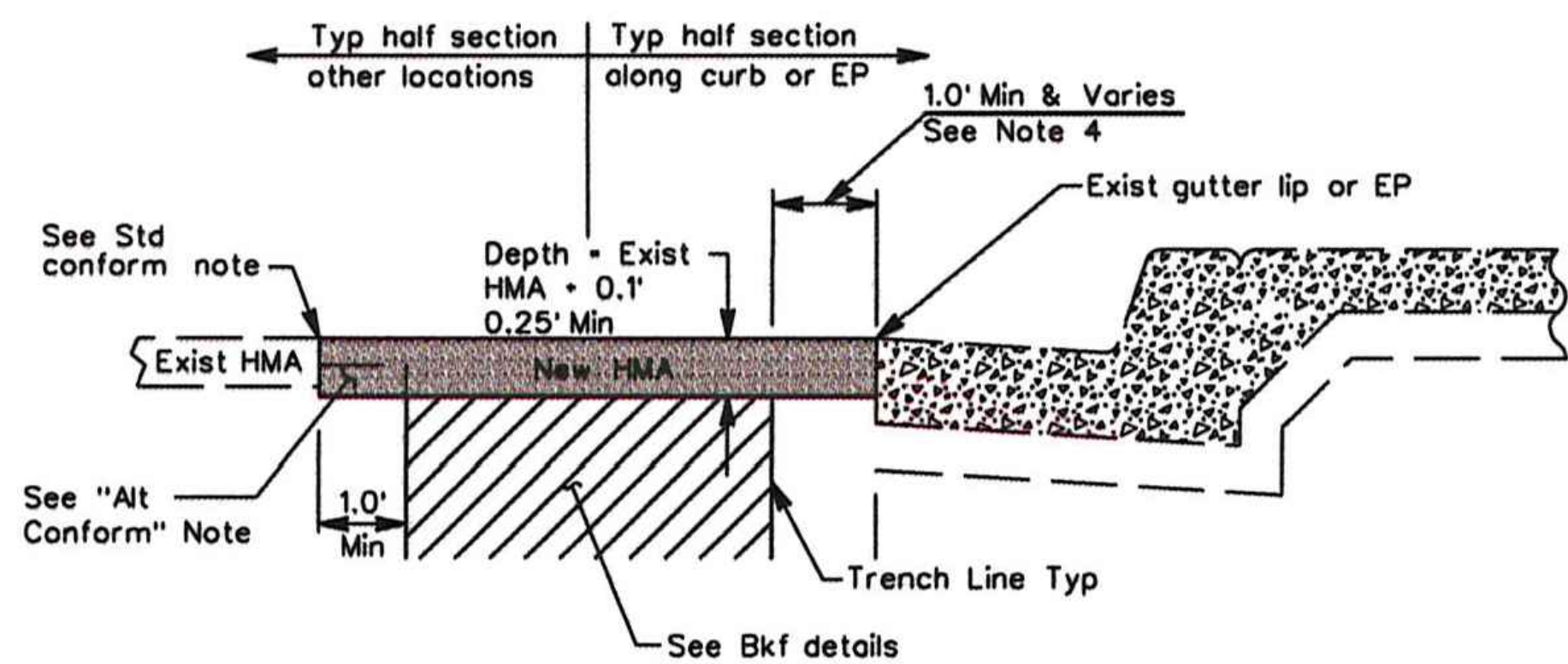


HAZEL STREET STORM DRAIN IMPROVEMENTS

SITE IMPROVEMENT PLAN - 2

DATE: 9/16/2022  
SCALE: AS SHOWN  
DESIGN: BLS  
DRAWN: VOB  
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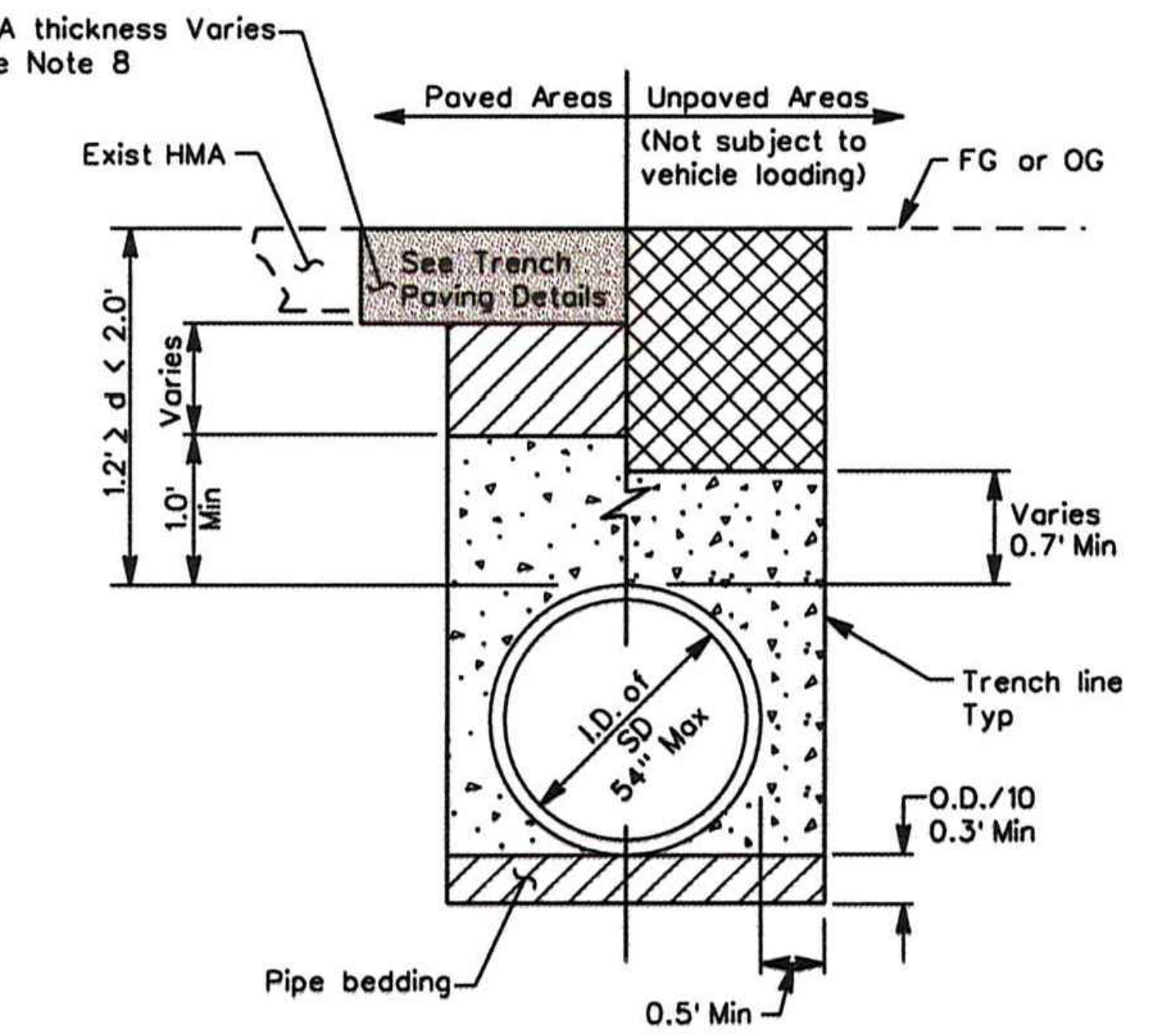


TRENCH PAVING DETAILS

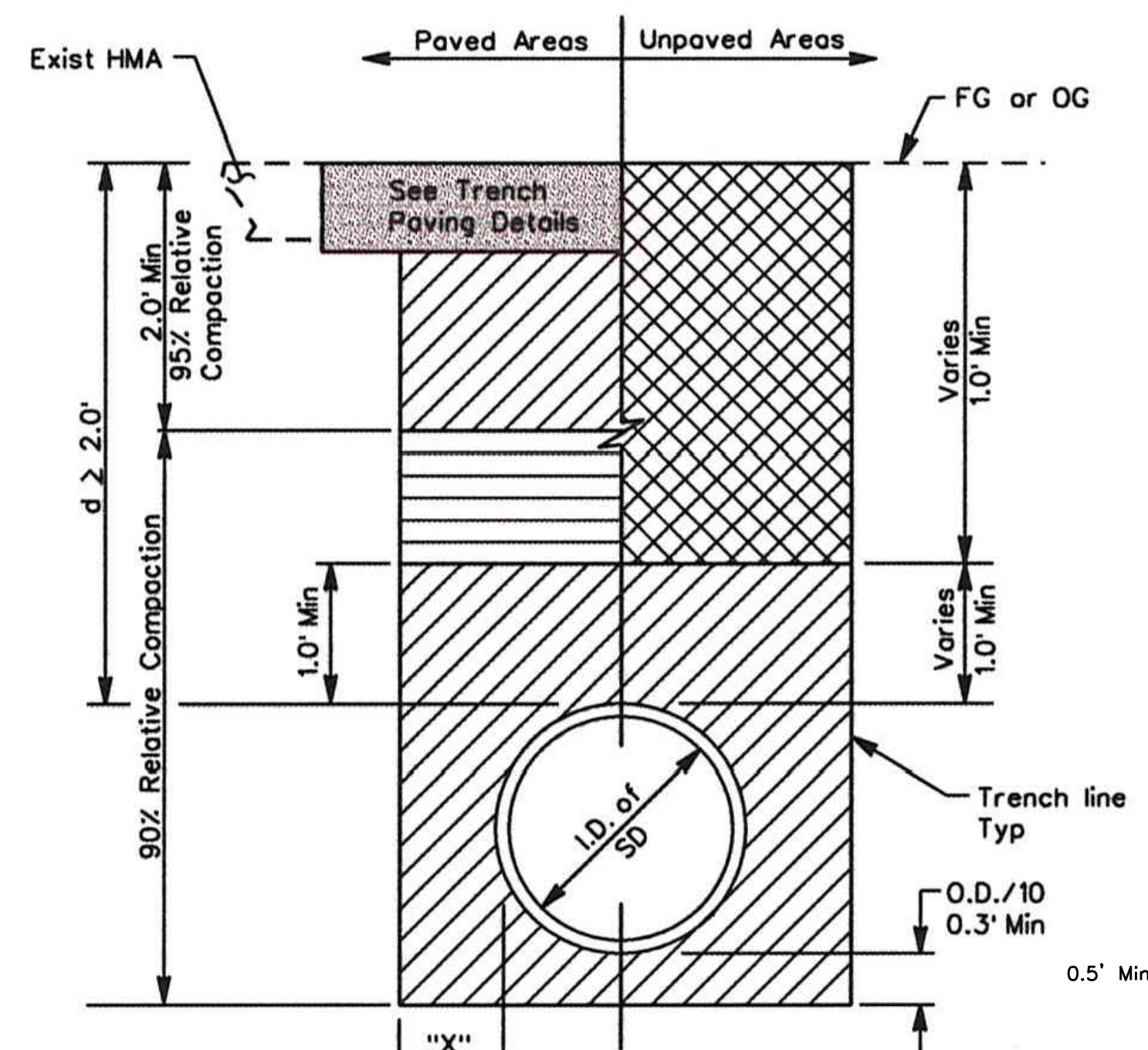
**CONFORM NOTES:**  
 The pavement conform shall be as follows:  
**STANDARD CONFORM:**  
 Cut through the full depth of existing HMA to a neat straight line at least 1.0 foot beyond the trench line. Re-cut any pavement edges damaged during construction to neat lines prior to paving. Paint binder (tack coat) shall be applied to all vertical surfaces in accordance with the latest edition of Caltrans Standard Specifications.  
**ALTERNATE CONFORM:**  
 Grind existing HMA to a minimum depth of 0.20 feet on a neat straight line at least 1.0 foot beyond the trench line. Any pavement edges, including ground edges, damaged during construction shall be re-cut or re-ground to neat lines prior to paving. Paint binder (tack coat) shall be applied to all vertical surfaces in accordance with the latest edition of Caltrans Standard Specifications.

*Julia R. Bueren*  
 PUBLIC WORKS DIRECTOR  
 March 11, 2014  
 PLANS APPROVAL DATE  
 No. 37937  
 CIVIL  
 STATE OF CALIFORNIA  
 REGISTERED PROFESSIONAL ENGINEER

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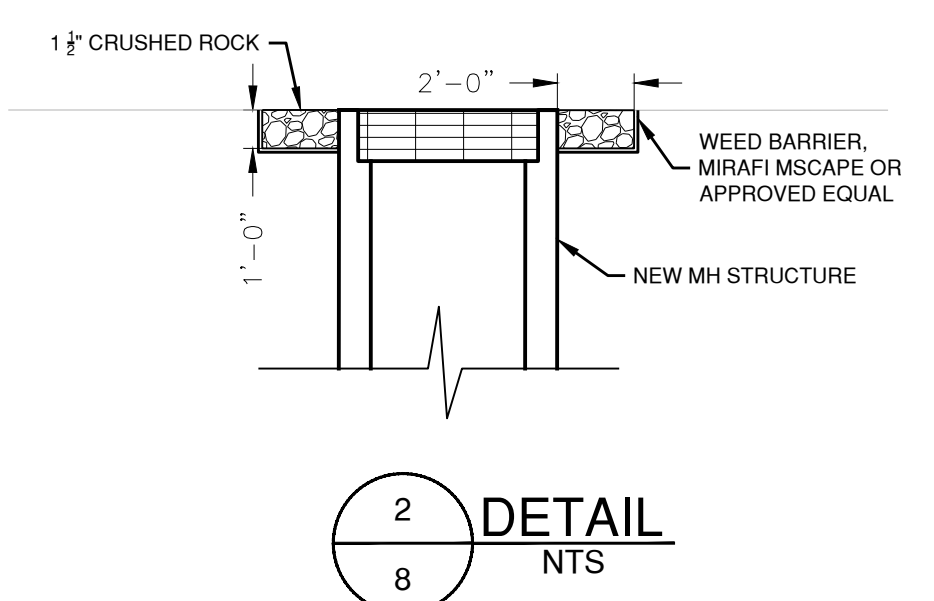


SHALLOW TRENCH BACKFILL DETAILS

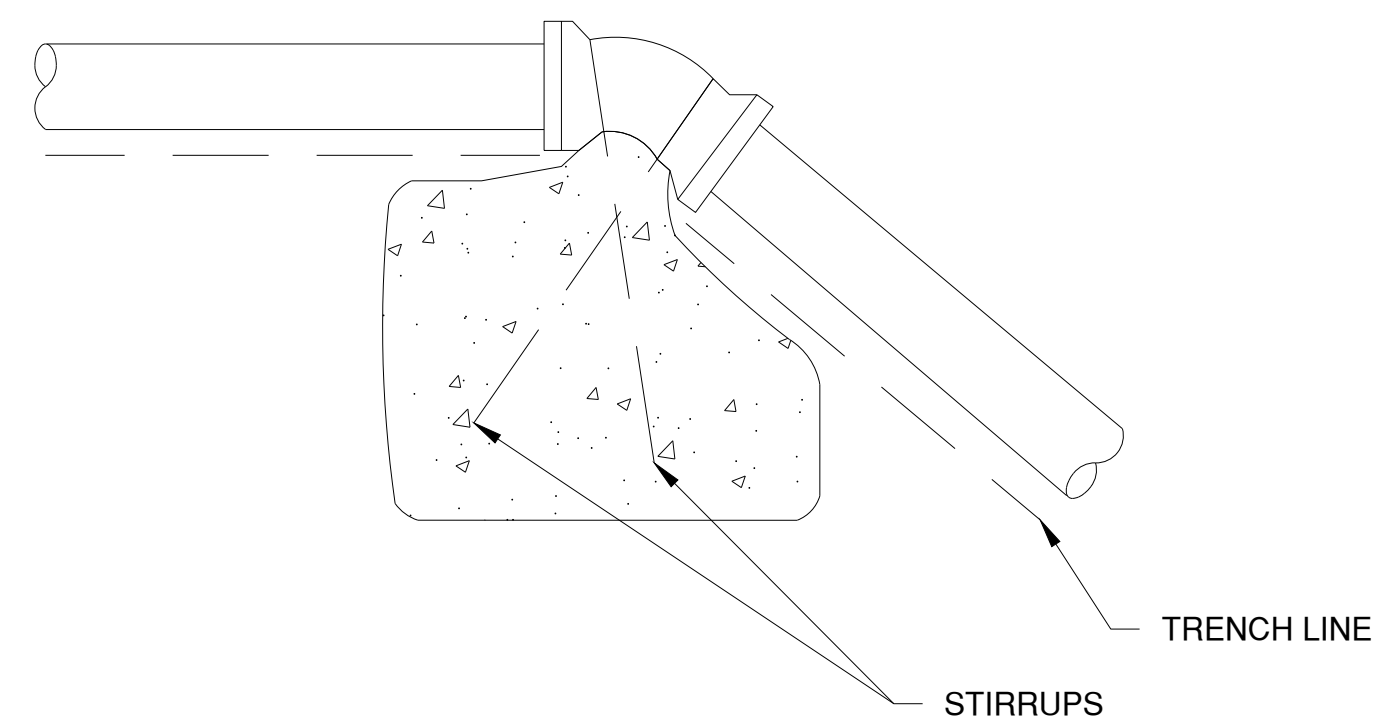


STANDARD TRENCH BACKFILL DETAILS

- NOTES:**
- Unsuitable native material shall be excavated below the limit of excavation and replaced with suitable backfill material when directed by the Public Works Department.
  - "X" shall be as a minimum, the dimensions shown below for the storm drain "I.D.".
- | I.D.       | "x"  |
|------------|------|
| up to 12"  | 0.5' |
| 12" to 54" | 1.0' |
| over 54"   | 2.0' |
- If cover is less than 1.2' or the storm drain I.D. exceeds 54 inches in shallow installations, a special design is required with approval by the Public Works Department.
  - Where the trench parallels curb and the nearest trench line is less than 3 feet from the gutter lip, all existing HMA shall be replaced to the gutter lip. For gutter lip paving detail see Detail A.
  - Hot mix asphalt shall be 1/2-inch Type A HMA in conformance with Section 39, "Hot Mix Asphalt," of the California Department of Transportation's Standard Specifications, unless otherwise specified in the County contract, encroachment permit's Special Road Encroachment Permit Conditions or as directed by the Public Works Department.
  - Concrete shall contain not less than 505 lbs of cementitious material per cubic yard in conformance with Section 90, "Concrete," of the California Department of Transportation's Standard Specifications.
  - This standard plan shall govern over encroachment permit's Standard Road Encroachment Permit Conditions, and General Permit Conditions-Attachment 1. County Contract Special Provisions and Plans, or Encroachment permit's Special Road Encroachment Permit Conditions shall govern over this standard plan.
  - HMA thickness shall be existing HMA plus 0.1'. If PCC backfill encroaches into this specified thickness, the HMA thickness may be reduced, except the minimum HMA thickness shall not be less than 0.20'.



DETAIL 2 NTS



DETAIL 3 ANCHOR BLOCK DETAIL NTS

**LEGEND**

- HMA Paving
- Cl 2 AB
- Conc Bkf, See Note 6
- Cl 2 AB, or suitable native Bkf Mtl with a Min sand equivalent of 20.
- Suitable native Mtl, no solid materials (rock, Conc) larger than 4 inches in greatest dimension or organic matter.

**DETAIL A**  
 Gutter Lip Paving

COUNTY OF CONTRA COSTA  
 PUBLIC WORKS DEPARTMENT  
 MARTINEZ, CALIFORNIA  
 STANDARD PLAN

**STORM DRAIN TRENCH DETAILS**

SCALE: NO SCALE DATE: 3/14  
 DRAWN BY: H. HUSSEY PLAN NO. CD01  
 CHECKED BY: M. HOLLINGSWORTH

NO.	DATE	REVISION	DESCRIPTION	BY

DETAIL 1 TRENCH BACKFILL DETAIL NTS

- NOTES:**
- THRUST BLOCKS AND ANCHOR BLOCKS SHALL BE OF 2500 P.S.I. CONCRETE AND POURED AGAINST UNDISTURBED SOIL
  - THRUST RESTRAINT SIZES REQUIRED ARE BASED ON 150 P.S.I. HYDROSTATIC TEST PRESSURE AND A 1.25 FACTOR OF SAFETY
  - STIRRUPS SHALL BE MINIMUM 1/2" DIAMETER
  - TWO STIRRUPS REQUIRED ON 4" - 8" FITTINGS, FOUR STIRRUPS REQUIRED ON 12" FITTINGS
  - ALL CAST IRON, DUCTILE IRON, AND STEEL SURFACES (INCLUDING IRON SADDLES) SHALL BE ENCASED IN POLYETHYLENE
  - ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE 1000 PSF. MINIMUM THRUST BLOCK BEARING AREA SHALL NOT BE LESS THAN 4.5 SQUARE FEET
  - ANCHOR BLOCK VOLUME SHALL BE NO LESS THAN 1 CUBIC YARD



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NO.	REVISION	DATE	APPR	APPROVED FOR CONSTRUCTION:	HAZEL STREET STORM DRAIN IMPROVEMENTS	DATE:	SHEET
						9/16/2022	8
						AS SHOWN	OF
						BLS	12
						VOB	
						BLS	

CITY OF PINOLE, CALIFORNIA  
 DEVELOPMENT SERVICES DEPARTMENT  
 2131 PEAR STREET, PINOLE, CA 94564

APPROVED FOR CONSTRUCTION:  
 DEVELOPMENT SERVICES DIRECTOR/  
 CITY ENGINEER  
 DATE

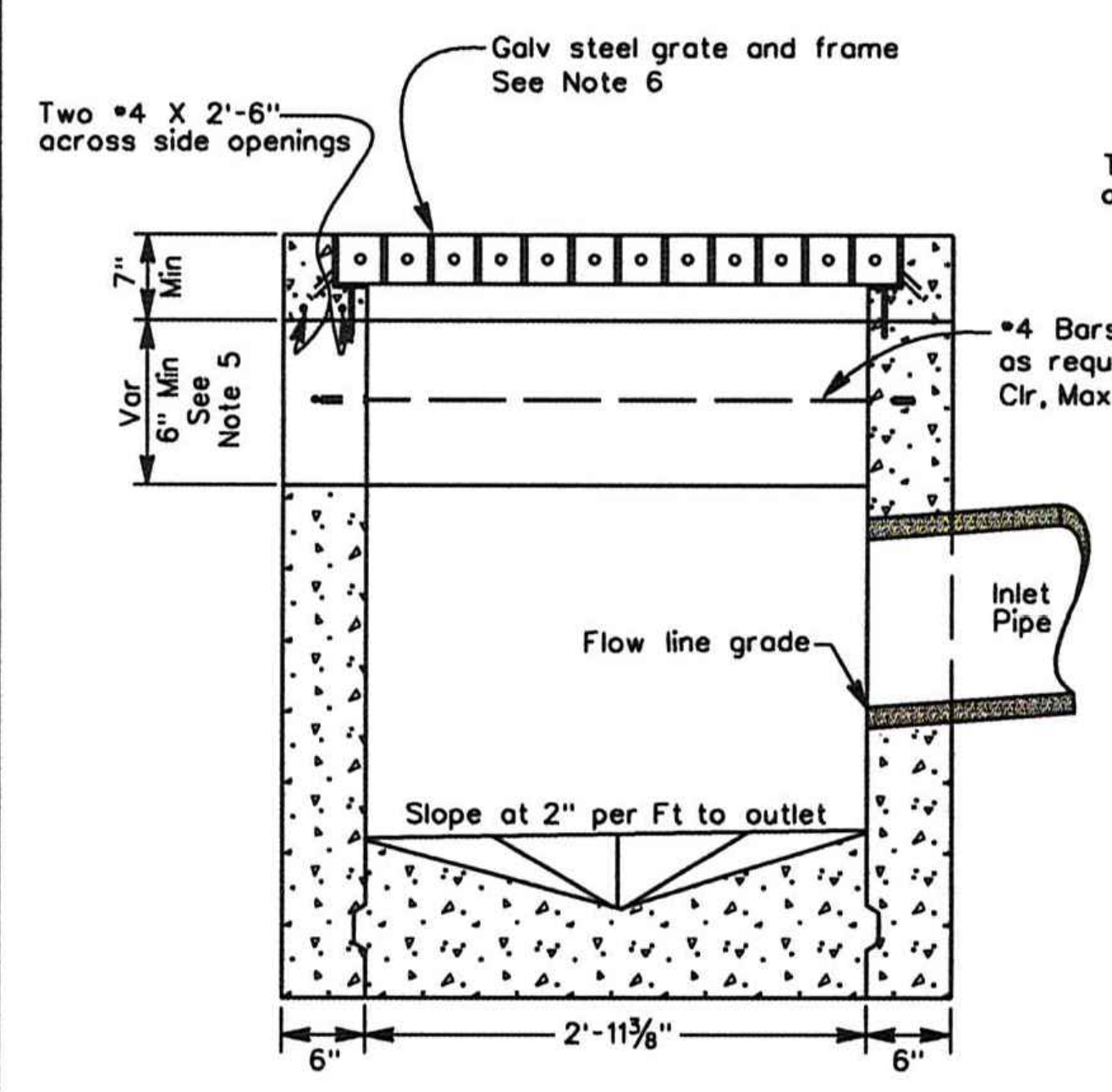
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 4699 OLD IRONSIDES DRIVE, STE 350  
 SANTA CLARA, CA 95054  
 (408) 246-4848



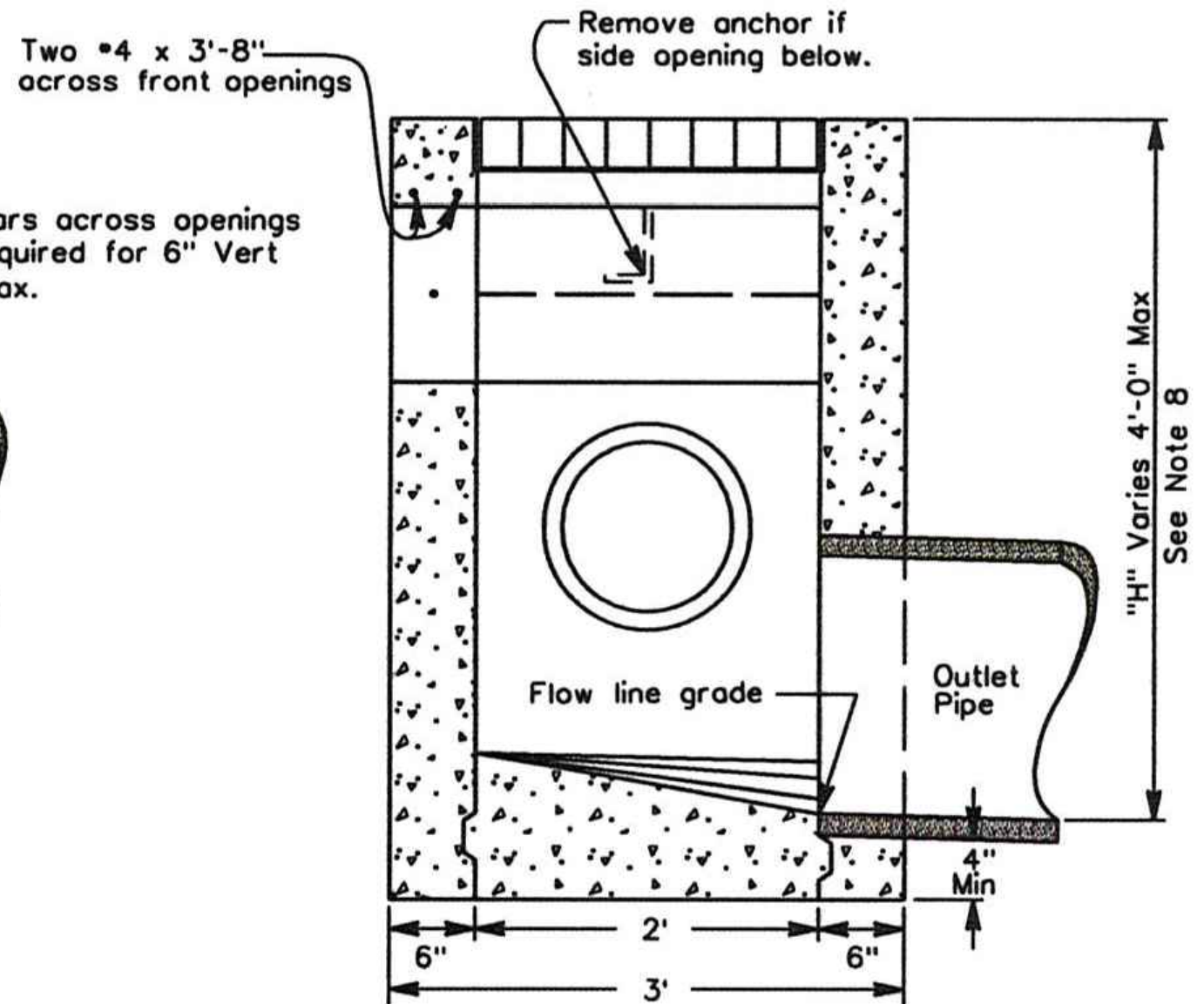
HAZEL STREET STORM DRAIN IMPROVEMENTS  
 CIVIL DETAILS - 1

DATE: 9/16/2022  
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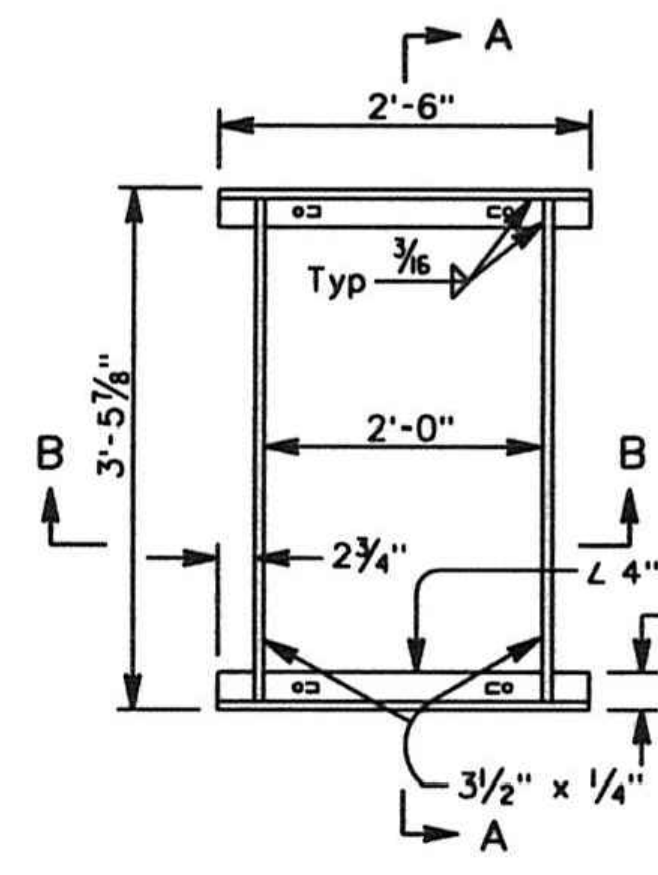
*Julia R Bueren*  
 PUBLIC WORKS DIRECTOR  
 March 11, 2022  
 PEANS APPROVAL DATE  
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 REGISTERED PROFESSIONAL ENGINEER  
 JULIA R BUEREN  
 No. 37937  
 CIVIL  
 STATE OF CALIFORNIA



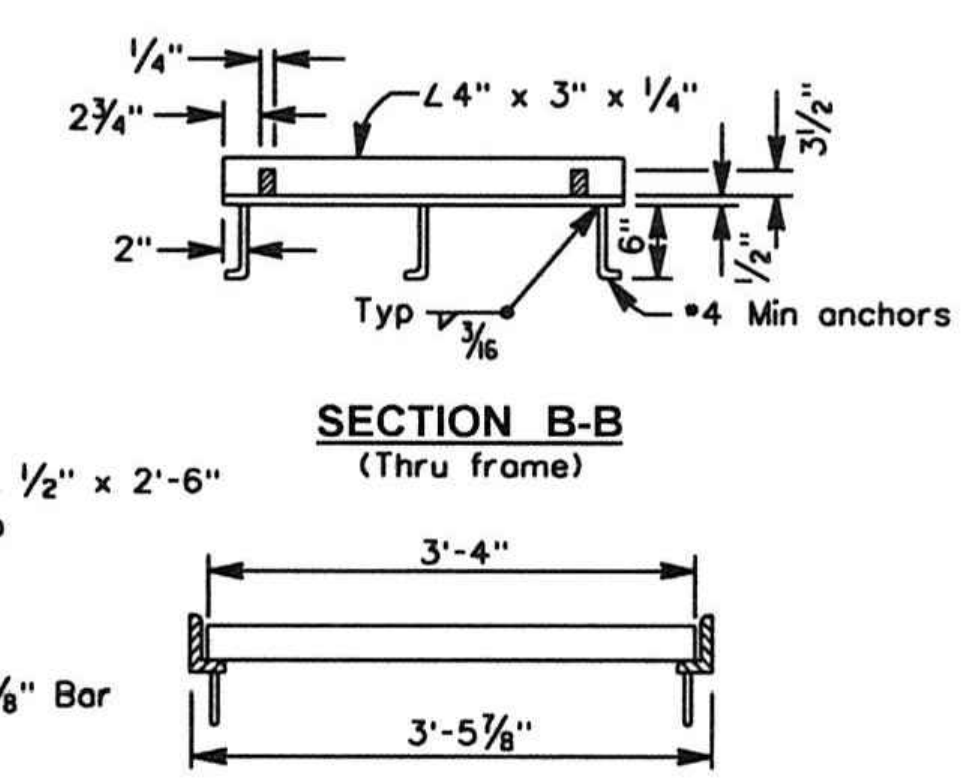
SECTION A-A



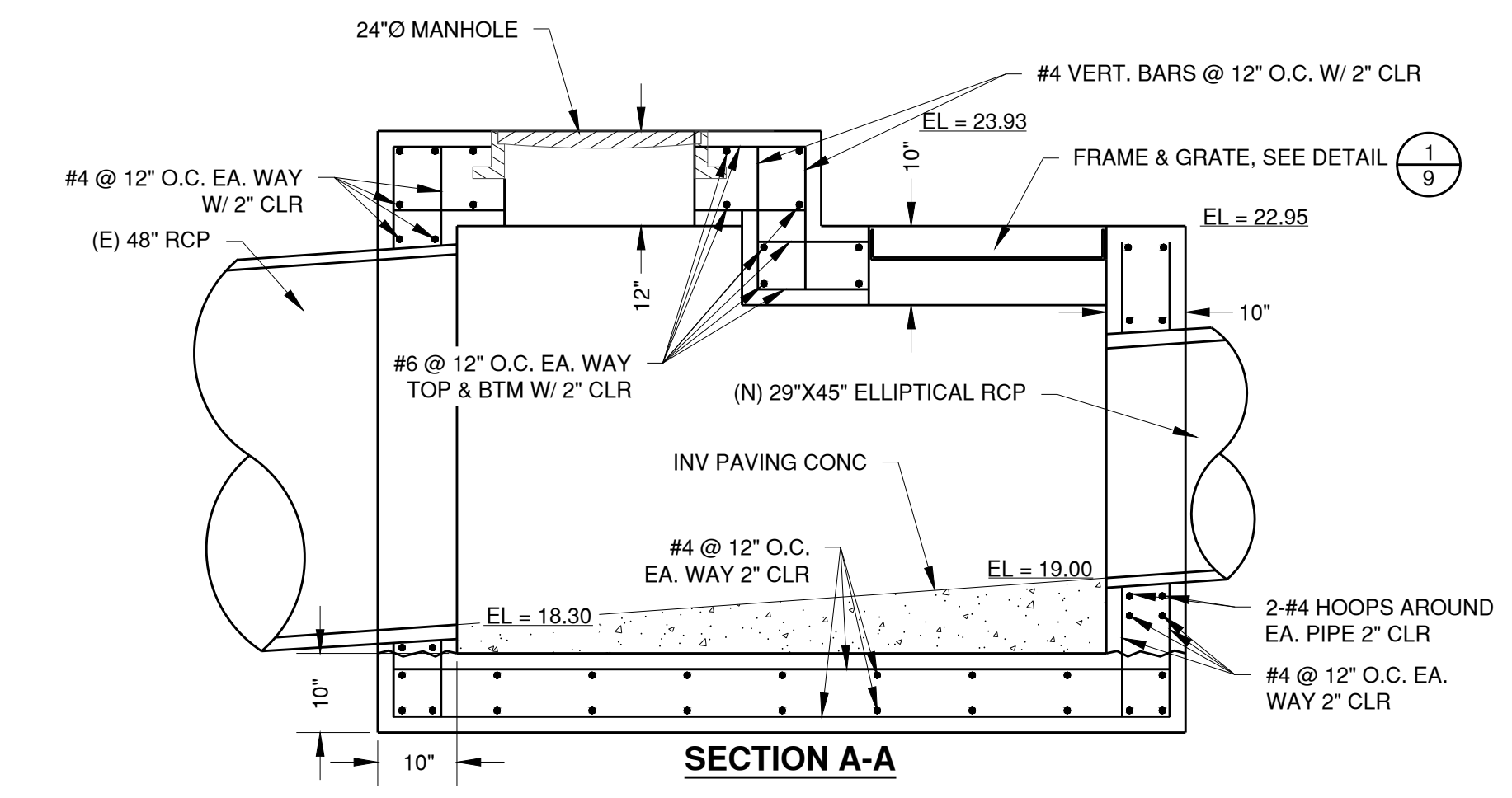
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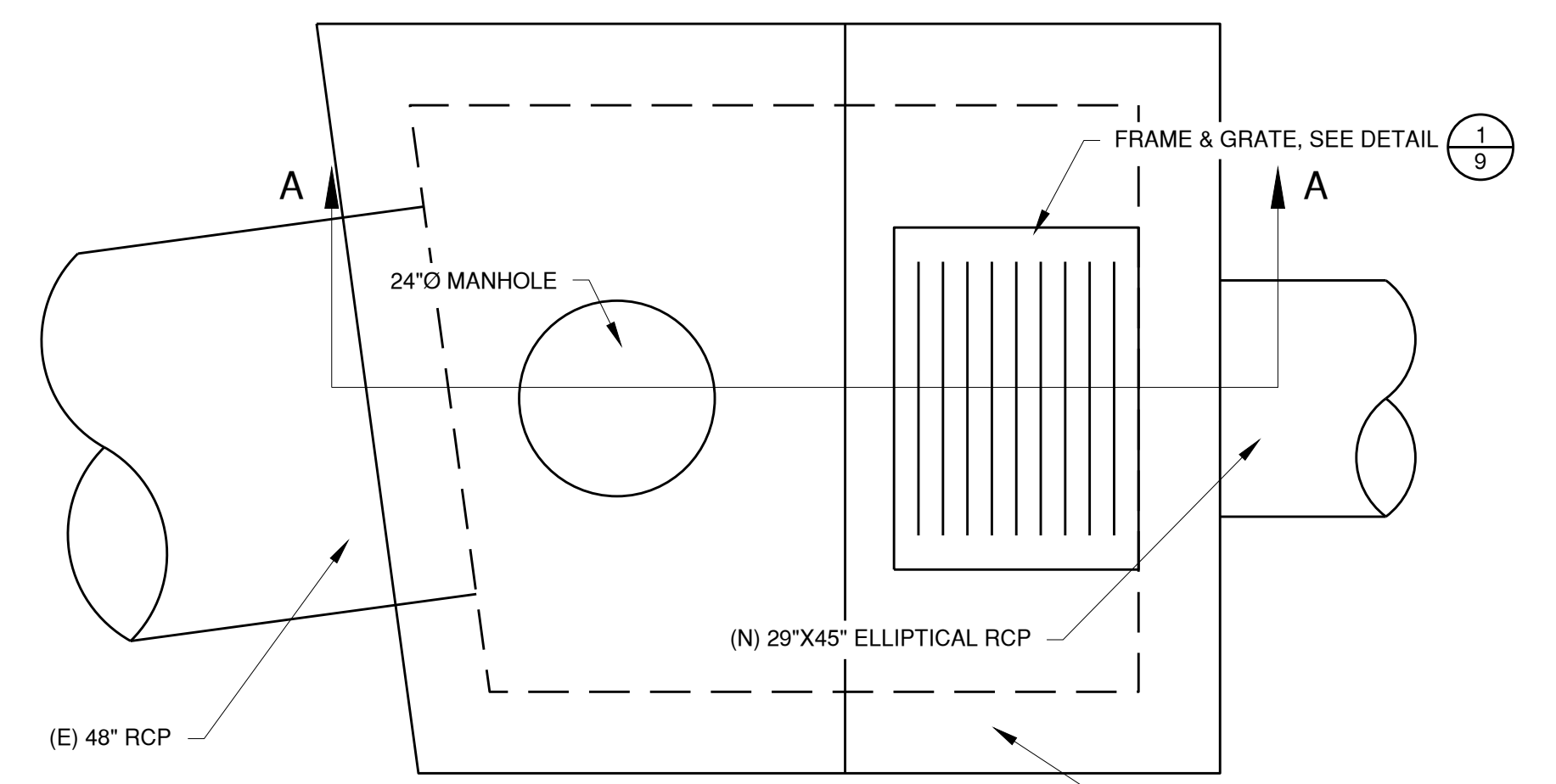
TYPE C INLET FRAME



SECTION A-A (Thru frame and grate)

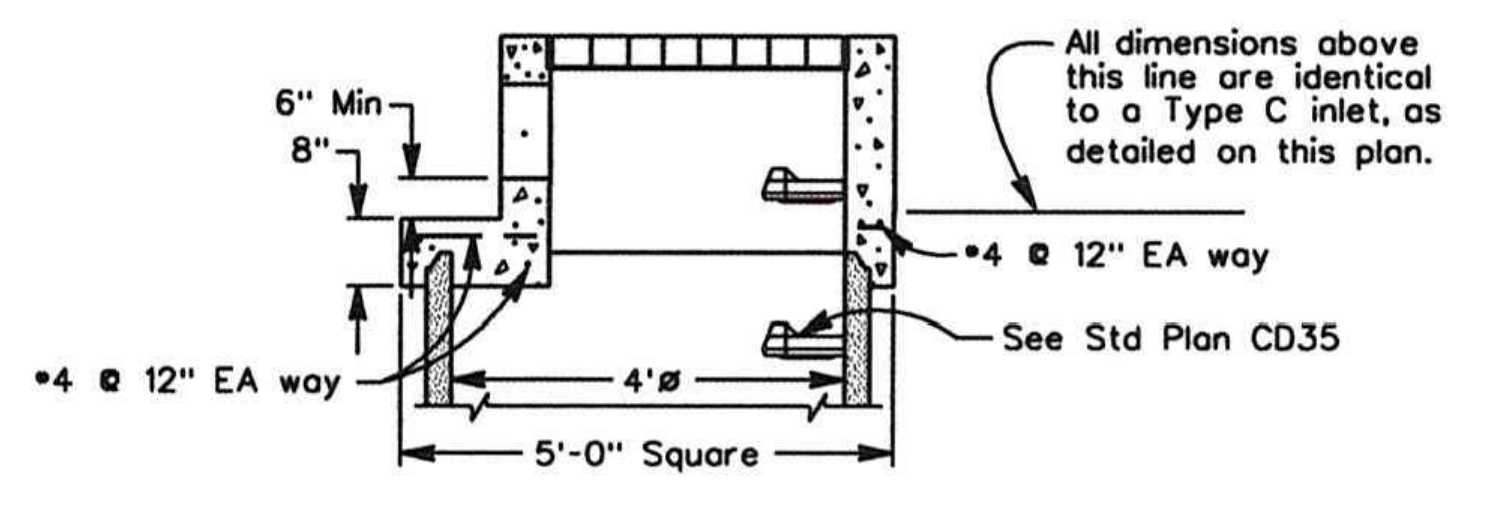


SECTION A-A

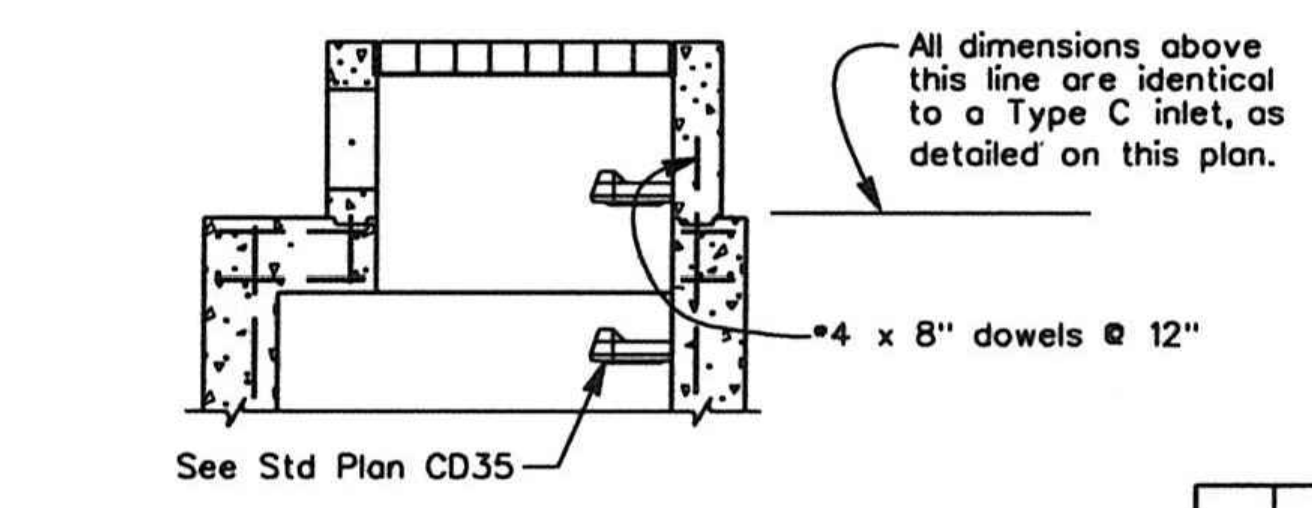


PLAN VIEW

TYPE III MH BASE - STA 0+29.94  
 NTS



TYPE "C" OPENING ON PRECAST MANHOLE BARREL  
 REFER TO STANDARD PLAN CD30



TYPE "C" OPENING ON MANHOLE BASE  
 REFER TO STANDARD PLAN CD31

NOTES:

1. See Standard Plan CD35 for Inlet General Drainage Notes.
2. Type J inlets shall not be used in pedestrian areas.
3. Construction joints are optional where shown. Other locations are subject to the approval of the Public Works Department. Key Dimensions are 3/4" x 2 1/2".
4. Min clearance shall be 2" for all reinforcing steel.
5. Location, flowline elevation and size of side openings to be as shown on plans, or as directed by the Public Works Department.
6. All inlets shall be constructed with Caltrans Type 24-10S grates, see Caltrans Standard Plan D77B, and Type J inlet frame shown on this plan.
7. No precast Type J inlets are allowed without prior approval of the Public Works Department.
8. Maximum depth for Type J inlet shall be 4'. For depths greater than 4' use a manhole base with a Type J top. The Type J inside wall with steps shall be flush with manhole base inside wall below.

COUNTY OF CONTRA COSTA  
 PUBLIC WORKS DEPARTMENT  
 MARTINEZ, CALIFORNIA  
 STANDARD PLAN

**TYPE "J" INLET**

SCALE: NO SCALE DATE: 3/14  
 DRAWN BY: L. COSTA PLAN NO. CD29  
 CHECKED BY: M. HOLLINGSWORTH

TYPE "J" INLET DETAIL  
 NTS



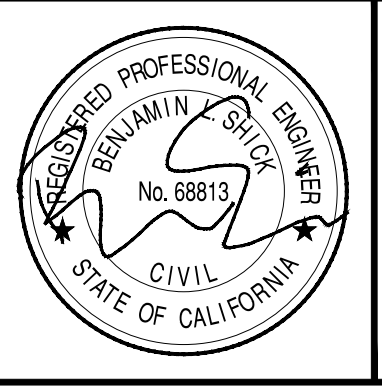
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 DEVELOPMENT SERVICES DEPARTMENT  
 2131 PEAR STREET, PINOLE, CA 94564

APPROVED FOR CONSTRUCTION:  
 DEVELOPMENT SERVICES DIRECTOR/  
 CITY ENGINEER  
 DATE

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 SANTA CLARA, CA 95054  
 (408) 246-4848



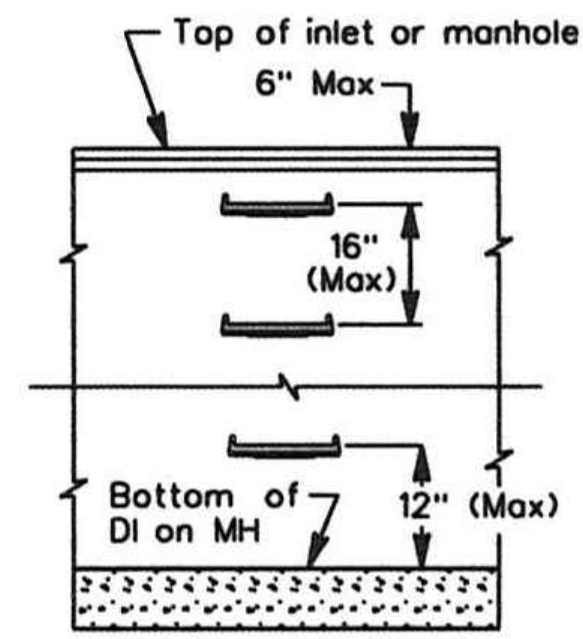
HAZEL STREET STORM DRAIN IMPROVEMENTS  
 CIVIL DETAILS - 2

DATE: 9/16/2022  
 SCALE: AS SHOWN  
 DESIGN: BLS  
 DRAWN: VOB  
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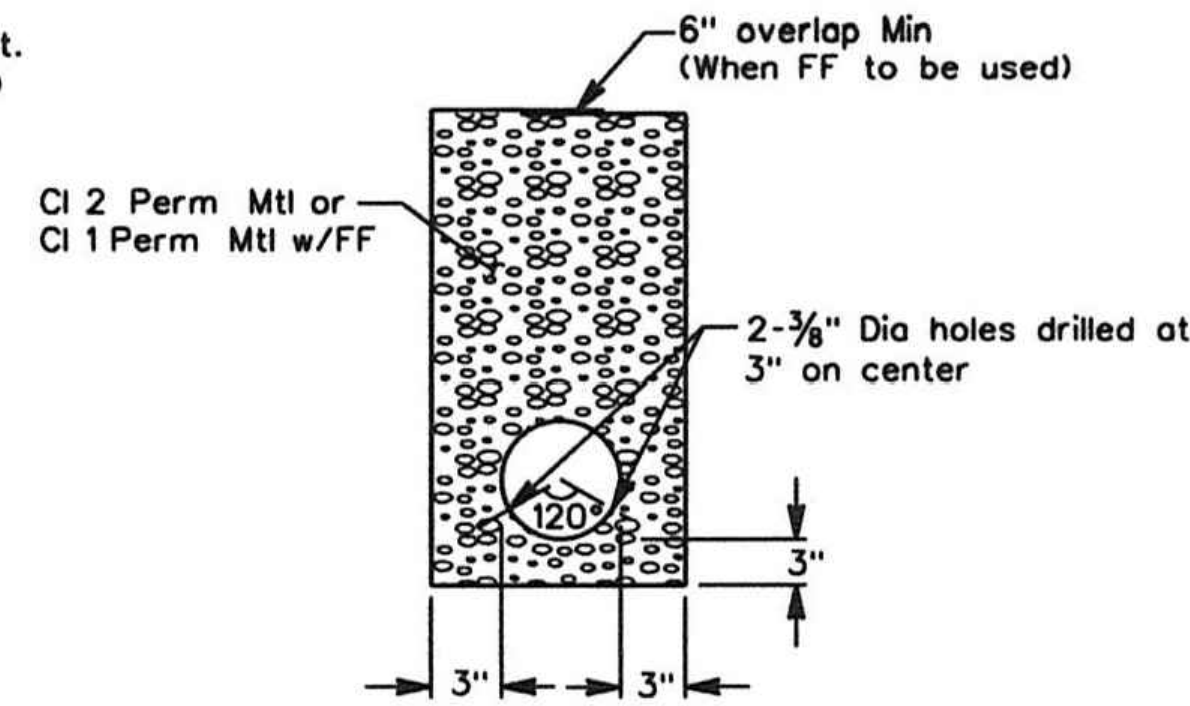
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**NOTES:**

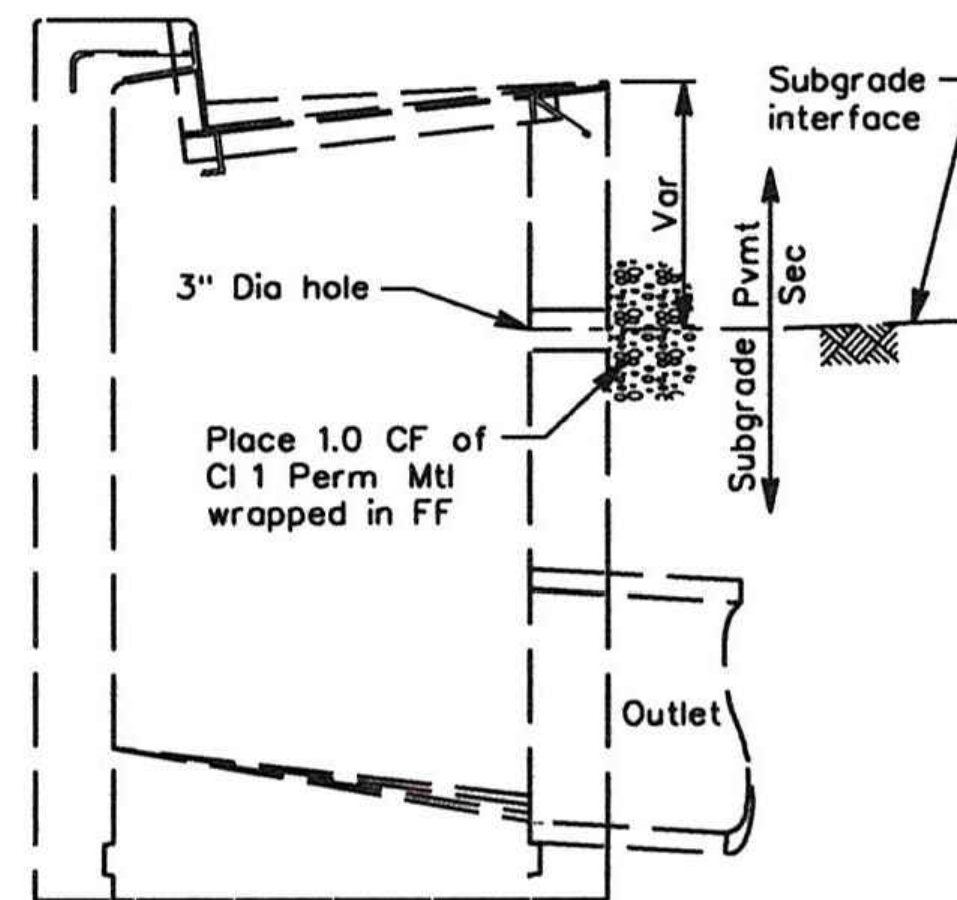
- All inlets shall have a County approved "anti-pollution" plastic marker attached to the inlet as directed by the Inspector or Resident Engineer. The marker shall be applied following manufacturer's recommendations. PCC surfaces shall be mechanically cleaned just prior to attaching the marker. The marker and adhesive may be furnished by the Public Works Department, check your permit conditions or contract Special Provisions.
- Steps shall be steel reinforced polypropylene plastic, M.A. Industries, Inc. No. PS2-PF or equivalent. Steps to be cast in place or press fitted into holes per manufacturer. Install steps with lowest rung 12" maximum above the floor and highest rung not more than 6" below top of inlet. The spacing between steps shall not exceed 16" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Steps shall not be installed on inlet back wall. No steps required where distance from floor of inlet to top of grate is 4' or less.
- Weephole elevation varies depending on the depth of the adjoining pavement section. It shall be at, or slightly below, the pavement section subgrade elevation with a minimum depth of 18" below the curb inlet grate elevation. The side weephole detail shall be used at all "sump" locations. Edge drain (Standard Plan CD08), or side weephole drains detail at other locations may be required as shown on the construction plans or by the Public Works Department. Where the side weephole detail or edge drains are not required, these weepholes shall conform to the front face weephole details shown on this plan.
- 3" edge drain per Standard Plan CD08, when shown on the plans or specified by the Public Works Department.
- Concrete shall conform to Section 90, "Concrete", of California Department of Transportation's Standard Specifications and the following.
  - Construction joints shown on standard plans are permitted when top portion of inlet is to be constructed monolithically with curb and sidewalk. Key dimensions - 3/4" x 3".
  - Concrete construction joint shall be located 12" to 18" below top of curb elevation.
  - Concrete above construction joint shall contain a minimum of 505 lbs of cementitious material per cubic yard, 1" maximum aggregate grading.
  - Concrete below construction joint shall contain a minimum of 590 lbs of cementitious material per cubic yard, 1" maximum aggregate grading.
  - When inlet is constructed as a single unit concrete shall comply with item D, described above.
- Type "I" manhole (Std Pln CD30) bases are for use with pipes to 24" in diameter and where there is sufficient cover to use minimum length manhole barrel, eccentric cone, and cover frame. Use Type "II" manhole bases (Std Pln CD31) with pipes to 42" in diameter. Type "III" manhole bases (Std Pln CD32) for 60" in diameter. Use Type "V" manhole bases (Std Pln CD34) for pipes up to 96" in diameter. For pipe larger than 96" in diameter, a special manhole base design is required.
- Unless otherwise noted on Standard Plans all concrete shall contain not less than 590 lbs. of cementitious material per cubic yard, 1" maximum grading in conformance with Section 90, "Concrete" of California Department of Transportation's Standard Specifications. Invert paving concrete shall contain not less than 505 lbs per cubic yard of cementitious material, 1" maximum grading, in conformance with said Standard Specifications.
- Inlet and outlet pipes shall not intercept a manhole base through a corner. If skew angle is too great to permit the opening to be made in a single wall face, use a Type "III" manhole base. (See Std Pln CD32).



**STEP DETAIL**  
See Note 2

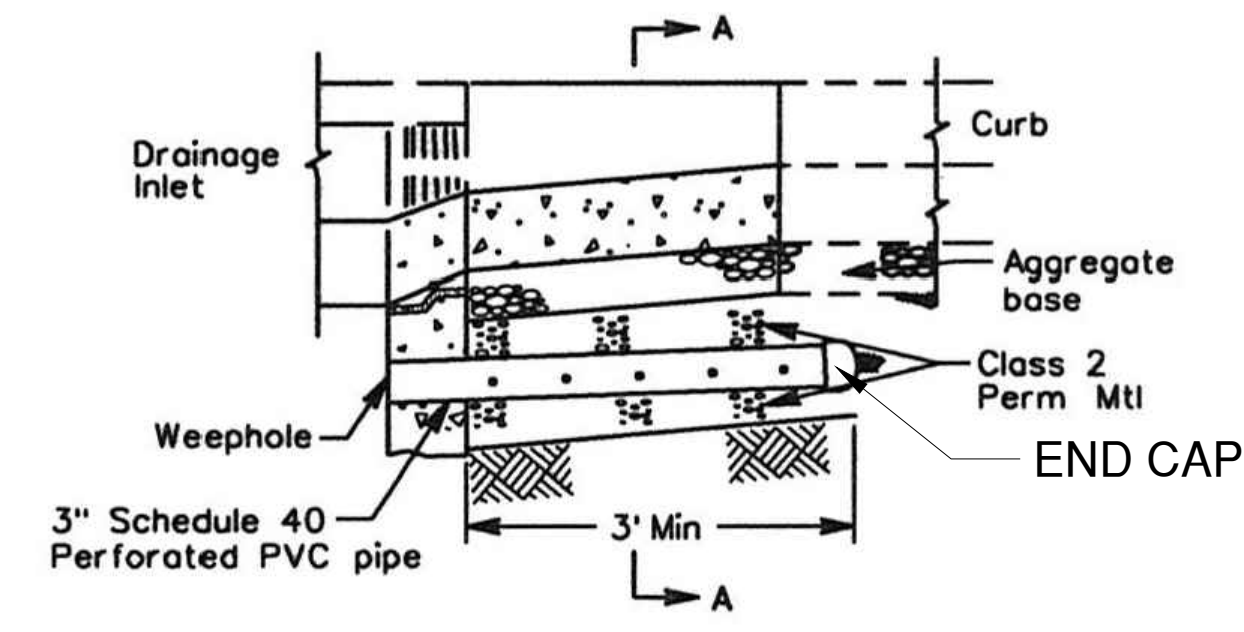


**EDGE DRAIN TRENCH DETAIL**

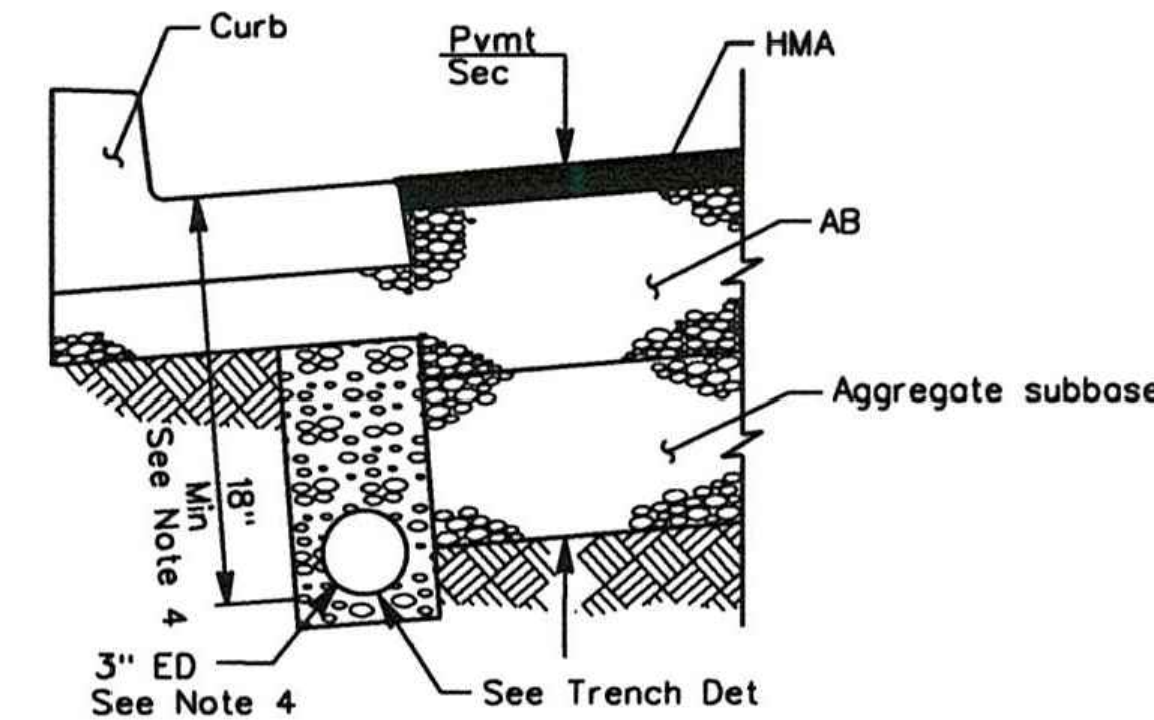


**STANDARD FRONTSIDE WEEPHOLE DETAIL**  
See Note 3

*Julia R. Bueren*  
PUBLIC WORKS DIRECTOR  
March 11, 2024  
PLANS APPROVAL DATE  
PROFESSIONAL ENGINEER  
JULIA R. BUEREN  
No. 37937  
CIVIL  
STATE OF CALIFORNIA



**SIDE WEEPHOLE DRAIN DETAIL**  
See Note 3



**SECTION A-A**

COUNTY OF CONTRA COSTA  
PUBLIC WORKS DEPARTMENT  
MARTINEZ, CALIFORNIA  
STANDARD PLAN  
**STD INLET/MANHOLE PLAN**  
**GENERAL NOTES & DETAILS**  
SCALE: NO SCALE DATE: 3/14  
DRAWN BY: H. HUSSEY PLAN NO. **CD35**  
CHECKED BY: M. HOLLINGSWORTH

NO.	DATE	REVISION DESCRIPTION	BY



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usanorth811.org

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1 STANDARD MANHOLE DETAIL  
10 NTS

NO.	REVISION	DATE	APPR

CITY OF PINOLE, CALIFORNIA  
DEVELOPMENT SERVICES DEPARTMENT  
2131 PEAR STREET, PINOLE, CA 94564

APPROVED FOR CONSTRUCTION:  
DEVELOPMENT SERVICES DIRECTOR/  
CITY ENGINEER  
DATE

**Schaaf & Wheeler**  
CONSULTING CIVIL ENGINEERS  
4699 OLD IRONSIDES DRIVE, STE 350  
SANTA CLARA, CA 95054  
(408) 246-4848

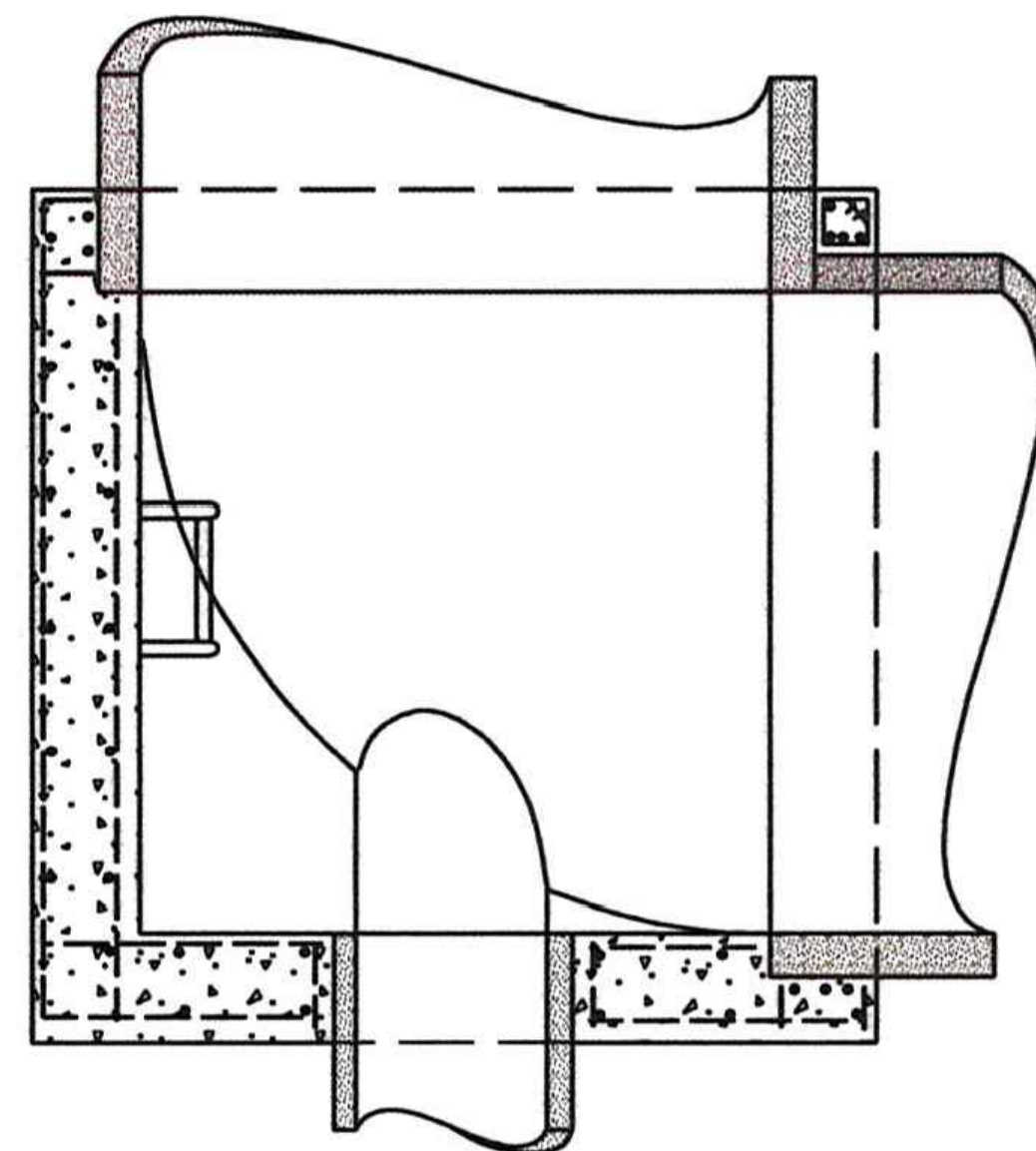
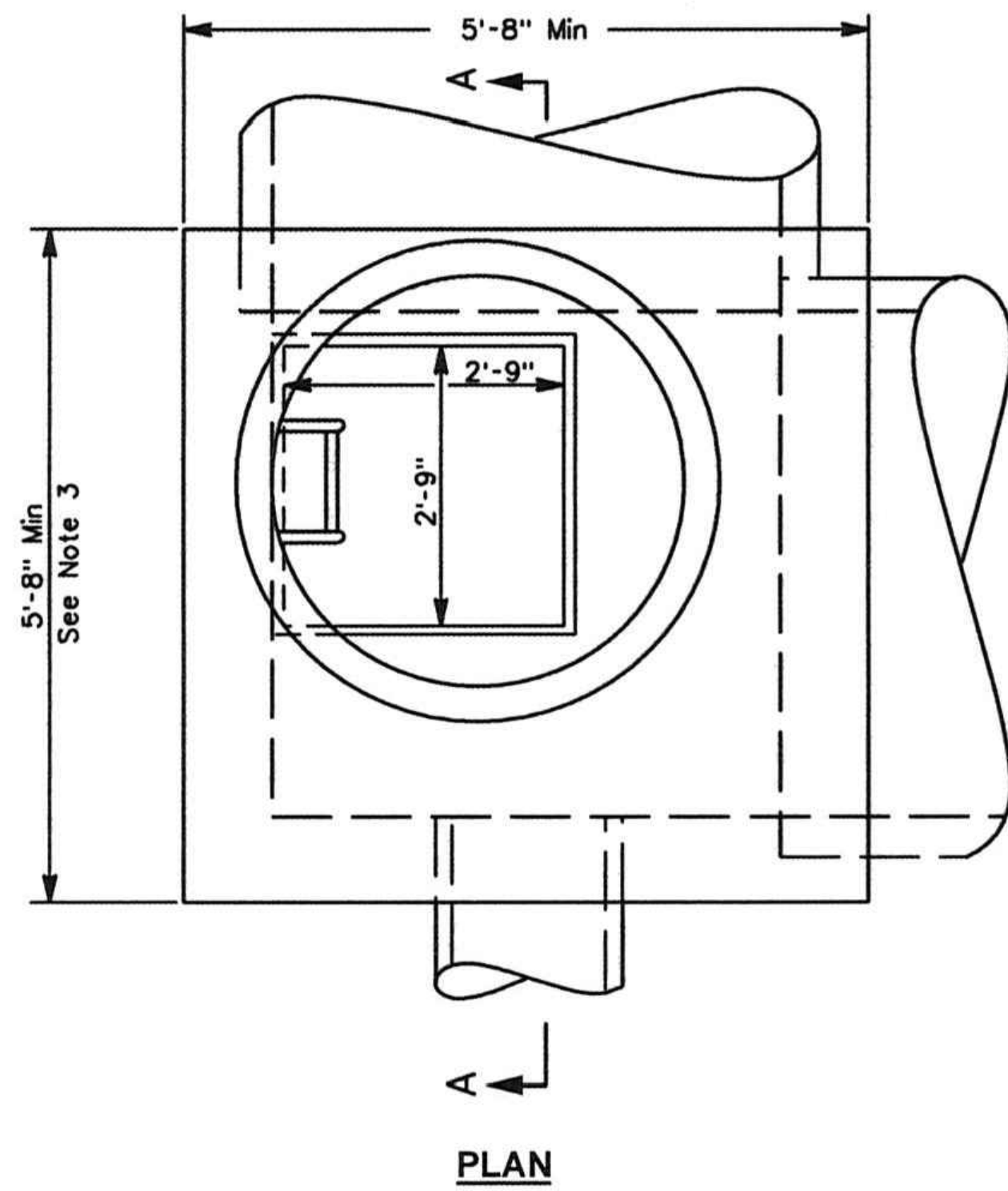


HAZEL STREET STORM DRAIN IMPROVEMENTS

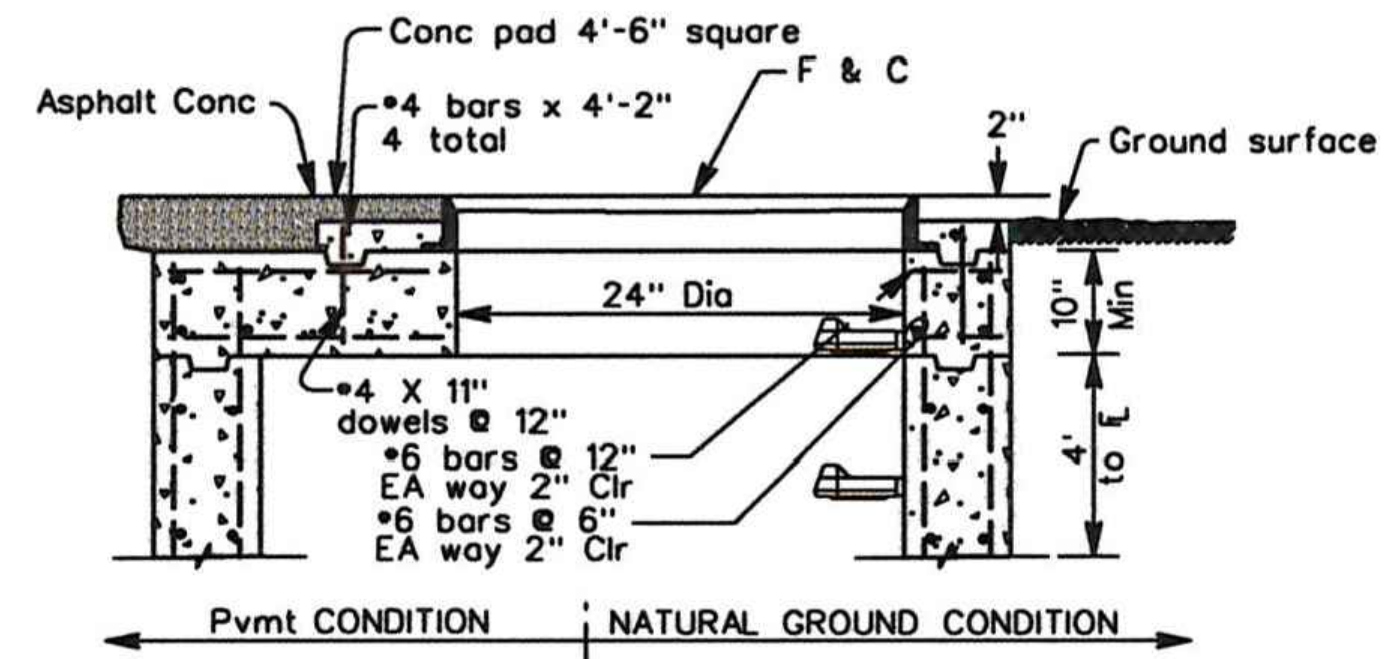
CIVIL DETAILS - 3

DATE: 9/16/2022  
SCALE: AS SHOWN  
DESIGN: BLS  
DRAWN: VOB  
CHECKED: BLS

SHEET  
10  
OF  
12



PLAN SECTION



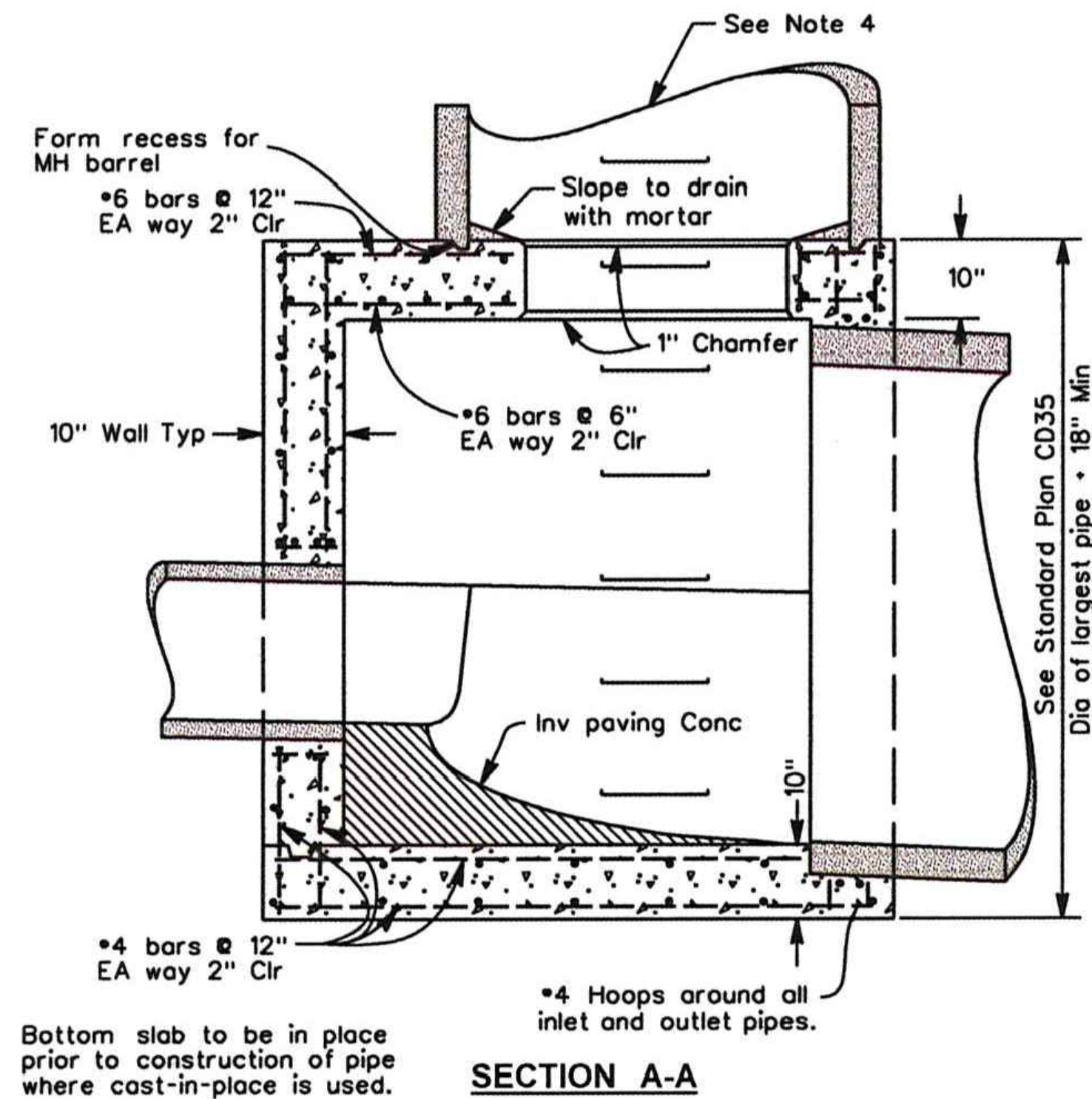
TOP SLAB

USE TOP SLAB:

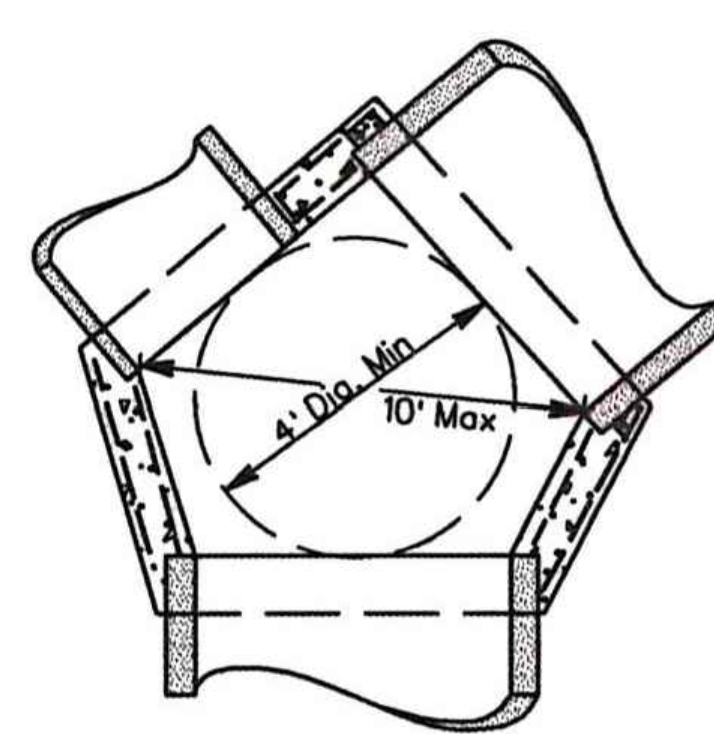
1. When there is insufficient clearance between the top of the manhole base and finish grade for a precast eccentric cone section.
2. When placing a Type G or Type J inlet opening on a Type III manhole base. The opening in the top slab shall conform to the inside dimensions of the inlet to be used.

NOTES:

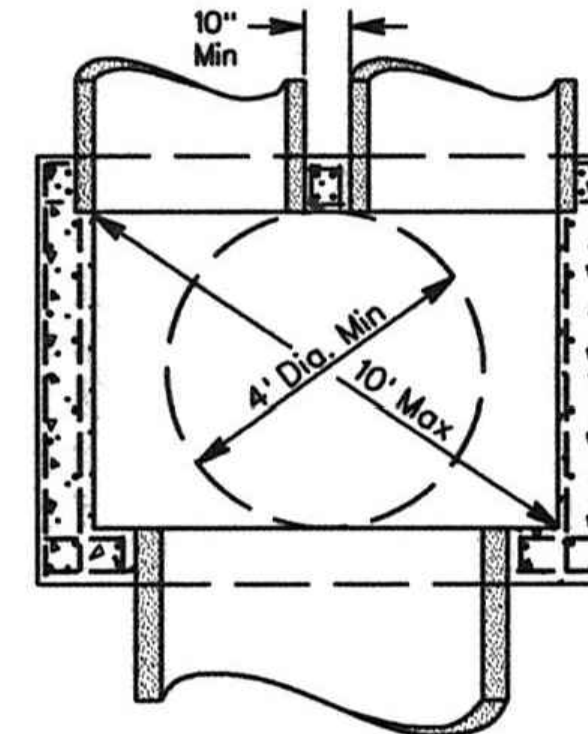
1. For General Manhole Notes and Details, see Standard Plan CD35.
2. Construction joints are optional where shown. Other locations are subject to approval by the Public Works Department. Key dimensions are 1/2" x 3".
3. Inlet and outlet pipes shall not intercept a manhole base through a corner. If skew angle is too great to permit the opening to be made in a single wall maybe lengthened or relocated as explained in "SPECIAL APPLICATIONS OF TYPE III MANHOLE BASES" on this plan.
4. For details of precast manhole. See Standard Plan CD30.
5. For details of manhole frame and cover, See Standard Plan CD30. Orient frame directly above steps.



SECTION A-A



PLAN SECTION



PLAN SECTION

SPECIAL APPLICATIONS OF TYPE "III" MANHOLE BASES

When circumstances, such as excessive skew or parallel pipes prevent the use of a standard Type III manhole base detailed elsewhere on this plan. The walls may be lengthened or relocated to accommodate the pipes provided the following criteria are met:

1. The inside dimensions of the base shall be such that a 48 inch diameter circle will lay flat on the manhole base floor as shown.
2. The maximum distance between any two inside corners shall be 10 feet, as shown.
3. Reinforcement and floor, wall and top thickness shall remain the same as for a normal Type III manhole base.
4. No pipe shall exceed 60 inches (inside diameter).

If any one of these criteria cannot be met, a special design will be required.

COUNTY OF CONTRA COSTA  
PUBLIC WORKS DEPARTMENT  
MARTINEZ, CALIFORNIA

STANDARD PLAN

TYPE III  
MANHOLE BASE

SCALE: NO SCALE DATE: 3/14

DRAWN BY: H. HUSSEY PLAN NO. CD32

CHECKED BY: M. HOLLINGSWORTH

NO.	DATE	REVISION DESCRIPTION	BY

1 TYPE III MANHOLE BASE  
11 NTS



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NO.	REVISION	DATE	APPR

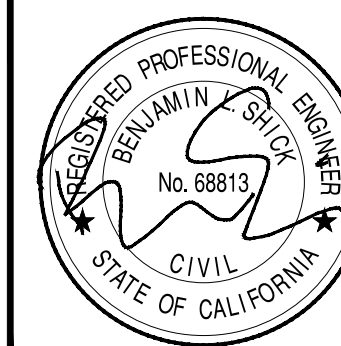
CITY OF PINOLE, CALIFORNIA  
DEVELOPMENT SERVICES DEPARTMENT  
2131 PEAR STREET, PINOLE, CA 94564

APPROVED FOR CONSTRUCTION:

DEVELOPMENT SERVICES DIRECTOR/  
CITY ENGINEER

DATE

Schaaf & Wheeler  
CONSULTING CIVIL ENGINEERS  
4699 OLD IRONSIDES DRIVE, STE 350  
SANTA CLARA, CA 95054  
(408) 246-4848



HAZEL STREET STORM DRAIN IMPROVEMENTS

CIVIL DETAILS - 4

DATE: 9/16/2022

SCALE: AS SHOWN

DESIGN: BLS

DRAWN: VOB

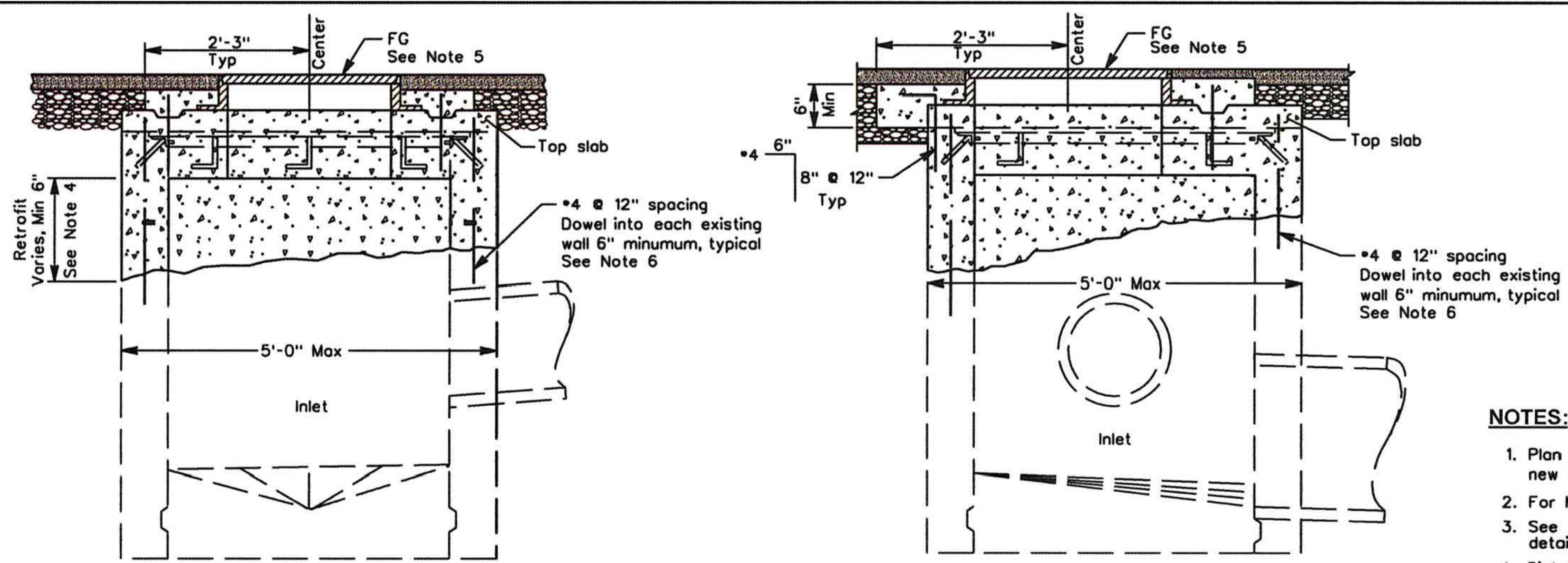
CHECKED: BLS

SHEET

11

OF

12



**SECTION A-A \***

\* Top slab steel not shown for clarity.

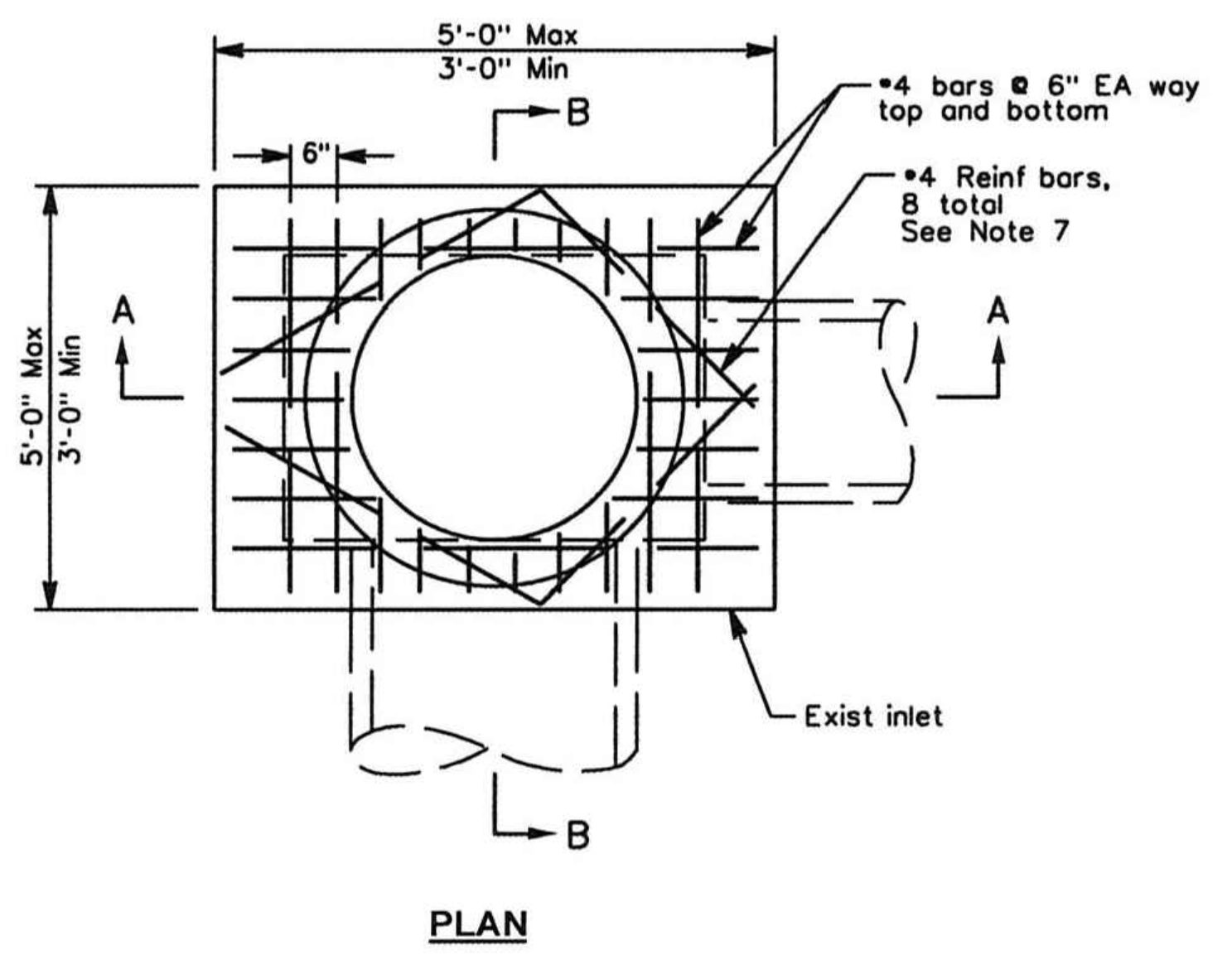
**SECTION B-B \***

\* Top slab steel not shown for clarity.

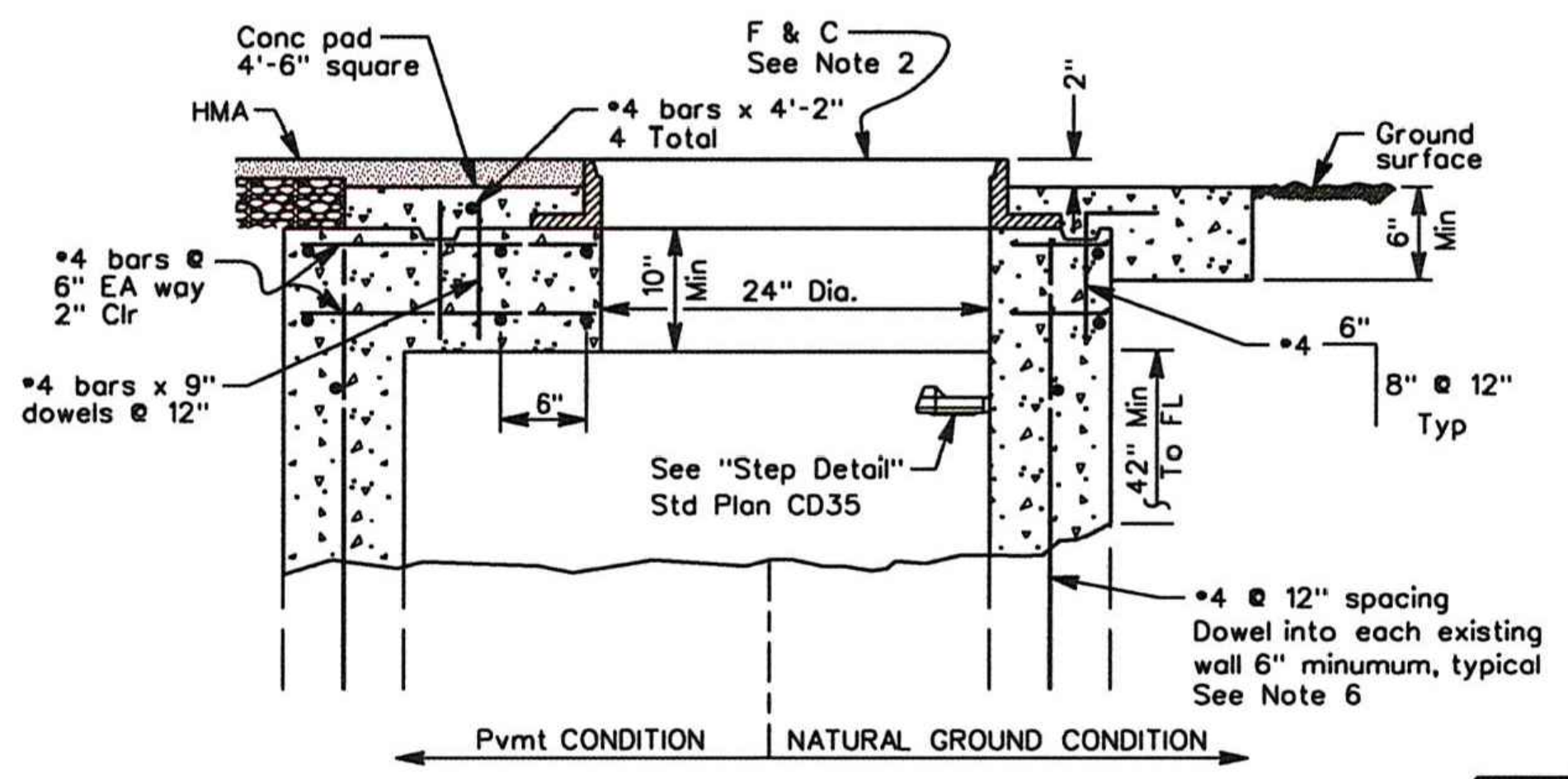
PUBLIC WORKS DIRECTOR  
 March 16, 2014  
 PLANS APPROVAL DATE  
 The County of Contra Costa or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

**NOTES:**

1. Plan shows modifying existing inlet, but this plan can be used in new construction.
2. For Manhole, General Notes and Details, see Standard Plan CD35.
3. See Standard Plan CD30 for manhole frame and cover detail.
4. Distance varies depending on depth to any existing side opening, minimum 6" below new top slab.
5. Manhole cover frame shall be adjusted to conform to finished grade and cross slope of pavement.
6. Dowels shall be placed in 3/4" diameter drilled holes with 1:1 sand cement grout.
7. Length of "diagonal" bars varies depending on top slab dimensions. The bars shall extend over existing inlet base walls with 2" clearance to edge of slab.



**PLAN**



**TOP SLAB DETAILS**

PUBLIC WORKS DEPARTMENT  
 MARTINEZ, CALIFORNIA  
 STANDARD PLAN  
**MANHOLE TOP SLAB ON EXISTING OR NEW INLET BASE**  
 SCALE: NO SCALE DATE: 3/14  
 DRAWN BY: H. HUSSEY PLAN NO. **CD16**  
 CHECKED BY: M. HOLLINGSWORTH

NO.	DATE	REVISION DESCRIPTION	BY



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1 MANHOLE TOP SLAB ON EXISTING OR NEW INLET BASE NTS

NO.	REVISION	DATE	APPR	APPROVED FOR CONSTRUCTION:	<b>Schaaf &amp; Wheeler</b> CONSULTING CIVIL ENGINEERS 4699 OLD IRONSIDES DRIVE, STE 350 SANTA CLARA, CA 95054 (408) 246-4848		HAZEL STREET STORM DRAIN IMPROVEMENTS  CIVIL DETAILS - 5	DATE: 9/16/2022	SHEET 12 OF 12
				DEVELOPMENT SERVICES DIRECTOR/ CITY ENGINEER				SCALE: AS SHOWN	
				DATE				DESIGN: BLS	
								DRAWN: VOB	
								CHECKED: BLS	