



MARIN COUNTY, CALIFORNIA

CONTRACT DOCUMENTS FOR

JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES

JOB NO. 20200-01

JULY 2023

DISTRICT BOARD

Megan Clark – President
Craig K. Murray – Vice President
Crystal J. Yezman
Ronald Ford
Gary E. Robards

Curtis Paxton – General Manager
Michael P. Cortez, PE – District Engineer
Mel Liebmann – Plant Manager
Dale McDonald – Administrative Services Manager
Greg Pease – Collection System/Safety Manager



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ACKNOWLEDGEMENT

ACKNOWLEDGEMENT OF THE CONTRACT DOCUMENTS MUST BE RECEIVED BY THE DISTRICT IN ORDER FOR YOU TO RECEIVE ADDENDUMS (i.e., updates or changes to the Contract Documents). PLEASE COMPLETE BELOW AND FAX TO 415-499-7715, OR EMAIL TO ihuang@lgvsd.org IMMEDIATELY UPON RECEIPT OF THIS PACKET so that you will receive any changes or updates as they occur. If we do not receive this form from you, any updates or changes that you do not receive are not the responsibility of the District.

BID ITEM: JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES

Date Received: _____

Recipient: _____ (BIDDER)

_____ (ADDRESS)

_____ (PHONE)

_____ (FAX)

_____ (EMAIL)

Printed Name

Signature

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CERTIFICATIONS PAGE

The various portions of the specifications and other contract documents for project "JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES," JOB NO. 20200-01, have been prepared under the direction of the following design professionals, licensed in the State of California.

LGVSD:



Responsible for the following sections:

All, except as noted below.

FREYER & LAURETA:

Jeffrey Tarantino, PE
Lic. No. C-063936

Responsible for the following sections:

Volume 3 – Technical Specifications

Division 1
01 10 00

Division 3
All

Division 31
All

Division 33
All

Volume 4 – Drawings

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VOLUME 1
CONTRACT REQUIREMENTS

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

NOTICE INVITING SEALED BIDS

1. The Las Gallinas Valley Sanitary District hereby invites bids for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, in accordance with California Public Contract Code Section 20804 and other applicable law, and the following:
2. All bids must be delivered to the **Engineering Department, Las Gallinas Valley Sanitary District, 101 Lucas Valley Road, Suite 300, San Rafael, California 94903** on or before **11:00 AM, August 3, 2023**. Bids will be opened and read publicly at that time. Bids must be made on the bid forms included in the bid package. Bids that are submitted late according to the official time kept by the District Engineer or a designee will be returned unopened. Bids submitted by facsimile or other electronic means will not be accepted. Bids that are incomplete or that otherwise do not conform to the requirements specified in the bid package may be deemed non-responsive.
3. A pre-bid meeting is scheduled for **July 20, 2023 at 1:00 PM, 101 Lucas Valley Road, Suite 300, San Rafael, CA 94903**. The pre-bid meeting is **not mandatory**. Please call **415-472-1734** or email pquinn@lqvsd.org to RSVP. In addition, this Project requires Bidders to submit a notarized copy of a Site Visit Affidavit to be submitted with the Bid. See required form under Bidding Requirements section of the Contract Documents. A site visit will follow after the pre-bid meeting. Special site visits may be scheduled 24 hours in advance a minimum of five (5) working days before bid opening.
4. The project Contractor shall furnish all tools, equipment, apparatus, facilities, labor and material necessary to perform and complete in a good and workmanlike manner the construction of the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project as shown in the project Technical Specifications and plans and in accordance with the Contract Documents within **150 calendar days** of the project commencement date specified in the Notice to Proceed for the project.
5. SCOPE OF WORK.
The project work is generally described as:
 - a) Installation of two (2) 60"-diameter precast concrete Cleanout Access Structures for a 20" O.D. HDPE force main.
 - b) Installation of eight (8) 60"-diameter precast concrete CCTV Inspection Access Structures on a 20" O.D. HDPE force main.
 - c) Bypass pumping, pipeline pigging, potholing, traffic control, and other ancillary components as necessary.
6. All the project work shall be completed in accordance with the bid packages on file at the District. Complete bid packages may be obtained at the **Engineering Department, Las Gallinas Valley Sanitary District, 101 Lucas Valley Road, Suite 300, San Rafael,**

California 94903. There will be a fifty dollar (\$50) non-refundable charge for each bid package. Checks and money orders must be made payable to the Las Gallinas Valley Sanitary District. Requests for information on receiving bid packages should be directed to the District Offices at (415) 472-1734. Bid packages will be mailed upon request and receipt of the non-refundable charge and the bidder's UPS or FedEx account number.

7. In accordance with California Public Contract Code Section 20804.5, all bids must be presented under sealed cover and include one of the following forms of bidder's security: cash, cashier's check made payable to the District, certified check made payable to the District, or a bidder's bond. The amount of bidder's security provided must equal at least ten (10) percent of the total of the bid price for the base bid and the additive or deductive items listed in this notice. The successful bidder must submit to the District complete, executed copies of all documents specified in the contract checklist included in the bid package within seven (7) calendar days of receiving written Notice of Award of the project. Bidder's security of any successful bidder that fails to do so will be forfeited to the District. The documents required pursuant to the contract checklist include, but are not limited to, a payment or labor and materials bond in an amount of at least 100 percent of the amount payable by the terms of the project contract and that satisfies the requirements of California Civil Code Section 3248, and a performance bond in an amount of at least 100 percent of the amount payable by the terms of the contract. All project bonds must be executed by an admitted surety insurer in accordance with applicable law and acceptable to the District. **The Engineer's estimate is \$500,000.**
8. Pursuant to California Public Contract Code Section 3300, a **Class A General Engineering** California contractor's license is required to bid on the project. In accordance with California Business and Professions Code Section 7028.15, all project work must be performed by properly licensed contractors and subcontractors with active licenses in good standing as of the date and time specified for bid opening. However, in accordance with California Public Contract Code Section 20103.5, if the project involves federal funds, project contractors and subcontractors must have active licenses in good standing no later than the time the project contract is awarded. Bids that do not satisfy applicable licensing requirements will be considered non-responsive. Licenses must be issued by the Contractor's State License Board of California and must be maintained in good standing throughout the project term. In accordance with California Business and Professions Code Section 7030.5, bidders must verify their Contractor's License number and license expiration date on the bid forms under penalty of perjury.
9. In accordance with California Public Contract Code Section 6109, contractors and subcontractors who are ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7 may neither bid on, be awarded or perform work as a subcontractor on the project.
10. In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the project is 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 project. In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for work in the locality in which the project is to be performed. In accordance with California Labor Code Section 1773, the District has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the project is to be performed for each craft, classification or type of worker needed to perform the project. In accordance with California Labor Code Section 1773.2, copies of the prevailing rate of per diem wages are on file at the District Engineer's Office and will be made available on request. A copy of said wage rates is available online at www.dir.ca.gov/DLSR/PWD. In accordance with California Labor Code Section 1777.1, contractors and subcontractors that are found guilty of willfully violating Chapter 1 of Part 7 of Division 2 of the Labor Code (except for Section 1777.5), or that are found guilty of such violations with intent to defraud, and entities in which such contractors or subcontractors have any interest, may be ineligible to bid on, be awarded, or perform project work as a subcontractor.

11. In accordance with California Public Contract Code Section 3400, bidders may propose equals of products listed in the Technical Specifications or Drawings by manufacturer name, brand or model number unless the Technical Specifications or plans specify that the product is necessary to match others in use. Complete information for products proposed as equals must be submitted to the District Engineer's Office for review at least seven (7) working days before the time specified for bid opening in accordance with the bidders instructions contained in the bid package.
12. In accordance with California Public Contract Code Section 22300, except where prohibited by federal regulations or policies, the successful bidder may, on request and at its expense, substitute securities in lieu of amounts withheld by the District from progress payments to ensure performance under the contract in accordance with the Contract Documents. Such securities will be subject to the terms of the escrow for security deposit agreement contained in the Contract Documents.
13. The District reserves the right to reject any and all bids and/or to waive any bid irregularities to the extent permitted by law. If the District elects to award a contract for performance of the project, the contract will be awarded in accordance with California Public Contract Code Section 20803 and other applicable law to the responsible bidder submitting a responsive bid with the lowest total bid price for the base bid and the following additive or deductive alternate items as further described in the bid package.
14. Questions regarding the bid package should be directed in writing as soon as possible (but no later than five (5) working days prior to the opening of bids to: Irene Huang, PE, Associate Engineer, 101 Lucas Valley Road, Suite 300, San Rafael, CA 94903. Where appropriate, the District may respond to such questions by addenda transmitted to all bid package recipients.

15. All bids will remain valid for ninety (90) calendar days after the bid opening. Except as permitted by law and subject to all applicable remedies, including forfeiture of bidder's security, bidders may not withdraw their bid during the ninety (90) day period after the bid opening.

Las Gallinas Valley Sanitary District

By: /s/ Michael P. Cortez

Michael P. Cortez PE, District Engineer

Date: July 5, 2023

INSTRUCTIONS TO BIDDERS

1. DEFINITIONS

- 1.1 Bid forms. The bid forms are the forms contained in Volume 2 of the bid package.
- 1.2 Bid package. A complete bid package consists of the following documents: Volume 1 – Contract Forms includes the Cover letter to Prospective Bidders, Notice Inviting Sealed Bids, Instructions to Bidders, Contract Check List, Contract, Performance Bond, Payment/Labor Bond, Maintenance Bond (Not Used), and Escrow for Security Deposit Agreement. Volume 2 – Bid Forms, includes the Bidder's Check List, Bid Label, Proposal Cover Page and Bid Schedule, Bid Bond, Contractor License Information, List of Proposed Subcontractors, Workers Compensation Insurance Certification, Non-Collusion Affidavit, Drug-Free Workplace Certification, Debarment Certification, Statement of Experience of Bidder, Financial Qualifications, Site Visit Affidavit, and Bidder's Signature Page. Volume 3 – Technical Specifications, and Supplemental Reports or Data (if any). Volume 4 – Drawings.
- 1.3 Contract Documents. The Contract Documents refer to all of the documents incorporated into the final Project contract as listed in the contract.
- 1.4 Project. The Project is the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project as described in the Technical Specifications and Drawings included in the project bid package.
- 1.5 Drawings. The Drawings are primarily graphic detailed requirements concerning the Project and are contained in Volume 4 of the bid package.
- 1.6 Technical Specifications. The Technical Specifications provide detailed requirements concerning the Project and are contained in Volume 3 of the bid package.

2. BIDDER'S REPRESENTATIONS

Each bidder by submitting a bid represents that:

- 2.1 The bidder has read and understands the bid package and the bid is in accordance with all of the requirements of the bid package and applicable law.
- 2.2 Neither the bidder nor any subcontractor included on the list of proposed subcontractors submitted with the bid, are ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7.
- 2.3 The bidder understands that quantities of unit price items may vary from the estimates provided in the Technical Specifications.

- 2.4 Representatives of the bidder have visited the Project site and have familiarized themselves with the conditions under which the Project work is to be performed so as to ensure that the Project work may be performed for the amount bid.
- 2.5 The bidder has informed the District in writing no later than five (5) working days prior to the time specified for bid opening of any apparent conflicts, errors, or ambiguities contained in the bid package or between the contents of the bid package and the Project site.

3. PRE-BID COMMUNICATION AND INTERPRETATION OF THE BID PACKAGE

- 3.1 Any bidder that discovers any apparent conflicts, errors, or ambiguities contained in the bid package or between the contents of the bid package and the Project site, or that has questions or requires clarification concerning the bid package or its intent must inform the District in writing as soon as reasonably possible, but no later than five (5) working days before the date specified for bid opening. Such notice to the District must be sent to the address specified in the Notice Inviting Sealed Bids for questions concerning the bid package. Questions received less than five (5) working days before the time specified for opening bids may not be answered.
- 3.2 Any interpretation, correction or change of the bid package prior to bid opening will be made by addendum signed by an authorized representative of the District and transmitted to all bid package recipients. No other interpretation or information concerning the bid package issued prior to the date specified for opening bids will be binding. All addenda signed by an authorized representative of the District and issued prior to the time and date specified for opening bids will form a part of the Contract Documents and must be acknowledged on the bid forms. Any changes, exceptions or conditions concerning the Project and/or the bid package submitted by any bidder as part of a bid may render that bid non-responsive.

4. PRE-BID ACCESS TO THE PROJECT SITE

- 4.1 Prior to submitting a bid, it will be the sole responsibility of each bidder to conduct any additional examination, investigation, exploration, test, study or other inquiry and to obtain any additional information pertaining to the physical conditions (including surface, subsurface, and underground utilities) at or near the Project site that may affect the cost, progress, or performance of the Project, and that the bidder deems are necessary to prepare its bid for performance of the Project in accordance with the bid package and Contract Documents. Bidders seeking any such additional examination or other inquiries or information concerning the Project will do so at the bidder's sole expense.
- 4.2 Bidders seeking to conduct any additional examination or other inquiry at the Project site must request site access from the District at least two (2) working days in advance. The location of any excavation, boring or other invasive testing will be subject to approval on behalf of the District and any other agencies with jurisdiction over such testing. Bidders may not conduct tests at the Project site prior to obtaining District approval. The District may require bidders to execute an access agreement prior to approving testing at the Project site. Once approved testing is complete, Bidders must fill all trenches or holes, restore all pavements to match existing structural section, and otherwise clean up and restore the test site to its pre-test condition.

5. BIDDING PROCEDURE

- 5.1 Bids must be delivered to the **Engineering Department, Las Gallinas Valley Sanitary District, 101 Lucas Valley Road, Suite 300, San Rafael, California 94903**, no later than the time and date specified in the Notice Inviting Sealed Bids. Bids will be opened and read publicly at that time. Bids that are submitted late according to the official time kept by the District Engineer or a designee will be returned unopened. Telephones for use by bidders are not available at the District offices.
- 5.2 In accordance with California Public Contract Code Section 20804.5, bids must be presented under sealed cover. A completed bid label form furnished with the bid forms must be affixed to and visible on the outside of the sealed bid cover at the time the bid is submitted. Bids must be submitted using the bid forms furnished with the bid package. Bids must include all documents listed in the Bidder's Check List contained in Volume 2 completed in accordance with the bid package. Bids must bear the bidder's legal name and be signed by a representative authorized to bind the bidder. Bids must be typed or written in ink. Corrections may be made if initialed by the individual signing the bid. No oral or telegraphic modifications of bids, including facsimile modifications, will be considered. Bids that are incomplete or that are not presented on the bid forms furnished with the bid package may be deemed non-responsive.
- 5.3 Each bid must give the full business address of the bidder. Bids of partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership, or by an authorized representative, followed by the printed name and title of the person signing. Bids of corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the president, secretary or other person authorized to bind the corporation. The name of each person signing shall also be typed or printed below the signature. Upon request of the District, bidders will furnish satisfactory evidence of the authority of the person signing the bid. Bids of joint ventures must include a certified copy of the legal agreement constituting the joint venture.
- 5.4 No person, firm, corporation, partnership or legal joint venture may submit more than one bid for the Project. However, a person, firm, corporation, partnership or legal joint venture that has submitted a subcontract proposal to a bidder, or that has quoted prices on materials to a bidder may submit a subcontract proposal, quote prices to other bidders and submit its own bid.
- 5.5 In accordance with California Public Contract Code Section 20804.5, all bids must include one of the forms of bidder's security specified in the Notice Inviting Sealed Bids in an amount of at least ten (10) per cent of the total of the bid prices for the base bid and those additive or deductive items specifically identified in the Notice Inviting Sealed Bids for the purpose of determining the lowest price bid. Bidders that elect to provide bidder's security in the form of a bid bond must execute a bid bond using the form provided in the bid forms. The bidder's security is tendered as a guarantee that the successful bidder, if awarded the Project contract, will execute and submit to the District all required bonds, certificates of insurance, completed contract forms and other documents listed in the Contract Check List in Volume 1 of the bid package and enter into a contract with the District within seven (7) calendar days of receipt of the

Notice of Award. The bidder's security of any successful bidder that fails to do so will be forfeited to the District. All bidders' security not forfeited to the District will be returned once a successful bidder provides all required documents and enters a contract with the District in accordance with all applicable bid package requirements. Forfeiture of the bidder's security to the District will not waive or otherwise limit any other remedy available to the District under applicable law.

- 5.6 In accordance with California Business and Professions Code Section 7028.15, Public Contract Code Section 20103.5, and as specified in the Notice Inviting Sealed Bids, all Project work must be performed by properly licensed contractors and subcontractors with active licenses in good standing as of the date and time specified for bid opening, or, if the project involves federal funds, no later than the time the Project contract is awarded. Bidders must verify their Contractor's License number and license expiration date on the proposal cover page under penalty of perjury. Bids that do not satisfy applicable licensing requirements will be considered non-responsive and rejected and may subject the bidder to criminal and/or civil penalties.
- 5.7 If the bid forms include a bidder's questionnaire, all bids must include a completed bidder's questionnaire on the forms provided. By submitting a bid, bidders authorize District representatives to verify any and all information provided on the bidder's questionnaire and agree to indemnify, defend and hold harmless the District and its officials, officers, employees, agents and volunteers to full the extent permitted by law from and against any claims, liability or causes of action, including, without limitation, legal fees and costs, arising out of verification of the information provided on the bidder's questionnaire, and/or arising out of use of information provided in the bidder's questionnaire to determine, in accordance with applicable law, the qualification of the bidder for performing the Project.
- 5.8 Bids may be withdrawn prior to the time set for bid opening by a written request signed by an authorized representative of the bidder filed with the District Engineer. The bid security submitted with bids so withdrawn will be returned to the bidder. Bidders that have withdrawn their bid in accordance with this provision may submit a new bid prior to the time set for bid opening in accordance with all applicable bid package requirements. Bids may not be withdrawn during the ninety (90) day period after the time set for bid opening except as permitted by law pursuant to California Public Contract Code Section 5100 and following. Any other bid withdrawal will result in forfeiture of the bidder's bid security to the District.

6. BID PROTESTS

Any protest of the proposed award of Bid to the bidder deemed the lowest responsible bidder must be submitted in writing to the District, no later than 3:00 PM on the third (3rd) business day following the date of the Bid opening.

- 6.1 The initial protest must contain a complete statement of the basis for the protest.
- 6.2 The protest must state the facts and refer to the specific portion of the document or the specific statute that forms the basis for the protest. The protest must include the name, address, and telephone number of the person representing the protesting party.
- 6.3 The party filing the protest must concurrently transmit a copy of the initial protest to the bidder deemed the lowest responsible bidder.

- 6.4 The party filing the protest must have actually submitted a Bid on the Project. A subcontractor of a party filing a Bid on this Project 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.
- 6.5 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 a Bid Protest. The Bidder's failure to fully comply with these procedures shall constitute a waiver of any right to further pursue the Bid Protest, including filing of a challenge of the award pursuant to the California Public Contracts Code, filing of a claim pursuant to the California Government Code, or filing of any other legal proceedings.
- 6.6 The District shall review all timely protests prior to formal award of the Bid. The District shall not be required to hold an administrative hearing to consider timely protest, but may do so at the option of the General Manager. At the time of the District Board's consideration of the award of the bid, the District Board shall also consider the merits of any timely protests. The District Board may either accept the protest and award the bid to the next lowest responsible bidder or reject the protest and award to the lowest responsible bidder. Nothing in this section shall be construed as a waiver of the District Board's right to reject all bids.
- 6.7 The District reserves the right to waive any bid irregularities not affecting the amount of the bid, except where such waiver would give the low bidder an advantage or benefit not allowed other bidders.

7. AWARD

- 7.1 In accordance with applicable law, the District reserves the right to reject any or all bids and to waive any informality in any bid. The District reserves the right to accept any portion of any bid, unless the bid package expressly provides that the award will be made as a whole. If the District elects to award a contract for performance of the Project, the contract will be awarded in accordance with California Public Contract Code Section 20803 and other applicable law to the responsible bidder submitting a responsive bid with the lowest total bid price for the base bid and the additive or deductive alternate items listed in the Notice Inviting Sealed Bids. In accordance with the Contract Documents and other applicable law, the District may add or deduct items of work from the Project after the lowest responsible bidder is determined.
- 7.2 The successful bidder must submit to the District complete, executed copies of all documents specified in the contract checklist included in Volume 1 of the bid package within seven (7) calendar days of receiving written Notice of Award of the Project. Bidder's security of any successful bidder that fails to do so will be forfeited to the District.
- 7.3 The successful bidder and any subcontractors and others engaged in performance of the Project must have valid local business license(s), as applicable, before commencing work on the Project.
- 7.4 Upon verifying that the successful bidder has provided complete, executed copies of all documents specified in the contract checklist included in Volume 1 of the bid package,

an authorized District representative will execute the Project contract, and the District will issue to the successful bidder a Notice to Proceed specifying the Project commencement date. The number of working days within which the Project must be complete begins to run on the Project commencement date.

8. PRICING

- 8.1 If an inconsistency exists between the amount listed for a unit price in a bid and the total listed for that bid item (e.g., if the total listed for a bid item does not equal the unit price listed in the bid multiplied by the quantity listed), subject to applicable law, the unit price will be deemed to accurately reflect the bidder's intent concerning the bid item and the intended total for the bid item will be deemed to be the unit price as listed in the bid multiplied by the quantity listed.
- 8.2 If the Project bid price is a lump sum total made up of smaller individual bid item prices and an inconsistency exists between the lump sum total bid price and any individual bid item price, subject to applicable law, the individual bid item prices as listed in the bid will be deemed to accurately reflect the bidder's intended bid for the Project and the intended lump sum total bid for the Project will be deemed to be the sum of the individual bid item prices as listed in the bid, even if that sum is different from the amount actually listed as the lump sum total bid for the Project.
- 8.3 Any federal, state, or local tax payable on articles to be furnished for the Project shall be included in the lump sum total bid price and paid by the Contractor under the contract.

9. QUANTITIES

- 9.1 Quantities, including but not limited to, material or labor quantities, that are provided in the bid package concerning the Project are estimates only and are provided solely as a general indication of the Project scope. The District does not warrant that such quantity estimates provided in the bid package represent the actual quantities required to perform the Project in accordance with the Contract Documents. Such quantity estimates do not bind the District, and bidders should not rely on them in preparing their bids. Each bidder is solely responsible for determining the quantities on which to base their bids in light of information contained in the bid package, bidder investigation and analysis of the Project and the Project site, and any other analysis or expertise of the bidder concerning the Project.
- 9.2 The District may amend, decrease or increase the Project work in accordance with the bidding package and the Contract Documents. If the District amends, decreases or increases the Project work prior to award of the Project each bidder will be solely responsible for determining the revised quantities, if any, on which to base their bid in light of information contained in the bid package and any amendments or addenda to the bid package, bidder investigation and analysis of the Project as amended, decreased or increased, the Project site, and any other analysis or expertise of the bidder concerning the Project.

10. SUBSTITUTION OF "OR EQUAL" ITEMS

- 10.1 In accordance with California Public Contract Code Section 3400, where the Drawings list products by manufacturer's name, brand or model number such information

indicates the quality and utility of the items desired and does not restrict bidders to that manufacturer's name, brand or model number, unless the Technical Specifications or Drawings specify that the listed product is necessary to match others in use on a particular public improvement either completed or in the course of completion. Except where the Specifications indicate that a particular brand product is necessary to match others in use, when a manufacturer's name, brand or model number is listed, it shall be construed to be followed by the words "or equal" whether or not those words in fact follow the manufacturer's name, brand name or model number listed in the Technical Specifications or Drawings. Unless the Technical Specifications or Drawings indicate that a particular brand product is necessary to match others in use, bidders may propose equals of products listed by manufacturer name, brand name or model number.

10.2 Complete information for products proposed as equals must be submitted to the District Engineer for review at least seven (7) calendar days before the time specified for opening bids. To be considered, proposals concerning products proposed as equals must include sufficient information to permit the District to determine whether the products proposed as equals will satisfy the same performance requirements as products listed by manufacturer's name, brand or model number. Such performance requirements may include, but are not limited to, size, strength, function, appearance, ease of maintenance and repair, and useful life requirements. Proposals concerning products proposed as equals that are submitted less than seven (7) calendar days before the time specified for opening bids will not be considered. Failure to bid products specified by manufacturer name, brand name or model number where the Technical Specifications or Drawings specify that a particular product is necessary to match others in use, or where no proposal concerning products proposed as equals has been submitted in accordance with this provision may render a bid non-responsive.

11. SUBCONTRACTING

11.1 Bids must be in accordance with the requirements of the Subletting and Subcontracting Fair Practices, Act, California Public Contract Code Section 4100 and following. Bids must include a completed list of proposed subcontractors on the form included in the bid package. In accordance with California Public Contract Code Section 4104, completed lists of proposed subcontractors must include the name, business location, the portion (type or trade), and dollar amount of the Project work to be subcontracted for each subcontractor that will perform a portion of the Project work (including special fabrication and installation of a portion of the work) valued in excess of one half ($\frac{1}{2}$) of one (1) percent of the total Project bid price. If the Project work includes construction of streets or highways, the completed list of proposed subcontractors must include the subcontractor name, business location, type of work and dollar amount to be subcontracted for each subcontractor that will perform a portion of the Project work (including special fabrication and installation of a portion of the work) valued in excess of one half ($\frac{1}{2}$) of one (1) percent of the total Project bid price, or ten thousand dollars (\$10,000), whichever is greater. Bids that fail to include complete lists of proposed subcontractors in accordance with Public Contract Code Section 4100 and following and this provision may be deemed non-responsive.

11.2 In accordance with California Public Contract Code Section 4106, for any portion of the Project work with a value of more than one half ($\frac{1}{2}$) of one (1) percent of the total Project bid price for which no subcontractor is listed, or for which more than one

subcontractor is listed, bidders certify by submitting their bids that they are qualified to perform that portion of the Project work and that they will perform that portion of the Project work with their own forces. Bidders may not substitute another subcontractor for a subcontractor listed in their bid except as permitted by the District in accordance with Section 4107 and following of the California Public Contract Code.

12. ASSIGNMENT

Bidders may not assign, sublet, sell, transfer, or otherwise dispose of their bid or any right, title or interest in their bid, or their obligations under their bid, without the written consent of an authorized representative of the District. Any purported assignment, subletting, sale, transfer or other disposition of a bid or any interest in a bid, or of any obligations under a bid without such written consent will be void and of no effect.

13. BONDS

The successful bidder must submit to the District a performance bond within seven (7) calendar days of receiving written Notice of Award. If the Project involves expenditures in excess of twenty five thousand dollars (\$25,000), the successful bidder must submit to the District a payment or labor and materials bond within seven (7) calendar days of receiving written Notice of Award. Prior to issuance of the final Project payment, the successful bidder must submit a warranty or maintenance bond. All bonds must be executed by corporate sureties who are admitted surety insurers in the State of California in accordance with applicable law and acceptable to the District. Individual sureties will not be accepted. All project bonds must be executed using the forms provided in the bid package.

13.1 In accordance with California Civil Code Section 3247, the payment or labor and materials bond must be in the amount of one hundred percent (100%) of the total amount payable by the terms of the Project contract and guarantee payment to persons listed in California Civil Code Section 3181 for work performed and for charges for materials, supplies, and equipment provided under the Project contract (including amounts due under or subject to the Unemployment Insurance Code) in accordance with the requirements of California Civil Code Section 3248.

13.2 The performance bond must be in the amount of one hundred (100) percent of the amount payable by the terms of the Project contract to guarantee the faithful performance of the Project work.

13.3 The warranty or maintenance bond must be in the amount of ten (10) percent of the final Project contract amount and guarantee the Project work against defects in materials, equipment, workmanship, or needed repair for three (3) years from the District's acceptance of the Project work.

14. LABOR LAWS

14.1 Bidders shall comply with applicable provisions of Chapter 1 of Part 7 of the California Labor Code, beginning with Section 1720.

14.2 In accordance with California Labor Code Section 1861, bids must include a workers' compensation insurance certification on the form included in the bid package.

14.3 In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which

the project is 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 project.

- 14.4 In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for work in the locality in which the project is to be performed. A copy of said wage rates is available online at www.dir.ca.gov/DLSR/PWD. Said prevailing rate of per diem wages will be made available to any party upon request, and a copy thereof shall be posted at the jobsite by the Contractor.
- 14.5 In accordance with California Labor Code Section 1777.1, contractors and subcontractors that are found guilty of willfully violating Chapter 1 of Part 7 of Division 2 of the Labor Code (except for Section 1777.5), or that are found guilty of such violations with intent to defraud, and entities in which such contractors or subcontractors have any interest, may be ineligible to bid on, be awarded, or perform project work as a subcontractor.

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

CONTRACT CHECK LIST

Complete, accurate, executed copies of the following documents must be submitted to the Las Gallinas Valley Sanitary District in accordance with the bid package issued by the District for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, within seven (7) calendar days of receiving written Notice of Award of the project. The bidder's security of any successful bidder that fails to do so will be forfeited to the District.

Contract Check List:

- 2 copies of the signed Agreement
- Performance Bond
- Payment/Labor and Materials Bond
- Maintenance Bond
- Certificates of Insurance and Endorsements
- Escrow for Deposit Agreement, if applicable
- Safety Manual
- Appendix E: DIR Form PWC-100 Supplemental Questionnaire. Submit a completed form for the Contractor and each Subcontractor listed in the List of Proposed Subcontractors submitted with the bid. List Contractor's and all Subcontractors' license number, name, address, phone number, email address, and classification of workers they are providing at the time of the contract signing.

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

AGREEMENT

The Las Gallinas Valley Sanitary District, ("District") enters into this agreement, dated _____, with _____ ("Contractor"), whose address is _____.

RECITALS

1. **NOTICE INVITING SEALED BIDS.** The District gave Notice Inviting Sealed Bids on _____ for bids to be submitted for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project by published notice and/or posting in accordance with California Public Contract Code Section 20804 and other applicable law.
2. **BID OPENING.** On _____, District representatives opened the bids for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project and read the bids aloud.
3. **PROJECT AWARD.** On _____, the District Board awarded the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project to the Contractor and directed District staff to send the Contractor written Notice of Award of the project. The District Board conditioned award of the project on the Contractor's providing executed copies of all documents specified in the contract check list included in the bid package within seven (7) calendar days of receiving written Notice of Award of the project.
4. **REQUIRED DOCUMENTS.** The Contractor has provided the District executed copies of all documents specified in the contract check list included in the bid package within seven (7) calendar days of receiving written Notice of Award, unless noted otherwise.

AGREEMENT TERMS

The District and the Contractor agree as follows:

1. **THE WORK.** The Contractor shall furnish all equipment, tools, apparatus, facilities, material labor, and skill necessary to perform and complete in a good and workmanlike manner the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project ("Work") as shown in the Technical Specifications and Drawings in accordance with the Contract Documents and applicable law.
2. **LOCATION OF WORK.** The Work will be performed at the following location:

Various locations within San Rafael, CA
3. **TIME FOR COMPLETION.** The Contractor must complete the Work in accordance with the Contract Documents within **150 calendar days** from the date specified in the District's Notice to Proceed ("Time for Completion").

4. REMEDIES FOR FAILURE TO TIMELY COMPLETE THE WORK. If the Contractor fails to fully perform the Work in accordance with the Contract Documents by the Time for Completion, as such time may be amended by change order or other modification to this agreement in accordance with its terms, and/or if the Contractor fails, by the Time for Completion, to fully perform all of the Contractor's obligations under this agreement that have accrued by the Time for Completion, the Contractor will become liable to the District for all resulting loss and damage in accordance with the Contract Documents and applicable law. The District's remedies for the Contractor's failure to perform include, but are not limited to, assessment of liquidated damages of **\$1,000 per day** in accordance with California Government Code Section 53069.85 and the Contract Documents, and/or obtaining or providing for substitute performance in accordance with the Contract Documents.

5. CONTRACT PRICE AND PAYMENT. As full compensation in consideration of completion of the Work in accordance with the Contract Documents and in consideration of the fulfillment of all of the Contractor's obligations under the Contract Documents, the District will pay the Contractor in lawful money of the United States the total price of _____ (the "Contract Price") as specified in the Contractor's completed Bid Schedule dated _____, and attached to and incorporated in this agreement. Payment to the Contractor under this agreement will be for Work actually performed in accordance with the Contract Documents and will be made in accordance with the requirements of the Contract Documents and applicable law. The District will have no obligation to pay the Contractor any amount in excess of the Contract Price unless this agreement is first modified in accordance with its terms. The District's obligation to pay the Contractor under this agreement is subject to and may be offset by charges that may apply to the Contractor under this agreement. Such charges include but are not limited to, charges for liquidated damages and/or substitute performance in accordance with the Contract Documents.

6. PREVAILING WAGES. In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is 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 must be paid to all workers engaged in performing the Work. In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for the locality in which the Work is to be performed. In accordance with California Labor Code Section 1773, the District has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the Work is to be performed for each craft, classification or type of worker needed to perform the project. In accordance with California Labor Code Section 1773.2, copies of the prevailing rate of per diem wages are on file at the District Engineer's Office and will be made available on request. Throughout the performance of the Work the Contractor must comply with all provisions of the Contract Documents and all applicable laws and regulations that apply to wages earned in performance of the Work.

7. THE CONTRACT DOCUMENTS. This agreement consists of the following documents ("Contract Documents"), all of which are incorporated into and made a part of this agreement as if set forth in full. In the event of a conflict between or among the Contract Documents, precedence will be in the following order:
 - a. Permits

- b. Typical Details
- c. Reference Standard Specs
- d. Reference Standard Plans

- 7.1 This agreement and change orders and other amendments to this agreement signed by authorized representatives of the District and the Contractor.
- 7.2 The General Conditions and change orders and other amendments to the General Conditions signed by authorized representatives of the District and the Contractor.
- 7.3 The Technical Specifications, addenda to the Technical Specifications signed by authorized representatives of the District and issued prior to bid opening, Equal Product Proposals accepted by the District and signed by authorized District representatives prior to bid opening, and change orders and other amendments to the Technical Specifications signed by authorized representatives of the District and the Contractor.
- 7.4 The Drawings, addenda to the Drawings signed by authorized representatives of the District and issued prior to bid opening, Equal Product Proposals accepted by the District and signed by authorized District representatives prior to bid opening, and change orders and other amendments to the Drawings signed by authorized representatives of the District and the Contractor.
- 7.5 Notice Inviting Sealed Bids
- 7.6 Instructions to Bidders
- 7.7 The successful bidder's completed Proposal Cover Page and Bid Schedule
- 7.8 The successful bidder's completed Contractor License Information
- 7.9 The successful bidder's completed Notice to Proceed
- 7.10 The successful bidder's completed List of Proposed Subcontractors
- 7.11 The successful bidder's Workers Compensation Insurance Certification
- 7.12 The successful bidder's completed Non-Collusion Affidavit
- 7.13 The successful bidder's Drug-Free Workplace Certification
- 7.14 The successful bidder's Debarment Certification
- 7.15 The successful bidder's completed Certificates of Insurance and Endorsements
- 7.16 The successful bidder's executed Performance Bond
- 7.17 The successful bidder's executed Payment Bond
- 7.18 The Maintenance Bond form included in the bid package that the Contractor must execute prior to release of final payment under the Contract
- 7.19 The successful bidder's Statement of Experience
- 7.20 The successful bidder's signed Bidder's Signature Page
- 7.21 The successful bidder's Financial Qualifications

- 8. INTERPRETATION OF CONTRACT DOCUMENTS. Any question concerning the intent or meaning of any provision of the Contract Documents, including, but not limited to, the Technical Specifications or Drawings, must be submitted to the District Engineer, or his/her designee, for issuance of an interpretation and/or decision by the authorized District representative in accordance with the requirements of the Contract Documents. Interpretations or decisions by any other person concerning the Contract Documents will not

be binding on the District. The decision of the District Engineer, or his/her designee, shall be final.

- 9. ASSIGNMENT PROHIBITED. The Contractor may not assign part or all of this agreement, or any moneys due or to become under this agreement, or any other right or interest of the Contractor under this agreement, or delegate any obligation or duty of the Contractor under this agreement without the prior written approval of an official authorized to bind the District and an authorized representative of Contractor's surety or sureties. Any such purported assignment or delegation without such written approval on behalf of the District and the Contractor's sureties will be void and a material breach of this agreement subject to all available remedies under this agreement and at law and equity.
- 10. CERTIFICATION RE: CONTRACTOR'S LICENSE. By signing this Agreement the Contractor certifies that the Contractor holds a valid **Class A** license issued by the California State Contractors Licensing Board, and that the Contractor understands that failure to maintain its license in good standing throughout the performance of the Work may result in discipline and/or other penalties pursuant to the California Business and Professions Code, and may constitute a material breach of this agreement subject to all available remedies under this agreement and at law and equity.
- 11. SEVERABILITY. If any term or provision or portion of a term or provision of this Agreement is declared invalid or unenforceable by any court of lawful jurisdiction, then the remaining terms and provisions or portions of terms or provisions will not be affected thereby and will remain in full force and effect.
- 12. VENUE. This Agreement shall be governed and construed by the laws of the State of California. The parties agree that jurisdiction and venue of any dispute shall be in the Superior Court of the State of California in the County of Marin, exclusively.
- 13. ENTIRE AGREEMENT. This Agreement supersedes any and all other agreements, either oral or in writing, between the parties with respect to the subject of this agreement. This agreement contains all of the covenants and agreements between the parties with respect to the subject of this agreement, and each party acknowledges that no representations, inducements, promises, or agreements have been made by or on behalf of any party except the covenants and agreements embodied in this Agreement. No agreements, statement, or promise not contained in this Agreement shall be valid or binding between the parties with respect to the subject of this Agreement. Any modifications shall be in writing.

Executed on _____ by

CONTRACTOR

DISTRICT

By: _____

By: _____

Curtis Paxton, General Manager

Las Gallinas Valley Sanitary District

Title: .

Attest:

[Attach Notary Page]

By: _____

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

GENERAL CONDITIONS

1. DEFINITIONS:

The following terms as used in any agreement of which these General Conditions are a part are defined as follows:

- 1.1 Agreement: The agreement between the District and Contractor concerning the Project, as evidenced by and comprised of the Contract Documents.
- 1.2 Architect or Engineer: The person or persons so specified on the title sheet of the Technical Specifications and/or Drawings.
- 1.3 Bid Package: All of the documents listed as comprising the entire Bid Package as specified in the Instructions to Bidders and representing the full set of documents made available to bidders on the Project.
- 1.4 District: Las Gallinas Valley Sanitary District
- 1.5 Documents: All those documents listed in the Project agreement as comprising the entire agreement between the District and the Contractor.
- 1.6 Construction Manager – The person, firm, designated in writing by the District to act as its representative at the construction site and to perform construction observation services and administrative functions relating to this Contract. All contact by the Contractor with the District shall be through the Construction Manager.
- 1.7 Contractor: The successful bidder for the Project and party to the Project agreement with the District as specified in the Project agreement.
- 1.8 Days: Unless otherwise specified in the Contract Documents, days mean working days. Where necessary for clarity, calendar days and working days are appropriately specified as such in the Contract Documents.
- 1.9 Project: The JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project as described in the Technical Specifications and Drawings.
- 1.10 District Engineer: The District's authorized representative for administration and overall management of the Project agreement and Work. The District Engineer is the official point of contact between the District, the Architect and/or Engineer, and the Contractor.
- 1.11 Owner: Las Gallinas Valley Sanitary District
- 1.12 Drawings: The primarily graphic detailed requirements concerning the Project contained in Volume 4 of the Bid Package and any addenda to the Drawings signed by authorized District representatives and issued prior to bid opening, Equal Product

Proposals accepted by the District and signed by authorized District representatives prior to bid opening, and change orders and other amendments to the Drawings signed by authorized representatives of the District and the Contractor in accordance with the requirements of the Contract Documents.

- 1.13 Project Inspector: The party or parties charged by the District with inspecting the Work for compliance with the requirements of the Contract Documents and applicable laws and regulations. The Project Inspector acts under the direction of the District and shall coordinate with the District Engineer and Architect as directed by the District in accordance with the Contract Documents.
- 1.14 Subcontractor: A person, firm or corporation that is obligated as a party to a contract with the Contractor to perform part of the Project work. For purposes of these General Conditions Subcontractors include, but are not limited to, those that are obligated as parties to a contract with the Contractor to specially fabricate and install a portion of the Project Work according to the Technical Specifications and/or Drawings.
- 1.15 Technical Specifications: The detailed Project requirements contained in Volume 3 of the Bid Package and any addenda to the Technical Specifications signed by authorized District representatives and issued prior to bid opening, Equal Product Proposals accepted by the District and signed by authorized District representatives prior to bid opening, and change orders and other amendments to the Technical Specifications signed by authorized representatives of the District and the Contractor in accordance with the requirements of the Contract Documents.
- 1.16 Work: The furnishing of all equipment, tools, apparatus, facilities, material, labor and skill necessary to perform and complete in a good and workmanlike manner the Project as shown in the Technical Specifications and Drawings in accordance with the Contract Documents and applicable law.
- 1.16 Written Notice: Will be deemed to have been duly served for purposes of these General Conditions and any agreement of which they are a part if delivered in person to the individual or to a member of the firm or to any office of the corporation for whom the notice is intended, or if sent by registered or certified mail to the last known business address known to the party giving notice. Unless otherwise specified in the Contract Documents, the last known address of the Contractor shall be that listed in the Contractor's completed Proposal Cover Page and Bid Schedule.

2. SCOPE OF WORK

- 2.1 Documents Furnished by District. The District will furnish to the Contractor, free of charge, five (5) sets of half-size prints of the Drawings and Technical Specifications for execution of the Work. Throughout the performance of the Work the Contractor must keep one copy of the Drawings and Technical Specifications in good order and available for review by the District Engineer, the Engineer, the Architect, and any other District contractors or representatives.
- 2.2 Ownership of Documents Furnished by District. All documents furnished by the District, including, but not limited to, the Technical Specifications, Drawings, and any copies, are the property of the District. Documents furnished by the District may not to

be used on any other work. All documents furnished by the District must be returned to District upon completion of the Work.

2.3 Technical Specifications and Drawings.

2.3.1 The Technical Specifications and Drawings are complementary and intended to mutually describe the Work necessary to complete the Project in accordance with the Contract Documents.

2.3.2 In general, the Drawings indicate dimensions, position and kind of construction, and the Technical Specifications indicate qualities and methods. Any Work indicated on the Drawings and not mentioned in the Technical Specifications or vice versa must be furnished as though fully set forth in both. Work that is not particularly detailed, marked or specified shall be the same as similar Work that is detailed, marked or specified. The Contractor must furnish items necessary for the operation of equipment depicted in the Drawings or specified in the Technical Specifications that are suitable to allow such equipment to function properly at no extra charge.

2.3.3 The Contractor must notify the District Engineer and the Architect as soon as possible of any apparent errors or inconsistencies, including, but not limited to, typographical or notational errors in the Drawings, Technical Specifications, and/or in work done by others affecting the Work. The District Engineer will issue instructions concerning any such apparent errors or inconsistencies. If the Contractor proceeds with Work impacted by apparent errors or inconsistencies without instructions from the District Engineer, the Contractor shall do so at its sole risk and shall have all of the obligations and the District shall have all of the rights and remedies specified in Section 11 concerning any resulting damage or defect.

2.3.4 The General Conditions apply with equal force to all of the Work, including extra work authorized by the District Engineer in accordance with the Contract Documents. The Contractor must submit any required shop diagrams and/or drawings by the times and in the quantities indicated in the Technical Specifications. Any such shop diagrams and/or drawings must show completely the Work to be done, expanding on the Drawings concerning details not previously shown, field conditions and the condition of the Work. Architect or Engineer review of such shop diagrams and/or drawings will concern conformance with the requirements of the Contract Documents only. The Architect or Engineer assumes no responsibility for the correctness or accuracy of the dimensions, or any other contents of any shop diagrams and/or drawings submitted by the Contractor. The Contractor must check all dimensions at the Work site. Shop diagrams and/or drawings must be clearly marked with the name of the Project and the name of the Contractor, subcontractor or supplier making the submittal, and must be stamped and signed by the Contractor and submitted under a signed transmittal letter from the Contractor certifying that all dimensions have been checked at the Work site. These requirements are mandatory. The Architect or Engineer will not review shop diagrams and/or drawings that do not satisfy these requirements. The Contractor will be responsible for any and all discrepancies between dimensions of the actual Project site and/or Work and those shown on shop diagram and/or drawings

submitted by the Contractor, and for any other errors contained in or resulting from such shop diagrams and/or drawings, including, but not limited to, errors in material and/or equipment quantities and any resulting errors, delays or additional cost in the performance of the Work. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any discrepancies or errors in shop diagrams and/or drawings submitted by the Contractor, and concerning any resulting errors, delays or additional costs in the performance of the Work.

3. CONTROL OF WORK AND MATERIAL

- 3.1 District Engineer's Status. The District Engineer will administer the Project in accordance with the Contract Documents. After execution of the agreement and issuance of the Notice to Proceed, all correspondence and/or instructions concerning the Project between the Contractor and/or District shall be forwarded through the District Engineer. Except as otherwise provided in the Contract Documents, the District Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, or procedures or for safety precautions in connection with the Work. The District Engineer, however, will have authority to reject materials and/or workmanship that do not conform to the requirements of the Contract Documents. The District Engineer will also have the authority to require inspection or testing of the Work.
- 3.2 Architect or Engineer's Status. The Architect or Engineer will advise the District Engineer concerning decisions on all claims of the Contractor and all other matters relating to the execution and progress of the Work or the interpretation of the Contract Documents. The Architect or Engineer will also advise the Construction Manger concerning Work that does not conform to the Contract Documents. Whenever, in the Architect's or Engineer's opinion, it is necessary or advisable in accordance with the Contract Documents, the Architect or Engineer may recommend to the District Engineer inspection or testing of the Work, whether or not such Work is then fabricated, installed or completed.
- 3.3 Inspection and Testing of Work and Material.
- 3.3.1 The District, the District Engineer, the Architect or Engineer and their representatives will have access to the Work at all times wherever it is in preparation or progress. The Contractor must provide proper facilities for such access and for inspection.
- 3.3.2 The Contractor must inspect all materials as delivered and promptly return all defective materials without waiting for their rejection by the District Engineer or Architect or Engineer.
- 3.3.3 If the District Engineer, the Technical Specifications, or any laws, ordinances, or any public authority require any Work to be tested or approved, the Contractor must give the District Engineer timely notice of the Contractor's readiness for inspection. Inspections will be promptly made, and where practicable, at the source of supply. Any work subject to such testing that is covered up without timely notice to the District Engineer or without the approval or consent of the District Engineer must, if required by the District Engineer, be uncovered for examination at the Contractor's expense. The Contractor will have all of the

obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any work subject to testing that is covered up without timely notice to the District Engineer and that is not uncovered for examination at the Contractor's Expense if required by the District Engineer.

3.3.4 Tests of materials or qualification tests required by the Contract Documents must be made in accordance with the Technical Specifications and the requirements of the California Building Standards Code as adopted by the District and other applicable law. Copies of all testing reports shall be distributed as required in the Technical Specifications.

3.3.5 The District or its representatives may order re-examination of questioned Work. If ordered to do so, the Contractor must uncover such Work. If such Work is found to be according to the Contract Documents, the District shall pay the cost of uncovering and restoring the Work, unless such Work was subject to testing and covered up without timely notice to or approval of the District Engineer. If re-examined Work is found not in accordance with the Contract Documents, the Contractor must pay the cost of uncovering and restoring the Work. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any re-examined Work not in accordance with the Contract Documents that the Contractor fails to uncover and restore at the Contractor's expense.

3.3.6 The Contractor must replace or correct without charge any material or workmanship found not to conform to the requirements of the Contract Documents, unless the District consents to accept such material or workmanship with an appropriate adjustment in the Contract Price. The Contractor must promptly segregate and remove non-conforming material from the Work site. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any failure by the Contractor to replace or correct without charge any material or workmanship that does not conform to the requirements of the Contract Documents and that the District has not consented to accept.

3.4 Samples Furnished by the Contractor. The Contractor must furnish all samples for approval as directed in sufficient time to permit the Architect or Engineer to examine, approve and select samples before they are required by the progress of the Work. Portions of the Work for which samples are required and for which the Architect or Engineer has selected samples must be in accordance with such approved samples. Samples must be sent prepaid to the office of the District Engineer or to such place as the District Engineer may direct.

3.5 Materials and Substitutions.

3.5.1 Materials used for the Work must be new and of the quality specified. When not particularly specified, materials must be the best of their class or kind. The Contractor must, if required, submit satisfactory evidence as to the kind and quality of materials.

3.5.2 If the Contractor submitted complete information to the District Engineer for products proposed as equals in accordance with the Bid Package, and the District approved such products proposed as equals in writing, the Contractor

may either furnish such products approved as equals, or furnish the products listed by manufacturer name, brand or model number in the Technical Specifications or Drawings. The District retains the right, in its sole discretion, to accept or reject any other proposed substitution. To be considered, proposals concerning products proposed as equals must include sufficient information to permit the District to determine whether the products proposed as equals will satisfy the same performance requirements as products listed by manufacturer's name, brand or model number. Such performance requirements may include, but are not limited to, size, strength, function, appearance, ease of maintenance and repair, and useful life requirements. If the District does not accept a proposed substitution, the Contractor must furnish the product specified in the Technical Specifications or Drawings for the Contract Price, regardless of whether the product is specified by manufacturer's name, brand or model number, or otherwise.

3.5.3. During the performance of the Work, all materials must be neatly stacked, properly protected from the weather and other adverse impacts, and placed so as to avoid interference with efficient progress of the Work, with other activities of the District, or with the use of existing District facilities by the public. All materials must be delivered so as to ensure efficient and uninterrupted progress of the Work. Materials must be stored so as to cause no obstruction and so as to prevent overloading of any portion of the Work. The Contractor will be responsible for damage or loss of materials delivered to and/or stored at the Work site due to weather or other causes. The Contractor must promptly remove from the Work site all materials rejected by the District or its representatives as failing to conform to the requirements of the Contract Documents, whether such non-conforming materials have been incorporated in the Work or not. If the District or its representatives so direct, the Contractor must promptly replace and re-execute Work performed by the Contractor and order the replacement and re-execution of Work performed by subcontractors using non-conforming materials with materials that satisfy the requirements of the Contract Documents without expense to the District. The Contractor will bear the expense of making good all Work destroyed or damaged by such removal. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any failure by the Contractor to replace or re-execute Work using non-conforming materials, and/or to make good all work destroyed or damaged by such removal and/or execution.

3.6 Audits and Examination of Records. The District may examine and audit at no additional cost to the District all books, estimates, records, contracts, documents, bid documents, bid cost data, subcontract job cost reports and other Project related data of the Contractor, subcontractors engaged in performance of the Work, and suppliers providing supplies, equipment and other materials required for the Work, including computations and projections related to bidding, negotiating, pricing or performing the Work or contract modifications and other materials concerning the Work, including, but not limited to, Contractor daily logs, in order to evaluate the accuracy, completeness, and currency of cost, pricing, scheduling and any other project related data. The Contractor will make available all such Project related data at all reasonable times for examination, audit, or reproduction at the Contractor's business office at or near the Work site, and at any other location where such Project related data may be kept until

three years after final payment under the Agreement. Pursuant to California Government Code Section 8546.7, if the amount of public funds to be expended is in excess of \$10,000, this Agreement shall be subject to the examination and audit of the State Auditor, at the request of the District, or as part of any audit of the District, for a period of three (3) years after final payment under the Agreement.

3.7 Advertising. No advertising signs of any kind may be displayed on the Work site, or on fences, offices or elsewhere adjacent to the Work site.

3.8 Project Schedule. Within seven (7) calendar days of the Notice to Proceed, the Contractor shall submit a schedule showing each task of Work, the sequence of each task, the number of days required to complete each task, and the critical path controlling the completion of the entire Work. The schedule shall allow for the completion of the entire Work within the Time for Completion.

3.8.1 District Review of Schedule. The District may review the Contractor's submitted schedule and may note any exceptions. The Contractor shall correct any exceptions noted by the District within five (5) working days of being notified of the exceptions.

3.8.2 Update of Schedule. After submission of a schedule to which the District has taken no exceptions, the Contractor shall submit an updated schedule on a biweekly basis until completion of the Work. The updated schedule shall show the progress of Work as of the date specified in the updated schedule.

3.8.3 Float. The schedule shall show early and late completion dates for each task. The number of working days between these dates shall be designated as "float". The Float shall be designated to the Project and shall be available to both the District and the Contractor as needed.

3.8.4 Failure to Submit Schedule. If the Contractor fails to submit the schedule within the time period specified in Section 3.8, or the updated schedule as specified in Section 3.8.2, or submit a schedule to which the District has taken uncorrected exceptions, **the District shall be entitled to withhold payment for the next application for payment submitted after the schedule or updated schedule becomes late.**

3.8.5 Responsibility for Schedule. The Contractor shall have sole and exclusive responsibility for creating the schedule and properly updating it. The District has no authority to approve the schedule. The District may note exceptions to any schedule submitted by the Contractor. However, it shall be the Contractor's sole responsibility to determine the proper method to address exceptions and the District's review of the schedule shall not serve to place any such obligation on the District.

4. CHANGES IN WORK

4.1 District Directed Change Orders. The District may at any time during the progress of the Work direct any amendments to the Work or any of the Contract Documents, including, but not limited to the Technical Specifications, or Drawings. Such amendments will in no way void the agreement, but will be applied to amend the

Contract Price, if such amendments affect the Contract Price, the Project schedule, if such amendments affect the Project schedule, or any other provision of the Contract Documents based on a fair and reasonable valuation of the amendment in accordance with this Section 4.

- 4.2 Writing Requirement. Change orders and other amendments to the Technical Specifications, the Drawings, or other Contract Documents may be made only by a writing executed by authorized representatives of the District and the Contractor.
- 4.3 Contractor Proposed Change Orders. Unless the District Engineer otherwise authorizes or the District and the Contractor otherwise agree, change order proposals submitted by the Contractor must be submitted to the District Engineer no later than the time of the proposed change.
- 4.4 All Change Orders. All change order proposals must be submitted on completed Change Order forms provided in the Contract Documents. All such change order proposals must itemize all cost impacts of the proposed change order and include a total price for that change order and the amended Contract Price that would become effective upon execution of the change order. All change order proposals must specify any change in the Project schedule, or in any project milestone including, but not limited to, the Time for Completion, under the change order. It is understood that change orders that do not specify a change in any milestone, including, but not limited to, the Time for Completion, may be accomplished by the Time for Completion then in effect.
- 4.5 Change Order Pricing. Change order pricing will be governed by the following:
 - 4.5.1 Unit prices specified in the Contract Documents will apply to cost impacts involving items for which the Contract Documents specify unit prices.
 - 4.5.2 Cost impacts involving items for which no unit prices are specified will be calculated by adding the itemized actual direct cost that would be added or reduced under the change order and an allowance for indirect costs in accordance with this Section. Itemization for direct costs for required labor must include the classifications of labor required, the total hours required for each classification, the hourly rate for each classification and other labor related costs such as liability and workers compensation insurance, social security, retirement and unemployment insurance. All other cost impacts for which no unit prices are specified must be itemized as appropriate, including the cost of tools, vehicles, phones and other equipment, and the cost of all required materials or supplies. Indirect costs added under a change order may not exceed an allowance of fifteen (15) percent of the total of combined Contractor and subcontractor direct costs added under the change order. Such allowance covers Contractor overhead and profit under the change order and includes the cost of insurance in addition to that required pursuant to Section 8.8, bond premiums, superintendent labor, clerical labor, home office expenses, worksite office expenses, and utility costs under the change order. Such costs may not be itemized as direct costs under a change order. Indirect costs deducted under a change order will be calculated in exactly the same way as indirect costs added under a change order, except indirect costs deducted under a change order may not exceed an allowance of seven and a half (7.5) percent of

the total of combined Contractor and subcontractor direct costs deducted under the change order.

- 4.6 Liability Under Unapproved Change Orders. The Contractor shall be solely responsible for any and all losses, costs, or liabilities of any kind incurred by the Contractor, any subcontractor engaged in the performance of the Work, any party supplying material or equipment for the Work or any third party that are incurred pursuant to Contractor-proposed change orders prior to issuance of an approved change order executed in accordance with this Section 4. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any work or resulting losses, costs, or liabilities pursuant to a Contractor proposed change order before issuance of an approved change order executed in accordance with this Section 4.
- 4.7 Changes Subject to Contract Documents. Any changes in the Work and/or the Contract Documents pursuant to change orders and any other amendments issued in accordance with the Contract Documents, including this Section 4, will in all respects be subject to all provisions of the Contract Documents, including, but not limited to, the Technical Specifications and the Drawings, except as modified by such change orders or amendments.
- 4.8 Change Order Disputes.
- 4.8.1 Disputed District Directed Change Orders. If the Contractor disputes a District directed change order following a reasonable effort by the District and the Contractor to resolve the dispute including, at a minimum, a meeting between appropriate representatives of the Contractor and the District, the Contractor must commence performing the Work consistent with the disputed change order within five (5) working days of the last meeting between representatives of the Contractor and the District to resolve the dispute, or within the time specified in the disputed District directed change order, whichever is later. In performing Work consistent with a disputed District-directed change order pursuant to this provision the Contractor will have all of the Contractor's rights concerning claims pursuant to the Contract Documents and applicable law.
- 4.8.2 Disputed Contractor Proposed Change Orders. If the District disputes a Contractor proposed change order, the District and the Contractor will use reasonable efforts to resolve the dispute including, at a minimum, holding a meeting between appropriate representatives of the Contractor and the District. Regardless of and throughout any such efforts to resolve the dispute the Contractor must continue performing the Work irrespective of and unmodified by the disputed change order. In continuing to perform the Work, the Contractor will retain all of the Contractor's rights under contract or law pertaining to resolution of disputes and protests between contracting parties. Disputes between the District and the Contractor concerning any Contractor-proposed change order or other amendment do not excuse the Contractor's obligation to perform the Work in accordance with the Contract Documents excluding such Contractor-proposed change order or other amendment by the Time for Completion or waive any other Project milestone or other requirement of the Contract Documents.

5. TRENCHING AND UTILITIES

5.1 Excavation More Than Four Feet Deep. In accordance with California Public Contract Code Section 7104, if the Work involves excavation more than four feet deep the Contractor must promptly notify the District in writing before disturbing: any material that the Contractor believes may be 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; any subsurface or latent physical conditions at the Work site differing from those indicated; or any unknown physical conditions at the Work 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 Documents. The District will promptly investigate any such conditions for which notice is given. If the District finds that the conditions do materially differ, or involve hazardous waste, and would cause a decrease or increase in the cost or time of performance of the Work, the District will issue a change order pursuant to Section 4 of these General Conditions. If a dispute arises between the District and the Contractor concerning whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the cost or time of performance, the Contractor will not be excused from any completion date provided in the Contract Documents, but shall proceed with all Work to be performed. The Contractor will retain all rights under contract or law pertaining to resolution of disputes and protests between contracting parties.

5.2 Excavation of Five Feet or More. In accordance with California Labor Code Section 6705, contractors performing contracts exceeding \$25,000 in cost and involving excavation five or more feet deep must submit for the District's acceptance, prior to 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 excavation. If the plan varies from the shoring system standards, it must be prepared by a registered civil or structural engineer.

5.3 Existing Utilities.

5.3.1 General – The location of known existing utilities and pipelines are shown on the Plans in their approximate locations. However, nothing herein shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the project can be inferred from the presence of other visible facilities, such as buildings, cleanouts, meter and junction boxes, on or adjacent to the site of the Project.

The District will assume the responsibility for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Project site if such utilities are not identified by the District in the Contract Documents or which cannot reasonably be inferred from the presence of other visible facilities.

5.3.2 Utility Location – It shall be the Contractor's responsibility to determine the exact location and depth of all utilities, including service connections, which have been marked by the respective utility owners and which the Contractor believes may affect or be affected by the Contractor's operations. The Contractor shall not be entitled to additional compensation nor time extensions

for work necessary to avoid interferences nor for repair to damaged utilities if the Contractor does not expose all such existing utilities as required by this section.

The locating of utilities shall be in conformance with Government Code Section 4216 et seq. except for the District's utilities located on the District's property and not on public right-of-way.

A "High Priority Subsurface Installation" is defined in Section 4216 (e) as "high-pressure natural gas pipelines with normal operating pressures greater than 415kPA gauge (60psig) or greater than six inches nominal pipe diameter, petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground of greater than or equal to 60kv, or hazardous materials pipelines that are potentially hazardous to workers or the public if damaged."

A "Subsurface Installation" is defined in Section 4216 (l) as "any underground pipeline, conduit, duct, wire, or other structure, except non-pressurized sewer lines, non-pressurized storm drains, or other non-pressurized drain lines."

Pursuant to Government Code Section 4216.2 the Contractor shall contact the appropriate regional notification center at least two (2) working days but not more than fourteen (14) calendar days before performing any excavation. The Contractor shall request that the utility owners conduct a utility survey and mark or otherwise indicate the location of their service. The Contractor shall furnish to the Construction Manager written documentation of its contact(s) with the regional notification center prior to commencing excavation at such locations.

After the utility survey is completed, the Contractor shall commence "potholing" or hand digging to determine the actual location of the pipe, duct, or conduit. The Construction Manager and District Engineer shall be given notice prior to commencing potholing operations. The Contractor shall uncover all piping and conduits, to a point one (1) foot below the pipe, where crossings, interferences, or connections are shown on the Drawings, prior to trenching or excavating for any pipe or structures, to determine actual elevations. New pipelines shall be laid to such grade as to clear all existing facilities, which are to remain in service for any period subsequent to the construction of the run of pipe involved.

The Contractor's attention is directed to the requirements of Government Code Section 4216.2 (a)(2) which provides: "When the excavation is proposed within 10 feet of a high priority subsurface installation, the operator of the high priority subsurface installation shall notify the excavator of the existence of the high priority subsurface installation prior to the legal excavation start date and time, as such date and time are authorized pursuant to paragraph (1) of subdivision (a) of 4216.2. The excavator and the operator or its representative shall conduct an onsite meeting at a mutually-agreed-on time to determine actions or activities required to verify the location of the high priority subsurface installation prior to start time." The Contractor shall notify the Construction Manager and District Engineer in advance of this meeting.

- 5.3.4. Utility Relocation and Repair – If interferences occur at locations other than those indicated in the Contract Documents with reasonable accuracy, the Contractor shall notify the Construction Manager and District Engineer in writing. The Construction Manager will supply a method for correcting said interferences in accordance with the responsibilities of this section and Government Code Section 4215.

Care shall be exercised by the Contractor to prevent damage to adjacent existing facilities and public or private works; where equipment will pass over these obstructions, suitable planking shall be placed. If high priority subsurface installations are damaged and the operator cannot be contacted, the Contractor shall call 911 emergency services.

The District will compensate the Contractor for the costs of locating and repairing damage not due to the failure of the Contractor to exercise reasonable care, and for removing or relocating such main or trunk line utility facilities not indicated in the Contract Documents with reasonable accuracy, and for the cost of equipment on the Project necessarily idled during such work. The payment for such costs will be made as provided in Section 4, Change Orders. The Contractor shall not be assessed liquidated damages for delay in completion of the Project, when such delay is caused by the failure of the District or utility company to provide for removal or relocation of such utility facilities.

The public utility, where they are the owner of the effected utility, shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price. The right is reserved to the District and the owners of utilities or their authorized agents to enter upon the Work area for the purpose of making such changes as are necessary for the rearrangement of their facilities or for making necessary connections or repairs to their properties. The Contractor shall cooperate with forces engaged in such work and shall conduct its operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by such forces and shall allow the respective utilities time to relocate their facility.

When the Contract Documents indicate that a utility is to be relocated, altered or constructed by others, the District will conduct all negotiations with the utility company and the work will be done at no cost to the Contractor, unless otherwise stipulated in the Agreement.

Temporary or permanent relocation or alteration of utilities desired by the Contractor for its own convenience shall be the Contractor's responsibility and it shall make arrangements and bear all costs for such work.

6. PROJECT FACILITIES

- 6.1 Work Site Offices. Any Work site office facilities used by the Contractor and/or its privities must conform to all applicable codes, ordinances, and regulations. The cost of such Work site office facilities shall be paid from the included in the Contract Price.

6.2 District Rights of Access and Ownership. The District and its authorized representatives will at all reasonable times while such office facilities are located at the Work site (including, at a minimum, all times during which the Work is performed), have access to any such Work site office facilities used by the Contractor and/or its privities. With respect to the right of access of the District and its authorized representatives, neither the Contractor nor its privities shall have a reasonable expectation of privacy pursuant to the Fourth Amendment to the Unites States Constitution or other applicable law concerning such Work site office facilities used by the Contractor and/or its privities. Without exception, any and all Project related materials located at such Work site facilities will be deemed at all times to be District property subject to inspection and copying by the District and its authorized representatives at all reasonable times while such facilities are located at the Work site (including, at a minimum, all times during which the Work is performed). Any interference by the Contractor or its privities with the District's rights of access and/or ownership pursuant to this Section 6 will constitute a material breach of the Agreement subject to any and all remedies available pursuant to the Contract Documents and at law and equity.

7. PROSECUTION AND PROGRESS OF THE WORK

7.1 Liquidated Damages. Time is of the essence in the Agreement. The District and the Contractor agree that it will be difficult and/or impossible to determine the actual damage which the District will sustain in the event of the Contractor's failure to fully perform the Work or to fully perform all of the Contractor's obligations that have accrued pursuant to the Agreement by the Time for Completion. Accordingly, the District and the Contractor agree in accordance with California Government Code Section 53069.85 that the Contractor will forfeit and pay to the District liquidated damages in the sum of \$1,000 per day for each and every calendar day completion of the Work and/or performance of all of the Contractor's obligations that have accrued pursuant to the Agreement is delayed beyond the Time for Completion. The District and the Contractor further agree in accordance with California Government Code Section 53069.85 that the liquidated damages sum specified in this provision is not manifestly unreasonable under the circumstances existing at the time the Agreement was made, and that the District may deduct liquidated damages sums in accordance with this provision from any payments due or that may become due the Contractor under the Agreement.

7.2 No Damage for Delay Beyond District and Contractor Control. The Contractor will not be held responsible for delays in performance of the Work caused by delay beyond the control of both District and Contractor, such as by strikes, lockouts, or labor disturbances that are not within the control of the contractor to resolve, lack or failure of transportation, or acts of other government entities. This provision will not apply where the delay would not have occurred but for a previous contractor caused delay in the prosecution of the Work. The District will not be liable to the Contractor, any subcontractor or other entity engaged in the performance of the Work, any supplier, or any other person or organization, or to any surety or employee or agent of any of them, for damages arising out of or resulting from (i) delays beyond the control of the District and the Contractor including but not limited to fires, floods, epidemics, abnormal weather conditions, earthquakes and acts of God or acts or neglect by utility owners or other contractors performing other work, or (ii) delays caused by the District,

its officials, officers, employees, agents, or volunteers, or delays caused by the District Engineer or the Architect or Engineer, which delays are reasonable under the circumstances involved and/or are within the contemplation of the District and the Contractor. An extension of the Time for Performance in an amount equal to the time loss due to such delay(s) will be the Contractor's sole and exclusive remedy for such delay(s).

- 7.3 No Damage for Contractor Caused Delay. Contractor shall not be entitled to additional compensation for extended field or home office overhead, field supervision, costs of capital, interest, escalation charges, acceleration costs or other impacts for any delays to the extent such delays are caused by the failure of the Contractor or any subcontractor or other entity engaged in performance of the Work to perform the Work in accordance with the Contract Documents. Contractor may be eligible for additional compensation in excess of the Contract Price for delays caused by the District and/or its privities.
- 7.4 No Damage for Other Delay. Contractor will not be entitled to damages for delay to the Work caused by the following, which the District and Contractor agree will be deemed for purposes of California Public Contract Code Section 7102 either not caused by the District, and/or within the contemplation of the District and the Contractor, and/or reasonable under the circumstances:
- 7.4.1 Exercise of the District's right to sequence the Work in a manner that would avoid disruption to the District and other contractors based on: the failure of the Contractor or any subcontractor or other entity engaged in the performance of the Work to perform the Work in accordance with the Contract Documents, enforcement by the District or any other governmental agency of competent jurisdiction of any government act or regulation, or enforcement by the District of any provisions of the Agreement.
- 7.4.2 Requests for clarification or information concerning the Contract Documents or proposed change orders or modifications to the Contract Documents, including extensive and/or numerous such requests for clarification or information or proposed change orders or modifications, provided such clarifications or information or proposed change orders or modifications are processed by the District or its representatives in a reasonable time in accordance with the Contract Documents.
- 7.5 Delays Caused by the District and/or Its Privities. Either the District or the Contractor may propose a change in the Time for Completion for delays that are purported to be caused by the District and/or its privities and that are not reasonable under the circumstances involved and/or that are not within the contemplation of the District and the Contractor. Such proposed changes in the Time for Completion will constitute change order proposals subject to Section 4. In accordance with Section 4, the District and the Contractor may agree upon pricing for the cost impacts, if any, resulting from such delays. If such pricing is in anticipation of cost impacts that may, but have not yet occurred, the District will be obligated to pay the Contractor for such anticipated impacts in accordance with the Agreement and any applicable, approved change orders only to the extent the Contractor actually incurs the anticipated cost impacts. Notwithstanding anything to the contrary in Section 4.5.2, the District and the Contractor may agree to a daily rate or cap or lump sum that will apply to the cost

impacts, if any, resulting from delay purportedly caused by the District and/or its privities subject to this provision. However, if such daily rate or cap or lump sum is in anticipation of cost impacts that have not yet occurred, the District will be obligated to pay such daily rate or cap or lump sum only to the extent the Contractor actually incurs such cost impacts.

7.5.1 Weather Delays. Extensions of the Time for Completion will not be allowed for weather conditions that are consistent with the following list of anticipated rain days based on historical weather data of the National Oceanographic and Atmospheric Administration of the U.S. Department of Commerce for the record station that is nearest or most applicable to the Work site. Extensions of the Time for Completion for delays due to adverse weather will be allowed only if the number of rain days exceeds those listed in the following table and the Contractor can verify to the District's reasonable satisfaction that such adverse weather caused actual delay in the timely completion of the Work. No extensions of the Time for Completion will be granted for rain days in addition to those listed in the following table that merely result in delays that do not or would not, themselves, result in failure to complete the Work by the Time for Completion. Anticipated weather delays, which may include rain, strong wind, or other types of inclement weather conditions, are as follows:

August through October:	4 days
November through April:	40 days
May through July	4 days

7.6 Delay Claims. Whenever the Contractor claims a delay for which the Time for Completion may be extended, the Contractor must request an extension of time within five (5) working days of the start of the delay. The request must be in writing and describe in detail the cause for the delay, and, if possible, the foreseeable extent of the delay.

7.7 Contractor Coordination of the Work.

7.7.1 The District reserves the right to do other work in connection with or in the vicinity of the Project by contract or otherwise, and Contractor shall at all times conduct the Work so as to impose no hardship on the District, others engaged in the Work or other contractors working at the Work site. The Contractor will adjust, correct and coordinate the Work with the work of others so that no delays result in the Work or other work at or near the Work site.

7.7.2 If any part of the Work depends for proper execution or results upon the work of the District or any other contractor, the Contractor will, before proceeding with such Work, promptly report to the District any apparent discrepancies or defects in such other Work. Failure of the Contractor to promptly report any apparent discrepancy or defect will be deemed an acceptance of the District's or other contractor's Work as fit and proper.

7.7.3 The Contractor will anticipate the relations of the various trades to the progress of the Work and will ensure that required anchorage or blocking is furnished and set at proper times. Anchorage and blocking necessary for each trade shall be part of the Work except where stated otherwise.

7.7.4 The Contractor will provide proper facilities at all times for access of the District, the District Engineer, Architect or Engineer, and other authorized District representatives to conveniently examine and inspect the Work.

7.8 Suspension of Work

7.8.1 If the Contractor fails to correct defective work, or fails to carry out the Work in accordance with the Contract Documents or any other applicable rules and regulations, the District, by a written order of the District 's representative or signed personally by an agent specifically so empowered by the District, in writing, may order the Contractor to stop the work, in its entirety or any portion thereof. In the event of a suspension of only a portion of the work, the Contractor is obligated to perform the portion of the work not suspended. The Suspension of Work shall remain in effect until the condition or cause for such order has been eliminated. The District's concurrence that the condition or cause has been eliminated will be provided to the Contractor in writing. This right of the District to stop and suspend the Work shall not give rise to any duty on the part of the District to exercise this right for the benefit of the Contractor or any other person or entity. All delays in the Work occasioned by such stoppage shall not relieve the Contractor of any duty to perform the Work or serve to extend the time for its completion. Any and all necessary corrective work done in order to comply with the Contract Documents shall be performed at no cost to the District.

7.8.2 In the event that a suspension of Work is ordered, as provided in this paragraph, the Contractor, at its expense, shall perform all work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public, pedestrian, and vehicular traffic, during the period of such use by suspension. Should the Contractor fail to perform the Work as specified, the District may perform such work and the cost thereof may be deducted from partial payments and/or final payment due the Contractor under the Contract.

7.8.3 The District shall also have authority to suspend the Work wholly or in part, for such period as the District may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the Work. Such temporary suspension of the Work will be considered justification for time extensions to the Contract in an amount equal to the period of such suspension if such suspended work includes the current critical activity on the latest favorably reviewed progress schedule. The Contractor as directed by the District shall comply with the provisions in Section 7.8.2 above. Such additional work shall be compensated as provided for in Section 4, Changes in Work.

8. CONTRACTOR RESPONSIBILITIES

8.1. Eligibility. By executing the Agreement, the Contractor certifies that the Contractor is not ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7. In accordance with California Public Contract Code Section 6109(a), contractors who are ineligible to perform work on public works

projects pursuant to California Labor Code Sections 1777.1 or 1777.7 may neither bid on, be awarded or perform the Work. The Contractor shall hold harmless and indemnify the District from and against any and all damages, costs, and liability arising from or as a consequence of any violation of Public Contract Code Section 6109.

- 8.2 Supervision of the Work. The Contractor will be solely responsible for the performance of the Work, including portions of the Work to be performed by subcontractors. The Contractor is charged with ensuring that all orders or instructions from the District, District Engineer or Architect are disseminated to and followed by all subcontractors engaged in performance of the Work. The Contractor will supervise the Work using the Contractor's best skill and attention. At any time during the progress of the Work, the District, the District Engineer, or the Architect may require the Contractor and/or subcontractors engaged in performance of the Work to attend a project meeting and the Contractor will attend, and ensure the attendance of any subcontractors whose attendance is required by the District and/or advisable in light of the matters to be addressed at the meeting.
- 8.3 Contractor's Superintendent. The Contractor will keep on the Work, throughout its progress, a competent superintendent and any necessary assistants, all satisfactory to the District. The superintendent may not be changed without the consent of the District. The superintendent will represent the Contractor and all directions given by the District to the superintendent will bind the Contractor in accordance with the Agreement. Superintendent time included in Contractor's completed Bid Schedule and/or in approved change orders, if any, must be included in Contractor's approved overhead rate and may not be charged as a direct cost.
- 8.4 Competent Employees. The Contractor must at all times enforce strict discipline and good order among the Contractor's employees and may not employ on the Work any unfit person or anyone not skilled in the Work assigned, or anyone incompetent or unfit for the duties of that person. When the District determines that a Contractor employee does not satisfy the requirements of this provision, upon notice from the District, the Contractor must ensure that employee performs no further Work and is no longer present at the Work site. Any such Contractor employee may not again be employed on the Work without District approval.
- 8.5 Items Necessary for Proper Completion of the Work. Except as otherwise noted in the Contract Documents, the Contractor will provide and pay for all labor, materials, equipment, permits, fees, licenses, facilities and services necessary for the proper execution and timely completion of the Work in accordance with the Contract Documents.
- 8.6 Construction Reports. The Contractor must submit daily construction reports detailing the daily progress of the Work to the District Engineer on a weekly basis.
- 8.7 Subcontracting.
 - 8.7.1 By executing the Agreement, the Contractor certifies that no subcontractor included on the list of proposed subcontractors submitted with the Contractor's bid is ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7. In accordance with California Public Contract Code Section 6109(a), subcontractors who are ineligible to perform

work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7 may neither bid on, be awarded or perform as a subcontractor on the Work. In accordance with California Public Contract Code Section 6109(b), any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. The Contractor will ensure that no debarred subcontractor receives any public money for performing the Work, and any public money that may have been paid to a debarred subcontractor for the Work is returned to the District. The Contractor will be responsible for payment of wages to workers of a debarred subcontractor who has been allowed to perform the Work.

- 8.7.2 The Agreement and the performance of the Work are subject to the requirements of the Subletting and Subcontracting Fair Practices Act codified at California Public Contract Code Section 4100 and following. If the Contractor fails to specify a subcontractor or specifies more than one subcontractor for the same portion of the Work in excess of one-half of 1 percent of the Contractor's total bid, the Contractor agrees that the Contractor is fully qualified to perform that portion of the Work with the Contractor's own forces, and that the Contractor will perform that portion of the Work with the Contractor's own forces. If after award of the Agreement the Contractor subcontracts, except as provided for in California Public Contract Code Sections 4107 or 4109, any such portion of the Work, the Contractor will be subject to the penalties set forth in California Public Contract Code Sections 4110 and 4111, including cancellation of the Agreement, assessment of a penalty of up to 10 percent of the amount of the subcontract, and disciplinary action by the Contractors State License Board.
- 8.7.3. No contractual relationship exists between the District and any subcontractor engaged in performance of the Work.
- 8.7.4 Incorporation of Contract Documents. The Contractor must incorporate the Contract Documents in each contract with a subcontractor engaged in the performance of the Work. The Contractor shall be solely responsible for any delay or additional costs incurred as a result of its failure to provide adequate or accurate project information to a subcontractor that results in improper submittals and/or work, or time or other impacts is the sole responsibility of the Contractor. The Contractor will have all of the obligations and the District will have all of the remedies that are specified in Section 11.
- 8.7.5 Coordination of Subcontract Work: The Contractor is responsible for scheduling the Work of subcontractors so as to avoid delay or injury to either Work or materials.

8.8 Insurance.

- 8.8.1 All required insurance shall be provided in the form of "occurrence"-type policies underwritten by admitted insurers in the State of California with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to the District. All policies must be issued at the expense of the Contractor and must be maintained at the Contractor's expense throughout the performance of the Work. Coverage should be maintained for a minimum of five (5) years after contract completion.

- 8.8.2 The Contractor and any subcontractors engaged in performance of the Work must secure payment of workers compensation in accordance with California Labor Code Section 3700 and other applicable law. The Contractor must verify that all Subcontractors comply with this requirement.
- 8.8.3 Within seven (7) calendar days following Notice of Award the Contractor must submit to the District along with executed copies of all other documents specified in the Contract Check List certificates of insurance and endorsements evidencing that the Contractor has in effect and will maintain throughout the performance of the Work the following kinds and amounts of insurance:
- 8.8.3.1 Worker's Compensation Insurance. In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860) and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the Labor Code of the State of California, the Contractor is required to secure the payment of compensation to its employees and for that purpose obtain and keep in effect adequate Workers' Compensation Insurance. If the Contractor, in the sole discretion of the District, satisfies the District of the responsibility and capacity under the applicable Workers' Compensation Laws, if any, to act as self-insurer, the Contractor may so act, and in such case, the insurance required by this paragraph need not be provided. The Contractor is advised 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 shall comply with such provisions and have Employers' Liability limits of **\$1,000,000** per accident and per employee, and in the aggregate for injury by disease, before commencing the performance of the work of this Contract. Before the Notice to Proceed with the Work under this Contract is issued, the Contractor shall submit written evidence that the Contractor has obtained for the period of the Contract Workers' Compensation and Employer's Liability Insurance as required for all persons whom it employs or may employ in carrying out the work under this Contract. Such evidence of coverage shall be accompanied by an endorsement from the insurer agreeing to waive all rights of subrogation against the District, its officers, officials, employees, agents and volunteers, the Design Consultants, the Construction Manager and their agents, consultants and employees which might arise by reason of any payment under the policy. This insurance shall be in accordance with the requirements of the most current and applicable State Workers' Compensation Insurance Laws.
- 8.8.3.2 Commercial General Liability and Automobile Liability Insurance - This insurance shall protect the Contractor from claims for bodily injury, personal injury and property damage which may arise because of the nature of the work or from operations under this Contract. The Commercial General Liability Insurance shall be maintained for five (5) years after final completion and shall provide coverage on an occurrence basis.

a. Additional Insureds - The Commercial General Liability and Automobile Policies of insurance shall include as additional insureds or be endorsed to contain the following provisions the "entities" listed below and each of their partners, 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 and or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitation on the scope of protection afforded to the "entities" and each of their partners, officers, officials, employees, agents and volunteers and coverage provided to such additional insured. This policy shall provide coverage to each of the said insureds with respect to said work. Said policy shall provide primary coverage to the full limit of liability stated in the declarations.

Las Gallinas Valley Sanitary District
300 Smith Ranch Road
San Rafael, CA 94903

Construction Manager: (To be selected by the District later.)

District Consultants: (To be selected by the District later.)

Other Public Agencies Having Jurisdiction

b. (1) Amount of Coverage (General Contractor) - The bodily injury, personal injury and property damage liability of the Commercial General Liability insurance shall provide coverage in the following limits of liability: **\$5,000,000** on account of anyone occurrence for bodily injury and property damage, **\$5,000,000** personal and advertising injury limit with an annual general aggregate limit of not less than **\$5,000,000**, and **\$5,000,000** products and completed operations aggregate, combined single limit. The Automobile Liability insurance policy shall provide minimum limits of **\$5,000,000** per accident for bodily injury and property damage and **\$5,000,000** policy aggregate arising out of the ownership, maintenance, or use of any owned or non-owned vehicles.

(2) Amount of Coverage for Subcontractors - The bodily injury, personal injury and property damage liability of the Commercial General Liability insurance shall provide coverage in the following limits of liability: **\$3,000,000** on account of anyone occurrence for bodily injury and property damage **\$3,000,000** personal and advertising injury limit with an annual general aggregate limit of not less than **\$3,000,000**, and **\$3,000,000** products and completed operations aggregate, combined single limit. The Automobile Liability insurance policy shall provide minimum limits of **\$3,000,000** per accident and **\$3,000,000** policy aggregate arising out of the ownership, maintenance, or use of any owned or non-owned vehicles.

c. Subcontractors - The bodily injury and property damage liability insurance shall not be deemed to require the Contractor to have its

subcontractors named as insureds in the Contractor's policy, but the policy shall protect the Contractor from contingent liability which may arise from operations of its subcontractors.

d. Included Coverage - The above Commercial General Liability insurance shall also include the following coverage:

- Premises – Operations
- Independent Contractors
- Products - Completed Operations
- Personal Injury - (False Arrest, Libel, Wrongful Eviction, etc.)
- Advertising Injury
- Broad Form Property Damage, Including, Completed Operations
- Separation of Insureds/Cross-Liability Provision
- Duty to Defend all Insureds
- Deletion of any Limitation on Coverage for Bodily Injury or Property Damage Arising out of Subsidence or Soil or Earth Movement
- Separate Aggregate - A provision that the annual general aggregate and the products and completed operations annual aggregate shall apply separately to each project for which Contractor provides services away from premises owned by or rented to Contractor.
- XCU - (Explosion, Collapse, and Underground Damage) is applicable to operations performed by the Contractor or its subcontractors.
- Blanket Contractual Liability

8.8.3.3 Commercial Umbrella Policy. The Commercial policy is to insure losses above General liability, Employers liability, Auto liability, and Contractor's Pollution Legal liability limits. The Contractor may use an umbrella policy to meet the limit requirements of Section 8.8.3.2.b(1). However, any such umbrella/excess policy must be approved by the District and maintain an A.M. Best Rating of no less than A:VII.

8.8.3.4 Builders Risk. (Not Required)

8.8.3.5 Contractor's Pollution Legal Liability. Coverage for liability because of third-party claims for bodily injury and/or property damage, including insurance for remediation costs stemming from pollution incidents resulting from the contractor's operations. The Contractor's Pollution Legal Liability insurance policy shall provide coverage with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.

8.8.4 For any claims related to this project, the Contractor's insurance coverage shall be primary and non-contributory insurance coverage as respects the District, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the District, its officers, officials, employees, or volunteers shall

be excess of the Contractor's insurance and shall not contribute with it. This requirement shall also apply to any Excess or Umbrella liability policies.

- 8.8.5 Any deductibles or self-insured retentions must be declared to and approved by the District.
- 8.8.6 See Appendix section for the required insurance endorsement forms and other requirements.
- 8.8.7 For each insurance policy required under the Agreement except for the required workers compensation insurance policy, the Contractor must provide endorsements that add the District, its officers, officials, employees, and volunteers, as an additional insured. Such endorsements must: provide that the insurance required to be furnished by the Contractor will be primary as regards the District, its officers, officials, employees, and volunteers, and that the District's insurance will be excess of and not contribute to the insurance required to be furnished by the Contractor; that the District will receive 30-calendar day written notice of any reduction or cancellation of such insurance required to be furnished by the Contractor; and include a severability of interest clause acceptable to the District. Said endorsement shall be at least as broad as Insurance Services Office form number CG20 10 11 85 (Modified).
- 8.8.8 Contractor hereby grants to District a waiver of subrogation which any insurer may acquire against District, its officers, officials, employees, and volunteers, 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, but this provision applies regardless of whether or not the District has received a waiver of subrogation endorsement from the insurer.
- 8.8.9 The Contractor shall not allow any subcontractor to commence work on its subcontract until all similar insurance required of the subcontractor, except Builder's Risk Insurance, has been obtained and verified by the Contractor and submitted to the Construction Manager for the District's review and records. Subcontractors shall furnish original certificates and required endorsements as verification of insurance coverage. The insurance liability limits specified in Sections 8.8.3.2.a(2), shall also apply for all subcontractors listed in Section LIST OF PROPOSED SUBCONTRACTORS. The Contractor shall designate the required insurance liability limits for all other subcontractors.
- 8.8.10 Proof of Coverage - Before the Notice to Proceed with the Work under this Contract is issued, the Contractor shall furnish the District with certificate(s) evidencing issuance of all insurance mentioned herein, copies of the policy declaration or information page(s) and additional insured endorsements. The certificate(s) and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms as included in the appendix section or equivalent endorsement forms acceptable to the District. The certificate(s), policy declaration or information page(s), and endorsements are to be received and approved by the District before work commences. Except for the waiver of subrogation rights endorsements, no other endorsements are required for Workers Compensation or Builder's Risk Insurance. Such certificates of

Insurance shall provide that the insurance policy shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or limits except after thirty (30) calendar days prior written notice by certified mail, return receipt requested, has been given to the District. Contractor shall also provide certificate(s) evidencing renewals of all insurance required herein, at least thirty (30) calendar days prior to the expiration date of any such insurance.

Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, the Design Consultants and the Construction Manager and their officers, officials, employees, agents and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses. In the event of the breach of any provision of this paragraph, or in the event of any notices received which indicates any required insurance coverage will be diminished or canceled, District, at its option, may, notwithstanding any other provisions of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work pursuant to this Agreement.

8.8.11 Insurance During Guarantee Period

For any construction related work, including, but not limited to, maintenance, service, or repair work performed by the Contractor or its subcontractors during the guarantee period, workers compensation, and commercial general liability insurance in the amounts and format required herein, shall remain in force and shall be maintained for five (5) years after final completion of the contract of work.

8.9 Indemnities.

8.9.1 The Contractor will take all responsibility for the Work, and will bear all losses and damages directly or indirectly resulting to the Contractor, any subcontractors engaged in performance of the Work, the District, its officials, officers, employees, agents, volunteers and consultants, and to third parties on account of the performance or character of the Work, unforeseen difficulties, accidents, or occurrences of other causes predicated on active or passive negligence of the Contractor or of any subcontractor engaged in performance of the Work. To the fullest extent permitted by law the Contractor will indemnify, defend and hold harmless the District, its officials, officers, employees, agents, volunteers and consultants from and against any or all loss, liability, expense, claims, costs (including costs of defense), suits, and damages of every kind, nature and description (including, but not limited to, penalties resulting from exposure to hazards in violation of the California Labor Code) directly or indirectly arising from the performance of the Work ("Claims").

8.9.2 The Contractor will indemnify, defend and hold harmless the District, the District's officials, officers, employees, volunteers, agents and the District Engineer and Architect for all liability on account of any patent rights, copyrights, trade names or other intellectual property rights that may apply to the Contractor's performance of the Work. The Contractor will pay all royalties

or other charges as a result of intellectual property rights that may apply to methods, types of construction, processes, materials, or equipment used in the performance of the Work, and will furnish written assurance satisfactory to the District that any such charges have been paid.

- 8.9.3 The Contractor assumes all liability for any accident or accidents resulting to any person or property as a result of inadequate protective devices for the prevention of accidents in connection with the performance of the Work. The Contractor will indemnify, defend, and hold harmless the District and its officials, officers, employees, agents, volunteers and consultants from such liability.
- 8.9.4 Approval of the Contractor's certificates of insurance and/or endorsements does not relieve the Contractor of liability under this Section 8.9. The Contractor will defend, with legal counsel reasonably acceptable to the District, any action or actions filed in connection with any Claims and will pay all related costs and expenses, including attorney's fees incurred. The Contractor will promptly pay any judgment rendered against the District, its officials, officers, employees, agents, volunteers, or consultants for any Claims. In the event the District, its officials, officers, employees, agents, volunteers or consultants is made a party to any action or proceeding filed or prosecuted against Contractor for any Claims, Contractor agrees to pay the District, its officials, officers, employees, agents, volunteers and consultants any and all costs and expenses incurred in such action or proceeding, including but not limited to, reasonable attorneys' fees.
- 8.9.5 In accordance with California Civil Code Section 2782(a), nothing in the Agreement will be construed to indemnify the District for its sole negligence, willful misconduct, or for defects in design furnished by District. In accordance with California Civil Code Section 2782(b), nothing in the Agreement will be construed to impose on the Contractor or to relieve the District from liability for the District's active negligence. By execution of the Contract Documents the Contractor acknowledges and agrees that the Contractor has read and understands the insurance and other requirements of Agreement, and this Section 8.9, which is a material element of consideration.
- 8.10 Licenses/Permits. The Contractor must, without additional expense to the District, obtain all licenses, permits and other approvals required for the performance of the Work.
- 8.11 California Labor Code Requirements.
 - 8.11.1 In accordance with California Labor Code Section 1810, eight (8) hours of labor in performance of the Work shall constitute a legal day's work under the Agreement.
 - 8.11.2 In accordance with California Labor Code Section 1811, the time of service of any worker employed in performance of the Work is limited to eight hours during any one calendar day, and forty hours during any one calendar week, except in accordance with California Labor Code Section 1815, which provides that work in excess of eight hours during any one calendar day and forty hours during any one calendar week is permitted upon compensation for all hours

worked in excess of eight hours during any one calendar day and forty hours during any one calendar week at not less than one-and-one-half times the basic rate of pay. However, if the prevailing wage determination requires a higher rate of pay for overtime than is required under Section 1815, then the overtime rate must be paid, as specified in California Code of Regulation Title 8, Group 3, Section 16200(a)(3)(F).

- 8.11.3 In accordance with California Labor Code Section 1813, the Contractor and its subcontractors will forfeit as a penalty to the District \$25 for each worker employed in the performance of the Work for each calendar day during which the worker is required or permitted to work more than eight (8) hours in any one calendar day, or more than forty (40) hours in any one calendar week, in violation of the provisions of California Labor Code Section 1810 et seq.
- 8.11.4 In accordance with California Labor Code Section 1773.2, the District has determined the general prevailing wages in the locality in which the Work is to be performed for each craft or type of work needed to be as published by the State of California Department of Industrial Relations, Division of Labor Statistics and Research, a copy of which is on file in the office of the District Engineer and shall be made available on request. The Contractor and subcontractors engaged in the performance of the Work shall pay no less than these rates to all persons engaged in performance of the Work.
- 8.11.5 In accordance with California Labor Code Section 1775, the Contractor and any subcontractors engaged in performance of the Work must comply with Labor Code Section 1775 which establishes a penalty of up to \$200 per day for each worker engaged in the performance of the Work that the Contractor or any subcontractor pays less than the specified prevailing wage. The amount of such penalty shall be determined by the Labor Commissioner. The Contractor or subcontractor shall pay the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate. If a subcontractor worker engaged in performance of the Work is not paid the general prevailing per diem wages by the subcontractor, the Contractor is not liable for any penalties therefore unless the Contractor had knowledge of that failure or unless the Contractor fails to comply with all of the following requirements:
 - 8.11.5.1 The contract executed between the Contractor and the subcontractor for the performance of part of the Work must include a copy of the provisions of California Labor Code Sections 1771, 1775, 1776, 1777.5, 1813, and 1815.
 - 8.11.5.2 The Contractor must monitor payment of the specified general prevailing rate of per diem wages by the subcontractor by periodic review of the subcontractor's certified payroll records.
 - 8.11.5.3 Upon becoming aware of a subcontractor's failure to pay the specified prevailing rate of wages, the Contractor must diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for performance of the Work.

8.11.5.4 Prior to making final payment to the subcontractor, the Contractor must obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages employees engaged in the performance of the Work and any amounts due pursuant to California Labor Code Section 1813.

8.11.6 In accordance with California Labor Code Section 1776, the Contractor and each subcontractor engaged in performance of the Work, must keep accurate payroll records showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed in performance of the Work. Each payroll record must contain or be verified by a written declaration that it is made under penalty of perjury, stating that the information contained in the payroll record is true and correct and that the employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by the employer's employees on the public works project. The payroll records required pursuant to California Labor Code Section 1776 must be certified and must be available for inspection by the District and its authorized representatives, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations and must otherwise be available for inspection in accordance with California Labor Code Section 1776.

8.11.7 In accordance with California Labor Code Section 1777.5, the Contractor, on behalf of the Contractor and any subcontractors engaged in performance of the Work, will be responsible for ensuring compliance with California Labor Code Section 1777.5 governing employment and payment of apprentices on public works contracts.

Apprentices - Prior to commencing the Work, Contractor shall comply with the provisions of Labor Code 1777.5, including but not limited to the submission of contract award information to an applicable apprenticeship program that can supply apprentices to the site of the Work. Such information shall include an estimate of journeyman hours to be performed under this Contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall be submitted to the District if requested by the District.

A determination by the Chief of the Division of Apprenticeship Standards that Contractor or its subcontractors have knowingly violated Labor Code 1777.5 shall forfeit as a civil penalty an amount not exceeding one hundred dollars (\$100) for each full calendar day of noncompliance. Contractor or its subcontractor, who knowingly commits a second or subsequent violation of Labor Code 1777.5 within a three-year period, where the noncompliance results in apprenticeship training not being provided as required, shall forfeit as a civil penalty the sum of not more than three hundred dollars (\$300) for each full calendar day of noncompliance. Upon the receipt of a determination that a civil penalty has been imposed by the Chief of the Division of Apprenticeship

Standards, the District shall withhold the amount of the civil penalty from the next progress payment then due or to become due Contractor.

8.11.8 In case it becomes necessary for the Contractor or any subcontractor engaged in performance of the Work to employ on the Work any person in a trade or occupation (except executive, supervisory, administrative, clerical, or other non-manual workers as such) for which no minimum wage rate has been determined by the Director of the Department of Industrial Relations, the Contractor must pay the minimum rate of wages specified therein for the classification which most nearly corresponds to Work to be performed by that person. The minimum rate thus furnished will be applicable as a minimum for such trade or occupation from the time of the initial employment of the person affected and during the continuance of such employment.

8.11.9 Labor Discrimination. Attention is directed to Section 1735 of the Labor Code, which reads as follows:

"No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age or sexual orientation of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for violation of this chapter."

8.11.10 Receipt of Workers' Wages, Fee for Registering or Placing Persons In Public Works - Attention is directed to the provisions of sections 1778 and 1779 of the California Labor Code, which read as follows:

"Section 1778. Every person, who individually or as a representative of an awarding or public body or officer, or as a contractor or subcontractor doing public work, or agent or officer thereof, who takes, receives or conspires with another to take or receive, for its own use or the use of any other person any portion of the wages of any workman or working subcontractor, in connection with services rendered upon any public work is guilty of a felony."

"Section 1779. Any person or agent or officer thereof who charges, collects, or attempts to charge or collect, directly or indirectly, a fee or valuable consideration for registering any person for public work, or for giving information as to where such employment may be procured, or for placing, assisting in placing, or attempting to place, any person in public work, whether the person is to work directly for the state, or any political subdivision or for a contractor or subcontractor doing public work is guilty of a misdemeanor."

8.12 Laws and Ordinances. The Contractor and all subcontractors engaged in the performance of the Work must conform to the following specific rules and regulations as well as all other laws, ordinances, rules and regulations that apply to the Work. Nothing in the Technical Specifications or Drawings is to be construed to permit Work not conforming to these codes:

National Electrical Safety Code, U. S. Department of Commerce
National Board of Fire Underwriters' Regulations

California Building Standards Code as adopted by the District
Manual of Accident Prevention in Construction, latest edition, published by
A.G.C. of America
Industrial Accident Commission's Safety Orders, State of California
Regulations of the State Fire Marshall (Title 19, California Code of Regulation) and
Applicable Local Fire Safety Codes
Labor Code of the State of California - Division 2, Part 7, Public Works and Public
Agencies.

8.13 Guaranty. The Contractor guarantees all of the Work for one year from the date the District accepts the Work. Upon receiving written notice of a need for repairs which are directly attributable to defective materials or workmanship the Contractor must make good any defects arising or discovered in any part of the Work by diligently commencing the necessary repairs within seven (7) calendar days from the date of notice from the District. If the Contractor fails to make good any defects in the Work in accordance with this provision, in addition to any other available remedy under the contract or at law or equity, the District may make good or have made good such defects in the Work and deduct the cost from amounts that may be due or become due the Contractor, and/or call on the Contractor's maintenance bond for the cost of making good such defects and for the District's reasonable legal costs, if any, of recovering against the bond. The Contractor shall remain responsible for repairing any Work found to be defective regardless of when such defect is discovered by the District. See Drawings for other Guaranty/Warranty requirements for the project.

8.14 Safety

8.14.1 Contractor's Safety Responsibility - The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons and property during performance of the Work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor (OSHA), the California Occupational Safety and Health Act (CalOSHA), and all other applicable Federal, State, County, and local laws, ordinances, codes, including but not limited to the requirements set forth below, and any regulations that may be detailed in other parts of these Contract Documents. In the event of conflicting requirements, the most stringent requirement as it pertains to the Contractor's safety responsibility shall be followed by the Contractor.

No provision of the Contract Documents shall act to make the District, the Construction Manager, Design Consultant or any other party than the Contractor responsible for safety. The Contractor agrees that for purposes of California Labor Code Section 6400 and related provisions of law the Contractor, the Contractor's privities and any other entities acting pursuant to this contract will be "employers" responsible for furnishing employment and a place of employment that is safe and healthful for the employees, if any, of such entities acting pursuant to this contract and that neither the District nor the Construction Manager, Design Consultant or their respective officers, officials, employees, agents or volunteers or other authorized representatives will be responsible for having hazards corrected and /or removed at the location(s) where the work is to be performed. The Contractor agrees that neither the District nor the Construction Manager, Design Consultant or their respective

officers, officials, employees, agents or volunteers or other authorized representatives will be responsible for taking steps to protect the Contractor's employees from such hazards, or for instructing the Contractor's employees to recognize such hazards or to avoid the associated dangers. The Contractor agrees that with respect to the work to be performed under this contract and the location(s) where such work is to be performed, the Contractor will be responsible for not creating hazards, and for having hazards corrected and/or removed. The Contractor agrees that through the safety obligations contained in this contract and the Contractor's own inspection of the site(s) where the contract work is to be performed, the Contractor is aware and has been notified of the hazards to which the Contractor's employees may be exposed in the performance of contract work. The Contractor has taken and/or will take appropriate, feasible steps to protect the Contractor's employees from such hazards, and has instructed and/or will instruct its employees to recognize such hazards and how to avoid the associated dangers. The Contractor agrees that neither the District nor the Construction Manager, Design Consultant or their respective officers, officials, employees, agents or volunteers or other authorized representatives will be "employers" pursuant to California Labor Code Section 6400 and related provisions of law with respect to the Contractor, the Contractor's privities or other entities acting pursuant to this contract.

- 8.14.2 Review and inspection by the District, the District Engineer, the Architect or Engineer, and/or other representatives of the District of the Contractor's performance of the Work will not constitute review of the adequacy of the Contractor's safety measures in, on, or near the Work site. Such reviews and inspections do not relieve the Contractor of any of the Contractor's obligations under the Contract Documents and applicable law to ensure that the Work site is maintained, and the Work is performed in a safe manner.
- 8.14.3 The Contractor will be solely responsible for the implementation and maintenance of safety programs to ensure that the Work site is maintained, and the Work is performed in a safe manner in accordance with the Contract Documents and applicable law.
- 8.14.4 Safety Plan - Within seven (7) calendar days following Notice of Award the Contractor must submit to the District a copy of the Contractor's Safety Plan.

The Contractor shall establish, implement, and maintain a written injury prevention program as required by Labor Code Section 6401.7. Before beginning the Work, the Contractor shall prepare and file with the Construction Manager a written Contractor Safety Plan that provides for the implementation of all of the Contractor's safety responsibilities in connection with the Work at the Project site. The coordination of that program and its associated procedures and precautions with safety plans, precautions and procedures of each of its subcontractors and other Contractors performing work at the Project site. The Contractor shall be solely responsible for initiating, maintaining, monitoring, coordinating, and supervising all safety plans, precautions, and procedures in connection with the Work and for coordinating its programs, precautions, and procedures of the other contractors and subcontractors performing the Work at the Project site. The Safety Plan should contain all the necessary elements for the Contractor to administer its program on the Project site. At a minimum, this

written Safety Plan shall address the elements required by Labor Code Section 6401.7.

The Contractor's compliance with requirements for safety and/or the Construction Manager's review of the Contractor's Safety Plan shall not relieve or decrease the liability of the Contractor for safety. The Construction Manager's review of the Contractor's Safety Plan is only to determine if the above listed elements are included in the program.

- 8.14.5 The Contractor must furnish and place proper guards and systems for the prevention of accidents, including, but not limited to, those systems required pursuant to Title 8, Section 1670 and following of the California Code of Regulations concerning safety belts and nets. The Contractor must provide and maintain any other necessary systems or devices required to secure safety of life or property at the Work site in accordance with accepted standards of the industry and applicable law. The Contractor must maintain during all night hours sufficient lights to prevent accident or damage to life or property.
- 8.14.6 The Contractor must comply with the District's Confined Space Entry Program shown in the Appendix section of the Contract Documents.
- 8.14.7 The Contractor shall indemnify, defend and hold District and Construction Manager, Design Consultant and their respective officers, officials, employees, agents and volunteers or other authorized representatives harmless to the full extent permitted by law concerning liability related to the Contractor's safety obligations in accordance with the indemnification section of the Contract Documents.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the Construction Manager and the District. In addition, the Contractor shall furnish the Construction Manager with a copy of the Employer's Report of Injury immediately following any incident requiring the filing of said report during the prosecution of the Work under this Contract. The Contractor shall also furnish the Construction Manager with a copy of the Employer's Report of Injury involving any subcontractors on this Project. The Contractor shall make all reports as are, or may be, required by any authority having jurisdiction, and permit all safety inspections of the Work being performed under this Contract.

If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Construction Manager, giving full details of the claim.

- 8.14.8 Safety Supervisor - The Contractor shall appoint an employee as safety supervisor who is qualified and authorized to supervise and enforce compliance with the Safety Program. The Contractor shall notify the Construction Manager in writing prior to the commencement of work of the name of the person who will act as the Contractor's Safety Supervisor and furnish the safety supervisor's resume to the Construction Manager.

Contractor will, through and with its Safety Supervisor, ensure that all of its employees, and its subcontractors of any tier, fully comply with the Project Safety Policies. The Safety Supervisor shall be a full-time employee of the Contractor whose responsibility shall be for supervising compliance with applicable safety requirements on the Project site and for developing and implementing safety training classes for all job personnel. The District shall have the authority to require removal of the Contractor's Safety Supervisor if the representative is judged to be improperly or inadequately performing the duties; however, this authority shall not in any way affect the Contractor's sole responsibility for performing this work safely, nor shall it impose any obligation upon the District to ensure the Contractor performs its work safely.

8.14.9 Safety and Protection - The Contractor shall take all necessary precautions to prevent damage, injury, and loss to:

- All employees on the Project, employees of all subcontractors, and other persons and organizations who may be affected thereby;
- All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, wetlands, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction, even if not shown on the Contract Drawings.

The Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and of underground facilities and utility districts when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor, supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the Contractor, and the Contractor shall be responsible for any direct or indirect costs resulting from such damage, injury or loss.

8.14.10 Excavation Safety - In accordance with the provisions of Section 6705 of the Labor Code, the Contractor shall submit, in advance of excavation of any trench or trenches five feet or more in depth, 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 plans vary from the shoring system standards set forth in the Construction Safety Orders of the Division of Industrial Safety in Title 8, Subchapter 4, Article 6, California Code of Regulations, the plans shall be prepared and signed by a registered civil or structural engineer employed by the Contractor, and all costs therefor 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, bracing,

sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this section shall be construed to impose a tort liability on the District, the Design Consultant, the Construction Manager, nor any of their officers, officials, employees, agents, consultants or volunteers. The District's review of the Contractor's excavation plan is only for general conformance to the Construction Safety Orders.

Prior to commencing any excavation, the Contractor shall designate in writing to the Construction Manager the "competent person(s)" with the authority and responsibilities designated in the Construction Safety Orders.

8.14.11 Safety Emergencies - In emergencies affecting the safety or protection of persons or the Work or property at the Project site or adjacent thereto, the Contractor, without special instruction or authorization from the Construction Manager, is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Construction Manager prompt written notice if the Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby.

8.14.12 Safety Violations - Should the Contractor fail to correct an unsafe condition, the District shall have the right to notify the Contractor through the Construction Manager that an unsafe condition may exist and must be corrected or the work in question can be stopped in accordance with Section 7.8, Suspension of Work until the condition is corrected to the satisfaction of the District. No extension of time or additional compensation will be granted as a result of any stop order so issued. The notification and suspension of such work or the failure to provide such notification and suspension by the District shall not relieve the Contractor of its sole responsibility and liability for safety and the correction of any unsafe conditions.

The District shall have the authority to require the removal from the project of any worker and the foreman and/or superintendent in responsible charge of the work where safety violations occur.

8.14.13 Equipment Safety Provisions - The completed Work shall include all necessary permanent safety devices, such as machinery guards and similar safety items, required by the State and Federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the Work, including District -selected equipment, subject to such safety regulations shall be fabricated, furnished, and installed in compliance with these requirements. All equipment furnished shall be grounded and provided guards and protection as required by safety codes. Where vapor-tight or explosion-proof electrical installation is required by safety codes, this shall be provided. Contractors and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. The Contractor shall notify all equipment suppliers and subcontractors of the provisions of this paragraph.

8.14.14 Confined Spaces – The Project requires work in confined spaces and requires compliance with CAL/OSHA and Federal OSHA requirements. Confined spaces for the purposes of this section shall be as defined by the Division of Industrial Safety. Notwithstanding any classifications relative to the

Tunnel Safety Orders, work within confined spaces of this project is subject to the definitions and applicable provisions of Section 5156 et. seq., Title 8, Division 1, Chapter 4, Subchapter 7, Group 16, Article 108 of California Code of Regulations.

Entry into existing "permit" confined spaces as defined by OSHA shall be allowed only in compliance with a confined space entry permit program by the Contractor that meets the requirements of CAL/OSHA Section 5157. While the District has identified certain existing facilities as confined spaces other confined spaces may exist on the Project. It shall be the responsibility of the Contractor to identify and classify these confined spaces.

Sources of ignition, including smoking, shall be prohibited in any confined space.

It is anticipated that the Contractor may encounter hazardous conditions within these confined spaces which include, but are not limited to the following:

- A. Exposure to hydrogen sulfide, methane, carbon dioxide and other gases and vapors commonly found in municipal sewers which could have or has the potential of having Immediate Danger to Life or Health Conditions (IDLH).
- B. Exposure to atmosphere containing insufficient oxygen to support human life.
- C. Exposure to combustible, flammable and/or explosive atmosphere.
- D. Exposure to sewage which may contain bacteriological, chemical, and other constituents harmful to humans.
- E. Work in conditions where engulfment or entrapment may occur.
- F. Work in environments which may be slippery and/or have uneven work surfaces.
- G. Work in structures which have limited and/or restricted access and egress.
- H. Work in structures where workers may trip, slip and/or fall several feet.
- I. See Appendices "Contractor Safe Work Requirements" and "Confined Space Entry Program" for additional requirements. Copies of confined space permits shall be submitted to the District weekly.

8.14.15 Construction Activity Permits - The Contractor must submit a copy of its respective current DOSH permit before beginning work on any the following construction activities:

- A. Construction of trenches or excavations which are five feet or deeper and into which a person is required to descend.

- B. Construction of any building, structure, scaffolding or falsework more than three stories high or the equivalent height (36 feet).
- C. Demolition of any building or structure, or dismantling of scaffolding or falsework more than three stories high or the equivalent height (36 feet).
- D. Erection or dismantling of vertical shoring systems more than three stories high, or the equivalent height (36 feet).

8.14.16 Public Safety and Convenience – In accordance with the provisions of Section 6500 of the Labor Code the Contractor shall conduct his work so as to ensure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the Work and to ensure the protection of persons and property. No road or street shall be closed to the public except with the permission of the Construction Manager and the proper governmental authority. Fire hydrants on or adjacent to the Work shall be accessible to firefighting equipment. Temporary provisions shall be made by the Contractor to ensure the use of sidewalks, private and public driveways and proper functioning of gutters, sewer inlets, drainage ditches and culverts, irrigation ditches and natural water courses. To the maximum extent permitted by law, Contractor shall indemnify, hold harmless and defend District from any and all liability, including attorneys' fees and costs of litigation, arising from any failure to comply with this section by Contractor or its privities.

8.15 Assignment of Unfair Business Practice Claims. In accordance with California Public Contract Code Section 7103.5, the Contractor and any subcontractors offer and agree to assign to the District all rights, title, and interest in and to all causes of action the Contractor or any subcontractors may have under Section 4 of the Clayton Act (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 (commencing with § 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to this contract. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgement by the parties.

9. MEASUREMENT AND PAYMENT

9.1 F.O.B. All shipments must be F.O.B. destination to the Work site and/or other sites indicated in the Contract Documents. The Contract Price is all-inclusive (including sales tax). There shall be no additional compensation paid for containers, packing, unpacking, drayage or insurance.

9.2 Payment

9.2.1 On or about the first day of each calendar month the Contractor will submit to the District Engineer a verified application for payment and schedule of values supported by a statement showing all materials actually installed during the preceding month and the cost of labor actually expended in the performance of the Work. Unless otherwise provided in the Contract Documents, no allowances or payments will be made for material or equipment not placed at the Work site.

- 9.2.2 To be eligible for payment the Contractor's applications for payment must include certified payroll reports prepared in accordance with California Labor Code Section 1776 and the Agreement for each employee of the Contractor and any subcontractors engaged in the performance of the Work during the preceding months, applications for payment will not be processed without certified payroll reports.
- 9.2.3 In accordance with California Public Contract Code Section 20104.50, the District will review applications for payment as soon as practicable after receipt. Any application or part of an application that is determined to be improper will be returned to the Contractor as soon as practicable, but no later than seven (7) calendar days after receipt by the District, along with a written description of the reasons why the application is improper. The Contractor's failure to submit a schedule in the time specified in Section 3.8, or its submission of a schedule to which the District has taken any uncorrected exception, shall serve as a basis for returning an application for payment in its entirety.
- 9.2.4 Unless the Contractor has elected to post securities in lieu of retention in accordance with California Public Contract Code Section 22300 and the Agreement, and the Contractor and the District have executed an escrow agreement in accordance with the Public Contract Code and the Agreement, the District will make progress payments to the Contractor in accordance with applicable law in the amount of 95 percent of the value of the labor actually performed and the material incorporated in the Work as specified in Contractor's verified application for payment upon approval by the District's authorized representative(s). Payment of progress payments will not be construed as acceptance of the Work performed. If the Contractor has elected to post securities in lieu of retention in accordance with Public Contract Code Section 22300 and the Agreement and the Contractor and the District have executed an escrow agreement in accordance with the Public Contract Code and the Agreement, the District will make payments to the Contractor or the Contractor's escrow agent in accordance with such escrow agreement.
- 9.2.5 The District will pay the Contractor's final invoice in accordance with applicable law and this Section 9 following acceptance of the Work provided that:
- 9.2.5.1 The Contractor has furnished evidence satisfactory to the District that all claims for labor and material have been paid, or the time for filing valid stop notices has passed and no stop notices have been filed, or all stop notices filed have been released by valid release or release bond acceptable to the District.
- 9.2.5.2 No claim has been presented to the District by any person based upon any acts or omissions of the Contractor or any subcontractor engaged in the performance of the Work.
- 9.2.5.3 No other claim or dispute exists under the Agreement or applicable law concerning payment of the Contractor's final invoice and/or release of the Agreement retention.

- 9.2.5.4 The Contractor has filed with the District the Maintenance Bond provided in the Contract Documents with duly notarized signatures of an authorized representative of the Contractor and an attorney-in-fact of an admitted surety insurer acceptable to the District and such Maintenance Bond binds the Contractor as Principal and the Surety in accordance with its terms in the amount of 10% of the final Contract Price.
- 9.2.5.5 The Contractor's application for final payment contains a written waiver of all claims against the District of which the Contractor may not yet asserted at the time of the submission of the application for final payment.
- 9.2.5.6 In accordance with California Public Contract Code Section 7107, the final payment or release of retention shall not be due and payable until the expiration of 60 days from the date of recording the Notice of Completion by the District.
- 9.2.6 In accordance with California Public Contract Code Section 20104.50, if the District fails to make a progress payment within 30 calendar days of receipt of an undisputed, properly submitted application for payment, the District will pay the Contractor interest equivalent to the legal rate set forth in subdivision (a) of California Code of Civil Procedure Section 685.010. The number of calendar days available to the District to make a payment without incurring an interest obligation pursuant to this provision and California Public Contract Code Section 20104.50 will be reduced by the number of calendar days, if any, by which the District has delayed return of an application for payment beyond the seven day return requirement set forth in Section 9.2.5.
- 9.3 Non-Allowable Direct Charges. The following costs are not allowable direct charges under the Agreement. The following costs may only be paid under the Agreement, if at all, as part of any allowance for contractor overhead and/or profit established under the Agreement.
 - 9.3.1 Labor costs in excess of applicable prevailing wages pursuant to the Agreement and applicable law, liability and workers compensation insurance, social security, retirement and unemployment insurance and other employee compensation and benefits pursuant to bona fide compensation plans in effect at the time specified for the opening of Project bids for contractor and subcontractor employees engaged in the performance of the Work. However, in no event will allowable direct labor charges under the agreement include employee bonuses, employee vehicles or vehicle allowances, employee telephones or telephone allowances, or employee housing or housing allowances, whether or not such benefits are part of a bona fide compensation plan in effect at the time specified for the opening of Project bids.
 - 9.3.2 Superintendent labor and clerical labor.
 - 9.3.3 Bond premiums
 - 9.3.4 Insurance in excess of that required under Section 8.8

- 9.3.5 Utility costs
- 9.3.6 Work Site office expenses
- 9.3.7 Home office expenses.
- 9.4 Withhold. The District or its agent may, in accordance with the Contract Documents and applicable law, withhold any payment of monies due or that may become due the Contractor because of:
 - 9.4.1 Defective work not remedied or uncompleted work.
 - 9.4.2 Claims filed or reasonable evidence indicating probable filing of claims.
 - 9.4.3 Failure to properly pay subcontractors or to pay for material or labor.
 - 9.4.4 Reasonable doubt that the Work can be completed for the balance then unpaid.
 - 9.4.5 Damage to another contractor.
 - 9.4.6 Damage to the District.
 - 9.4.7 Damage to a third party.
 - 9.4.8 Delay in the progress of the Work, which, in the District's judgment, is due to the failure of the Contractor to properly expedite the Work.
 - 9.4.9 Liquidated damages or other charges that apply to the Contractor under the Agreement.
 - 9.4.10 Any other lawful basis for withholding payment under the contract.
 - 9.4.11 Failure of the Contractor to maintain record documents and as-built drawings.
 - 9.4.12 Cost of insurance arranged by the District due to cancellation or reduction of the Contractor's insurance.
 - 9.4.13 Failure to submit, revise, resubmit or otherwise conform to the requirements herein for preparing and maintaining a construction schedule.
 - 9.4.14 Failure to make proper submissions, as specified herein.
 - 9.4.15 Stop Notice claims filed by Contractor's subcontractors, of any tier, or its material suppliers.
 - 9.4.16 Provisions of law that enable or require the District to withhold such payments in whole or in part.
 - 9.4.17 Failure to comply with environmental or other regulatory requirements.
 - 9.4.18 Failure of Contractor to submit Operation and Maintenance Manuals.

9.5 Securities in Lieu of Retention.

- 9.5.1 In accordance with Public Contract Code Section 22300, except where federal regulations or polices do not permit substitution of securities, the Contractor may substitute securities for any moneys withheld by the District to ensure performance of the Work. At the Contractor's request and expense, securities equivalent to the amount withheld will be deposited with the District, or with a state or federally chartered bank in California as the escrow agent, who will then pay those moneys to the Contractor under the terms of an Escrow for Security Deposit agreement. The Escrow for Security Deposit agreement is provided in the Contract Documents. Upon satisfactory completion of the Work, the securities will be returned to the Contractor.
- 9.5.2 Alternatively, at the Contractor's request and expense, the District will pay retentions earned directly to the escrow agent. At the Contractor's expense, the Contractor may direct investment of the payments into securities. Upon satisfactory completion of the Work, the Contractor will receive from the escrow agent all securities, interest, and payments received by the escrow agent from the District pursuant to this provision and the terms of the Escrow for Security Deposit agreement. The Contractor will, within twenty (20) working days of receipt of payment, pay to each subcontractor the respective amount of interest earned, less costs of retention withheld from each Subcontractor, on monies withheld to ensure the Contractor's performance of the Work.
- 9.5.3 Securities eligible for investment in accordance with this provision include those listed in Government Code Section 16430, 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 District.
- 9.5.4 The Contractor will be the beneficial owner of any securities substituted for moneys withheld and will receive any interest thereon.

10. PROJECT ACCEPTANCE AND CLOSEOUT

- 10.1 Occupancy. The District reserves the right to occupy or use any part or parts or the entire of the Work before the Work is fully performed. Subject to applicable law, exercising this right will in no way constitute acceptance of any part of the Work so occupied or used or acceptance of the entire Work, nor will such occupancy or use in any way affect the times when payments will become due the Contractor, nor will such occupancy or use in any way prejudice the District's rights under the Agreement, any Agreement bonds, or at law or equity. Occupancy or use shall not waive the District's rights to assess liquidated damages in accordance with Section 7 after the date of such occupancy or use.
- 10.2 Work Completion and Final Inspection.
- 10.2.1 Certificate of Completion. When the Contractor considers the Work is completed, the Contractor will submit written certification to the District Engineer specifying that: the Contract Documents have been reviewed; the Work has been inspected for compliance with the Contract Documents; the Work has been completed in accordance with the Contract Documents; and that equipment and systems have been tested in the presence of the District's

representative and are operational. The District and/or the District's authorized representatives will make an inspection to verify that the Work is complete and will notify the Contractor in writing of any incomplete or deficient Work. The Contractor will take immediate steps to remedy the stated deficiencies and give notice of correction to the District Engineer. Upon receiving a notice of correction, the District or the District's authorized representatives will re-inspect the Work. The Contractor must correct all punch list items within 15 working days after the issuance of the punch list.

10.2.2 Project Record Drawings (As-Builts). Before acceptance of the Work the Contractor must submit:

1. One set of Project Record Drawings, based on the Conformed Set, in 24 x 36 and 11 x 17 sheets.
2. Project Record Drawings, based on the Conformed Set, in AutoCad (.DWG) and portable document file (.PDF) formats.
3. Equipment operating and maintenance instructions and data: one set of hard copy, and one scanned set in portable document file (.PDF) format.
4. Miscellaneous construction-related documents, studies, reports, etc., obtained or developed by the contractor during construction of the project in portable document file (.PDF) format.
5. Maintenance Bond, warranties, etc.

10.3 Work Acceptance.

10.3.1 All finished Work will be subject to inspection and acceptance or rejection by the District, the District Engineer, and the Architect or Engineer and other government agencies having jurisdiction over the Work. Final acceptance of the Work will be at the discretion of the District.

10.3.2 The District will accept the Work in writing only when the Work has been completed to the District's reasonable satisfaction. Progress payments will in no way be construed as acceptance of any part of the Work.

10.3.3 In evaluating the Work, no allowance will be made for deviations from the Technical Specifications, Drawings or other Contract Documents unless already approved in writing in accordance with the requirements of Section 4, above.

10.3.4 The fact that the Work and materials have been inspected from time to time and that progress payments have been made does not relieve the Contractor of the responsibility of replacing and making good any defective or omitted work or materials in accordance with the requirements of the Contract Documents.

11. REMEDIES AND DISPUTES

11.1 Failure to Correct Work. Within ten (10) working days of receiving written notice from the District describing Work that is defective or that is otherwise not in accordance with the requirements of the Agreement and/or applicable law and directing that such Work be corrected, the Contractor and/or the Contractor's sureties must give the District written notice of the intent of the Contractor and/or the Contractor's sureties to correct such Work and commence correction of such Work in accordance with the District's notice and the Agreement. If the Contractor and/or the Contractor's sureties do not give the District written notice of intent to correct such Work and commence correction of such Work within ten (10) working days of receipt of the District's notice, then the District may correct such work and/or have such work corrected for the account and at

the expense of the Contractor and/or its sureties, and the Contractor and/or its sureties will be liable to the District for any resulting excess cost. The District may, in addition to all other remedies that the District may have under the Agreement and at law or equity, deduct any such excess cost of completing the Work from amounts that are due or that may become due the contractor.

11.2 Termination.

11.2.1 In accordance with California Public Contract Code Section 7105, in addition to all other available remedies that the District may have under the Agreement, and at law or equity, the District may terminate the Contractor's control of the Work:

11.2.1.1 If the Contractor or any of its subcontractors engaged in the performance of the Work fails to timely perform the Work and/or any of the Contractor's material obligations under the Contract Documents, including but not limited to submission of an acceptable schedule, that have accrued except for due to reasons beyond the control of the Contractor pursuant to the Contract Documents.

11.2.1.2 If the Contractor is adjudged bankrupt, or if it should make a general assignment for the benefit of creditors, or if a receiver should be appointed on account of its creditors.

11.2.1.3 If the Contractor or any of the subcontractors engaged in the performance of the Work persistently or repeatedly refuses or fails to supply enough properly skilled workmen or proper materials for the timely completion of the Work.

11.2.1.4 If the Contractor fails to make prompt payment to subcontractors engaged in the performance of the Work or for material or labor used in the performance of the Work in accordance with the Contract Documents and applicable law.

11.2.1.5 If the Contractor or any subcontractors engaged in the performance of the Work persistently disregards laws or ordinances applicable to the performance of the Work, or the instructions of the District, the District Engineer, the Architect, or other authorized representatives of the District.

11.2.1.6 For any reason or for no reason, at the District's sole discretion.

11.2.2 If the District intends to terminate the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 through 11.2.1.5, above, the District will immediately serve written notice to the Contractor and its sureties in accordance with the Contract Documents. Notice of the District's intent to terminate the Contractor's control of the Work will be given by registered or certified mail and specify the grounds for termination, the required cure and the time by which the cure must be effected. Upon receipt of notice of the District's intent to terminate the Contractor's control of the Work for any of the reasons specified in provisions 11.2.1.1 through 11.2.1.5, above, the Contractor will have ten (10) working days from receipt of the notice or a longer time specified

in the notice to cure its default. If the Contractor does not effect the required cure by the time specified in the notice, the District will issue a written notice of termination to the Contractor and its sureties by registered or certified mail. The notice of termination will specify: that upon receipt of the notice the Contractor's right to perform or complete the Work, including on behalf of the Contractor's sureties, is terminated; that the Contractor's sureties will have the right to take over and complete the Work and perform all of the Contractor's remaining obligations that have accrued under the Agreement; and that if the Contractor's sureties do not both give the District written notice of their intention to take over and perform the Agreement and commence completion of the Work and performance of all of the Contractor's remaining obligations that have accrued under the Agreement within ten (10) working days after receipt of notice of termination that the District may declare the Contractor's sureties in default and take over the completion of the Work or have the Work completed for the account and at the expense of the Contractor and its sureties, and the Contractor and its sureties will be liable to the District for any resulting excess cost. The District may, in addition to all other available remedies that the District may have under the Contract Documents and at law or equity, deduct any such excess cost of completing the Work from amounts that are due or that may become due the Contractor.

- 11.2.3 Upon termination of the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 - 11.2.1.5, the Contractor will, if so directed by the District, immediately remove from the Work site any and all materials and personal property belonging to the Contractor which have not been incorporated in the Work and the Contractor and its sureties will be liable upon their bond for all damages caused the District by reason of the Contractor's failure to complete the Work.
- 11.2.4 Upon termination of the Contractor's control of the Work for any of the reasons specified in provisions 11.2.1.1 through 11.2.1.5, above, the District reserves the right to refuse tender of the Contractor by any surety to complete the Work.
- 11.2.5 If the District completes or has completed any portion of, or the whole of the Work, following termination of the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 through 11.2.1.5, above, the District will neither be liable for nor account to the Contractor or the Contractor's sureties in any way for the time within which, or the manner in which such Work is performed, or for any changes made in such Work or for the money expended in satisfying claims and/or suits and/or other obligations in connection with completing the Work. If, following termination of the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 through 11.2.1.5, above, the unpaid balance of the Contract Price exceeds the expense of completing the Work, including compensation for additional legal, managerial and administrative services and all other amounts due for the completion of the Work and/or satisfaction of claims of the District and/or others arising out of the Agreement and any other charges that apply to the Contractor under the Agreement, the difference will be paid to the Contractor. If such expenses of completing the Work exceed the unpaid balance of the Contract Price, the Contractor or its sureties will pay the difference to the District.

11.2.6 If the Agreement or Contractor's control of the Work is terminated for any reason, no allowances or compensation will be granted for the loss of any anticipated profit by the Contractor.

11.2.7 In accordance with California Government Code Section 4410, in the event a national emergency occurs, and public work being performed by contract is stopped, directly or indirectly, because of the freezing or diversion of materials, equipment or labor, as the result of an order or a proclamation of the President of the United States, or of an order of any federal authority, and the circumstances or conditions are such that it is impracticable within a reasonable time to proceed with a substantial portion of the work, then the District and the Contractor may, by written agreement, terminate the Agreement. In accordance with California Government Code Section 4411, such an agreement will include the terms and conditions of the termination of the contract and provision for the payment of compensation or money, if any, which either party will pay to the other or any other person, under the facts and circumstances in the case. Compensation to the Contractor will be determined on the basis of the reasonable value of the work done, including preparatory work. As an exception to the foregoing, in the case of any fully completed separate item or portion of the Work for which there is a separate contract price, the contract price shall control. The parties may in any other case adopt the contract price as the reasonable value of the work or any portion of the work done.

11.3 Disputes.

11.3.1 In accordance with California Public Contract Code Section 20104.2, the following procedures apply to claims of \$375,000 or less between the Contractor and the District:

11.3.1.1 The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

11.3.1.2 For claims of less than fifty thousand dollars (\$50,000), the District shall respond in writing to any written claim within forty five (45) calendar days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the District may have against the Contractor.

11.3.1.2.1 If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the District and the Contractor.

11.3.1.2.2 The District's written response to the claim, as further documented, shall be submitted to the Contractor within fifteen (15) calendar 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, whichever is greater.

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

11.3.1.3.1 If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the District and the Contractor.

11.3.1.3.2 The District's written response to the claim, as further documented, shall be submitted to the Contractor within thirty (30) calendar 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.

11.3.1.4 If the Contractor disputes the District's written response, or the District fails to respond within the time prescribed, the Contractor may so notify the District, in writing, either within fifteen (15) calendar days of receipt of the District's response or within fifteen (15) calendar days of the District'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 District shall schedule a meet and confer conference within thirty (30) calendar days for settlement of the dispute.

11.3.1.5 Following the meet and confer conference, if the claim or any portion remains in dispute, the Contractor may file a claim as provided in 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 the Contractor submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

11.3.1.6 This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by 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.

11.3.2 In accordance with California Public Contract Code Section 20104.4, the following procedures apply to civil actions to resolve claims greater than \$375,000 between the District and the Contractor:

11.3.2.1 Within sixty (60) calendar days, but no earlier than thirty (30) calendar days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within fifteen (15) calendar days by both parties of a disinterested third person as mediator, shall be commenced within thirty (30) calendar days of the submittal, and shall be concluded within fifteen (15) calendar 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.

11.3.2.2 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.

11.3.2.2.1 Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article 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.

11.3.2.2.2 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, pay the attorney's fees of the other party arising out of the trial de novo.

11.3.2.3 The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

11.3.3 In accordance with California Public Contract Code Section 20104.6:

11.3.4.1 The District shall not fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

11.3.4.2 In any suit filed under Public Contract Code Section 20104.4 concerning this contract, the District shall pay interest at the legal rate

on any arbitration award or judgment. Such interest shall accrue from date the suit was filed.

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

PERFORMANCE BOND

BOND NO. _____

PREMIUM: _____

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, LAS GALLINAS VALLEY SANITARY DISTRICT, (hereinafter designated as "Obligee") 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 _____, and identified as project JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES, JOB NO. 20200-01, is hereby referred to and made a part hereof; and

WHEREAS, Said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement;

NOW, THEREFORE, We, the principal and _____ as surety, are held and firmly bound unto the hereinafter called "The Obligee," in the penal sum of _____ dollars (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally firmly by these presents.

The condition of this obligation is such that if the above bound principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in the said agreement and any alteration thereof made as therein provided, on his or their part, to be kept and perform and at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Obligee, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

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

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specification accompanying the same shall in any wise 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.

JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES
PERFORMANCE BOND

1-67

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by their undersigned representatives, pursuant to authority of their governing bodies.

(Corporate Seal)

PRINCIPAL

(Acknowledgement)

By: _____
Title: _____

(Corporate Seal)

SURETY

By: _____

(Attorney-in-fact)

(Acknowledgement)

Title: _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond.)

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

PAYMENT/LABOR AND MATERIALS BOND

BOND NO.: _____

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ Principal, and _____, incorporated under the laws of the State of _____ and authorized to execute bonds and undertakings as sole surety, as Surety, are held and firmly bound unto any and all persons named in California Civil Code Section 1181 whose claim has not been paid by the contractor, company or corporation, in the aggregate total of _____ dollars (\$ _____), for the payment whereof, well and truly to be made, said Principal and Surety bind themselves, their heirs, administrators, successors and assigns, jointly and severally, firmly by these present.

The Condition of the foregoing obligation is such that; whereas the above bounden Principal has entered into a contract, dated _____, with the LAS GALLINAS VALLEY SANITARY DISTRICT to do the following work, to-wit: JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES, JOB NO. 20200-01.

NOW, THEREFORE, if the above bounden Principal contractor, person, company or corporation, or his or its subcontractor, fails to pay any claimant named in Section 3181 of the Civil Code of the State of California, or amounts due under the Unemployment Insurance Code, with respect to work or labor performed by any such claimant, that, the Surety on this bond will pay the same, in an amount not exceeding the aggregate sum specified in this bond, and also in case suit is brought upon this bond, a reasonable attorney's fee, which shall be awarded by the court to the prevailing party in said suit, said attorney's fee to be taxes as costs in said suit. This bond shall inure to the benefit of any person named in Section 3181 of the Civil Code of the State of California so as to vie a right of action to them or their assignees in any suit brought upon this bond.

This bond is executed and filed to comply with the provisions of the act of Legislature of the State of California as designated in Civil Code Sections 3247-3252 inclusive, and all amendments thereto.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, _____ the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by their undersigned representatives, pursuant to authority of their governing bodies.

(Corporate Seal)

PRINCIPAL

(Acknowledgement)

By:
Title: _____

(Corporate Seal)

SURETY

By: _____

(Attorney-in-fact)

(Acknowledgement)

Title: _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond.)

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS the Board of the Las Gallinas Valley Sanitary District (designated as the "OBLIGEE"), has awarded to _____, (designated as the "PRINCIPAL") a contract for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, which contract and all of the Contract Documents as defined therein (designated as the "Contract") are hereby made a part hereof;

WHEREAS, the PRINCIPAL is required under the terms of the Contract to furnish a bond for the correction of any defects due to defective materials or workmanship in the work performed under the Contract, for a period of THREE (3) YEARS from the date of acceptance by the OBLIGEE of the contracted work.

NOW, THEREFORE, we the PRINCIPAL and the undersigned _____, as surety (designated as "SURETY"), an admitted surety insurer authorized to do business in the State of California, are held and firmly bound unto the Las Gallinas Valley Sanitary District, in the penal sum of _____ Dollars (\$_____), lawful money of the United States, being a sum not less than ten percent (10%) of the final Contract price, 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 THREE (3) YEARS from the date of acceptance by the OBLIGEE 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) calendar days from the date of said notice, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

If any action shall be brought by the OBLIGEE upon this bond, a reasonable attorney's fee, to be fixed by the Court, shall be and become a part of OBLIGEE's judgment in any such action. No right of action shall accrue on this bond to, or for the use of, any person or corporation other than the OBLIGEE named herein or the heirs, executors, administrator or successor of the OBLIGEE.

IN WITNESS WHEREOF, the above bound parties have executed this instrument under their seals this _____ day of _____, _____, the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES
MAINTENANCE BOND

(Corporate Seal)

PRINCIPAL

(Acknowledgement)

By: _____
Title: _____

(Corporate Seal)

SURETY

(Acknowledgement)

By: _____

(Attorney-in-fact)
Title: _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond)

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

**ESCROW AGREEMENT FOR
SECURITY DEPOSITS IN LIEU OF RETENTION**

This Escrow Agreement is made and entered into by and between the Board of the LAS GALLINAS VALLEY SANITARY DISTRICT, whose address is 101 Lucas Valley Road Suite 300, San Rafael, California, 94903, hereinafter called "District", _____, whose address is _____, hereinafter called "Contractor", and _____, whose address is _____, hereinafter called "Escrow Agent"

For consideration hereinafter set forth, the District, Contractor, and Escrow Agent agree as follows:

1. Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by District pursuant to the Construction Contract entered into between the District and Contractor for the project entitled JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES in the amount of _____ dated _____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the District shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as substitute for Contract earnings, the Escrow Agent shall notify the District within ten (10) working days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the District and Contractor. Securities shall be held in the name of _____ and shall designate the Contractor as the beneficial owner.

2. The District shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

3. When the District makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this contract is terminated. The Contractor may direct the investments of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the District pays the escrow agent directly.

4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the District. These expenses and payment terms shall be determined by the District, Contractor and Escrow Agent.

5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of the Contractor and shall be subject to withdrawal by contractor at any time and from tune to time without notice to the District.

6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from District to the Escrow Agent that District consents to the withdrawal of the amount sought to be withdrawn by Contractor.

7. The District shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven day's written notice to the Escrow Agent from the District of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the District.

8. Upon receipt of written notification from the District certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.

9. Escrow Agent shall rely on the written notifications from the District and the Contractor pursuant to Sections (4) to (6) inclusive, of this agreement and the District and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the District and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures, are as follows:

On behalf of District:

On Behalf of Contractor

Title

Curtis Paxton, General Manager

Name

On behalf of Escrow Agent:

Title

Name

Signature

Address

At the time the Escrow Account is opened, the District and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

District:

Contractor:

Curtis Paxton, General Manager
Las Gallinas Valley Sanitary District
101 Lucas Valley Road, Suite 300
San Rafael, CA 94903

Title

Name

Signature

Address

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**VOLUME 2
BID FORMS**

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

BIDDER'S CHECK LIST

Name of Bidder: _____
(Contractor's Legal Name)

Did You:

- _____ Send a properly completed Acknowledgement form immediately after receiving the Contract Documents and before bid opening.
- _____ Submit equal product proposals, if any, in accordance with the Instruction to Bidders included in the bid package at least seven (7) calendar days before the time specified for bid opening.
- _____ Include with your bid properly completed, accurate copies of the following documents in the following order using the forms included in the bid package:
 - _____ Bidder's Check List and Bid Label
 - _____ Proposal Cover Page and Bid Schedule
 - _____ Acknowledgement of each addendum issued by the District, if any, with signed and dated acknowledgement page.
 - _____ Executed Bid Bond
 - _____ Contractor License Information
 - _____ List of Proposed Subcontractors with License Information and References
 - _____ List of Major Materials
 - _____ Workers Compensation Insurance Certification
 - _____ Signed and notarized Non-Collusion Affidavit
 - _____ Drug-Free Workplace Certification
 - _____ Debarment Certification
 - _____ Statement of Experience of Bidder
 - _____ Financial Qualifications
 - _____ Signed and Notarized Site Visit Affidavit
 - _____ Executed Bidder's Signature Page

(CONTINUED ON NEXT PAGE)

- _____ Affix a properly completed, signed and accurate Bid Label using the form included in the bid package to the sealed cover of your bid.

- _____ Arrange to have the sealed bid delivered to the **Engineering Department, Las Gallinas Valley Sanitary District, 101 Lucas Valley Road, Suite 300, San Rafael, CA 94903** before the time and day specified on the Notice Inviting Sealed Bids.

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

BID LABEL

Sealed bid for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES, JOB NO. 20200-01.

Bidder: _____

Bidder Business Address (Street, City, State and Zip Code)

Bidder Business Phone No.: _____

Bidder Business Fax No.: _____

Bidder Email Address: _____

By my signature below I certify under penalty of perjury under the laws of the State of California that a representative of the above bidder visited the project sites listed in the Contract Documents, and I am the person authorized to bind bidder as required by the attached Site Visit Affidavit.

By: _____
(Official authorized to bind bidder)

Print Name and Title: _____

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

PROPOSAL COVER PAGE AND BID SCHEDULE

TO THE BOARD OF DIRECTORS OF THE LAS GALLINAS VALLEY SANITARY DISTRICT:

Pursuant to the Notice Inviting Sealed Bids for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT, JOB NO. 20200-01, the person signing the bidder's signature page contained in this proposal binds the entity listed on the bidder's signature page to submit complete, executed copies of all documents specified in the contract checklist included in Volume 1 of the bid package within seven (7) calendar days of receiving written Notice of Award of the project, and to fully perform the project by the time for completion specified in the Contract Documents for the price specified in the bid schedule below in accordance with the terms of the Contract Documents and applicable law. This proposal cover page and bid schedule will be included as part of the Contract Documents in accordance with the bid package.

This bid includes properly completed, accurate copies of all of the documents listed in the Bidder's Check List included in the bid package in the order listed in the Bidder's Check List and using the forms included in the bid package. This bid includes copies of each of the following addenda issued by the District. Each addendum has been signed and dated to confirm receipt on behalf of the entity listed on the bidder's signature page.

Addendum No. 1 dated _____

Addendum No. 2 dated _____

Addendum No. 3 dated _____

Addendum No. 4 dated _____

Addendum No. 5 dated _____

BID SCHEDULE

SCHEDULE OF BID ITEMS

Item No.	Estimated Quantity And Unit	Item Description Bid Item Price (Written in Words)	Unit Price (Figures)	Extended Amount (Figures)
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1.	1 LS	<p>Mobilization/Demobilization, General Conditions, Permits & Licenses: Shall include project coordination, supervision and management, traffic plans prior to construction, payment bonding, performance bonding, insurance, local, state, and OSHA health and safety and emergency requirements, temporary site signage and lighting, utility needs and requirements, dust control, and provide for continuous private property ingress/egress as required. Item shall also include Contractor's mobilization, shop drawing and submittal process at the beginning of the project, demobilization, cleanup, and surface restoration at project completion. Item shall also include preparatory work and operations and establishment of other facilities necessary to work on the Project, labor compliance, prevailing wage compliance, and preparation of as-built drawings and Operation & Maintenance Manuals.</p>
----	------	--

Payment shall be lump sum (LS) and not to exceed 5% of project costs, 50% of which shall be payable at the beginning of the job upon mobilization and 50% shall be payable at the job completion.

\$ _____

Lump Sum

2.	1 LS	<p>Sheeting, Shoring, and Bracing: Shall include all sheeting, shoring, and bracing for all excavation as necessary to protect workers pursuant to applicable safety orders and prevent movement of trench bottom and adjacent improvement. Measurement and payment for temporary bracing, shoring and sheeting or equivalent method will be based upon the completion of all planning, design, engineering, furnishing and construction and the removal and disposal of all such temporary bracing, shoring and sheeting as a lump sum (LS) item, complete, as required under the provisions of any permits, and in accordance with the requirements of OSHA and the Construction Safety Orders of the State of California, pursuant to the provisions of Section 6707 and Section 6705 of the California Labor Code. Groundwater will be present in trench backfill of existing utilities. Contractor shall design shoring and dewatering systems to mitigate against washout or raveling of materials from existing utility trenches. Payment for bracing, shoring and sheeting or equivalent method shall be by lump sum, which price named in the Bid Schedule under this item shall constitute full compensation for completion of all such work as required per contract documents and any and all other regulatory and legal requirements.</p>
----	------	--

\$ _____

Lump Sum

				Name of Bidder
Item No.	Estimated Quantity And Unit	Item Description Item Unit Price (Written in Words)	Unit Price (Figures)	Extended Amount (Figures)
3.	1 LS	<p>Traffic Control: Traffic control for the entire Work, complete as specified in conformance with governing agencies having jurisdiction. Measurement for payment for traffic control will be based upon completion of all necessary measures to temporarily control, detour, or stage traffic during construction and all other related work per Contract Documents. Payment for traffic control will be made at the lump sum (LS) price, which shall constitute full compensation for completion of all such work as required per Contract Documents.</p>		\$ _____
		Lump Sum		
4.	1 LS	<p>Bypass Pumping: Shall include control of sewage at all times during the course of the project, including but not limited to, temporary piping; continuous pumping with equipment that does not impede the flow of traffic; redundant equipment in case of equipment failure; 24 hour per day monitoring of all bypass systems; and including all necessary materials, labor, and equipment. All equipment must be the ultra-quiet type. In addition, Contractor shall bring "dirt plug" materials to the jobsite to block flow in the drainage ditch in case of force main leaks. See Temporary Bypass Pumping Requirements in Volume 4 – Drawings.</p>		\$ _____
		Lump Sum		
5.	10 EA	<p>Potholing (as needed): Shall include all work necessary for the field verification of the existing 20" HDPE force main and underground utilities by conventional hand digging or vacuum excavation methods for the access structures, including but not limited to, backfill and compaction per specifications, surface restoration, and notification and coordination with utility owners or governing agencies. The location of the potholes shall be coordinated between Contractor, Engineer, and the District. Contractor shall submit potholing results in electronic format, which will be used to confirm locations and depths of the 20" force main that may impact installation of the new access structures. (Note: District authorization is required for this work. See Alternate Bid Item section.)</p>		\$ _____
		Per Each	\$ _____	\$ _____

				Name of Bidder	
Item No.	Estimated Quantity And Unit	Item Description Bid Item Unit Price (Written in Words)	Unit Price (Figures)	Extended Amount (Figures)	
6.	2 EA	Cleanout Access Structures: Installation of two (2) 60"-diameter precast concrete Cleanout Access Structures, including piping, fittings, and other ancillary components necessary to complete work as shown and specified.			
			\$ _____	\$ _____	
		Per Each			
7.	1 LS	Utility Pig Cleaning: Cleaning of the 20" O.D. HDPE sanitary force main using utility pigging method as specified in Technical Specifications Section 31 33 24, including off-site disposal of debris and collected sewage associated with the process.			
				\$ _____	
		Lump Sum			
8.	8 EA	CCTV Inspection Access Structures: Installation of eight (8) 60"-diameter precast concrete CCTV Inspection Access Structures, including valves, fittings, and other ancillary components necessary to complete work as shown and specified.			
			\$ _____	\$ _____	
		Per Each			

TOTAL BASE BID, BASIS OF AWARD (SUM OF BID ITEMS 1 THRU 8):

\$ _____
(In figures)

_____ Dollars
(In words)

BID ALTERNATES: The undersigned Bidder offers to make, at the following Bid Alternate prices, the change in the Work covered by the Total Base Bid that is specified in the Bid Alternate priced below. It is understood that:

1. A price must be filled in for each Bid Alternate item.
2. The acceptance or rejection of the Bid Alternate is at the option of the District.
3. Acceptance or rejection of the Bid Alternate will not necessarily be made on the basis of price alone.

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

BID BOND

(NOTE: Bidders must use this form, or use of any other bid bond form may render a bid non-responsive)

KNOW ALL MEN BY THESE PRESENTS:

That we, as PRINCIPAL, and _____, a (sole proprietorship /corporation/partnership/joint venture) organized and existing under and by virtue of the laws of the State of _____ and an admitted surety insurer authorized to do business in the State of California, as SURETY, are held and firmly bound unto the Las Gallinas Valley Sanitary District, as OBLIGEE, in a penal sum equal to ten-percent (10%) the total bid price including the base bid and alternates specified in the proposal of the PRINCIPAL, to the OBLIGEE for the work described below, which penal sum is _____ (\$ _____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the PRINCIPAL has submitted the accompanying proposal dated _____, _____ to the OBLIGEE, for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01.

NOW THEREFORE, if the PRINCIPAL shall not withdraw said proposal within the ninety (90) day period following the opening of bids, and if the PRINCIPAL receives written notice that the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, is awarded to the PRINCIPAL and shall, within seven (7) calendar days of receiving such notice: enter into a written contract with the OBLIGEE in the form prescribed in the bid package issued by the OBLIGEE concerning the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01; and give insurance and bond with good and sufficient sureties guaranteeing the faithful performance and proper fulfillment of such contract and guaranteeing payment for labor and materials used for performance of the contract as required by law; and file with the OBLIGEE all required documents and do all other thing required in accordance with the bid package issued by the OBLIGEE concerning the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, for the contract between the PRINCIPAL and the OBLIGEE to become effective and for work to commence in accordance with the bid package issued by the OBLIGEE concerning the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, or, in the event of withdrawal of the accompanying proposal within the ninety (90) day period following the opening of bids; or failure by the PRINCIPAL to enter into such contract with the OBLIGEE or to give the OBLIGEE such bonds or to file any other documents or to do any other things required in the bid package issued by the OBLIGEE for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, if the PRINCIPAL shall pay the OBLIGEE the difference between the total bid price in the accompanying proposal and the amount for which the OBLIGEE may procure the required performance, if the latter amount be in excess of the former, together with all costs

JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES
BID BOND

incurred by the OBLIGEE in again attempting to let the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01 and if the said PRINCIPAL shall fully reimburse and save harmless the OBLIGEE from any damage sustained by the OBLIGEE through failure of the PRINCIPAL to enter into the written contract or to file the required performance or labor and material bonds, or to file any other required documents or to do any other things required for the contract between the PRINCIPAL and the OBLIGEE to become effective and the work to commence in accordance with the bid package issued by the OBLIGEE concerning the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect.

SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the bid or Contract Documents for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, or to the specifications included in the same, or to the work to be performed there under, or to the notice to bidders, or to any other documents concerning the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, shall in anywise affect SURETY's obligation under this bond, and SURETY hereby waives notice of any such change, extension of time, alteration or addition to such bid or Contract Documents.

In the event suit is brought upon this bond by the OBLIGEE and judgment is recovered, the SURETY shall pay all costs incurred by the OBLIGEE in such suit, including a reasonable attorney's fee to be fixed by the Court.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, _____, the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by their undersigned representatives, pursuant to authority of their governing bodies.

(Corporate Seal)

PRINCIPAL _____

By _____

(Acknowledgement)

Title _____

(Corporate Seal)

SURETY _____

By _____
(Attorney-in-fact)

(Acknowledgement)

Title _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond.)

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

CONTRACTOR LICENSE INFORMATION

The bidder acknowledges that the license(s) required for performance of the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, is a **Class A** license.

The bidder holds the following California Contractors License(s):

- 1. License No. _____, Class _____, Expiration Date _____
- 2. License No. _____, Class _____, Expiration Date _____
- 3. License No. _____, Class _____, Expiration Date _____
- 4. License No. _____, Class _____, Expiration Date _____
- 5. License No. _____, Class _____, Expiration Date _____
- 6. License No. _____, Class _____, Expiration Date _____
- 7. License No. _____, Class _____, Expiration Date _____
- 8. License No. _____, Class _____, Expiration Date _____
- 9. License No. _____, Class _____, Expiration Date _____
- 10. License No. _____, Class _____, Expiration Date _____

Bidder's Taxpayer Identification No. _____

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

LIST OF PROPOSED SUBCONTRACTORS

In accordance with the requirements of the Subletting and Subcontracting Fair Practices, Act, California Public Contract Code Section 4100 and following, listed below are the name, business location, and the portion (type or trade) of the Project work to be subcontracted to each subcontractor that will perform a portion of the Project work (including special fabrication and installation of a portion of the work) valued in excess of one half (½) of one (1) percent of the total bid price. If the Project work includes construction of streets or highways, listed below are the name, business location, and the portion (type or trade) of the Project Work to be subcontracted to each subcontractor that will perform a portion of the Project work (including special fabrication and installation of a portion of the work) valued in excess of one half (½) of one (1) percent of the total Project bid price, or ten thousand dollars (\$10,000), whichever is greater. Also listed below are the proposed subcontract dollar amount and current California Contractor's License Number(s) for each proposed subcontractor. Bids that fail to include complete proposed subcontractor information in accordance with this form and Public Contract Code Section 4100 and following may be deemed non-responsive.

In accordance with California Public Contract Code Section 4106, for any portion of the Project work with a value of more than one half (½) of one (1) percent of the total bid price for which no subcontractor is listed, or for which more than one subcontractor is listed, the bidder certifies by submission of its bid that the bidder is qualified to perform that portion of the Project work and that the bidder will perform that portion of the Project work with its own forces. The penalties listed in California Public Contract Code Section 4111 will apply to any substitution of another subcontractor for a subcontractor listed below except as permitted by the District in accordance with Section 4107 and following of the California Public Contract Code.

1. Subcontractor Name _____
Contact: _____
Phone No. _____ Email: _____
Business Location _____
Trade _____
Subcontract Amount _____
Current Contractor's License No(s). _____
DIR Registration No. _____

2. Subcontractor Name _____
Contact: _____
Phone No. _____ Email: _____
Business Location _____
Trade _____
Subcontract Amount _____
Current Contractor's License No(s). _____
DIR Registration No. _____
3. Subcontractor Name _____
Contact: _____
Phone No. _____ Email: _____
Business Location _____
Trade _____
Subcontract Amount _____
Current Contractor's License No(s). _____
DIR Registration No. _____
4. Subcontractor Name _____
Contact: _____
Phone No. _____ Email: _____
Business Location _____
Trade _____
Subcontract Amount _____
Current Contractor's License No(s). _____
DIR Registration No. _____

(Attach additional list as necessary.)

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

WORKERS COMPENSATION INSURANCE CERTIFICATION

By submitting its bid the bidder certifies as follows:

I am aware of the provisions of California Labor Code Section 3700 which require every employer to be insured against liability for workmen's compensation or to undertake self-insurance in accordance with the provisions of the Labor Code, and I will comply with such provisions before commencing performance of the work of this Contract.

Signed this _____ day of _____, 20____

Bidder's Name

Authorized Signature Date

Title of Signatory

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

NON-COLLUSION AFFIDAVIT

TO BE EXECUTED BY BIDDER
AND SUBMITTED WITH BID

STATE OF CALIFORNIA)
)
COUNTY OF _____)

_____, being first duly
sworn, deposes and says that he or she is _____ of _____
_____, the party making the foregoing bid, that the bid is not made in the
interest of, or on behalf of, any undisclosed person, partnership, company, association,
organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder
has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid,
and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or
anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has
not in any manner, directly or indirectly, sought by agreement, communication, or conference
with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or
cost element of the bid price, or of that of any other bidder, or to secure any advantage against
the public body awarding the contract of anyone interested in the proposed contract; that all
statements contained in the bid are true; and, further, that the bidder has not, directly or
indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or
divulged information or data relative thereto, or paid, and will not pay, any fee to any
corporation, partnership, company, association, organization, bid depository, or to any member
or agent thereof to effectuate a collusive or sham bid.

Signature of Bidder

(Acknowledgement)
Subscribed and sworn before me by _____, this _____
day of _____, _____.

(SEAL) _____
Notary Public

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

DRUG-FREE WORKPLACE CERTIFICATION

By submitting its bid the bidder certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The above-named contractor or applicant will:

1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a).
2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
 - (a) The dangers of drug abuse in the workplace,
 - (b) The person's or organization's policy of maintaining a drug-free workplace,
 - (c) Any available counseling, rehabilitation and employee assistance programs, and
 - (d) Penalties that may be imposed upon employees for drug abuse violations.
3. Provide as required by Government Code Section 8355(c), that every employee who works on the proposed contract:
 - (a) Will receive a copy of the company's drug-free policy statement, and
 - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract.

Signed this _____ day of _____, 20_____

Bidder's Name

Authorized Signature

Date

Title of Signatory

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

DEBARMENT CERTIFICATION

By submitting its bid the bidder certifies in accordance with California Public Contract Code Section 6109 that neither the bidder nor any subcontractor included on the list of proposed subcontractors submitted with the bid is ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7. In accordance with California Public Contract Code Section 6109, contractors and subcontractors who are ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7 may neither bid on, be awarded or perform as a subcontractor on public works projects.

Signed this _____ day of _____, 20____

Bidder's Name

Authorized Signature

Date

Title of Signatory

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

STATEMENT OF EXPERIENCE OF BIDDER

(To Accompany Bid)

The undersigned Bidder certifies that it is, at the time of bidding, and shall be, throughout the period of the contract, licensed under the provisions of Chapter 9, Division 3, of the Business and Professions Code of the State of California, to do the type of work contemplated in the Contract Documents. Bidder further certifies that it is skilled and regularly engaged in the general class and type of work called for in the Contract Documents.

The Bidder represents that it is competent, knowledgeable, and has special skills concerning the nature, extent, and inherent conditions concerning the work to be performed. Bidder further acknowledges that there are certain inherent conditions existent in the construction of the particular facilities which may create, during the construction program, unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that it is aware of such risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the construction work with respect to such hazards.

A. ESSENTIAL REQUIREMENTS FOR QUALIFICATION

If the answer to any of questions 1 through 3 is "no", or if the answer to any of questions 4 through 7 is "yes", the Bidder will be deemed ineligible or not responsible for purposes of the Contract.

1. Bidder possesses a valid and current California Contractor's license as required for the project for which it intends to submit a bid.
 Yes No
2. Bidder will comply with and provide all insurance as defined in Section 8.8, Insurance, of then General Conditions.
 Yes No
3. Bidder has current Workers' Compensation insurance coverage as required by the Labor Code or is legally self-insured pursuant to Labor Code section 3700 et. seq.
 Yes No
4. Has your contractor's license been revoked at any time in the last five (5) years?
 Yes No
5. Has a surety firm completed a contract on your behalf, or paid for completion because your firm was default terminated by the project owner within the last five (5) years?
 Yes No

6. At the time of submitting this qualification form, is your firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract, pursuant to either Labor Code section 1777.1 or Labor Code section 1777.7?
 Yes No
7. At any time during the last five (5) years, has your firm, or any of its owners or officers been convicted of a crime involving the awarding of a contract of a government construction project, or the bidding or performance of a government contract?
 Yes No

B. COMPANY EXPERIENCE

The Bidder has been engaged in the contracting business, under the present business name for _____ years and has experience in work of a nature similar to this project which extends over a period of _____ years (Bidder must show **at least five (5) years** of related experience).

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

For the District to consider the Bidder properly experienced in work of similar nature to this project, the Bidder must list at least **\$3,000,000** in construction volume on **no more than five (5)** projects completed **within the last five (5) years** of the following types of projects:

1. Wastewater collection system and treatment plant projects.

The Bidder can include project(s) currently under construction, but only the total amount paid by the District(s) as of three (3) months prior to the bid date on uncompleted project(s) can be included in the construction volume for purposes of this certification. The Bidder is allowed to list up to a maximum of five (5) projects of the types listed above, that combined, will add up to at least the cost in completed volume of work listed above. Any projects listed below which are not as defined above will not be considered by the District in meeting this experience requirement. For example, pump stations are not considered a treatment plant.

Bidder also certifies that Bidder self-performed at least forty percent (40%) of the Work on each of the projects listed below. The District considers this level of past self-performance demonstrates a benefit to a Project in terms of better control of cost, schedule and safety.

If the Bidder is a Joint Venture of two or more companies, each participant in the Joint Venture shall meet this prior project experience requirement and provide project information for each Joint Venture participant in the format below.

1. **Project Name:** _____
Owner: _____
Construction Cost: \$ _____
Construction Time: _____ **Calendar Days**
Owner's Representative: _____
Owner's Telephone No.: _____
Date of Substantial Completion: _____

2. **Project Name:** _____
Owner: _____
Construction Cost: \$ _____
Construction Time: _____ **Calendar Days**
Owner's Representative: _____
Owner's Telephone No.: _____
Date of Substantial Completion: _____

3. **Project Name:** _____
Owner: _____
Construction Cost: \$ _____
Construction Time: _____ **Calendar Days**
Owner's Representative: _____
Owner's Telephone No.: _____
Date of Substantial Completion: _____

4. **Project Name:** _____
Owner: _____
Construction Cost: \$ _____
Construction Time: _____ **Calendar Days**
Owner's Representative: _____
Owner's Telephone No.: _____
Date of Substantial Completion: _____

5. **Project Name:** _____
Owner: _____
Construction Cost: \$ _____
Construction Time: _____ **Calendar Days**
Owner's Representative: _____
Owner's Telephone No.: _____
Date of Substantial Completion: _____

C. SAFETY QUALIFICATION CRITERIA

The following information will be used to determine if you meet the minimum safety requirements for this project. To qualify to bid and be awarded the project, the contractor shall have a safety record that meets or exceeds the one of the three following safety criteria:

1. If the Contractor's three-year average Workers' Compensation Experience Modification (EMR) is equal to or less than 100%, the contractor meets the minimum safety requirements for this project;
2. If the Contractor's three-year average EMR is greater than 100%, the Contractor's three-year average Recordable Incident Rate (RIR) must not be greater than 3.8 and three-year average Lost Time Incident Rate (LTIR) must not be greater than 1.7 to meet the minimum safety requirements for this project;
3. If the Contractor only meets either the three-year average RIR or LTIR value, the Contractor shall be required to hire at no additional cost to the District a mutually acceptable safety consultant who will prepare a project specific safety plan, conduct random weekly inspections of the Contractor's activities to ensure conformance with the safety plan and prepare and submit a weekly report to the District summarizing the results of each inspection. The contractor's shall adhere to the safety plan. The contractor's activities shall be adjusted immediately to address any issues resulting from the weekly safety inspection.

Contractors that cannot meet any of the three safety criteria above are not eligible to work for the District.

The Bidder shall list its Experience Modification Rate, Lost time Incident Rate, and Recordable Incident Rate for the last three complete years (available from your insurance carrier).

<u>Year</u>	<u>EMR</u>	<u>RIR</u>	<u>LTIR</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
	_____AVG	_____AVG	_____AVG

To verify the above information, the District will contact the Bidder's Workers' Compensation Insurance carrier. The Bidder shall authorize its carrier to release this information. Failure to release this information will result in the bid being non-responsive and result in automatic disqualification of the bid.

Workers' Compensation Insurance Company: _____
Contact Person for Insurance Company: _____
Telephone Number: _____

Name of Bidder

Signed this _____ day of _____, 20 _____.

Name of Bidder

Contractor's License No.

Expiration Date

Signature of Bidder

Title of Signatory

D. FINANCIAL QUALIFICATIONS

(TO BE SUBMITTED WITH BID)

Provide evidence that the Bidder has sufficient financial resources to provide all work necessary to complete the project including construction, start-up, and warranty services.

A. Bidder must provide Section FINANCIAL QUALIFICATIONS to assist the District in determining the Bidder's financial condition.

B. Bidder must provide a letter from its Surety or Surety Broker which certifies that Bidder's current bonding capacity is sufficient for the bonding requirements for this Project.

C. Bidder shall identify any claims filed in court or arbitration against Bidder in the past five years which concerned Bidder's work on a construction project. For each claim, if any, the Bidder shall provide the project name, date of the claim, name of the claimant, a brief description of the nature of the claim, the court in which the case was filed and a brief description of the status of the claim (pending or, if resolved, a brief description of the resolution). Are there any pending claims against your company that should you lose the claim(s), would adversely affect your financial position or your ability to meet your obligations if awarded the contract for this project? If so, please explain.

Claims Filed Against Bidder

Project Name: _____

Date of Claim: _____

Claimant Name: _____

Court: _____

Status of Claim: _____

Explanation: _____

Bidder shall also identify any claims filed in court or arbitration by Bidder against a project owner in the past five years concerning work on a project or payment for a contract. For each claim, if any, the Bidder shall provide the project name, date of the claim, a brief description of the nature of the claim, the court in which the case was filed and a brief description of the status of the claim (pending or, if resolved, a brief description of the resolution). Are there any pending claims filed by your company against a project owner that should you lose the claim(s), would adversely affect your financial position or your ability to meet your obligations if awarded the contract for this project? If so, please explain.

Claims Filed By Bidder

Project Name: _____

Date of Claim: _____

Claimant Name: _____

Court: _____

Status of Claim: _____

Explanation: _____

All financial information provided by Bidder that is marked "Confidential" or "Proprietary" shall be handled by the District in accordance with Public Records Act.

The undersigned hereby states that all representations regarding the Bidder's Company Experience, and Safety Qualification Information are correct and true.

Signed this _____ day of _____, 20____

Bidder's Name

Authorized Signature

Date

Title of Signatory

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

**FINANCIAL QUALIFICATIONS
BIDDER'S REFERENCES AND CREDIT REPORT**

The Contractor shall submit with his/her bid a credit report, current within five (5) working days of the bid opening date for this project. For privacy purposes, the report may be submitted in an envelope marked "CONFIDENTIAL". To be considered a responsible bidder on this project, either the Contractor's credit report shall indicate a Dun & Bradstreet credit risk rating specified below or the Contractor's bank shall issue a financial statement on the following page. If the Contractor is a Dun & Bradstreet member, a copy of the current Dun & Bradstreet rating form showing a rating not less than the specified rating.

The specified Dun and Bradstreet credit risk rating for this project is 3A2 or better.

If the Contractor is not a Dun & Bradstreet member, an acceptable credit report shall consist of the submittal of the District's Financial Statement Form (which follows) executed by the Contractor's bank. Failure to submit the required report with the bid for this project shall cause the bid to be rejected. Failure to possess the required financial strength and credit risk rating may cause the bid to be rejected. The District shall request confirmation of the Contractor's rating from Dun & Bradstreet Information Services. The sufficiency of the Bidder's financial qualifications will be determined solely by the District and its decision shall be final.

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

Name of Bank	Address
_____	_____
_____	_____
_____	_____

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

Name of Surety Company _____

Signature of Bidder _____
Title _____
Company _____
Address _____

FINANCIAL STATEMENT FORM

_____ has an established deposit
and borrowing relationship with _____ since
(Bank)

_____. Both business account and credit accommodations are maintained in
(Date)

a highly satisfactory manner. Based on my knowledge of _____ 's
(Contractor)

Average monthly business account balances and its credit worthiness, I believe its general
financial strength and credit rating meet or exceed the Dun & Bradstreet alphanumeric rating of
not less than **3A2**.

Contractor Company Name

Contractor Representative, Printed Name

Contractor Representative, Signature

Date

Bank Name

Business Address

City/State/Zip Code

Bank Representative, Printed Name

Bank Representative, Signature

Date

Following are two Dun & Bradstreet rating component sheets to assist in the evaluation of the responsible bidder's tangible net worth and credit worthiness.

D & B RATING KEY

Quickly assesses a company's size and composite credit appraisal, e.g., a company rated 3A3 has a worth of \$1,000,000 - \$9,999,000 based on an interim or fiscal balance sheet and a composite credit appraisal of 'Fair'.

Key to Employee Range

ER1	1,000 or more
ER2	500-999
ER3	100-499
ER4	50-99
ER5	20-49
ER6	10-19
ER7	5-9
ER8	1-4
ERN	Not Available

<u>Rating Classification</u>			<u>Composite Credit Appraisal</u>			
<u>Based on Worth from Interim or Fiscal Balance Sheet</u>			<u>HIGH</u>	<u>GOOD</u>	<u>FAIR</u>	<u>LIMITED</u>
5A	\$50,000,000	and Over	1	2	3	4
4A	10,000,000	to \$49,999,999	1	2	3	4
3A	1,000,000	to 9,999,999	1	2	3	4
2A	750,000	to 999,999	1	2	3	4
1A	500,000	to 749,999	1	2	3	4
BA	300,000	to 499,999	1	2	3	4
BB	200,000	to 299,999	1	2	3	4
CB	125,000	to 199,999	1	2	3	4
CC	75,000	to 124,999	1	2	3	4
DC	50,000	to 74,999	1	2	3	4
DD	35,000	to 49,999	1	2	3	4
EE	20,000	to 34,999	1	2	3	4
FF	10,000	to 19,999	1	2	3	4
GG	5,000	to 9,999	1	2	3	4
HH		up to 4,999	1	2	3	4

<u>Rating Classification</u>			<u>Composite Credit Appraisal</u>		
<u>Based on Number of Employees</u>			<u>GOOD</u>	<u>FAIR</u>	<u>LIMITED</u>
1R	10 employees	and Over	2	3	4
2R	1	to 9	2	3	4

WHAT THE RATINGS MEAN

5A to HH – ‘5A’ to ‘HH’ Ratings reflect company size based on worth or equity as computed by D&B. Company size can be an effective indicator of credit capacity. These Ratings are assigned to businesses that have supplied D&B with a current financial statement.

1R and 2R – the ‘1R’ and ‘2R’ Rating categories reflect company size based on the total number of employees for the business. They are assigned to business files that do not contain a current financial statement.

Composite Credit Appraisal: The Composite Credit Appraisal is a number, one through four, that makes up the second half of the company’s rating and reflects D&B’s overall assessment of that firm’s credit worthiness. The Composite Credit Appraisal is based on analysis by D&B of company payments, financial information, public records, business age and other important factors (where available).

A ‘2’ is the highest Composite Credit Appraisal a company not supplying D&B with current financial information can receive.

Rating: May also include the ‘-’ symbol, or absence of a D&B Rating. This symbol should not be interpreted as indicating that credit should be denied. It means that the information available to D&B does not permit us to classify the company within our Rating key and that further inquiry should be made before reaching a credit decision. Some reasons for using the ‘-’ symbol includes: deficit net worth, bankruptcy proceedings, lack of sufficient payment information or incomplete history indicator.

Date Applied: Allows you to review a company’s rating changes over time (the last 10 Rating changes or any changes since 1991 if less than 10 are provided).

ER (Employee Range): Certain lines of business do not lend themselves to classification under the D&B Rating system. Instead, we assign these types of businesses an Employee Range symbol based on the number of people employed. No other significance should be attached to this symbol. For example, a Rating of ‘ER7’ means there are between five and nine employees in the company. ‘ERN’ should not be interpreted negatively. It simply means we do not have information indicating how many people are employed at this firm.

DS (DUNS) Support: This indicates that the information available to D&B does not permit us to classify the company within our Rating key. When ordering these reports an investigation can be performed and results sent to you within four working days, at no additional charge.

INV (Investigation Being Conducted): When an ‘INV’ appears, it means an investigation is being conducted on this business to get the most current details.

LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

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

(To Accompany Bid)

State of California)
County of _____) ss.

_____, being first duly sworn, deposes and says that
(Contractor's Authorized Representative)

he or she is _____ of _____,
(Title of Representative) (Contractor's Legal Name)

the party making the foregoing Bid, has visited the Project site(s) as described in the Contract Documents 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 acknowledgment on the part of the Bidder of familiarity with conditions at the site of the Work and 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 of Authorized Representative

Type/Print Name of Bidder

Type/Print Representative's Name

Type/Print Title

Date

(Acknowledgement)
Subscribed and sworn before me by _____, this _____
day of _____, _____.

(SEAL)

Notary Public

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LAS GALLINAS VALLEY SANITARY DISTRICT
101 Lucas Valley Road, Suite 300
San Rafael, California 94903

BIDDER'S SIGNATURE PAGE

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the information submitted with this proposal for the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, which information includes, but is not limited to, the Bidder's Check List, Proposal Cover Page and Bid Schedule, Acknowledgement of Bid Addenda, Bid Bond, Contractor License Information, List of Proposed Subcontractors, Workers Compensation Insurance Certification, Non-Collusion Affidavit, Drug-Free Workplace Certification, Debarment Certification, Statement of Experience of Bidder, Financial Qualifications, and Site Visit Affidavit are accurate, true and correct, and are submitted in accordance with the requirements of the bid package issued by the Las Gallinas Valley Sanitary District concerning the JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES project, JOB NO. 20200-01, and applicable law. By my signature on this proposal I further certify that I am legally authorized to bind the bidder in accordance with the requirements of the bid package.

Date: _____

(Typed or printed name)

(Signature)

(Bidder)

Bidder Business Address (Street, City, State and Zip Code)

Bidder Business Phone No.: _____

Bidder Business Fax No.: _____

Bidder Email Address: _____

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APPENDIX A

SAFE WORK REQUIREMENTS

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LAS GALLINAS VALLEY SANITARY DISTRICT

CONTRACTOR SAFE WORK REQUIREMENTS

Revised June 8, 2017

SAFETY POLICY

Contractors and their subcontractors working for the Las Gallinas Valley Sanitary District shall comply with all applicable federal, state, and local safety orders in the performance of any work on District projects. In addition, Contractors and their subcontractors shall comply with all safety regulations and procedures listed in this Safe Work Requirements. Contractors shall take any additional precautions necessary to prevent injury or damage to persons, property, or interference with District operations.

Contractors shall be responsible for notifying employees, subcontractors, and invitees of these District Safe Work Requirements. No work within District facilities or on District contract work sites shall begin prior to such notification. Contractor shall not allow a new employee or new subcontractor to begin work on District projects without having conducted a full and proper safety orientation.

Contractors doing work at the Treatment Plant facility, lift stations or sewage conveyance systems shall schedule a safety orientation session for their site Superintendent and other Contractor-designated personnel with the Authorized District Representative prior to commencing work. The orientation session shall include emergency procedures, an explanation of applicable District safety policies, and any unique and inherent hazards of District facilities. It is then the responsibility of the Contractor's Superintendent or designated personnel to orient and so inform all personnel under the Contractor's supervision.

The District may, in its sole discretion, either temporarily or permanently remove a Contractor's employee from District work and/or terminate the Contractor's right to proceed for any violation of applicable Cal/OSHA Construction Safety Orders or these District Safe Work Requirements.

DEFINITIONS

As used in this Safe Work Requirement, the following definitions are applicable:

A. **PARTS AND MATERIALS:**

All products, materials, devices, systems, or installations installed by Contractor shall have been approved, listed, labeled, or certified as conforming to applicable governmental or other nationally recognized standards, or applicable scientific principles. The listing, labeling, or certification of conformity shall be based upon an evaluation performed by a person, firm, or entity with appropriate registered engineering

competence; or by a person, firm, or entity, independent of the manufacturer or supplier of the product, with demonstrated competence in the field of such evaluation.

- B. CONTRACTOR**
Designates “Contractor”, “Contractors”, “Sub-Contractors”, “Suppliers”, and all employees of each.
- C. AUTHORIZED DISTRICT REPRESENTATIVE**
The District’s Authorized Representatives shall be the employee(s) designated by the District to be responsible for communicating with the Contractor.
- D. DISTRICT JURISDICTION**
For the purposes of these regulations, “District” Shall mean the Las Gallinas Valley Sanitary District.
- E. TREATMENT PLANT AND FACILITIES**
For the purposes of these regulations, “Treatment Plant & Facilities” shall include the District's Wastewater Treatment Plant, lift stations and sewage conveyance systems located within the boundaries of the District.

EMERGENCY PROCEDURES

- A. FIRST AID**
Contractors shall be responsible for providing first aid and medical treatment for their employees and for compliance with the first aid requirements of all applicable Cal/OSHA Construction Safety Orders.
- Contractors shall be responsible for making prior arrangements for emergency medical care and for transportation of injured Contractor personnel.
- B. FIRE**
When work is being performed which generates sparks or open flames, the Contractor will provide a fire watch, a person trained in the use of appropriate fire fighting equipment, whose only task is to observe and extinguish fires. A District “Hot Works” permit must be filled out and turned into the Collection System / Safety Manager, or General Manager when the Safety Manager is not available, when work is completed. Contractor shall ensure that appropriate fire extinguisher(s) are available at the specific work site for use in case of a fire. All Contractor’s employees shall be properly trained to use them.

In the event of a fire, Contractor shall immediately notify the nearest District employee and if possible, call emergency (911) and give the location of the plant, which is 300 Smith Ranch Rd. San Rafael. A map of the wastewater plant is included in this policy. Refer to Attachment A.

BASIC SAFETY RESPONSIBILITIES AT DISTRICT FACILITIES

A. COMMUNICATION

Contractor shall maintain close communication with the Authorized District Representative. Contractors should sign-in at the office at the beginning and end of each day along with a headcount of crew members.

B. RESPONSIBILITY

Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss, to:

1. All employees on the work site and other persons and organizations who may be affected thereby.
2. All the work, materials, and equipment to be incorporated therein, whether in storage or off the site.
3. 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 construction.

Contractor shall comply with all applicable laws and regulations (whether referred to herein or not) of any public agency having jurisdiction over the safety of persons or property, or the protection of persons from damage, injury, or loss, and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and facilities when performance of the work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property and facilities.

Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the District.

C. GENERAL SAFETY REGULATIONS

Basic Rules:

- Work shall not begin until the Contractor's personnel have been informed of the District's Safe Work Requirements and potential hazards. The District employee responsible for the project is responsible for advising the Contractor of the District's Safe Work Requirements and potential hazards.
- All safety procedures applicable to the job being performed, including use of appropriate protection equipment, shall be followed.
- The Contractor's personnel shall **never** operate, use, adjust, modify or relocate any District equipment, switches, valves, or other controls. The Authorized

District Representative must be contacted should operation, adjustment, modification, or relocation of District equipment be necessary.

- Contractor's use of District instruments, tools, ladders, scaffolding or other equipment is not permitted except in cases of emergency as determined by a District supervisor or by permission from a senior Manager of the District.
- Drinking water shall be supplied by Contractor. **Do Not Drink Water from Hose Connections at any District Facility.**
 1. Hose bib connections are located throughout the treatment plant. Most of these supply treated wastewater and may or may not be posted with signs reading "Do Not Drink." In any case, **never** drink water from hose bibs or hoses.
 2. Water lines throughout the treatment plant are color coded (when not stainless steel) and labeled as follows:

Recycle Water Piping	Purple
Domestic Water Piping	Blue
Service Water Piping (Plant Effluent)	Gray
 3. Hose connections may be used to wash down equipment. Never hose down electrical or heated equipment of any kind. If an employee has used a gray or purple water hose for wash down, he/she should immediately wash their hands in domestic water with soap.
- NEVER make any connection to any water line without first verifying with the Authorized District Representative that contamination of the water lines will not occur.
- Use of alcoholic beverages and/or illegal drugs by Contractor or any employee is strictly prohibited. Smoking within the plant is prohibited. Use of prescription or non-prescription drugs which interfere with the individual's ability to work safely is also prohibited.
- Contractor shall advise the Authorized District Representative of any employee with any medical conditions that could put the employee in danger.

Personal Protection Equipment:

- Contractor shall be responsible for providing and assuring use by employees of all OSHA required protective equipment.
- Approved respiratory equipment shall be worn when the possibility of exposure to hazardous dusts, vapors, fumes, mists, or gases exists. In addition to all other safety regulations, pipes or conduit should be mechanically BLOCKED off when being worked on. District safety procedures shall be followed when working on, but not limited to, the following systems:
 - 1) Natural gas and sludge gas (Methane)

- 2) Ferrous Chloride
 - 3) Polymer
 - 4) Hypochlorite
 - 5) Compressed Air
 - 6) Sodium Bisulfite
- Contractor shall be responsible for determining the existence and location of such systems prior to commencement of work.

Power Tools and Welding Equipment:

- Gasoline and electrical powered hand tools shall be protected by approved ground fault circuit interrupters, or shall be double insulated. Cords shall be inspected daily prior to use. Damaged cords shall not be used on District work.
- Pneumatic driven power tools shall be disconnected from air lines when not in use. Hoses shall be inspected daily prior to use. Damaged hoses shall not be used on District work.
- Power tools shall be used only by trained personnel who have a valid license (when applicable, i.e, welding) in their possession. Proper warning signs shall be posted when these tools are in use.
- Electric and gas welding and cutting tools, including cords and gas hoses, shall be inspected daily prior to use. Damaged cords and gas hoses shall not be used on District work.
- Contractor and Contractor employees' tools and equipment used on District work sites shall be in safe operating condition and shall conform to the requirements of Cal/OSHA regulations. All personnel using such tools shall be properly trained.

D. BARRICADES AND SIGNS FOR TRAFFIC CONTROL

All Contractors, permittees, or agencies doing work for District which requires traffic control shall:

- 1) Install and maintain required traffic devices.
- 2) Provide appropriately equipped flag persons when required.
- 3) Provide adequate safeguards for workers and District personnel.
- 4) Maintain access for District personnel to all District facilities.

All work on streets, roadways, or similar thoroughfares shall comply with the Federal Highway Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways" and any local ordinances. District Plant speed is *maximum* 10 mph.

SPECIAL PROCEDURES AND UNIQUE HAZARDS

A. **CONFINED SPACE ENTRY**

Confined spaces of all types exist throughout the District and throughout the plant and range from open trenches and manholes, to tanks, clarifiers and digesters. Contractors are required to meet Cal/OSHA safety standards for CONFINED SPACE ENTRY OPERATIONS, Title 8 Article 108 (Sections 5156-5159), or the most current CAL/OSHA applicable standards, and to provide a safe working environment for their employees. All Contractors directing or working in confined spaces are required to notify the Authorized District Representative. Contractors are responsible for all operations, testing, equipment calibration, ventilation, and entry per the Cal/OSHA standards. Contractors are responsible for all confined space permits and all appropriate equipment. Completed confined space permits are to be turned in to the District's safety manager.

B. **ELECTRICAL SUPPLY SYSTEMS**

The treatment plant's Electrical Supply System consists of two 65kW Gas Microturbine Generators, one 1MW diesel oil engine driven standby generator and one 380 KW trailer mounted standby generator, and solar power. All electrical power generated in the plant and PG&E power (beyond their transformer) is 480 volt, 3 phase, 60 Hz electricity and is delivered to one 480 volt switchgear panel. This panel is interconnected by cables and protected by breakers, relays and monitoring devices.

Electricity is dispersed from the switchgear through breakers and cables to motor control centers (MCC's), to power panels, to transformers (voltage reducers), to lighting panels and to motor driven pumps and equipment. Lockable control stations are located at each piece of equipment. 480 volt, 208 volt and 120 volt electricity is used in the plant. Contact the duty operator prior to working on any piece of electrical equipment. Electricity is hazardous and can burn or kill people.

All work on electrical systems shall be done in accordance with the State of California, CAL/OSHA, Article 33, Electrical Requirements for construction work, Low Voltage Electrical Safety Orders.

C. **FERROUS CHLORIDE SYSTEMS -**

The Ferrous Chloride System consists of a positive displacement pump with feed rate adjustment. Shut-off valves are located before and after the pump. Before working on this system, close all valves and disconnect the pump from electricity.

Ferrous Chloride is a dangerous chemical which will attack the skin, eyes and the mucous membranes of the mouth, throat and lungs. Contact the plant duty operator prior to working on this system.

D. DIGESTER GAS SYSTEM

The Digester Gas System consists of one steel tank, associated piping, compressors, flare, etc. Sludge is bacterially reduced in the tanks creating principally methane (CH₄) and other combustible hazardous gases, including hydrogen sulfide (H₂S). Hydrogen sulfide is toxic at very low concentrations. These gases are contained by the tank covers and piping which is located on overhead racks, in pipe trenches and buried throughout the plant. The gases are burned in large engines driving generators to make electricity for the plant. Heat from the engines is captured and piped to the digesters to heat the sludge, speeding up the digestion process.

Digesters and the stored gases within them are hazardous. No smoking, cutting, or spark-generating equipment is allowed on or within ten feet of any digester. Contact the duty operator prior to working on digesters.

E. HYPOCHLORITE SYSTEM

Hypochlorite, or concentrated chlorine bleach (12.5%), is used to disinfect, or kill bacteria and virus in the final effluent (water) discharged from the plant. Two tanks, each 7,000 gallons are used to store hypochlorite. Piping, valves, pumps, strainers (filters) and flow measuring and control equipment make up the system. Hypochlorite will attack clothing, skin, eyes and mucous membranes of the nose, mouth, throat and lungs. Contact the duty operator prior to working on the hypochlorite system.

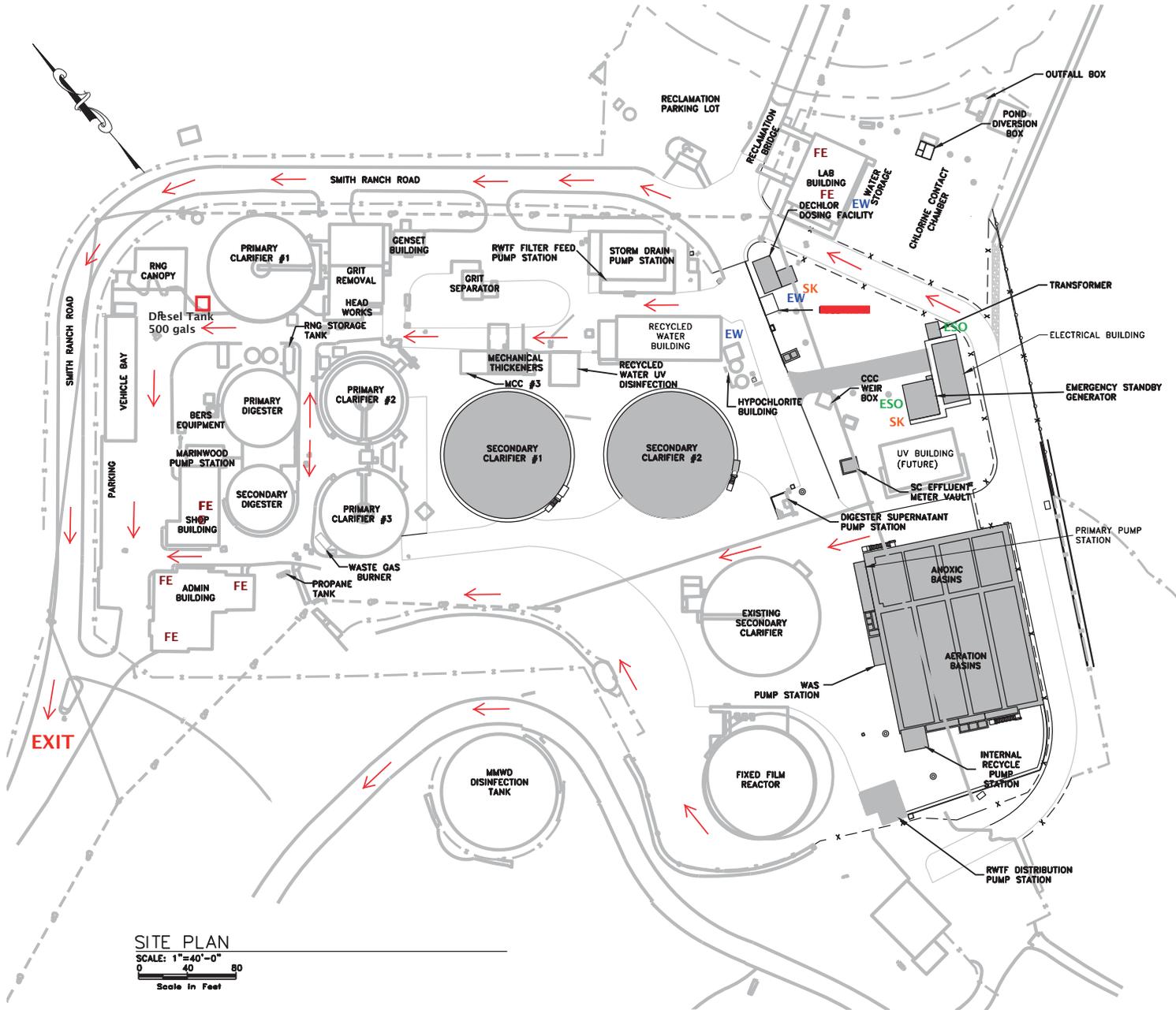
F. SODIUM BISULFITE

Sodium bisulfite is used when neutralizing sodium hypochlorite. Two tanks, each 4,000 gallons and one 2,500 gallons are used to store sodium bisulfite. Piping, valves, pumps, strainers (filters) and flow measuring and control equipment make up the system. Sodium bisulfite is an irritant to eyes, skin and mucous membranes. Inhalation of mist may cause irritation to respiratory tract. Contact the duty operator prior to working on the sodium bisulfite system.

G. GENERAL HAZARDS

Throughout District's treatment plant and facilities there are a number of extremely hazardous elements that are dangerous. They include, but are not limited, to:

- Flammable gas and petroleum.
- H₂S (hydrogen sulfite)
- Deep pools of liquid sewage which are rarely patrolled, and for which self-rescue is unlikely.
- Automatic start equipment.
- HBV (Hepatitis B Virus)



Legend

- EW = Eyewash/Shower Station
- SK = Spill Kit
- FE = Fire Extinguisher
- ESO = Emergency Shutoff

SITE PLAN
 SCALE: 1"=40'-0"
 0 40 80
 Scale in Feet

Attachment A. Map of Wastewater Plant
EMERGENCY EVACUATION ROUTES

APPENDIX B

CONFINED SPACE ENTRY REQUIREMENTS

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**Las Gallinas Valley
Sanitary District**

Confined Space

Entry

Program

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**LAS GALLINAS VALLEY SANITARY DISTRICT
Confined Space Entry Program**

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SAMPLE

LGVSD CONFINED SPACE ENTRY PROGRAM

INTRODUCTION

The purpose of Las Gallinas Valley Sanitary District's confined space entry program is to protect employees who work in manholes, pump stations, tanks, or any other confined space that could expose employees to hazardous conditions or substances. The program establishes an entry permit system and procedures to ensure that potential hazards of each confined space are identified and evaluated and that appropriate safety precautions are taken before an employee enters the space.

Employees will be given an opportunity to participate in the development and implementation of LGVSD's confined space procedures. The program will be revised or procedures will be modified whenever suggestions or recommendations from employees would improve confined space safety.

The policies and procedures in this program are consistent with the requirements of Cal/OSHA General Industry Safety Orders, Title 8, Sections 5156 and 5157 and supersede previous confined space policies and procedures. The program applies to all employees who work in, or in connection with LGVSD confined spaces.

Confined spaces at LGVSD have been identified based on the definitions in Section 5157 as follows:

Confined Space is a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work; and
2. Has limited or restricted means for entry or exit; and
3. Is not designed for continuous employee occupancy.

Permit-Required Confined Space is a space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section; or
4. Contains any other recognized serious safety or health hazard.

Non-Permit Confined Space is a space that does not contain (or with respect to atmospheric hazards, has no potential to contain) any hazard capable of causing death or serious physical harm.

Employees who work in or in connection with confined spaces are required to follow the procedures described in this program and to take all the appropriate precautions to ensure that the work is performed safely. At no time should an employee enter a confined space or perform work in the space unless it can be done safely.

PERMIT-REQUIRED CONFINED SPACES

The tables on pages 4 and 5 list confined spaces at LGVSD that require a permit to enter. Potential hazards associated with these spaces include engulfment, toxic gases, explosive or flammable gases, oxygen deficiency, electrical and mechanical hazards, and may under certain circumstances involve heat stress. Warning signs will be posted at wet wells and similar locations to inform employees that the space requires a permit to enter. To prevent unauthorized entry, each of these spaces will be secured.

Using the entry permit, a non-entry evaluation must be done so that potential hazards can be identified and the appropriate safety precautions taken. The types of hazards that may be encountered, pre-entry safety checks, and the types of safety equipment that will be used are entered on the permit. Only the person designated as the entry supervisor has the authority to authorize the entry permit. At least three employees are required for a permit-required confined space entry which would include an attendant and a standby rescuer.

The tables on pages 4 and 5 that list permit-required confined spaces at LGVSD are not all-inclusive. Other spaces may be determined to be permit-required after evaluating the conditions or circumstances of the entry. The type of work to be performed in the space could introduce hazards to an otherwise safe space. Working with flammable or toxic substances, welding or other hot work, or drifting vapors from outside sources would make a space hazardous or potentially hazardous and therefore require a permit to enter.

ALTERNATE ENTRY PROCEDURES

Alternate procedures are allowed in permit-required spaces where it can be demonstrated and documented that the only hazard or potential hazard is an atmospheric one, and that continuous forced air ventilation alone will maintain the space safe for entry. A trained, qualified employee may enter these confined spaces without an attendant or rescue preparations provided the following conditions are met.

1. All unsafe conditions are eliminated before the confined space cover is removed.
2. The entrance to the space is guarded with a railing or other type of barrier to prevent an accidental fall through the opening and to protect employee in the space.
3. The atmosphere is tested before entry in the following order: O₂, LEL/LFL, H₂S.
4. No entrance is made until hazardous atmosphere is eliminated.
5. There is no hazardous atmosphere when employees are in the space.
6. Continuous forced ventilation is used.
7. The air supply is clean and will not increase hazards.
8. The air supply is directed to area where employees are working.
9. The atmosphere is tested every 15 minutes to ensure a hazardous atmosphere is not developing.
10. Records of pre-entry and entry monitoring data and inspection data are maintained.
11. The entrant certifies, in writing, that the required pre-entry measures have been taken.
12. Monitoring and inspection data, and the certification information are made available to each employee entering the space.

If a hazardous atmosphere develops in the space, or other hazards arise, alternate procedures can no longer be used and the space must be reclassified as a fully permitted space.

SPECIAL ENTRY PROCEDURES

There are a few confined spaces at LGVSD that are not considered permit-required confined spaces. As far as can be determined, these spaces do not contain any known hazard. However, as a precautionary measure, employees are required to follow certain special procedures before entering these spaces.

1. Test the atmospheric conditions prior to entry.
2. If atmospheric conditions are acceptable, entry can be made.
3. If atmospheric conditions are not acceptable, use alternate procedures.
4. If any other hazardous condition exists, follow permit-required confined space procedures.

THE ENTRY PERMIT SYSTEM

Confined space entry permits are to be issued for a specific purpose, a specific work crew, and for a specified period of time. The entry permit is a written authorization of the location and type of work to be done. It also authorizes the personnel assigned to the job, and verifies that potential hazards have been evaluated and controlled or eliminated, that proper safety precautions have been taken, and it is safe for workers to enter. The permit must be kept at the work site (outside the space) for the duration of the work and cancelled after the work is completed.

HOT WORK PERMIT

A hot work permit must be issued for any work that produces heat, sparks or flame in a permit-required confined space. This includes but not limited to brazing, cutting, grinding, soldering, and welding.

Table 1: Main Plant Permit-Required Confined Spaces

MAIN PLANT	Permit-Required	Alternate or Special Procedure	MAIN PLANT	Permit-Required	Alternate or Special Procedure
Marinwood Pump Station			Deep Bed Filter		
Pre Wet Well Structure	•		Bypass Channel	•	
Wet Well	•		Wet Well/Supply Pumps	•	
Valve Pit		SP	Valve Pit		SP
Flow Meter Pit (F1)		SP	Tanks	•	
Primary Clarifier			Weir Overflow Pit	•	
Tank	•		Underdrain	•	
Scum Pit	•		Inlet Channel	•	
Weir Overflow Pit	•		Center Column	•	
Chemical Tank	•		F8 Flow Meter Manhole	•	
Sodium Hydroxide Tank	•		Effluent Channel	•	
Methane Tank	•		Backwash Return Wet Well	•	
Methane Scrubber Tank	•		Hypochlorite Storage Tank	•	
Primary Digester			Digester Supernatant Pump Station		
Tank	•		Wet Well	•	
Valve Pit			Valve Pit		SP
Secondary Digester			Secondary Clarifier		
Tank	•		Tank	•	
Valve Pit		SP	Flow Meter (F4)	•	
Intermediate Flow Meter Pit (F3)	•		Effluent Box	•	
Aerated Grit			Scum Pit	•	
Tank	•		Fixed Film Reactor		
Scum Pit	•		Tank	•	
Outlet Channel	•		Underdrain	•	
Inlet Channel	•		Center Column	•	
Clarifier Return Pit			F4 Diversion Box	•	
Wet Well	•		Influent and Effluent Wet well	•	
Influent Flow Meter Pit		SP	Filter Water Storage Tank	•	
Grease Storage Tank	•		Chlorine Sample Pump #2		
Intermediate Clarifier East			Wet Well	•	
Diversion Structure	•		Valve Pit	•	
Tank	•		Chlorine Contact Chamber/DBF Backwash		
Scum Pit	•		Tank	•	
Weir Overflow Pit (2)	•				
Intermediate Clarifier West			Pipe Inspection Manhole	•	
Tank	•		Plant Effluent Water Pump Wet Well	•	
			Bisulfite		
Scum Pit	•		Wet Well	•	
Weir Overflow Pit	•		Tanks	•	
Sludge Thickener			White Shack Effluent Box		
Influent Pit	•		Wet Well	•	
Tank	•		Flow Meter Pit (F5)		SP
Scum Pit	•		Effluent Pipe Inspection Manhole	•	
Primary Biofilter			Stormwater Pump Station		
Valve Pit			Wet Well	•	
Pump Pit Dry Well		SP	Flow Metet Pit (F9)		SP
Underdrain	•		Miller Creek Plant Effluent Box Wet Well	•	
Prim/Sec Biofilter Diversion Vault	•		Storm Ponds Pump Pit Wet Wells	•	
Secondary Biofilter			Centrifuge Pit Tank	•	
Effluent Box	•		Gardener's Building (ventilate before entry)		
Underdrain	•		F4 - DBF Effluent Box	•	
Pump Pit	•		DBF Effluent Weir Box/Plant Water Pump	•	
			MMWD Backwash Return Wet Wells (2)	•	

Table 2: Reclamation, Collection System, and Pump Stations Permit-Required Confined Spaces

Location	Permit-Required	Alternate Procedure	Location	Permit-Required	Alternate Procedure
RECLAMATION			PUMP STATIONS		
Diversion box			McInnis Park		
Wet Well	•		Wet Well	•	
Valve Pit	•		Valve Pit		•
Underdrain	•		Smith Ranch		
Transfer Box			Wet Well	•	
Wet Well	•		Valve Pit		•
Valve Pit	•		Flow Meter Pit		•
Underdrain	•		Industrial Park		
Meter Pit (F7)		•	Wet Well	•	
Reclamation Pump Station			Valve Pit		•
Wet Well	•		John Duckett		
Flow Meter Pit (F6)			Wet Well	•	
Sludge Supernatant Pump Station			Valve Pit		•
Wet Well	•		Flow Meter Pit		•
Dry Well	•		Comminutor Deck		•
Valve Pit		•	Civic Center North		
Pond Diversion Gate Boxes	•		Wet Well	•	
Pond Inflow/Effluent Boxes	•		Valve Pit		•
Sludge Ponds (3)	•		Marin Lagoon (9)		
			Wet Well	•	
			Valve Pit		•
COLLECTION SYSTEM			Mulligan		
All Manholes	•		Wet Well	•	
Air Release Valves		•	Valve Pit		•
Valve Boxes	•		Venetia Harbor		
			Wet Well	•	
			Valve Pit		•
			Hawthorne		
			Wet Well	•	
			Dry Well		•
			Adrian Way		
			Wet Well	•	
			Valve Pit		•
			Descanso Way		
			Wet Well	•	
			Valve Pit		•
			McPhail		
			Wet Well	•	
			Valve Pit		•
			San Rafael Meadows		
			Wet Well	•	
			Valve Pit		•
SPECIAL ENTRY PROCEDURES (SP)					
1. Test atmospheric conditions prior to entry.					
2. If atmospheric conditions are acceptable, entry can be made.					
3. If atmospheric conditions are not acceptable, use alternate procedures.					
4. If any other hazardous condition exists, follow permit-required confined space procedures.					

DUTIES OF ENTRY TEAM

A permit-required confined space entry team will include an entry supervisor, entrant(s), and at least one attendant. Before an employee begins confined space work, the work must be authorized by the District Manager or Plant Superintendent. In the absence of the District Manager and Plant Superintendent, the designated employee-in-charge may authorize the work.

As long as each individual can fully perform his/her duties, an entry supervisor may be the same person as the entrant or the attendant. The safety precautions that should be taken with a permit-required confined space entry will vary depending on the types of hazards or potential hazards involved. Regardless of the types of hazards, it is the District's policy that in addition to an attendant, a standby rescuer must be part of the entry team.

Duties of Entry Supervisor

1. Verifies that acceptable entry conditions exist.
2. Ensures acceptable entry conditions are maintained.
3. Verifies that the information and procedures on the entry permit are accurate and complete.
4. Verifies that the equipment specified on the permit is in place and in good condition.
5. Reviews permit conditions and procedures with entrants and attendants.
6. Ensures unauthorized persons do not enter the space.
7. Signs the permit to authorize entry.
8. Cancels and files permit.

Duties of Entrant

1. Properly uses the safety equipment and tools supplied.
2. Promptly notifies the attendant if any prohibited condition exists or any warning signs or symptoms appear.
3. Quickly evacuates space if an order is given by the attendant or entry supervisor, if any prohibited condition is detected, or if an alarm is activated.
4. Maintains communication with the attendant to enable attendant to monitor status of space conditions and the entrants.
5. Adheres to the procedures and precautions indicated on the permit and provided in training.

Duties of Attendant

1. Remains outside the permit space until relieved by another attendant.
2. Maintains communication with entrants.
3. Maintains accurate count and identification of entrants.
4. Monitors activities inside and outside the space.
5. Orders entrants to evacuate if a prohibited condition exists, or behavioral effects of hazardous exposure are detected, or activities outside space could endanger entrants, or attendant cannot effectively perform all required duties.
6. Ensures unauthorized persons stay away from the space.
7. Performs non-entry rescue procedures or initiates on-site rescue operations.
8. Summons additional rescue services, when needed.

ENTRY PROCEDURES

Pre-Entry

1. Notify other work groups or employees who may be affected by any interruption in service.
2. Determine (by entry supervisor or other qualified person) what hazards or potential hazards are within the confined space.
3. Check that all safety equipment is available and in good working condition.
4. Check that atmosphere monitoring equipment has been calibrated as recommended by manufacturer.
5. Without entering space:
 - a) Test atmosphere and record readings on permit.
Acceptable atmospheric conditions: Oxygen not less than 19.5% or more than 23.5%, LEL/LFL not more than 10%, H2S not more than 10 ppm, CO not more than 25 ppm.
 - b) Ventilate the space or check that ventilation system is operating properly.
6. Ensure that all affected employees observe pre-entry atmospheric testing.
7. Set up barrier around entrance to prevent accidental falls and to protect employees from vehicles, or falling objects.
8. Check for physical hazards such as poor footing, structures and equipment that hinder movement, and extreme temperatures or humidity that could affect worker safety.
9. Secure and lock out all energy sources (electrical, mechanical, hydraulic, pneumatic, chemical) that are potentially hazardous to confined space workers. Follow lockout/tagout procedures.
10. Disconnect, blind, or block lines to prevent development of hazardous conditions.
11. Use continuous forced air ventilation. Ensure that there is no recirculation of exhausted air from blowers or the introduction of contaminants from the outside, such as traffic exhaust, or vapors or toxic substances from other areas. Place blowers at least 10 feet away from opening of space.
12. Entry supervisor reviews and authorizes entry permit if the space is safe to enter, and all preparatory steps required for safe entry have been taken.

Entry

1. Only employees who have been trained on LGVSD's confined space entry and work procedures are allowed to work in or around confined spaces.
2. Only the work activity specified on the authorized permit is to be performed in the confined space.
3. At least one attendant is required for confined space work.
4. If at any time during the performance of confined space work, dangerous atmospheric conditions develop, work must stop and the space evacuate immediately.
5. An attendant must be stationed outside the space at all times during the confined space operations and remain in constant communication with workers in the space.
6. The attendant must order evacuation of the space whenever:
 - a) a condition not allowed on the permit is observed
 - b) unusual behavior is observed
 - c) an outside situation endangers the confined space workers
 - d) the attendant must leave the work station

7. The permit must be cancelled if the air becomes hazardous after entry.
8. Respiratory equipment must be worn whenever a safe atmosphere cannot be assured after implementing pre-entry procedures.

Post-Entry

The entry supervisor:

1. Cancels the permit by entering date and time of cancellation and signature.
2. On the reverse side of the permit, makes note of any problems encountered during entry operations.
3. Places the cancelled permit in the safety files.
4. Notifies the Plant Superintendent if any equipment, safety gear or tools need to be repaired or replaced.

RESCUE PROCEDURES

It is the District's policy that all employees who work in or in connection with confined spaces must be trained in rescue procedures. Members of a permit space entry team must be knowledgeable of the hazards or potential hazards, be able to recognize the signs and symptoms of exposure, be trained in the selection and use of personal protective equipment, and be certified in first-aid and cardiopulmonary resuscitation. Prior to each entry the team will plan and prepare for non-entry and entry rescues and ensure that at least one standby is immediately available to provide rescue services.

Self-Rescue

If possible, entrants should immediately leave the confined space:

1. When an alarm sounds.
2. At the first sign of any exposure symptoms.
3. When ordered to evacuate by attendant or entry supervisor.

Non-Entry Rescue

If entrants cannot immediately evacuate the space at the first sign of trouble, the attendant should attempt a non-entry rescue by retrieving the entrant using a harness and hoisting equipment. The attendant must not enter the space unless relieved by another attendant. Retrieval systems must be used in vertical permit spaces more than 5 feet deep.

Entry Rescue

Rescuers are to assume that a hazardous atmosphere exists if an entrant has slurred speech, appears dizzy, disoriented, confused, unconscious, or displays any unusual behavior, or if communication with the entrant is lost. A self-contained breathing apparatus must be worn for entry rescues if a hazardous atmosphere is suspected or if there is any chance that it can develop. Call 911 for assistance or if specialized equipment is needed to remove a worker.

Outside Rescue Services

Although outside rescue services may be present at the time of the entry or summoned to give assistance and support in an emergency, members of the entry team must be prepared to give immediate assistance to any of the entrants who may need it.

NON-PERMIT CONFINED SPACES

All confined spaces are considered permit-required until pre-entry procedures demonstrate otherwise. A confined space may be designated a non-permit space, or a permit-required confined space may be reclassified a

non-permit space if all hazards have been eliminated. Because atmospheric hazards are controlled with ventilation and not eliminated in spaces, these spaces cannot be classified as non-permit spaces.

CONTRACTORS

Contractors and subcontractors who plan to work in LGVSD confined spaces will be given all available information on LGVSD confined space hazards, the permit system, and entry procedures. Contractors are required to use a permit system for entry into LGVSD permit-required confined spaces. Contractors are also required to coordinate work and entry activities whenever LGVSD employees and contractor employees will be working in or near the permit spaces.

At the conclusion of the contractor's work, the LGVSD supervisor in charge will debrief the contractor to determine if any hazards were encountered or created during entry.

TRAINING

All employees who work in or around confined spaces must be trained before performing any confined space work. At a minimum, the training will include:

1. Hazards of confined spaces.
2. Signs and symptoms of hazard exposure.
3. Duties of entrant, attendant, and entry supervisor.
4. Pre-entry and entry procedures.
5. LGVSD confined space permit system.
6. Selection and use of personal protective equipment.
7. Atmosphere test equipment.
8. Rescue procedures and equipment.
9. CPR/First Aid.

In addition, employees involved in confined space work will participate in simulated rescue operations at least once per year. Review training will be provided whenever the need is indicated, such as changes in procedures, introduction of new equipment, the hiring of new employees or whenever deficiencies in implementing the program are observed.

Training records will be maintained which will include names and signatures of trainees and trainers, dates and content of training. These records will be made available for inspection to employees or their representatives

LGVSD CONFINED SPACE ENTRY PERMIT

Date issued: _____ Permit Expiration Date/Time: _____ Location/Description of Space: _____ Street Address of Entry _____ Reason for Entry: _____	Work Site Permit: Authorized entry permit and monitoring data must remain at the work site until the job is complete.
	Fire Dept. Notified 472-0911 Before entry _____ initials After exiting _____ initials

Entry Supervisor: _____

Authorized Attendants and Initials _____ _____ _____	Authorized Entrant and Initials: _____ _____ _____
---	---

Note: Indicate which attendant is assigned standby rescue duties. Initial of attendants and entrants indicate they understand their assignments, responsibilities and duties.

Pre-Entry Checks (complete before obtaining work authorization): <input type="checkbox"/> Notified other work groups. N/A _____ <input type="checkbox"/> Notified office personnel. N/A _____ <input type="checkbox"/> Checked that entry team training is current. N/A _____ <input type="checkbox"/> Reviewed entry procedures with team. N/A _____ <input type="checkbox"/> Set up barrier at entrance to space. N/A _____ <input type="checkbox"/> Checked that gas detection equipment calibration is current. N/A _____ <input type="checkbox"/> Performed pre-entry atmosphere tests. N/A _____ <input type="checkbox"/> Checked ventilation system. N/A _____ <input type="checkbox"/> Checked for physical hazards. N/A _____ <input type="checkbox"/> Secured and locked out energy sources. N/A _____ <input type="checkbox"/> Blocked or disconnected lines. N/A _____ <input type="checkbox"/> Discussed potential hazards with team. N/A _____ <input type="checkbox"/> Reviewed emergency response procedures. N/A _____ <input type="checkbox"/> Checked condition of safety equipment. N/A _____ <input type="checkbox"/> Obtained work authorization signatures. N/A _____	Potential Hazards: <input type="checkbox"/> Oxygen deficiency N/A _____ <input type="checkbox"/> Oxygen enrichment N/A _____ <input type="checkbox"/> Flammable gases or vapors N/A _____ <input type="checkbox"/> Toxic gases or vapors N/A _____ <input type="checkbox"/> Mechanical hazards N/A _____ <input type="checkbox"/> Electrical hazards N/A _____ <input type="checkbox"/> Engulfment/entrapment N/A _____ <input type="checkbox"/> Noise N/A _____ <input type="checkbox"/> Heat/Cold N/A _____ <input type="checkbox"/> Falls N/A _____ <input type="checkbox"/> Falling objects N/A _____ <input type="checkbox"/> Other N/A _____ Safety Equipment: <input type="checkbox"/> Gas detection equipment N/A _____ <input type="checkbox"/> Safety harness N/A _____ <input type="checkbox"/> Safety line N/A _____ <input type="checkbox"/> Wristlets N/A _____ <input type="checkbox"/> Hoisting equipment N/A _____	<input type="checkbox"/> Manhole hook N/A _____ <input type="checkbox"/> Barricades, cones, tape N/A _____ <input type="checkbox"/> Portable blower and hose N/A _____ <input type="checkbox"/> Explosion-proof lighting N/A _____ <input type="checkbox"/> Non-sparking tools N/A _____ <input type="checkbox"/> Tool bucket and line N/A _____ <input type="checkbox"/> Ladder N/A _____ <input type="checkbox"/> First aid kit N/A _____ <input type="checkbox"/> Fire extinguisher N/A _____ <input type="checkbox"/> Radio communication equipment N/A _____ <input type="checkbox"/> Cell phone N/A _____ <input type="checkbox"/> SCBA N/A _____ <input type="checkbox"/> Hard hat N/A _____ <input type="checkbox"/> Goggles, face shield N/A _____ <input type="checkbox"/> Gloves N/A _____ <input type="checkbox"/> Rain suit N/A _____ <input type="checkbox"/> Rubber boots N/A _____ <input type="checkbox"/> Other _____ _____
--	---	---

Hot Work:
 Does the entry involve hot work? Yes No If Yes, complete and attach a hot work permit.

Special Instructions:

Monitoring Data: Record monitoring data at 15-minute intervals on the reverse side of this permit.
Acceptable Atmospheric Conditions: Oxygen not less than 19.5% or more than 23.5%, LEL/LFL/not more than 10%, H₂S not more than 10 ppm.

Work Authorization Signatures All confined space work must be authorized by the General Manager, Plant Manager or Collection Crew Manager Work authorized by: _____ Date/Time: _____	Entry Authorization I certify that the confined space work authorized by this permit has been reviewed with the entry team and that acceptable entry conditions exist and the necessary equipment for safe entry has been provided. Entry supervisor signature: _____	Permit Cancellation Date: _____ Time: _____ Entry supervisor signature: _____
---	---	--

LGVSD HOT WORK PERMIT

This form is to be filled out by employee before performing hot work.

Name: _____

Date: _____ Time: _____ Location of job: _____

Detailed description of job: _____

	YES	NO
1. If the job is planned to be done indoors, can it be done outdoors or in the welding shop? If yes, move to one of these locations.	<input type="checkbox"/>	<input type="checkbox"/>
2. have all combustible materials (solids, liquids, gases) been removed from the work area?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are there any gas lines or other lines carrying combustible/flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>
4. If yes, have all lines be disconnected, blanked or otherwise protected?	<input type="checkbox"/>	<input type="checkbox"/>
5. Has atmospheric test data been collected in the work area?	<input type="checkbox"/>	<input type="checkbox"/>
6. Is a fire watch needed for this job?	<input type="checkbox"/>	<input type="checkbox"/>
7. Is a fire extinguisher or water hose available and ready to use at the job site?	<input type="checkbox"/>	<input type="checkbox"/>
8. Can flame or sparks ignite materials in work area or on lower floors or levels?	<input type="checkbox"/>	<input type="checkbox"/>
9. Are non-flammable tarps used to cover combustibles in the work area?	<input type="checkbox"/>	<input type="checkbox"/>
10. Have affected employees reviewed or given specific safety instructions?	<input type="checkbox"/>	<input type="checkbox"/>
11. Have screens been set up in the work area?	<input type="checkbox"/>	<input type="checkbox"/>

Special precautions to be taken: _____

I have reviewed and approved this permit: Date: _____ Time: _____ _____ Signature of District Manager	Please make note of any actions taken based on the above responses.
--	---

Revision: February 2006
 P:\Safety\Hot Work Permit

LGVS D CONFINED SPACE ENTRY PROCEDURES SUMMARY

Pre-Entry

1. Obtain work authorization from the District Manager or District Superintendent.
1. Perform non-entry evaluation of the space to identify potential hazards.
2. Test atmosphere, check ventilation system and check for physical hazards in and around work area.
3. Ensure affected employees observe pre-entry testing.
4. Gather appropriate safety equipment and check that all of it is in good working condition.
5. Without entering the space, secure and lockout energy sources and disconnect or block lines.
6. Place barricade or railing around opening to space.
7. Make sure there are no ignition sources near the confined space.
8. Complete pre-entry checks.
9. Have the Entry Supervisor authorize the entry permit.
10. Test atmosphere of space again. If there is no air contamination or O₂ deficiency, entry may proceed provided permit conditions and appropriate safety procedures are in effect.
11. If there is contamination or O₂ deficiency, ventilate 10 minutes and test again. If contamination persists, do not enter. Notify the Entry Supervisor.
12. Prior to entry, ventilate manholes and other confined spaces known or suspected to be hazardous.
13. Maintain continuous ventilation. Existing ventilation must be augmented whenever there is a potential for hazardous atmosphere or initial tests indicate contamination.
14. Keep the entry permit and monitoring data at the work site until the job is complete. Entry permits are valid only for the duration indicated on the permit.

Entry

1. Do not work in or around confined spaces if you are not properly trained or experienced in safe entry and rescue procedures.
2. Wear respiratory equipment whenever a safe atmosphere cannot be ensured.
3. Attendant must be in constant communication and visual contact with entrant and must monitor activities inside and outside of space.
4. Attendant must order evacuation if he/she observes any activity not on the permit, unusual behavior, or an outside situation that endangers the entrant.
5. Perform only the work authorized on the permit.

Rescue

1. Attendant never performs entry rescue unless relieved by another attendant.
2. Perform rescue from outside the space whenever possible.
3. Use respiratory equipment if entry rescue is performed.
4. Call 911 for rescue assistance.

Post-Entry

1. Note on back of permit and notify the District Superintendent of any unsafe or unusual conditions encountered during the confined space work.
2. Have Entry Supervisor cancel and file the permit.
3. Submit the cancelled permit to the Safety chairperson for review and filing.
3. Notify the Plant Superintendent if any equipment, safety gear or tools need to be repaired or replaced.

APPENDIX C

INSURANCE FORMS

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APPENDIX B: Common Insurance Industry Forms

- ACORD Certificates of Insurance:
 - Standard form
 - Annotated form
- Primary and Non-Contributory Endorsement
- ISO standard endorsements
 - CG 20 10, CG 20 33, CG 20 37, CG 20 38, CG 20 26, CG 20 39 and CG 20 40
- ISO endorsement: State or Political Subdivisions
- ISO endorsement: Waiver of Subrogation
- Four ISO endorsements used to amend policy limits:
 - Amendment of Limits of Insurance (Designated Project or Premises)
 - Amendment of Limits of Insurance
 - Amendment – Aggregate Limits of Insurance (Per Project)
 - Amendment – Aggregate Limits of Insurance (Per Location)
- Four State Compensation Insurance Fund Forms:
 - Certificate of Workers’ Compensation Insurance
 - Additional Insured Employer
 - Waiver of Subrogation
 - Certificate Holders’ Notice (Cancellation Notice)
- ISO policy for General Liability on an “Occurrence” basis
- Form MCS-90 – Endorsement for Motor Carrier Policies of Insurance for Public Liability
- Performance Bond
- Payment Bond Public Works



Certificate of Liability Insurance (Standard Form)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER, CONTACT NAME, PHONE, FAX, E-MAIL, ADDRESS, INSURER(S) AFFORDING COVERAGE, NAIC #, INSURER A, INSURER B, INSURER C, INSURER D, INSURER E, INSURER F

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Table with columns: INSR LTR, TYPE OF INSURANCE, ADDL SUBR, INSD, WVD, POLICY NUMBER, POLICY EFF (MM/DD/YYYY), POLICY EXP (MM/DD/YYYY), LIMITS. Rows include Commercial General Liability, Automobile Liability, Umbrella Liab, Workers Compensation and Employers' Liability.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER, CANCELLATION, SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE

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ACORD 25 (2014/01)

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Certificate of Liability Insurance (Annotated Form)

2 This notice confirms the provisions of the California Insurance Code, §384. Other states have similar provisions. It states that the policy, not the certificate governs coverage.

CERTIFICATE OF LIABILITY INSURANCE				DATE (MM/DD/YYYY)
THIS IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS IS NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED AGENT OR PRODUCER, AND THE CERTIFICATE HOLDER.				
If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. IF SUBROGATION IS WAIVED, subject to the provisions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the issue of such endorsement(s).				
PRODUCER This block identifies the Agent or Broker. 1		CONTACT INFORMATION NAME: _____ PHONE (A/C, No, Ext): _____ FAX (A/C, No): _____ E-MAIL ADDRESS: _____ ADDRESS: _____		
INSURED The insured is your entity's contractor or lessee. 4		INSURER(S) AFFORDING COVERAGE INSURER A: 3 _____ INSURER B: _____ INSURER C: _____ INSURER D: _____ INSURER E: _____ INSURER F: _____ The insurer will be identified here. The insurer letter appears again near the left margin at "3" to show which insurer provides which coverage.		
COVERAGES CERTIFICATE NUMBER: _____				
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN HAVE BEEN REDUCED BY PAID CLAIMS.				
TRM LTR	TYPE OF INSURANCE <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER: _____ AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTIONS \$ _____	ADDL TRM INSD WVD	PC	LIMITS MED EXP (Any one person) \$ _____ PERSONAL & ADV INJURY \$ _____ GENERAL AGGREGATE \$ _____ PRODUCTS - COMPROP AGG \$ _____ COMBINED SINGLE LIMIT \$ _____ BODILY INJURY (Per person) \$ _____ BODILY INJURY (Per accident) \$ _____ PROPERTY DAMAGE (Per occurrence) \$ _____ CURRENT LIABILITY \$ _____ E&O \$ _____ ACCIDENT \$ _____ E&O - EA EMPLOYEE \$ _____ E.L. DISEASE - POLICY LIMIT \$ _____
WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N/A If yes, describe under DESCRIPTION OF OPERATIONS below		7 These two columns show inception and expiration dates for policies identified. Pay special attention that coverage does not expire before or during your project or lease.		
9 This section will usually be used to restrict coverage to a specific job or lease. Watch for restrictions that would omit the coverage required by your specifications.		8 This column identifies limits per occurrence and aggregate for each type of coverage afforded. Pay special attention to low aggregate limits for public works-type contractors. Losses on other jobs may reduce your coverage.		
10 Certificate holder is your entity.		11 Cancellation provisions		
12 The authorized representative of the insurer should be an employee, unless the agent or broker is specifically authorized to sign on behalf of the company.		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE _____		

Reproduction of Insurance Services Office, Inc. Form**COMMERCIAL GENERAL LIABILITY
CG 20 01 04 13****THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.****PRIMARY AND NONCONTRIBUTORY –
OTHER INSURANCE CONDITION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PARTThe following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:**Primary And Noncontributory Insurance**

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

- (1) The additional insured is a Named Insured under such other insurance; and

- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

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POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 10 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
 2. The acts or omissions of those acting on your behalf;
- in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

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- C.** With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable Limits of Insurance shown in the Declarations; whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

SAMPLE

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

**COMMERCIAL GENERAL LIABILITY
CG 20 10 07 04****THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.****ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.



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POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – (FORM B)**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART.

SCHEDULE

Name of Person or Organization:

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that insured by or for you.

Modifications to ISO form CG 20 10 11 85:

1. The Insured scheduled above includes the Insured's officers, officials, employees and volunteers.
2. This insurance shall be primary as respects the Insured shown in the schedule above, or if excess, shall stand in an unbroken chain of coverage excess of the Named Insured's scheduled underlying primary coverage. In either event, any other insurance maintained by the Insured scheduled above shall be in excess of this insurance and shall not be called upon to contribute with it.
3. The insurance afforded by this policy shall not be canceled except after thirty days prior written notice by certified mail return receipt requested has been given to the Entity.

CG 20 10 11 85

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Page 1 of 1

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CG 20 33 04 13**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.****ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – AUTOMATIC STATUS WHEN
REQUIRED IN CONSTRUCTION AGREEMENT WITH YOU**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. Section II – Who Is An Insured is amended to include as an additional insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured:

1. Only applies to the extent permitted by law; and
2. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

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2. "Bodily injury" or "property damage" occurring after:

- a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

The most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement you have entered into with the additional insured; or
 2. Available under the applicable Limits of Insurance shown in the Declarations;
- whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

SAMPLE

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POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 37 07 04**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.****ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

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POLICY NUMBER:

**COMMERCIAL GENERAL LIABILITY
CG 20 37 04 13**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

Reproduction of Insurance Services Office, Inc. Form**COMMERCIAL GENERAL LIABILITY
CG 20 38 04 13****THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.****ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – AUTOMATIC STATUS FOR OTHER
PARTIES WHEN REQUIRED IN WRITTEN
CONSTRUCTION AGREEMENT**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART**A. Section II – Who Is An Insured** is amended to include as an additional insured:

1. Any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy; and
2. Any other person or organization you are required to add as an additional insured under the contract or agreement described in Paragraph 1. above.

Such person(s) or organization(s) is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

- a. Your acts or omissions; or
- b. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured described above:

- a. Only applies to the extent permitted by law; and
- b. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for the person or organization described in Paragraph 1. above are completed.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:
 - a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of, or the failure to render, any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:
 - a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

Reproduction of Insurance Services Office, Inc. Form

- b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.
- c. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**
The most we will pay on behalf of the additional insured is the amount of insurance:
1. Required by the contract or agreement described in Paragraph **A.1.**; or
 2. Available under the applicable Limits of Insurance shown in the Declarations;
whichever is less.
This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

SAMPLE

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 13 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – STATE
OR GOVERNMENTAL AGENCY OR SUBDIVISION
OR POLITICAL SUBDIVISION – PERMITS
OR AUTHORIZATIONS RELATING TO PREMISES**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

State Or Governmental Agency Or Subdivision Or Political Subdivision:

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

A. Section II – Who Is An Insured is amended to include as an additional insured any state or governmental agency or subdivision or political subdivision shown in the Schedule, subject to the following additional provision:

This insurance applies only with respect to the following hazards for which the state or governmental agency or subdivision or political subdivision has issued a permit or authorization in connection with premises you own, rent or control and to which this insurance applies:

1. The existence, maintenance, repair, construction, erection or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoist away openings, sidewalk vaults, street banners or decorations and similar exposures; or
2. The construction, erection or removal of elevators; or
3. The ownership, maintenance or use of any elevators covered by this insurance.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 26 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – DESIGNATED
PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):

[Empty box for Name Of Additional Insured Person(s) Or Organization(s)]

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

- 1. In the performance of your ongoing operations; or
- 2. In connection with your premises owned by or rented to you.

However:

- 1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
- 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

- 1. Required by the contract or agreement; or
 - 2. Available under the applicable limits of insurance;
- whichever is less.

This endorsement shall not increase the applicable limits of insurance.

Reproduction of Insurance Services Office, Inc. Form

COMMERCIAL GENERAL LIABILITY
CG 20 39 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – AUTOMATIC STATUS WHEN
REQUIRED IN WRITTEN CONSTRUCTION AGREEMENT
WITH YOU (COMPLETED OPERATIONS)**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

A. Section II – Who Is An Insured is amended to include as an additional insured any person or organization for whom you have performed operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" performed for that additional insured and included in the "products-completed operations hazard".

However, the insurance afforded to such additional insured:

1. Only applies to the extent permitted by law; and
2. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to:

"Bodily injury" or "property damage" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

1. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

2. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

C. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

The most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement you have entered into with the additional insured; or
 2. Available under the applicable limits of insurance;
- whichever is less.

This endorsement shall not increase the applicable limits of insurance.

Reproduction of Insurance Services Office, Inc. Form

COMMERCIAL GENERAL LIABILITY
CG 20 40 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – AUTOMATIC STATUS FOR OTHER
PARTIES WHEN REQUIRED IN WRITTEN
CONSTRUCTION AGREEMENT (COMPLETED
OPERATIONS)**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART**A. Section II – Who Is An Insured** is amended to include as an additional insured:

1. Any person or organization for whom you have performed operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy; and
2. Any other person or organization you are required to add as an additional insured under the contract or agreement described in Paragraph 1. above.

Such person(s) or organization(s) is an additional insured only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" performed for the additional insured described in Paragraph 1. or 2. above and included in the "products-completed operations hazard".

However, the insurance afforded to such additional insured described above:

- a. Only applies to the extent permitted by law; and
- b. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to:

"Bodily injury" or "property damage" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

1. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
2. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the rendering of, or the failure to render, any professional architectural, engineering or surveying services.

Reproduction of Insurance Services Office, Inc. Form

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

The most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement described in Paragraph A.1.; or

2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

SAMPLE

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

**COMMERCIAL GENERAL LIABILITY
CG 24 04 05 09****WAIVER OF TRANSFER OF RIGHTS OF RECOVERY
AGAINST OTHERS TO US**

This endorsement modifies insurance provided under the following:

**COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART****SCHEDULE****Name Of Person Or Organization:**

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

**The following is added to Paragraph 8. Transfer Of
Rights Of Recovery Against Others To Us of
Section IV – Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

Reproduction of Insurance Services Office, Inc. Form**COMMERCIAL GENERAL LIABILITY
CG 24 53 12 19****THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.****WAIVER OF TRANSFER OF RIGHTS OF RECOVERY
AGAINST OTHERS TO US (WAIVER OF SUBROGATION) –
AUTOMATIC**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART DESIGNATED SITES
POLLUTION LIABILITY LIMITED COVERAGE PART DESIGNATED SITES
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY DESIGNATED TANKS

The following is added to Paragraph 8. **Transfer Of Rights Of Recovery Against Others To Us** of Section IV – **Conditions**:

We waive any right of recovery against any person or organization, because of any payment we make under this Coverage Part, to whom the insured has waived its right of recovery in a written contract or agreement. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person or organization prior to loss.

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
 CG 25 01 07 98

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.
**AMENDMENT OF LIMITS OF INSURANCE
 (DESIGNATED PROJECT OR PREMISES)**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

	Limits Of Insurance
General Aggregate Limit	\$ _____
Products-Completed Operations Aggregate Limit	\$ _____
Personal & Advertising Injury Limit	\$ _____
Each Occurrence Limit	\$ _____
Damage To Premises Rented To You Limit	\$ _____ Any One Premises
Medical Expense Limit	\$ _____ Any One Person
Designation Of Project Or Premises:	
(This area is currently blank in the sample form.)	

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The limits of insurance shown in the Declarations are replaced by the limits designated in the Schedule with respect to the project or premises entered above. These limits are inclusive of and are not in addition to the limits being replaced.

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
 CG 25 02 07 98

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.
AMENDMENT OF LIMITS OF INSURANCE

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
SCHEDULE

	Limits Of Insurance
General Aggregate Limit	\$ _____
Products-Completed Operations Aggregate Limit	\$ _____
Personal & Advertising Injury Limit	\$ _____
Each Occurrence Limit	\$ _____
Damage To Premises Rented To You Limit	\$ _____ Any One Premises
Medical Expense Limit	\$ _____ Any One Person

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The limits of insurance shown in the Declarations are replaced by the limits designated in the Schedule or in the Declarations as subject to this endorsement with respect to which an entry is made.

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 25 03 05 09

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**DESIGNATED CONSTRUCTION PROJECT(S)
GENERAL AGGREGATE LIMIT**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Construction Project(s):

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage A, and for all medical expenses caused by accidents under Section I – Coverage C, which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under Coverage A, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", and for medical expenses under Coverage C regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
 3. Any payments made under Coverage A for damages or under Coverage C for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.
 4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.

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- B.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage A, and for all medical expenses caused by accidents under Section I – Coverage C, which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. Any payments made under Coverage A for damages or under Coverage C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-completed Operations Aggregate Limit, whichever is applicable; and
 2. Such payments shall not reduce any Designated Construction Project General Aggregate Limit.
- C.** When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.
- D.** If the applicable designated construction project has been abandoned, delayed or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.
- E.** The provisions of Section III – Limits Of Insurance not otherwise modified by this endorsement shall continue to apply as stipulated.

Reproduction of Insurance Services Office, Inc. Form

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 25 04 05 09

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**DESIGNATED LOCATION(S)
GENERAL AGGREGATE LIMIT**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Location(s):

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage A, and for all medical expenses caused by accidents under Section I – Coverage C, which can be attributed only to operations at a single designated "location" shown in the Schedule above:
1. A separate Designated Location General Aggregate Limit applies to each designated "location", and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Designated Location General Aggregate Limit is the most we will pay for the sum of all damages under Coverage A, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", and for medical expenses under Coverage C regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
 3. Any payments made under Coverage A for damages or under Coverage C for medical expenses shall reduce the Designated Location General Aggregate Limit for that designated "location". Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Location General Aggregate Limit for any other designated "location" shown in the Schedule above.
 4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Location General Aggregate Limit.

Reproduction of Insurance Services Office, Inc. Form

- B.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage A, and for all medical expenses caused by accidents under Section I – Coverage C, which cannot be attributed only to operations at a single designated "location" shown in the Schedule above:
1. Any payments made under Coverage A for damages or under Coverage C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-completed Operations Aggregate Limit, whichever is applicable; and
 2. Such payments shall not reduce any Designated Location General Aggregate Limit.
- C.** When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Location General Aggregate Limit.
- D.** For the purposes of this endorsement, the Definitions Section is amended by the addition of the following definition:
- "Location" means premises involving the same or connecting lots, or premises whose connection is interrupted only by a street, roadway, waterway or right-of-way of a railroad.
- E.** The provisions of Section III – Limits Of Insurance not otherwise modified by this endorsement shall continue to apply as stipulated.

Reproduction of State Compensation Insurance Fund Form

STATE COMPENSATION INSURANCE FUND	P.O. BOX 807, SAN FRANCISCO, CALIFORNIA 94101 CERTIFICATE OF WORKERS' COMPENSATION INSURANCE	
	POLICY NUMBER: CERTIFICATE EXPIRES:	

This is to certify that we have issued a valid Workers' Compensation insurance policy in a form approved by the California Insurance Commissioner to the employer named below for the policy period indicated.

This policy is not subject to cancellation by the Fund except upon 30 day's written notice to the employer.

We will give you 30 day's advance notice should this policy be canceled prior to its normal expiration.

This certificate of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

PRESIDENT

(Note: following text is typewritten addition to printed form)

THE STATE COMPENSATION INSURANCE FUND WAIVES ANY RIGHT OF SUBROGATION ENDORSEMENT #2570. AGAINST (ENTITY) _____, ITS OFFICIALS, EMPLOYEES AND VOLUNTEERS BY REASON OF ANY PAYMENT UNDER THIS POLICY.

ENDORSEMENT #0015 ENTITLED ADDITIONAL INSURED EMPLOYER EFFECTIVE 07-20-87 IS ATTACHED TO AND FORMS A PART OF THIS POLICY. ADDITIONAL INSURED EMPLOYER: _____.

ENDORSEMENT #2065 ENTITLED 30 DAY CANCELLATION NOTICE EFFECTIVE 07-20-87 IS ATTACHED TO AND FORMS A PART OF THIS POLICY.

LIABILITY OF THE STATE COMPENSATION INSURANCE FUND IS LIMITED TO \$3,000,000 FOR ALL DAMAGES FOR ONE OR MORE CLAIMS RESULTING FROM EACH ACCIDENT OF OCCURRENCE ARISING OUT OF ANY ONE EVENT.

EMPLOYER

Reproduction of State Compensation Insurance Fund Form

STATE COMPENSATION INSURANCE FUND	ADDITIONAL INSURED EMPLOYER ENDORSEMENT AGREEMENT
Home Office San Francisco	All Effective Dates are at 12:01 AM Pacific Standard Time or the Time Indicated at Pacific Standard Time

ANYTHING IN THIS POLICY TO THE CONTRACT NOTWITHSTANDING, IT IS AGREED THAT

EMPLOYER:	NAMED OF ADDITIONAL INSURED (ONE NAME PER ENDORSEMENT)
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IS HEREBY NAMED AS AN ADDITIONAL INSURED EMPLOYER ON THIS POLICY BUT ONLY AS RESPECTS EMPLOYEES WHOSE NAMES APPEAR ON THE PAYROLL RECORDS OF

(POLICY NAME)

(HEREIN CALLED THE PRIMARY INSURED) WHILE THOSE EMPLOYEES ARE ENGAGED IN WORK UNDER THE SIMULTANEOUS DIRECTION AND CONTROL OF THE PRIMARY INSURED AND THE ADDITIONAL INSURED EMPLOYER.

IT IS FURTHER AGREED THAT THE PAYMENT OF THE FULL PREMIUM DUE AND PAYABLE UNDER THIS POLICY SHALL REMAIN THE SOLE RESPONSIBILITY OF THE PRIMARY INSURED.

NOTHING IN THIS ENDORSEMENT CONTAINED SHALL BE HELED TO VARY, ALTER, WAIVE OR EXTEND ANY OF THE TERMS, CONDITIONS, AGREEMENTS OR LIMITATIONS OF THIS POLICY OTHER THAN AS STATED. NOTHING ELSEWHERE IN THIS POLICY SHALL BE HELD TO VARY, ALTER, WAIVE OR LIMIT THE TERMS, CONDITIONS, AGREEMENTS OR LIMITATIONS OF THIS ENDORSEMENT.

COUNTERSIGNED AND ISSUED AT SAN FRANCISCO

0015

Reproduction of State Compensation Insurance Fund Form

STATE COMPENSATION INSURANCE FUND	ADDITIONAL INSURED EMPLOYER ENDORSEMENT AGREEMENT
Home Office San Francisco	All Effective Dates are at 12:01 AM Pacific Standard Time or the Time Indicated at Pacific Standard Time

ANYTHING IN THIS POLICY TO THE CONTRARY NOTWITHSTANDING, IT IS AGREED THAT THE STATE COMPENSATION INSURANCE FUND WAIVES ANY RIGHT OF SUBROGATION AGAINST:

(SPECIFY 3RD PARTY REQUESTING WAIVER: ONE NAME PER ENDORSEMENT)

WHICH MIGHT ARISE BY REASON OF ANY PAYMENT UNDER THIS POLICY IN CONNECTION WITH WORK PERFORMED BY:

(POLICY NAME)

IT IS FURTHER AGREED THAT THE INSURED SHALL MAINTAIN PAYROLL RECORDS ACCURATELY SEGREGATING THE REMUNERATION OF EMPLOYEES WHILE ENGAGED IN WORK FOR THE ABOVE EMPLOYER.

IT IS FURTHER AGREED THAT PREMIUM ON THE EARNINGS OF SUCH EMPLOYEES SHALL BE INCREASED BY _____%.

NOTHING IN THIS ENDORSEMENT CONTAINED SHALL BE HALED TO VARY, ALTER, WAIVE OR EXTEND ANY OF THE TERMS, CONDITIONS, AGREEMENTS OR LIMITATIONS OF THIS POLICY OTHER THAN AS STATED. NOTHING ELSEWHERE IN THIS POLICY SHALL BEHELD TO VARY, ALTER, WAIVE OR LIMIT THE TERMS, CONDITIONS, AGREEMENTS OR LIMITATIONS OF THIS ENDORSEMENT.

COUNTERSIGNED AND ISSUED AT SAN FRANCISCO

2570

Reproduction of State Compensation Insurance Fund Form

STATE COMPENSATION INSURANCE FUND	ADDITIONAL INSURED EMPLOYER ENDORSEMENT AGREEMENT
Home Office San Francisco	All Effective Dates are at 12:01 AM Pacific Standard Time or the Time Indicated at Pacific Standard Time

ANYTHING IN THIS POLICY TO THE CONTRARY NOTWITHSTANDING, IT IS AGREED THAT THIS POLICY SHALL NOT BE CANCELED UNTIL:

(SPECIFY NUMBER) _____ DAYS

AFTER WRITTEN NOTICE OF SUCH CANCELLATION HAS BEEN PLACED IN THE MAIL BY STATE FUND TO CURRENT HOLDERS OF CERTIFICATE OF WORKERS' COMPENSATION INSURANCE.

NOTHING IN THIS ENDORSEMENT CONTAINED SHALL BE HELED TO VARY, ALTER, WAIVE OR EXTEND ANY OF THE TERMS, CONDITIONS, AGREEMENTS OR LIMITATIONS OF THIS POLICY OTHER THAN AS STATED. NOTHING ELSEWHERE IN THIS POLICY SHALL BEHELD TO VARY, ALTER, WAIVE OR LIMIT THE TERMS, CONDITIONS, AGREEMENTS OR LIMITATIONS OF THIS ENDORSEMENT.

COUNTERSIGNED AND ISSUED AT SAN FRANCISCO

0015

Reproduction of Insurance Services Office, Inc. Form

COMMERCIAL GENERAL LIABILITY
CG 00 01 04 13

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations, and any other person or organization qualifying as a Named Insured under this policy. The words "we", "us" and "our" refer to the company providing this insurance.

The word "insured" means any person or organization qualifying as such under Section II – Who Is An Insured.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section V – Definitions.

SECTION I – COVERAGES**COVERAGE A – BODILY INJURY AND PROPERTY DAMAGE LIABILITY****1. Insuring Agreement**

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury" or "property damage" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury" or "property damage" to which this insurance does not apply. We may, at our discretion, investigate any "occurrence" and settle any claim or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Section III – Limits Of Insurance; and
- (2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements under Coverages A or B or medical expenses under Coverage C.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments – Coverages A and B.

b. This insurance applies to "bodily injury" and "property damage" only if:

- (1) The "bodily injury" or "property damage" is caused by an "occurrence" that takes place in the "coverage territory";

(2) The "bodily injury" or "property damage" occurs during the policy period; and

(3) Prior to the policy period, no insured listed under Paragraph 1. of Section II – Who Is An Insured and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew that the "bodily injury" or "property damage" had occurred, in whole or in part. If such a listed insured or authorized "employee" knew, prior to the policy period, that the "bodily injury" or "property damage" occurred, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known prior to the policy period.

c. "Bodily injury" or "property damage" which occurs during the policy period and was not, prior to the policy period, known to have occurred by any insured listed under Paragraph 1. of Section II – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim, includes any continuation, change or resumption of that "bodily injury" or "property damage" after the end of the policy period.

d. "Bodily injury" or "property damage" will be deemed to have been known to have occurred at the earliest time when any insured listed under Paragraph 1. of Section II – Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim:

- (1) Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;
- (2) Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or
- (3) Becomes aware by any other means that "bodily injury" or "property damage" has occurred or has begun to occur.

e. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

Reproduction of Insurance Services Office, Inc. Form**2. Exclusions**

This insurance does not apply to:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" resulting from the use of reasonable force to protect persons or property.

b. Contractual Liability

"Bodily injury" or "property damage" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages:

- (1) That the insured would have in the absence of the contract or agreement; or
- (2) Assumed in a contract or agreement that is an "insured contract", provided the "bodily injury" or "property damage" occurs subsequent to the execution of the contract or agreement. Solely for the purposes of liability assumed in an "insured contract", reasonable attorneys' fees and necessary litigation expenses incurred by or for a party other than an insured are deemed to be damages because of "bodily injury" or "property damage", provided:

- (a) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract"; and
- (b) Such attorneys' fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.

c. Liquor Liability

"Bodily injury" or "property damage" for which any insured may be held liable by reason of:

- (1) Causing or contributing to the intoxication of any person;
- (2) The furnishing of alcoholic beverages to a person under the legal drinking age or under the influence of alcohol; or
- (3) Any statute, ordinance or regulation relating to the sale, gift, distribution or use of alcoholic beverages.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in:

- (a) The supervision, hiring, employment, training or monitoring of others by that insured; or
- (b) Providing or failing to provide transportation with respect to any person that may be under the influence of alcohol;

if the "occurrence" which caused the "bodily injury" or "property damage", involved that which is described in Paragraph (1), (2) or (3) above.

However, this exclusion applies only if you are in the business of manufacturing, distributing, selling, serving or furnishing alcoholic beverages. For the purposes of this exclusion, permitting a person to bring alcoholic beverages on your premises, for consumption on your premises, whether or not a fee is charged or a license is required for such activity, is not by itself considered the business of selling, serving or furnishing alcoholic beverages.

d. Workers' Compensation And Similar Laws

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

e. Employer's Liability

"Bodily injury" to:

- (1) An "employee" of the insured arising out of and in the course of:
 - (a) Employment by the insured; or
 - (b) Performing duties related to the conduct of the insured's business; or
- (2) The spouse, child, parent, brother or sister of that "employee" as a consequence of Paragraph (1) above.

This exclusion applies whether the insured may be liable as an employer or in any other capacity and to any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by the insured under an "insured contract".

Reproduction of Insurance Services Office, Inc. Form**f. Pollution**

- (1) "Bodily injury" or "property damage" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":
- (a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to, any insured. However, this subparagraph does not apply to:
 - (i) "Bodily injury" if sustained within a building and caused by smoke, fumes, vapor or soot produced by or originating from equipment that is used to heat, cool or dehumidify the building, or equipment that is used to heat water for personal use, by the building's occupants or their guests;
 - (ii) "Bodily injury" or "property damage" for which you may be held liable, if you are a contractor and the owner or lessee of such premises, site or location has been added to your policy as an additional insured with respect to your ongoing operations performed for that additional insured at that premises, site or location and such premises, site or location is not and never was owned or occupied by, or rented or loaned to, any insured, other than that additional insured; or
 - (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire";
 - (b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;
 - (c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for:
 - (i) Any insured; or
 - (ii) Any person or organization for whom you may be legally responsible; or
 - (d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the premises, site or location in connection with such operations by such insured, contractor or subcontractor. However, this subparagraph does not apply to:
 - (i) "Bodily injury" or "property damage" arising out of the escape of fuels, lubricants or other operating fluids which are needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, if such fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them. This exception does not apply if the "bodily injury" or "property damage" arises out of the intentional discharge, dispersal or release of the fuels, lubricants or other operating fluids, or if such fuels, lubricants or other operating fluids are brought on or to the premises, site or location with the intent that they be discharged, dispersed or released as part of the operations being performed by such insured, contractor or subcontractor;
 - (ii) "Bodily injury" or "property damage" sustained within a building and caused by the release of gases, fumes or vapors from materials brought into that building in connection with operations being performed by you or on your behalf by a contractor or subcontractor; or
 - (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire".
 - (e) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants".

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- (2) Any loss, cost or expense arising out of any:
- (a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or
 - (b) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

However, this paragraph does not apply to liability for damages because of "property damage" that the insured would have in the absence of such request, demand, order or statutory or regulatory requirement, or such claim or "suit" by or on behalf of a governmental authority.

g. Aircraft, Auto Or Watercraft

"Bodily injury" or "property damage" arising out of the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft owned or operated by or rented or loaned to any insured. Use includes operation and "loading or unloading".

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft that is owned or operated by or rented or loaned to any insured.

This exclusion does not apply to:

- (1) A watercraft while ashore on premises you own or rent;
- (2) A watercraft you do not own that is:
 - (a) Less than 26 feet long; and
 - (b) Not being used to carry persons or property for a charge;
- (3) Parking an "auto" on, or on the ways next to, premises you own or rent, provided the "auto" is not owned by or rented or loaned to you or the insured;
- (4) Liability assumed under any "insured contract" for the ownership, maintenance or use of aircraft or watercraft; or

- (5) "Bodily injury" or "property damage" arising out of:

- (a) The operation of machinery or equipment that is attached to, or part of, a land vehicle that would qualify under the definition of "mobile equipment" if it were not subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged; or
- (b) The operation of any of the machinery or equipment listed in Paragraph **f.(2)** or **f.(3)** of the definition of "mobile equipment".

h. Mobile Equipment

"Bodily injury" or "property damage" arising out of:

- (1) The transportation of "mobile equipment" by an "auto" owned or operated by or rented or loaned to any insured; or
- (2) The use of "mobile equipment" in, or while in practice for, or while being prepared for, any prearranged racing, speed, demolition, or stunting activity.

i. War

"Bodily injury" or "property damage", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war;
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

j. Damage To Property

"Property damage" to:

- (1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;
- (2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;
- (3) Property loaned to you;

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- (4) Personal property in the care, custody or control of the insured;
- (5) That particular part of real property on which you or any contractors or subcontractors working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations; or
- (6) That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" (other than damage by fire) to premises, including the contents of such premises, rented to you for a period of seven or fewer consecutive days. A separate limit of insurance applies to Damage To Premises Rented To You as described in Section III – Limits Of Insurance.

Paragraph (2) of this exclusion does not apply if the premises are "your work" and were never occupied, rented or held for rental by you.

Paragraphs (3), (4), (5) and (6) of this exclusion do not apply to liability assumed under a sidetrack agreement.

Paragraph (6) of this exclusion does not apply to "property damage" included in the "products-completed operations hazard".

k. Damage To Your Product

"Property damage" to "your product" arising out of it or any part of it.

l. Damage To Your Work

"Property damage" to "your work" arising out of it or any part of it and included in the "products-completed operations hazard".

This exclusion does not apply if the damaged work or the work out of which the damage arises was performed on your behalf by a subcontractor.

m. Damage To Impaired Property Or Property Not Physically Injured

"Property damage" to "impaired property" or property that has not been physically injured, arising out of:

- (1) A defect, deficiency, inadequacy or dangerous condition in "your product" or "your work"; or
- (2) A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "your product" or "your work" after it has been put to its intended use.

n. Recall Of Products, Work Or Impaired Property

Damages claimed for any loss, cost or expense incurred by you or others for the loss of use, withdrawal, recall, inspection, repair, replacement, adjustment, removal or disposal of:

- (1) "Your product";
- (2) "Your work"; or
- (3) "Impaired property";

if such product, work, or property is withdrawn or recalled from the market or from use by any person or organization because of a known or suspected defect, deficiency, inadequacy or dangerous condition in it.

o. Personal And Advertising Injury

"Bodily injury" arising out of "personal and advertising injury".

p. Electronic Data

Damages arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data.

However, this exclusion does not apply to liability for damages because of "bodily injury".

As used in this exclusion, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

q. Recording And Distribution Of Material Or Information In Violation Of Law

"Bodily injury" or "property damage" arising directly or indirectly out of any action or omission that violates or is alleged to violate:

- (1) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law;
- (2) The CAN-SPAM Act of 2003, including any amendment of or addition to such law;
- (3) The Fair Credit Reporting Act (FCRA), and any amendment of or addition to such law, including the Fair and Accurate Credit Transactions Act (FACTA); or

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- (4) Any federal, state or local statute, ordinance or regulation, other than the TCPA, CAN-SPAM Act of 2003 or FCRA and their amendments and additions, that addresses, prohibits, or limits the printing, dissemination, disposal, collecting, recording, sending, transmitting, communicating or distribution of material or information.

Exclusions c. through n. do not apply to damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to this coverage as described in Section III – Limits Of Insurance.

COVERAGE B – PERSONAL AND ADVERTISING INJURY LIABILITY**1. Insuring Agreement**

- a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "personal and advertising injury" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "personal and advertising injury" to which this insurance does not apply. We may, at our discretion, investigate any offense and settle any claim or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Section III – Limits Of Insurance; and
- (2) Our right and duty to defend end when we have used up the applicable limit of insurance in the payment of judgments or settlements under Coverages A or B or medical expenses under Coverage C.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments – Coverages A and B.

- b. This insurance applies to "personal and advertising injury" caused by an offense arising out of your business but only if the offense was committed in the "coverage territory" during the policy period.

2. Exclusions

This insurance does not apply to:

a. Knowing Violation Of Rights Of Another

"Personal and advertising injury" caused by or at the direction of the insured with the knowledge that the act would violate the rights of another and would inflict "personal and advertising injury".

b. Material Published With Knowledge Of Falsity

"Personal and advertising injury" arising out of oral or written publication, in any manner, of material, if done by or at the direction of the insured with knowledge of its falsity.

c. Material Published Prior To Policy Period

"Personal and advertising injury" arising out of oral or written publication, in any manner, of material whose first publication took place before the beginning of the policy period.

d. Criminal Acts

"Personal and advertising injury" arising out of a criminal act committed by or at the direction of the insured.

e. Contractual Liability

"Personal and advertising injury" for which the insured has assumed liability in a contract or agreement. This exclusion does not apply to liability for damages that the insured would have in the absence of the contract or agreement.

f. Breach Of Contract

"Personal and advertising injury" arising out of a breach of contract, except an implied contract to use another's advertising idea in your "advertisement".

g. Quality Or Performance Of Goods – Failure To Conform To Statements

"Personal and advertising injury" arising out of the failure of goods, products or services to conform with any statement of quality or performance made in your "advertisement".

h. Wrong Description Of Prices

"Personal and advertising injury" arising out of the wrong description of the price of goods, products or services stated in your "advertisement".

Reproduction of Insurance Services Office, Inc. Form**i. Infringement Of Copyright, Patent, Trademark Or Trade Secret**

"Personal and advertising injury" arising out of the infringement of copyright, patent, trademark, trade secret or other intellectual property rights. Under this exclusion, such other intellectual property rights do not include the use of another's advertising idea in your "advertisement".

However, this exclusion does not apply to infringement, in your "advertisement", of copyright, trade dress or slogan.

j. Insureds In Media And Internet Type Businesses

"Personal and advertising injury" committed by an insured whose business is:

- (1) Advertising, broadcasting, publishing or telecasting;
- (2) Designing or determining content of web sites for others; or
- (3) An Internet search, access, content or service provider.

However, this exclusion does not apply to Paragraphs **14.a.**, **b.** and **c.** of "personal and advertising injury" under the Definitions section.

For the purposes of this exclusion, the placing of frames, borders or links, or advertising, for you or others anywhere on the Internet, is not by itself, considered the business of advertising, broadcasting, publishing or telecasting.

k. Electronic Chatrooms Or Bulletin Boards

"Personal and advertising injury" arising out of an electronic chatroom or bulletin board the insured hosts, owns, or over which the insured exercises control.

l. Unauthorized Use Of Another's Name Or Product

"Personal and advertising injury" arising out of the unauthorized use of another's name or product in your e-mail address, domain name or metatag, or any other similar tactics to mislead another's potential customers.

m. Pollution

"Personal and advertising injury" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants" at any time.

n. Pollution-related

Any loss, cost or expense arising out of any:

- (1) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or
- (2) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

o. War

"Personal and advertising injury", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war;
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

p. Recording And Distribution Of Material Or Information In Violation Of Law

"Personal and advertising injury" arising directly or indirectly out of any action or omission that violates or is alleged to violate:

- (1) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law;
- (2) The CAN-SPAM Act of 2003, including any amendment of or addition to such law;
- (3) The Fair Credit Reporting Act (FCRA), and any amendment of or addition to such law, including the Fair and Accurate Credit Transactions Act (FACTA); or
- (4) Any federal, state or local statute, ordinance or regulation, other than the TCPA, CAN-SPAM Act of 2003 or FCRA and their amendments and additions, that addresses, prohibits, or limits the printing, dissemination, disposal, collecting, recording, sending, transmitting, communicating or distribution of material or information.

Reproduction of Insurance Services Office, Inc. Form**COVERAGE C – MEDICAL PAYMENTS****1. Insuring Agreement**

a. We will pay medical expenses as described below for "bodily injury" caused by an accident:

- (1) On premises you own or rent;
 - (2) On ways next to premises you own or rent; or
 - (3) Because of your operations;
- provided that:

- (a) The accident takes place in the "coverage territory" and during the policy period;
- (b) The expenses are incurred and reported to us within one year of the date of the accident; and
- (c) The injured person submits to examination, at our expense, by physicians of our choice as often as we reasonably require.

b. We will make these payments regardless of fault. These payments will not exceed the applicable limit of insurance. We will pay reasonable expenses for:

- (1) First aid administered at the time of an accident;
- (2) Necessary medical, surgical, X-ray and dental services, including prosthetic devices; and
- (3) Necessary ambulance, hospital, professional nursing and funeral services.

2. Exclusions

We will not pay expenses for "bodily injury".

a. Any Insured

To any insured, except "volunteer workers".

b. Hired Person

To a person hired to do work for or on behalf of any insured or a tenant of any insured.

c. Injury On Normally Occupied Premises

To a person injured on that part of premises you own or rent that the person normally occupies.

d. Workers' Compensation And Similar Laws

To a person, whether or not an "employee" of any insured, if benefits for the "bodily injury" are payable or must be provided under a workers' compensation or disability benefits law or a similar law.

e. Athletics Activities

To a person injured while practicing, instructing or participating in any physical exercises or games, sports, or athletic contests.

f. Products-Completed Operations Hazard

Included within the "products-completed operations hazard".

g. Coverage A Exclusions

Excluded under Coverage A.

SUPPLEMENTARY PAYMENTS – COVERAGES A AND B

1. We will pay, with respect to any claim we investigate or settle, or any "suit" against an insured we defend:

- a. All expenses we incur.
- b. Up to \$250 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.
- c. The cost of bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.
- d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$250 a day because of time off from work.
- e. All court costs taxed against the insured in the "suit". However, these payments do not include attorneys' fees or attorneys' expenses taxed against the insured.
- f. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.

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- g.** All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

These payments will not reduce the limits of insurance.

- 2.** If we defend an insured against a "suit" and an indemnitee of the insured is also named as a party to the "suit", we will defend that indemnitee if all of the following conditions are met:

- a.** The "suit" against the indemnitee seeks damages for which the insured has assumed the liability of the indemnitee in a contract or agreement that is an "insured contract";
- b.** This insurance applies to such liability assumed by the insured;
- c.** The obligation to defend, or the cost of the defense of, that indemnitee, has also been assumed by the insured in the same "insured contract";
- d.** The allegations in the "suit" and the information we know about the "occurrence" are such that no conflict appears to exist between the interests of the insured and the interests of the indemnitee;
- e.** The indemnitee and the insured ask us to conduct and control the defense of that indemnitee against such "suit" and agree that we can assign the same counsel to defend the insured and the indemnitee; and
- f.** The indemnitee:
- (1)** Agrees in writing to:
- (a)** Cooperate with us in the investigation, settlement or defense of the "suit";
- (b)** Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "suit";
- (c)** Notify any other insurer whose coverage is available to the indemnitee; and
- (d)** Cooperate with us with respect to coordinating other applicable insurance available to the indemnitee; and
- (2)** Provides us with written authorization to:
- (a)** Obtain records and other information related to the "suit"; and
- (b)** Conduct and control the defense of the indemnitee in such "suit".

So long as the above conditions are met, attorneys' fees incurred by us in the defense of that indemnitee, necessary litigation expenses incurred by us and necessary litigation expenses incurred by the indemnitee at our request will be paid as Supplementary Payments. Notwithstanding the provisions of Paragraph **2.b.(2)** of Section **I – Coverage A – Bodily Injury And Property Damage Liability**, such payments will not be deemed to be damages for "bodily injury" and "property damage" and will not reduce the limits of insurance.

Our obligation to defend an insured's indemnitee and to pay for attorneys' fees and necessary litigation expenses as Supplementary Payments ends when we have used up the applicable limit of insurance in the payment of judgments or settlements or the conditions set forth above, or the terms of the agreement described in Paragraph **f.** above, are no longer met.

SECTION II – WHO IS AN INSURED

- 1.** If you are designated in the Declarations as:
- a.** An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.
- b.** A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.
- c.** A limited liability company, you are an insured. Your members are also insureds, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.
- d.** An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.
- e.** A trust, you are an insured. Your trustees are also insureds, but only with respect to their duties as trustees.

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2. Each of the following is also an insured:
- a. Your "volunteer workers" only while performing duties related to the conduct of your business, or your "employees", other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business. However, none of these "employees" or "volunteer workers" are insureds for:
 - (1) "Bodily injury" or "personal and advertising injury":
 - (a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your business, or to your other "volunteer workers" while performing duties related to the conduct of your business;
 - (b) To the spouse, child, parent, brother or sister of that co-"employee" or "volunteer worker" as a consequence of Paragraph (1)(a) above;
 - (c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraph (1)(a) or (b) above; or
 - (d) Arising out of his or her providing or failing to provide professional health care services.
 - (2) "Property damage" to property:
 - (a) Owned, occupied or used by;
 - (b) Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by; you, any of your "employees", "volunteer workers", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).
 - b. Any person (other than your "employee" or "volunteer worker"), or any organization while acting as your real estate manager.
 - c. Any person or organization having proper temporary custody of your property if you die, but only:
 - (1) With respect to liability arising out of the maintenance or use of that property; and
 - (2) Until your legal representative has been appointed.
 - d. Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this Coverage Part.
3. Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:
- a. Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the policy period, whichever is earlier;
 - b. Coverage **A** does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and
 - c. Coverage **B** does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.
- No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

SECTION III – LIMITS OF INSURANCE

1. The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
2. The General Aggregate Limit is the most we will pay for the sum of:
 - a. Medical expenses under Coverage **C**;
 - b. Damages under Coverage **A**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard"; and
 - c. Damages under Coverage **B**.

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3. The Products-Completed Operations Aggregate Limit is the most we will pay under Coverage **A** for damages because of "bodily injury" and "property damage" included in the "products-completed operations hazard".
4. Subject to Paragraph **2.** above, the Personal And Advertising Injury Limit is the most we will pay under Coverage **B** for the sum of all damages because of all "personal and advertising injury" sustained by any one person or organization.
5. Subject to Paragraph **2.** or **3.** above, whichever applies, the Each Occurrence Limit is the most we will pay for the sum of:
 - a. Damages under Coverage **A**; and
 - b. Medical expenses under Coverage **C** because of all "bodily injury" and "property damage" arising out of any one "occurrence".
6. Subject to Paragraph **5.** above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage **A** for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, while rented to you or temporarily occupied by you with permission of the owner.
7. Subject to Paragraph **5.** above, the Medical Expense Limit is the most we will pay under Coverage **C** for all medical expenses because of "bodily injury" sustained by any one person.

The Limits of Insurance of this Coverage Part apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS

1. Bankruptcy

Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.

2. Duties In The Event Of Occurrence, Offense, Claim Or Suit

- a. You must see to it that we are notified as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, notice should include:
 - (1) How, when and where the "occurrence" or offense took place;
 - (2) The names and addresses of any injured persons and witnesses; and

- (3) The nature and location of any injury or damage arising out of the "occurrence" or offense.
- b. If a claim is made or "suit" is brought against any insured, you must:
 - (1) Immediately record the specifics of the claim or "suit" and the date received; and
 - (2) Notify us as soon as practicable.
You must see to it that we receive written notice of the claim or "suit" as soon as practicable.
- c. You and any other involved insured must:
 - (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";
 - (2) Authorize us to obtain records and other information;
 - (3) Cooperate with us in the investigation or settlement of the claim or defense against the "suit"; and
 - (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury or damage to which this insurance may also apply.
- d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

3. Legal Action Against Us

No person or organization has a right under this Coverage Part:

- a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or
- b. To sue us on this Coverage Part unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this Coverage Part or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

Reproduction of Insurance Services Office, Inc. Form**4. Other Insurance**

If other valid and collectible insurance is available to the insured for a loss we cover under Coverages **A** or **B** of this Coverage Part, our obligations are limited as follows:

a. Primary Insurance

This insurance is primary except when Paragraph **b.** below applies. If this insurance is primary, our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described in Paragraph **c.** below.

b. Excess Insurance

(1) This insurance is excess over:

- (a) Any of the other insurance, whether primary, excess, contingent or on any other basis:
 - (i) That is Fire, Extended Coverage, Builder's Risk, Installation Risk or similar coverage for "your work";
 - (ii) That is Fire insurance for premises rented to you or temporarily occupied by you with permission of the owner;
 - (iii) That is insurance purchased by you to cover your liability as a tenant for "property damage" to premises rented to you or temporarily occupied by you with permission of the owner; or
 - (iv) If the loss arises out of the maintenance or use of aircraft, "autos" or watercraft to the extent not subject to Exclusion **g.** of Section **I** – Coverage **A** – Bodily Injury And Property Damage Liability.
- (b) Any other primary insurance available to you covering liability for damages arising out of the premises or operations, or the products and completed operations, for which you have been added as an additional insured.

(2) When this insurance is excess, we will have no duty under Coverages **A** or **B** to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

(3) When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (a) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (b) The total of all deductible and self-insured amounts under all that other insurance.

(4) We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

5. Premium Audit

- a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.
- b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the first Named Insured. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the first Named Insured.
- c. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such times as we may request.

6. Representations

By accepting this policy, you agree:

- a. The statements in the Declarations are accurate and complete;

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- b. Those statements are based upon representations you made to us; and
- c. We have issued this policy in reliance upon your representations.

7. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

- a. As if each Named Insured were the only Named Insured; and
- b. Separately to each insured against whom claim is made or "suit" is brought.

8. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

1. "Advertisement" means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:
 - a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and
 - b. Regarding web sites, only that part of a web site that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.
2. "Auto" means:
 - a. A land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or
 - b. Any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged.

However, "auto" does not include "mobile equipment".

3. "Bodily injury" means bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time.

4. "Coverage territory" means:

- a. The United States of America (including its territories and possessions), Puerto Rico and Canada;
- b. International waters or airspace, but only if the injury or damage occurs in the course of travel or transportation between any places included in Paragraph a. above; or
- c. All other parts of the world if the injury or damage arises out of:

(1) Goods or products made or sold by you in the territory described in Paragraph a. above;

(2) The activities of a person whose home is in the territory described in Paragraph a. above, but is away for a short time on your business; or

(3) "Personal and advertising injury" offenses that take place through the Internet or similar electronic means of communication;

provided the insured's responsibility to pay damages is determined in a "suit" on the merits, in the territory described in Paragraph a. above or in a settlement we agree to.

5. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".

6. "Executive officer" means a person holding any of the officer positions created by your charter, constitution, bylaws or any other similar governing document.

7. "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.

8. "Impaired property" means tangible property, other than "your product" or "your work", that cannot be used or is less useful because:

- a. It incorporates "your product" or "your work" that is known or thought to be defective, deficient, inadequate or dangerous; or

- b. You have failed to fulfill the terms of a contract or agreement;

if such property can be restored to use by the repair, replacement, adjustment or removal of "your product" or "your work" or your fulfilling the terms of the contract or agreement.

Reproduction of Insurance Services Office, Inc. Form**9.** "Insured contract" means:

- a.** A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
- b.** A sidetrack agreement;
- c.** Any easement or license agreement, except in connection with construction or demolition operations on or within 50 feet of a railroad;
- d.** An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;
- e.** An elevator maintenance agreement;
- f.** That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph **f.** does not include that part of any contract or agreement:

- (1)** That indemnifies a railroad for "bodily injury" or "property damage" arising out of construction or demolition operations, within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing;
- (2)** That indemnifies an architect, engineer or surveyor for injury or damage arising out of:
 - (a)** Preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - (b)** Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage; or
- (3)** Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in **(2)** above and supervisory, inspection, architectural or engineering activities.

10. "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".

11. "Loading or unloading" means the handling of property:

- a.** After it is moved from the place where it is accepted for movement into or onto an aircraft, watercraft or "auto";
- b.** While it is in or on an aircraft, watercraft or "auto"; or
- c.** While it is being moved from an aircraft, watercraft or "auto" to the place where it is finally delivered;

but "loading or unloading" does not include the movement of property by means of a mechanical device, other than a hand truck, that is not attached to the aircraft, watercraft or "auto".

12. "Mobile equipment" means any of the following types of land vehicles, including any attached machinery or equipment:

- a.** Bulldozers, farm machinery, forklifts and other vehicles designed for use principally off public roads;
- b.** Vehicles maintained for use solely on or next to premises you own or rent;
- c.** Vehicles that travel on crawler treads;
- d.** Vehicles, whether self-propelled or not, maintained primarily to provide mobility to permanently mounted:
 - (1)** Power cranes, shovels, loaders, diggers or drills; or
 - (2)** Road construction or resurfacing equipment such as graders, scrapers or rollers;
- e.** Vehicles not described in Paragraph **a.**, **b.**, **c.** or **d.** above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:
 - (1)** Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or
 - (2)** Cherry pickers and similar devices used to raise or lower workers;
- f.** Vehicles not described in Paragraph **a.**, **b.**, **c.** or **d.** above maintained primarily for purposes other than the transportation of persons or cargo.

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However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos":

- (1) Equipment designed primarily for:
 - (a) Snow removal;
 - (b) Road maintenance, but not construction or resurfacing; or
 - (c) Street cleaning;
- (2) Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and
- (3) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.

However, "mobile equipment" does not include any land vehicles that are subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged. Land vehicles subject to a compulsory or financial responsibility law or other motor vehicle insurance law are considered "autos".

13. "Occurrence" means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.
14. "Personal and advertising injury" means injury, including consequential "bodily injury", arising out of one or more of the following offenses:
 - a. False arrest, detention or imprisonment;
 - b. Malicious prosecution;
 - c. The wrongful eviction from, wrongful entry into, or invasion of the right of private occupancy of a room, dwelling or premises that a person occupies, committed by or on behalf of its owner, landlord or lessor;
 - d. Oral or written publication in any manner, of material that slanders or libels a person or organization or disparages a person's or organization's goods, products or services;
 - e. Oral or written publication, in any manner, of material that violates a person's right of privacy;
 - f. The use of another's advertising idea in your "advertisement"; or
 - g. Infringing upon another's copyright, trade dress or slogan in your "advertisement".
15. "Pollutants" mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

16. "Products-completed operations hazard":

- a. Includes all "bodily injury" and "property damage" occurring away from premises you own or rent and arising out of "your product" or "your work" except:

- (1) Products that are still in your physical possession; or
- (2) Work that has not yet been completed or abandoned. However, "your work" will be deemed completed at the earliest of the following times:
 - (a) When all of the work called for in your contract has been completed.
 - (b) When all of the work to be done at the job site has been completed if your contract calls for work at more than one job site.
 - (c) When that part of the work done at a job site has been put to its intended use by any person or organization other than another contractor or subcontractor working on the same project.

Work that may need service, maintenance, correction, repair or replacement, but which is otherwise complete, will be treated as completed.

- b. Does not include "bodily injury" or "property damage" arising out of:

- (1) The transportation of property, unless the injury or damage arises out of a condition in or on a vehicle not owned or operated by you, and that condition was created by the "loading or unloading" of that vehicle by any insured;
- (2) The existence of tools, uninstalled equipment or abandoned or unused materials; or
- (3) Products or operations for which the classification, listed in the Declarations or in a policy Schedule, states that products-completed operations are subject to the General Aggregate Limit.

17. "Property damage" means:

- a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or
- b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the "occurrence" that caused it.

For the purposes of this insurance, electronic data is not tangible property.

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As used in this definition, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMs, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

18. "Suit" means a civil proceeding in which damages because of "bodily injury", "property damage" or "personal and advertising injury" to which this insurance applies are alleged. "Suit" includes:

a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or

b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.

19. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.

20. "Volunteer worker" means a person who is not your "employee", and who donates his or her work and acts at the direction of and within the scope of duties determined by you, and is not paid a fee, salary or other compensation by you or anyone else for their work performed for you.

21. "Your product":

a. Means:

(1) Any goods or products, other than real property, manufactured, sold, handled, distributed or disposed of by:

(a) You;

(b) Others trading under your name; or

(c) A person or organization whose business or assets you have acquired; and

(2) Containers (other than vehicles), materials, parts or equipment furnished in connection with such goods or products.

b. Includes:

(1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your product"; and

(2) The providing of or failure to provide warnings or instructions.

c. Does not include vending machines or other property rented to or located for the use of others but not sold.

22. "Your work":

a. Means:

(1) Work or operations performed by you or on your behalf; and

(2) Materials, parts or equipment furnished in connection with such work or operations.

b. Includes:

(1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your work"; and

(2) The providing of or failure to provide warnings or instructions.

MCS-90: Motor Carrier Public Liability
FORM MCS-90 Revised 01/05/2017

OMB No.: 2126-0008 Expiration: 01/31/2020
USDOT Number: _____ **Date Received:** _____

A Federal Agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2126-0008. Public reporting for this collection of information is estimated to be approximately 2 minutes per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Motor Carrier Safety Administration, MC-RRR, Washington, D.C. 20590.


**Endorsement for Motor Carrier Policies of Insurance for Public Liability
under Sections 29 and 30 of the Motor Carrier Act of 1980**

FORM MCS-90

Issued to _____ **of** _____
(Motor Carrier name) (Motor Carrier state or province)
Dated at _____ **on this** _____ **day of** _____

Amending Policy Number: _____ **Effective Date:** _____

Name of Insurance Company: _____

Countersigned by: _____
(authorized company representative)

The policy to which this endorsement is attached provides primary or excess insurance, as indicated for the limits shown (check only one):

- This insurance is primary and the company shall not be liable for amounts in excess of \$ _____ for each accident.
- This insurance is excess and the company shall not be liable for amounts in excess of \$ _____ for each accident in excess of the underlying limit of \$ _____ for each accident.

Whenever required by the Federal Motor Carrier Safety Administration (FMCSA), the company agrees to furnish the FMCSA a duplicate of said policy and all its endorsements. The company also agrees, upon telephone request by an authorized representative of the FMCSA, to verify that the policy is in force as of a particular date. The telephone number to call is: _____

Cancellation of this endorsement may be effected by the company of the insured by giving (1) thirty-five (35) days notice in writing to the other party (said 35 days notice to commence from the date the notice is mailed, proof of mailing shall be sufficient proof of notice), and (2) if the insured is subject to the FMCSA's registration requirements under 49 U.S.C. 13901, by providing thirty (30) days notice to the FMCSA (said 30 days notice to commence from the date the notice is received by the FMCSA at its office in Washington, DC).

Filings must be transmitted online via the Internet at <http://www.fmcsa.dot.gov/urs>.
(continued on next page)

MCS-90: Motor Carrier Public Liability (cont'd)

FORM MCS-90 Revised 01/05/2017

OMB No.: 2126-0008 Expiration: 01/31/2020

DEFINITIONS AS USED IN THIS ENDORSEMENT

Accident includes continuous or repeated exposure to conditions or which results in bodily injury, property damage, or environmental damage which the insured neither expected nor intended.

Motor Vehicle means a land vehicle, machine, truck, tractor, trailer, or semitrailer propelled or drawn by mechanical power and used on a highway for transporting property, or any combination thereof.

Bodily Injury means injury to the body, sickness, or disease to any person, including death resulting from any of these.

Property Damage means damage to or loss of use of tangible property.

Environmental Restoration means restitution for the loss, damage, or destruction of natural resources arising out of the accidental discharge, dispersal, release or escape into or upon the land, atmosphere, watercourse, or body of water, of any commodity transported by a motor carrier. This shall include the cost of removal and the cost of necessary measures taken to minimize or mitigate damage to human health, the natural environment, fish, shellfish, and wildlife.

Public Liability means liability for bodily injury, property damage, and environmental restoration.

The insurance policy to which this endorsement is attached provides automobile liability insurance and is amended to assure compliance by the insured, within the limits stated herein, as a motor carrier of property, with Sections 29 and 30 of the Motor Carrier Act of 1980 and the rules and regulations of the Federal Motor Carrier Safety Administration (FMCSA).

In consideration of the premium stated in the policy to which this endorsement is attached, the insurer (the company) agrees to pay, within the limits of liability described herein, any final judgment recovered against the insured for public liability resulting from negligence in the operation, maintenance or use of motor vehicles subject to the financial responsibility requirements of Sections 29 and 30 of the Motor Carrier Act of 1980 regardless of whether or not each motor vehicle is specifically described in the policy and whether or not such negligence occurs on any route or in any territory authorized to be served by the insured or elsewhere. Such insurance as is afforded for public liability, does not apply to injury to or death of the insured's employees while engaged in the course of their employment, or property transported by the insured, designated as cargo. It is understood and agreed that no condition, provision, stipulation, or limitation contained in the policy, this endorsement, or any other endorsement thereon,

or violation thereof, shall relieve the company from liability or from the payment of any final judgment, within the limits of liability herein described, irrespective of the financial condition, insolvency or bankruptcy of the insured. However, all terms, conditions, and limitations in the policy to which the endorsement is attached shall remain in full force and effect as binding between the insured and the company. The insured agrees to reimburse the company for any payment made by the company on account of any accident, claim, or suit involving a breach of the terms of the policy, and for any payment that the company would not have been obligated to make under the provisions of the policy except for the agreement contained in this endorsement.

It is further understood and agreed that, upon failure of the company to pay any final judgment recovered against the insured as provided herein, the judgment creditor may maintain an action in any court of competent jurisdiction against the company to compel such payment.

The limits of the company's liability for the amounts prescribed in this endorsement apply separately to each accident and any payment under the policy because of any one accident shall not operate to reduce the liability of the company for the payment of final judgments resulting from any other accident.

(continued on next page)

MCS-90: Motor Carrier Public Liability (cont'd)

FORM MCS-90 Revised 01/05/2017

OMB No.: 2126-0008 Expiration: 01/31/2020

SCHEDULE OF LIMITS — PUBLIC LIABILITY

Type of carriage	Commodity transported	January 1, 1985
(1) For-hire (in interstate or foreign commerce, with a gross vehicle weight rating of 10,000 or more pounds).	Property (nonhazardous)	\$750,000
(2) For-hire and Private (in interstate, foreign, or intrastate commerce, with a gross vehicle weight rating of 10,000 or more pounds).	Hazardous substances, as defined in 49 CFR 171.8 , transported in cargo tanks, portable tanks, or hopper-type vehicles with capacities in excess of 3,500 water gallons; or in bulk Division 1.1, 1.2, and 1.3 materials, Division 2.3, Hazard Zone A, or Division 6.1, Packing Group I, Hazard Zone A material; in bulk Division 2.1 or 2.2; or highway route controlled quantities of a Class 7 material, as defined in 49 CFR 173.403 .	\$5,000,000
(3) For-hire and Private (in interstate or foreign commerce, in any quantity; or in intrastate commerce, in bulk only; with a gross vehicle weight rating of 10,000 or more pounds).	Oil listed in 49 CFR 172.101 ; hazardous waste, hazardous materials, and hazardous substances defined in 49 CFR 171.8 and listed in 49 CFR 172.101 , but not mentioned in (2) above or (4) below.	\$1,000,000
(4) For-hire and Private (in interstate or foreign commerce, with a gross vehicle weight rating of less than 10,000 pounds).	Any quantity of Division 1.1, 1.2, or 1.3 material; any quantity of a Division 2.3, Hazard Zone A, or Division 6.1, Packing Group I, Hazard Zone A material; or highway route controlled quantities of a Class 7 material as defined in 49 CFR 173.403 .	\$5,000,000

*The schedule of limits shown does not provide coverage. The limits shown in the schedule are for information purposes only.

RAILROAD PROTECTIVE LIABILITY COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the company providing this insurance.

The word "insured" means any person or organization qualifying as such under Section II – Who Is An Insured.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section V – Definitions.

SECTION I – COVERAGES

COVERAGE A – BODILY INJURY AND PROPERTY DAMAGE LIABILITY

1. Insuring Agreement

- a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury" or "property damage" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury" or "property damage" to which this insurance does not apply. We may, at our discretion, investigate any occurrence and settle any claim or "suit" that may result. But:

(1) The amount we will pay for damages is limited as described in Section III – Limits Of Insurance; and

(2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Supplementary Payments – Coverage A.

- b. This insurance applies to "bodily injury" and "property damage" only if:

(1) The "bodily injury" or "property damage" occurs during the policy period; and

(2) The "bodily injury" or "property damage" arises out of acts or omissions at the "job location" which are related to or are in connection with the "work" described in the Declarations.

- c. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

2. Exclusions

This insurance does not apply to:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" resulting from the use of reasonable force to protect persons or property.

b. Contractual Liability

"Bodily injury" or "property damage" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages assumed in a contract or agreement that is a "covered contract".

c. Completed Work

"Bodily injury" or "property damage" occurring after the "work" is completed. The "work" will be deemed completed at the earliest of the following times:

(1) When all the "work" called for in the "contractor's" contract has been completed.

(2) When all the "work" to be done at the "job location" has been completed.

(3) When that part of the "work" done at the "job location" has been put to its intended use by you, the governmental authority or other contracting party.

This exclusion does not apply to "bodily injury" or "property damage" resulting from the existence of or removal of tools, uninstalled equipment or abandoned or unused materials.

d. Acts Or Omissions Of Insured

"Bodily injury" or "property damage", the sole proximate cause of which is an act or omission of any insured other than acts or omissions of any of "your designated employees". This exclusion does not apply to injury or damage sustained at the "job location" by any of "your designated employees" or employee of the "contractor", or by any employee of the governmental authority or any other contracting party (other than you) specified in the Declarations.

e. Workers' Compensation And Similar Laws

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law. This exclusion does not apply to any obligation of the insured under the Federal Employers Liability Act, as amended.

f. Pollution

"Bodily injury" or "property damage" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants" at or from the "job location":

- (1) Due to the past or present use of the "job location" by you or for you or others for the handling, storage, disposal, processing or treatment of waste; or
- (2) Due to the dumping or disposal of waste on the "job location" by the "contractor" with the knowledge of you or any of "your designated employees"; or
- (3) On which you or "contractors" working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the "job location" in connection with such operations by you, the "contractor" or "your designated employee".
However, this subparagraph does not apply to:
 - (a) "Bodily injury" or "property damage" arising out of fuels or lubricants for equipment used at the "job location".
 - (b) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire".
- (4) On which you or "contractors" working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants".

g. Damage To Owned, Leased Or Entrusted Property

"Property damage" to property owned by you or leased or entrusted to you under a lease or trust agreement.

h. War

"Bodily injury" or "property damage", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war;
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

COVERAGE B – PHYSICAL DAMAGE TO PROPERTY

1. Insuring Agreement

We will pay for "physical damage to property" to which this insurance applies. The "physical damage to property" must occur during the policy period. The "physical damage to property" must arise out of acts or omissions at the "job location" which are related to or in connection with the "work" described in the Declarations. The property must be owned by or leased or entrusted to you under a lease or trust agreement.

2. Exclusions

This insurance does not apply to "physical damage to property":

a. Completed Work

Occurring after the "work" is completed. The "work" will be deemed completed at the earliest of the following times:

- (1) When all the "work" called for in the "contractor's" contract has been completed.
- (2) When all the "work" to be done at the "job location" has been completed.
- (3) When that part of the "work" done at the "job location" has been put to its intended use by you, the governmental authority or other contracting party.

This exclusion does not apply to "physical damage to property" resulting from the existence of tools, uninstalled equipment or abandoned or unused materials.

b. Acts Or Omissions Of Insured

The sole proximate cause of which is an act or omission of any insured other than acts or omissions of any of "your designated employees".

c. Nuclear Incidents Or Conditions

Due to nuclear reaction, nuclear radiation or radioactive contamination or to any related act or condition.

d. Pollution

Due to the discharge, dispersal, seepage, migration, release or escape of "pollutants" excluded under Exclusion f. Pollution, Coverage A.

SUPPLEMENTARY PAYMENTS – COVERAGE A

We will pay, with respect to any claim we investigate or settle, or any "suit" against an insured we defend:

1. All expenses we incur.
2. All court costs taxed against the insured in the "suit". However, these payments do not include attorneys' fees or attorneys' expenses taxed against the insured.
3. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.
4. The cost of bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.
5. Expenses incurred by the insured for first aid administered to others at the time of an accident, for "bodily injury" to which this insurance applies.
6. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$250 a day because of time off from work.
7. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.

These payments will not reduce the limits of insurance.

SECTION II – WHO IS AN INSURED

1. You are an insured.
2. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers and directors.
3. Your stockholders are insureds, but only with respect to their liability as stockholders.

4. Any railroad operating over your tracks is an insured.

SECTION III – LIMITS OF INSURANCE

1. The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
2. The Aggregate Limit is the most we will pay for the sum of all damages because of all "bodily injury", all "property damage" and all "physical damage to property".
3. Subject to Paragraph 2. above, the Each Occurrence Limit is the most we will pay for the sum of all damages because of all "bodily injury", all "property damage" and all "physical damage to property" arising out of any one occurrence.
4. Subject to Paragraph 3. above, the payment for "physical damage to property" shall not exceed the lesser of:
 - a. The actual cash value of the property at the time of loss; or
 - b. The cost to repair or replace the property with other property of like kind or quality.

The Limits of Insurance of this Coverage Part apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

SECTION IV – CONDITIONS

- A. The following Conditions apply to Coverages A and B:
 1. **Assignment**

Assignment of interest under this Coverage Part shall not bind us unless we issue an endorsement consenting to the assignment.
 2. **Bankruptcy**

Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.
 3. **Cancellation**
 - a. You may cancel this policy by mailing or delivering to us advance written notice of cancellation.

- b. We may cancel this policy by mailing or delivering to you, the "contractor" and any involved governmental authority or other contracting party designated in the Declarations, at the respective mailing addresses last known to us, written notice of cancellation at least 60 days before the effective date of cancellation.
- c. Notice of cancellation will state the effective date of cancellation. The policy period will end on that date.
- d. If this policy is cancelled, any unearned premium will be refunded. If we cancel, the refund will be pro rata. If you cancel, the refund may be less than pro rata. The cancellation will be effective even if we have not made or offered a refund.
- e. If notice is mailed, proof of mailing will be sufficient proof of notice.
- 4. Changes**
- This policy contains all the agreements between you and us concerning the insurance afforded. You are authorized to make changes in the terms of this policy with our consent. This policy's terms can be amended or waived only by endorsement issued by us and made a part of this policy.
- 5. Inspections And Surveys**
- a. We have the right to:
- (1) Make inspections and surveys at any time;
 - (2) Give you reports on the conditions we find; and
 - (3) Recommend changes.
- b. We are not obligated to make inspections, surveys, reports or recommendations and any such actions we do undertake relate only to insurability and the premiums to be charged. We do not make safety inspections. We do not undertake to perform the duty of any person or organization to provide for the health or safety of workers or the public. And we do not warrant that conditions:
- (1) Are safe or healthful; or
 - (2) Comply with laws, regulations, codes or standards.
- c. Paragraphs a. and b. of this condition apply not only to us, but also to any rating, advisory, rate service or similar organization which makes insurance inspections, surveys, reports or recommendations.
- d. Paragraph b. of this condition does not apply to any inspections, surveys, reports or recommendations we may make relative to certification, under state or municipal statutes, ordinances or regulations, of boilers, pressure vessels or elevators.
- 6. Other Insurance**
- The insurance afforded by this policy is:
- a. Primary insurance and we will not seek contribution from any other insurance available to you except if the other insurance is provided by a contractor other than the designated contractor for the same operation and "job location"; and
 - b. If the other insurance is available, we will share with that other insurance by the method described below.
- If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.
- If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.
- 7. Premium And Premium Audit**
- a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.
 - b. Contract cost, the premium base shown in the Declarations, means the total cost of the operations described in the Declarations.
 - c. The premium shown in the Declarations as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the "contractor" designated in the Declarations. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the contractor designated in the Declarations.
- In no event shall the payment of premium be your obligation.

8. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this policy, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

B. The following Conditions apply to Coverage A only:**1. Legal Action Against Us**

No person or organization has a right under this policy:

- a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or
- b. To sue us on this policy unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this policy or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

2. Duties In The Event Of Occurrence, Claim Or Suit

- a. You must see to it that we are notified as soon as practicable of an occurrence which may result in a claim. To the extent possible, notice should include:
 - (1) How, when and where the occurrence took place;
 - (2) The names and addresses of any injured persons and witnesses; and
 - (3) The nature and location of any injury or damage arising out of the occurrence.
- b. If a claim is made or "suit" is brought against any insured, you must:
 - (1) Immediately record the specifics of the claim or "suit" and the date received; and

- (2) Notify us as soon as practicable.

You must see to it that we receive written notice of the claim or "suit" as soon as practicable.

- c. You and any other involved insured must:

- (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";
- (2) Authorize us to obtain records and other information;
- (3) Cooperate with us in the investigation or settlement of the claim or defense against the "suit"; and
- (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury or damage to which this insurance may also apply.

- d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

3. Separation Of Insureds

Except with respect to the Limits of Insurance, this insurance applies:

- a. As if each Named Insured were the only Named Insured; and
- b. Separately to each insured against whom claim is made or "suit" is brought.

C. The following Conditions apply to Coverage B only:**1. Appraisal**

If you fail to agree with us on the value of the property, or the amount of loss, either you or we may make written demand for an appraisal of the loss within 60 days after proof of loss is filed. In this event, each party will select a competent appraiser. The two appraisers will select a competent and impartial umpire. The appraisers will state separately the value of the property and the amount of loss. If they fail to agree, they will submit their differences to the umpire. A decision agreed to by any two will be binding. Each party will:

- a. Pay its chosen appraiser; and
- b. Bear the other expenses of the appraisal and umpire equally.

If we submit to an appraisal, we still retain our right to deny the claim.

2. No Benefit To Bailee

No person or organization, other than you, having custody of the property will benefit from this insurance.

3. Insured's Duties In The Event Of A Loss

You must:

- a. Protect the property, whether or not the loss is covered by this policy. Any further loss due to your failure to protect the property shall not be recoverable under this policy. Reasonable expenses incurred in affording such protection shall be deemed to be incurred at our request; and
- b. Submit to us, as soon after the loss as possible, your sworn proof of loss containing the information we request to settle the loss and, at our request, make available the damaged property for examination.

4. Legal Action Against Us

No person or organization has a right under this policy to sue us on this policy unless all of its terms have been fully complied with and until 30 days after proof of loss is filed and the amount of loss is determined as provided in this policy.

5. Payment Of Loss

We may pay for the loss in money, but there can be no abandonment of any property to us.

SECTION V – DEFINITIONS

1. "Bodily injury" means bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time.
2. "Contractor" means the contractor designated in the Declarations and includes all subcontractors working directly or indirectly for that "contractor" but does not include you.
3. "Covered contract" means any contract or agreement to carry a person or property for a charge or any interchange contract or agreement respecting motive power, or rolling stock equipment.
4. "Executive officer" means a person holding any of the officer positions created by your charter, constitution, bylaws or any other similar governing document.
5. "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.
6. "Job location" means the job location designated in the Declarations including any area directly related to the "work" designated in the Declarations. "Job location" includes the ways next to it.
7. "Physical damage to property" means direct and accidental loss of or damage to rolling stock and their contents, mechanical construction equipment or motive power equipment, railroad tracks, roadbeds, catenaries, signals, bridges or buildings.
8. "Pollutants" means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes material to be recycled, reconditioned or reclaimed.
9. "Property damage" means:
 - a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or
 - b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the occurrence that caused it.
10. "Suit" means a civil proceeding in which damages because of "bodily injury" or "property damage" to which this insurance applies are alleged. "Suit" includes:
 - a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or
 - b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.
11. "Work" means work or operations performed by the "contractor" including materials, parts or equipment furnished in connection with the work or operations.
12. "Your designated employee" means:
 - a. Any supervisory employee of yours at the "job location";
 - b. Any employee of yours while operating, attached to or engaged on work trains or other railroad equipment at the "job location" which are assigned exclusively to the "contractor"; or
 - c. Any employee of yours not described in Paragraph a. or b. above who is specifically loaned or assigned to the work of the "contractor" for the prevention of accidents or protection of property.

Performance BondBOND NO. _____
PREMIUM: _____

WHEREAS, The _____, (hereinafter designated as “Obligee”) 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 _____, and identified as project _____ is hereby referred to and made a part hereof; and

WHEREAS, Said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement;

NOW, THEREFORE, We, the principal and _____ as surety, are held and firmly bound unto the hereinafter called “The Obligee,” in the penal sum of _____ dollars (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally firmly by these presents.

The condition of this obligation is such that if the above bound principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in the said agreement and any alteration thereof made as therein provided, on his or their part, to be kept and perform and at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Obligee, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

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

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specification accompanying the same shall in any wise 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

By _____
PRINCIPAL

By: _____
PRINCIPAL

By: _____
ATTORNEY-IN-FACT

Payment (Labor & Materials) Bond

BOND NO. _____

KNOW ALL MEN/WOMEN BY THESE PRESENT that we, _____ as Principal (also referred to herein as "CONTRACTOR"), and _____ as Surety, are held and firmly bound unto _____, hereinafter called "OWNER," in the sum of _____ Dollars (\$ _____), 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 present.

The condition of the above obligation is such that, whereas said Principal has been awarded and is about to enter into the annexed Contract for the _____ [NAME OF PROJECT], in accordance with OWNER's Call for Bids documents and Principal's Bid Dated _____, and to which reference is hereby made for all particulars, and is required by said "OWNER" to give this bond in connection with the execution of said Contract;

NOW, THEREFORE, if said CONTRACTOR, its Subcontractors, its heirs, executors, administrators, successors, or assigns, shall fail to pay (a) for any materials, provisions, equipment, or other supplies used in, upon, for or about the performance of the WORK contracted to be done under the Contract, or (b) for any work or labor thereon of any kind contracted to be done under the Contract, or (c) for amounts due under the Unemployment Insurance Code with respect to work or labor performed pursuant to the Contract, or (d) for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the CONTRACTOR and its Subcontractors under Section 13020 of the Unemployment Insurance Code with respect to such work and labor, in each case, as required by the provisions of Sections 9550-9566 inclusive, of the Civil Code of the State of California and acts amendatory thereof, and sections of other codes of the State of California referred to therein and acts amendatory thereof, and provided that the persons, companies, corporations or other entities so furnishing said materials, provisions, provender, equipment, or other supplies, appliances, or power used in, upon, for, or about performance of the Work contracted to be executed or performed, or any person, company, corporation or entity renting or hiring implements or machinery or power for or contributing to said Work to be done, or any person who performs work or labor upon the same, or any person, company, corporation or entity who supplies both work and materials therefor, shall have complied with the provisions of said laws, then said Surety will pay in full the same in an amount not exceeding the sum hereinabove set forth and also will pay, in case suit is brought upon this bond, a reasonable attorney's fee, as shall be fixed by the Court. This bond shall inure to the benefit of any and all persons named in Section 9100 of the Civil Code of the State of California so as to give a right of action to them or their assigns in any suit brought upon this bond.

PROVIDED, that any alterations in the WORK to be done or the materials to be furnished, or changes in the time of completion, which may be made pursuant to the terms of said Contract



Documents, shall not in any way release said CONTRACTOR or said Surety thereunder, nor shall any extensions of time granted under the provisions of said Contract Documents release either said CONTRACTOR or said Surety, and notice of such alterations or extensions of the Agreement is hereby waived by said Surety.

IN WITNESS WHEREOF, the Principal and the Surety have executed this instrument in duplicate this _____ day of _____, 20_____.

Surety

Principal

By: _____

By: _____

Print Name/Title

Print Name/Title

Address

Address

(_____) _____
Telephone Number

(_____) _____
Telephone Number

Email Address

Email Address

**NOTARIAL CERTIFICATE OF ATTORNEY IN FACT AND SEAL OF SURETY
MUST BE ATTACHED.**

(Optional Form)

This blanket endorsement modifies insurance provided under the following:

Project Name: _____

Named Insured: Las Gallinas Valley Sanitary District, its officers, officials, employees and volunteers, 300 Smith Ranch Road, San Rafael, CA 94903

Effective Work Date(s): _____

Insuring Company: _____ **Policy No.:** _____

Description of Work/Locations/Vehicles:

AGENCY NAME AND ADDRESS:

ADDITIONAL INSURED:

The Agency, its elected or appointed officers, officials, employees and, volunteers are included as insureds with regard to damages and defense of claims arising from: (Check all that apply)

General Liability: (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, (c) premises owned, leased occupied or used by the Named Insured, and/or (d) permits issued for operations performed by the Named Insured. {Note: MEETS OR EXCEEDS ISO Form # CG 20 10 11 85}

Auto Liability: the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the Agency, its elected or appointed officers, officials, employees or volunteers.

Other: _____

PRIMARY/NON-CONTRIBUTORY: This insurance is primary and is not additional to or contributing with any other insurance carried by or for the benefit of Additional Insureds.

PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS: Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the Agency, its elected or appointed officers, officials, employees, or volunteers.

CANCELLATION NOTICE: The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior written notice (ten (10) days if canceled due to non-payment) by certified mail return receipt requested has been given to the Agency. Such notice shall be addressed as shown above.

WAIVER OF SUBROGATION:The insurer(s) named above agree to waive all rights of subrogation against the Agency, its elected or appointed officers, officials, agents, volunteers and employees for losses paid under the terms of this policy which arise from work performed by the Named Insured for the Agency.

Nothing herein contained shall vary, alter or extend any provision or condition of the Policy other than as above stated.

SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE OF THE INSURER

I, _____, (print/type name), warrant that I have authority to bind the above-named insurance company and by my signature hereon do so bind this company.

SIGNATURE OF AUTHORIZED REPRESENTATIVE (original signature required on endorsement furnished to the Agency)

ORGANIZATION: _____

TITLE: _____

ADDRESS: _____

TELEPHONE: (_____) _____ DATE ISSUED: _____

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APPENDIX D

DIR FORM PWC-100 SUPPLEMENTAL QUESTIONNAIRE

(Submit a completed form for the Contractor and each Subcontractor listed in the List of Proposed Subcontractors submitted with the bid. List Contractor's and all Subcontractors' license number, name, address, phone number, email address, and classification of workers they are providing at the time of the contract signing.)

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Add Contractor - Windows Internet Explorer

DIR <https://www.dir.ca.gov/pwc100ext/AddContractorPopup.aspx?ProjectID=3108&GCID=1>

Please enter all the information for the Contractor

Contractor

CSLB/Certificate Number:*

Name:
Address:
Phone:
Email:*

Classifications

<input type="checkbox"/> ASBESTOS	<input type="checkbox"/> BOILERMAKER	<input type="checkbox"/> BRICKLAYERS	<input type="checkbox"/> CARPENTERS
<input type="checkbox"/> CARPET/LINOLEUM	<input type="checkbox"/> CEMENT MASONS	<input type="checkbox"/> DRYWALL FINISHER	<input type="checkbox"/> DRYWALL/LATHERS
<input type="checkbox"/> ELECTRICIANS	<input type="checkbox"/> ELEVATOR MECHANIC	<input type="checkbox"/> GLAZIERS	<input type="checkbox"/> IRON WORKERS
<input type="checkbox"/> LABORERS	<input type="checkbox"/> MILLWRIGHTS	<input type="checkbox"/> OPERATING ENG	<input type="checkbox"/> PAINTERS
<input type="checkbox"/> PILE DRIVERS	<input type="checkbox"/> PIPE TRADES	<input type="checkbox"/> PLASTERERS	<input type="checkbox"/> ROOFERS
<input type="checkbox"/> SHEET METAL	<input type="checkbox"/> SOUND/COMM	<input type="checkbox"/> SURVEYORS	<input type="checkbox"/> TEAMSTER
<input type="checkbox"/> TILE WORKERS			

100%

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APPENDIX E

MISCELLANEOUS CONTRACT FORMS

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300 SMITH RANCH ROAD, SAN RAFAEL, CA 94903

Change Order
No. __

Project No: _____ **Date:** _____

Project: _____

Contractor: _____ **Phone:** _____

_____ **Fax:** _____

The following change is hereby made to the contract:

Description of Change:

Reason for Change:

Pricing Data:

Contract Extension:

This Change Order added __ working days to contract completion date.

Las Gallinas Valley Sanitary District (LGVSD), Owner, and the Contractor hereby agree that this change order constitutes full and mutual accord and satisfaction for all time, all costs, and all impacts related to this revision. In accepting this change order, the Contractor agrees that it represents a full and equitable adjustment to the contract, and further agrees to waive all rights to file claim with respect to any difficulties arising from, or as a result of, this change.

Accounting Summary:

Original Contract:	\$0.00	
Previous Additions:	\$0.00	
Previous Deductions (-):	\$0.00	
This Change Order (+/-):	\$0.00	
Contract to Date:	\$0.00	

APPROVED:

Michael Cortez, PE Date
District Engineer

Curtis Paxton, PE Date
General Manager

Contractor Date

To:

Project Name:
Project No:
Contractor:
Reference:

Date Submitted By Contractor:

Description: _____

COST BREAKDOWN FOR CHANGE ORDER PROPOSAL								
Description	Qty	Unit	Labor	Material	Equip	Rental	Sub	Total
Subtotal:								
Markup Rate for Self Performed Labor/Mat. & Suppliers/Equipment:								
Markup on Subcontractors:								
Total:								

Time extension required for this change: _____

Change Order Pricing

Paragraph 4.5.2 of the General Conditions, Page 1-28 states: "Indirect costs added under a change order **may not exceed an allowance of fifteen (15) percent of the total of combined Contractor and subcontractor direct costs added under the change order.** Such allowance covers Contractor overhead and profit under the change order and includes the cost of insurance in addition to that required pursuant to Section 8.8, bond premiums, superintendent labor, clerical labor, home office expenses, worksite office expenses, and utility costs under the change order. Such costs may not be itemized as direct costs under a change order."

See General Conditions, Paragraph 4 CHANGES IN WORK for more information.

UNCONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant:

Name of Customer:

Job Location:

Owner:

Through Date:

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment:

\$ _____

Exceptions

This document does not affect any of the following:

- (1) Retentions.
 - (2) Extras for which the claimant has not received payment.
 - (3) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.
-

Signature

Claimant's Signature:

Claimant's Title:

Date of Signature:

UNCONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Identifying Information

Name of Claimant:

Name of Customer:

Job Location:

Owner:

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

Exceptions

This document does not affect any of the following:
Disputed claims for extras in the amount of: \$

Signature

Claimant's Signature:

Claimant's Title:

Date of Signature:

CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant:

Name of Customer:

Job Location:

Owner:

Through Date:

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check:

Amount of Check: \$

Check Payable to:

Exceptions

This document does not affect any of the following:

- (1) Retentions.
 - (2) Extras for which the claimant has not received payment.
 - (3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:
 - Date(s) of waiver and release: _____
 - Amount(s) of unpaid progress payment(s): \$ _____
 - (4) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.
-

Signature

Claimant's Signature:

Claimant's Title:

Date of Signature:

CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information

Name of Claimant:

Name of Customer:

Job Location:

Owner:

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check:

Amount of Check: \$

Check Payable to:

Exceptions

This document does not affect any of the following:
Disputed claims for extras in the amount of: \$

Signature

Claimant's Signature:

Claimant's Title:

Date of Signature:

Project: _____

Project No. _____



Progress Payment No:	<input type="text"/>	<input type="checkbox"/> Contract	Period to:	<input type="text"/>
	<input type="checkbox"/>	Change Order	Attach Detail Sheet by Bid Line Item	

To Owner:	Las Gallinas Valley Sanitary District	Contract Time working days)	
From Contractor:		Orig. Contract:	<input type="text"/> 0
Via Construction Manager:		Added by CCOs:	<input type="text"/> 0
		Revised Total:	0 days

Contract Summary:			
Original Contract Amount:	<input type="text"/>	Previous Total Change Orders:	<input type="text"/>
Net Change by Change Orders:	<input type="text"/>	Change Orders This Month:	<input type="text"/>
Total Contract Amount	\$0	Total Change Orders:	\$0

CONTRACT AND CHANGE ORDER WORK

Previous Total Work Completed:	<input type="text"/>
Previous Total Completed and Stored:	\$0.00
Previous Total Earned Less Retainage:	<input type="text"/>
Work Completed This Period*:	<input type="text"/>
Work Completed Retention this Period (5%):	\$0.00 (a)
Payment For Work Completed:	\$0.00 (b)
Total Work Completed to Date	\$0.00 *

reference only - no progress payment toward matls stored until included as work complete; use other template if pymt for matls stored is contracted

Previous Materials Stored:	<input type="text"/>
Materials Added This Period:	<input type="text"/>
Materials Moved to Work Completed:	<input type="text"/>
Total Materials Stored:	\$0.00
Total Work Completed and Stored to Date:	\$0.00

Balance to Finish (incl CO's/NIC matls stored):	\$0.00
Percent Work Completed:	0.0%
Percent Completed and Stored:	0.0%
Percent Paid to Contractor:	0%

Previous Retainage:	<input type="text"/>
Current Total Retainage:	\$0.00 *
Retainage / Escrow for this Period:	\$0.00 (e)
Percent to Finish:	100.0%
Percent Change Orders:	0.00%

Current Payment Due to Contractor:	\$0.00	Current Amount Retained/to Escrow:	\$0.00
	(b)		(a) / not to exceed (e)

CONTRACTOR CERTIFICATION

The Undersigned Contractor certifies that to the best of the Contractor's knowledge, information, and belief, the Work covered by this application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work which previous Certificates for Payment were issued and Payments received from the Owner, and the current payment shown herein is no due.

Contractor

Date:

CONSTRUCTION MANAGER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Construction Manager certifies to the Owner that to the best of the Construction Manager's knowledge, information, and belief, the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED: **\$0.00**

Construction Management

Date:

OWNER APPROVAL

Las Gallinas Valley Sanitary District

Date:

Project: _____

Project No. _____

Progress Payment No:

Period to:

Item No.	Description	Quantity	Units	Unit Price	Bid Price	Units To Date	Cost To Date
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
	BASE CONTRACT						
	ALTERNATES						
	BASE CONTRACT INCLUDING ALTERNATES						
	<u>CHANGE ORDERS</u>						
1							
2							
	TOTAL CHANGE ORDERS						
					Contract to Date		
BASE CONTRACT					Less 5% Retention		
CHANGE ORDERS / WORK ORDERS / MISC.					Net Contract to Date		
TOTAL CONTRACT					Less Previous Payments		
PERCENT COMPLETED TO DATE					Amount Due		

----- FOR LGVSD USE ONLY -----

District Comments:

Other Comments:

- SOR Approved SOR Acceptable with Comments as Noted SOR NOT Approved/Resubmit

Date of Final Transmission to Contractor: _____

APPROVED:

Mel Liebmann
Plant Manager

Date

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APPENDIX F

LABOR COMPLIANCE PROGRAM

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LABOR COMPLIANCE PROGRAM HANDOUT

The Agency is committed to enforcing State prevailing wage requirements. The provisions of this law require all contractors to comply with the current prevailing wage rate requirements and all apprenticeship requirements.

The submission of complete and accurate certified payrolls records, including fringe benefit statements, DAS-140, DAS-142, CAC2 and similar forms are a prerequisite to receiving progress payments. Failure to comply with these rules and regulations can result in monies being withheld and penalties imposed. Contractors are advised to be familiar with Labor Code Section 1720 et. seq. For all projects advertised for bid after March 1st 2015 and all projects awarded after April 1, 2015 certified payrolls must be also be submitted to the CMU using eCPR.

- Prime contractor must set up all subcontractors in the eCPR system.
- Any subcontractor must also add all of their subtiers to the eCPR system.

At the time the General Contractor submits any progress payment to the Agency, the following documents are to be submitted by the General Contractor **directly to the CCMI** for all work performed, including work by subcontractors:

- 1 copy of the progress payment request
- A copy of the certified payroll report submitted to the eCPR
- PW26 or similar form listing fringe benefits being paid.
- CAC2 form or equivalent relating to monthly training contributions
- DAS-140 form for each craft employed on the project
- DAS-142 request to train apprentices
- Electrician Certification – Those employing electricians may need to submit additional data to verify the certification status of those employed

Subcontractors are to submit all documentation directly to the General Contractor in a timely (not less than monthly) basis. The General Contractor will then forward all information to CCMI. Failure to submit these documents to CCMI may result in the progress payment being delayed.

Should you have any questions or concerns, you are welcome to contact:
Contractor Compliance and Monitoring (CCMI) directly at:

CONTRACTOR COMPLIANCE AND MONITORING
635 Mariners Island Blvd. Suite 200
San Mateo, CA 94404
Phone (650) 522-4403
Fax (650) 522-4402

FOR REVIEW AT JOB START MEETINGS

The state labor law requirements applicable to the contract are composed of, but not limited to, the following:

1. Payment of Prevailing Wage Rates

The award of a public works contract requires that all workers employed on the project be paid not less than the specified general prevailing wage rates by the contractor and its subcontractors. Prevailing wage determinations for this project can be obtained at: www.dir.ca.gov. This includes a total package including fringe benefits and training contributions which are paid to the employee or for the benefit of the employee to a bona fide ERISA approved or otherwise unconditionally paid for the benefit of the employee Trust Fund.

The contractor is responsible for obtaining and complying with all applicable general prevailing wage rates for trades workers and any rate changes, which may occur during the term of the contract. Prevailing wage rates and rate changes are to be posted at the job site for workers to view. Or the contractor may post a notice stating where the prevailing wage determinations are available on the jobsite and the contractor shall provide access to such information upon reasonable notice.

2. All individuals or companies performing prevailing wage work on this project must be registered as a public works contractor and pay an annual fee of \$300 to the Department of Industrial Relations (DIR). This includes all work covered by prevailing wage such as trucking, surveying, building inspection and so on.

3. Apprentices

It is the duty of the contractor and subcontractors to employ registered apprentices on public works projects per Labor Code Section 1777.5; Contractors and subcontractors must submit proof of Public Works Contract Award Information (DAS140) or other documentation for Division of Apprenticeship Standards approved apprenticeship programs. Apprentices are to be employed in all crafts and in all trades with approved training programs. Contractors are to employ apprentices on a ratio of 1 apprentice hour for every 5 journeymen hours or as otherwise approved by the DAS approved Apprenticeship Training Committee. Contractors and subcontractors who do not meet this ratio must submit documentation that apprentices were requested and were not provided and/or not available in sufficient number to meet this ratio. The submission of an accurate DAS142(s) meets this requirement. Additional documentation may be required to verify the apprenticeship status of employees.

4. Penalties

Penalties, including forfeitures and debarment, shall be imposed for contractor/subcontractor failure to pay prevailing wages, failure to maintain and submit accurate certified payroll records upon request, failure to employ apprentices, and for failure to pay employees for all hours worked at the correct prevailing wage rate, in accordance with Labor Code Sections 1775, 1776, 1777.7, and 1813. Monetary penalties of \$200 per day per worker shall be imposed for failure to pay correct prevailing wage; \$25 per day per worker shall be imposed for overtime violated; \$100 per day per worker for failure to provide certified payroll information; \$100-\$300 per calendar day for noncompliance of Apprenticeship issues.

5. Certified Payroll Records

Per Labor Code Section 1776, contractors and subcontractors are required to keep accurate payroll records which reflect the name, address, social security number, and work classification of each employee; the straight time and overtime hours worked each day and each week; the fringe benefits; and the actual per diem wages paid to each journeyperson, apprentice, worker, or other employee hired in connection with a public works project. A listing of all current prevailing wage determinations can be obtained from the Agency's main office or by accessing the Department of Industrial Relation's website at: www.dir.ca.gov

Employee payroll records shall be certified (signed under penalty of perjury by someone in authority at the company) and shall be made available for inspection at all reasonable hours at the principal office of the contractor/subcontractor, or shall be furnished to any employee, or to his or her authorized representative on request. Disclosure of certified payroll information to anyone other than the Awarding Body, its agent, or the Department of Industrial Relations requires that personal information about the employees (name, address and social security number) listed on the forms be redacted (omitted) to protect employee privacy.

Contractors and subcontractors shall maintain their certified payrolls on a weekly basis and shall submit said payrolls on a monthly basis in conjunction with contractor's requests progress or final payment. In the event that there has been no work performed during a given week, the Certified Payroll Record shall be annotated "No Work" for that week. The Agency or its authorized representative is also authorized to request and review all related payroll records such as time cards, cancelled checks, etc. For all projects awarded after April 1, 2015, certified payrolls must also be submitted to the DIR the electronically through their eCPR system.

While the DIR accepts electronic versions of your certified payroll, the DIR and this agency may also request copies of the original certified payroll and supporting documentation at any time.

6. Nondiscrimination in Employment

Prohibitions against employment discrimination are contained in Labor Code Sections 1735 and 1777.6; the Government Code; the Public Contracts Code; and Title VII of the Civil Rights Act of 1964, as amended. All contractors and subcontractors are required to implement equal employment opportunities as delineated below:

a. Equal Employment Poster

The equal employment poster shall be posted at the job site in a conspicuous place visible to employees and employment applicants for the duration of the project. All other labor and employment related posters are also to be properly displayed on the jobsite.

7. Kickback Prohibited

Per Labor Code Section 1778, contractors and subcontractors are prohibited from accepting, taking wages illegally, or extracting "kickback" from employee wages;

8. Acceptance of Fees Prohibited

Contractors and subcontractors are prohibited from exacting any type of fee for registering individuals for public work (Labor Code Section 1779); or for filling work orders on public works contracts (Labor Code Section 1780);

9. Listing of Subcontractors

Contractors are required to list all subcontractors hired to perform work on a public works project when that work is equivalent to more than one-half of one percent of the total contract amount or \$10,000 whichever is greater. (Public Contract Code Section 4100, et seq.);

10. Proper Licensing

Contractors and subcontractors are required to be properly licensed. Penalties will be imposed for employing workers while unlicensed (Labor Code Section 1021 and Business and Professions Code Section 7000, et seq. under California Contractors License Law);

11. Unfair Competition Prohibited

Contractors and subcontractors are prohibited from engaging in unfair competition (Business and Professions Code Sections 17200-17208);

12. Workers' Compensation Insurance

All contractors and subcontractors are required to be insured against liability for workers' compensation, or to undertake self-insurance in accordance with the provisions of Labor Code Section 3700 (Labor Code Section 1861);

13. OSHA

Contractors and subcontractors are required to comply with the Occupational, Safety and Health laws and regulations applicable to the particular public works project.

14. Prompt Payment of Subcontractors and Suppliers

Contractors are required by law to promptly pay their subcontractors and suppliers within seven (7) days of receipt of any progress or final payment from the Public Agency. Likewise the subcontractor and supplier are required to pay their respective subcontractors and suppliers within seven (7) days of receipt of payment from the general contractor. When the payment to the contractor is a release of final retention on the project, those funds must be paid within seven (7) days of receipt.

15. IRCA

Pursuant to the Immigration Reform and Control Act of 1986, employers are required to verify that all employees working on public works contracts are legally able to work in the United States. Employers shall keep on file appropriate I-9 forms and documentation for all workers employed on the jobsite and make such forms available to inspection and review by the LCO upon request.

16. Jobsite Interviews

Jobsite interviews are not required on this project. If the need arises, CCMI may conduct random jobsite interviews on this project.

17. Certification of Electricians

Those employing electricians must comply with employment testing and certification requirements for electricians. Additional information may be required to verify the certification status of those employed.

18. Employee Wage Statements - It is required to provide itemized wage statements (pay stubs) to Employees under Labor Code Section 226.

19. Public Works Contractor Registration – Only those businesses who have registered and paid the applicable fee to the Department of Industrial Relations as a Public Works Contractor will be allowed to work on the project.

In accordance with federal and state laws, and with the Public Agency's policy and contract documents, the undersigned contractor herein certifies that they will comply with the foregoing labor law requirements; and fully understands that failure to comply with these requirements will subject them to the penalties cited herein.

The contractor also herein certifies that it has been provided with a copy of the Labor Compliance Program Package for Contractors with includes:

1. Labor Law Requirements Checklist (included herein)
2. The Location of Applicable General Prevailing Wage Rate Determinations
3. Blank Certified Payroll Record form
4. Fringe Benefit Statements
5. State apprenticeship contribution form (CAC2)
6. State apprenticeship requirements and form to register apprentices (DAS-140)
7. Request for apprentices (DAS-142)
8. Copy of the Labor Code relating to Public Works and Public Agencies (Part 7, Chapter 1, Sections 1720-1816 can be found at www.dir.ca.gov).

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE COPIES OF THE LABOR COMPLIANCE PROGRAM PACKAGE TO ALL LISTED SUBCONTRACTORS AND TO ANY SUBSTITUTED SUBCONTRACTORS.

Project Name and Number: _____

Public Agency: _____

Contractor: Name _____

Contractor Address: _____

Contractor Phone: _____ Fax: _____

License Number: _____ Date: _____

I acknowledge that I have been informed and am aware of the foregoing requirements and that I am authorized to make this certification on behalf of _____
 (Name of Contractor)

 Signature/Name/Title of Contractor Authorized Representative

Additional Explanation And Instructions Relating To Required LCP Forms and Information

Certified payroll or non performance documentation - is required for each week from the beginning of the contractor's /subcontractor's work on the project until completion of that contractor's/subcontractor's work. These documents need to reflect a consistent 7 day work week for the entirety of the project. The certified payroll forms need to be complete, listing the employee's correct name, address, social security number, hours worked per day, total hours worked per week, wages, deductions and check number. It is critical that the employee's craft classification be listed correctly. Just listing "Journeyman" or "Laborer" is

not sufficient. Many trades have sub-classifications and it is the contractor's obligation to correctly classify the employees. Employees must be classified and paid based on what type of work they are performing, not merely by title. It is acceptable for an employee to work in more than one trade category per day, but it is the employer's obligation to keep accurate records of the different type of work performed by the employee.

Please be aware non performance statements must be submitted for weeks in which no work is performed. More information about trade classifications and wage rates can be found at www.dir.ca.gov.

Fringe Benefit Statement - In order to complete a payroll audit, we need a copy of the fringe benefit statement listing the fringes being paid to each employee or employees on each trade. You are not required to use the worksheet in the packet, however all the information on that worksheet needs to be included in the documentation we receive. This should show an hourly breakdown of the specific contributions (health, pension, etc.) for each trade and the addresses of the plans being paid into. For contractors who pay medical benefits directly to a medical plan, such as Kaiser or Blue Shield, the monthly payment for each employee must be amortized into an hourly rate. (For example: Joe's health premium is \$300 a month, that rate multiplied by 12 (months) divided by 2080 (hours) yields an hourly rate of \$1.72 per hour). Similar amortization is allowed for vacation and holiday time paid. Training contributions paid to an approved apprenticeship committee needs to be listed as a separate item on this form (i.e. not just training/other together).

Apprenticeship

Submit contract award information- DAS-140

Submit the contract award information in writing to each of the apprenticeship program sponsors in the area of your public works project within 10 days of the prime execution of the contract or subcontract, but in no event later than the first day in which the contractor has workers employed on the public work. This is simply a notification of award, it is not automatically a request for dispatch of a registered apprentice.

If you are not already approved to train apprentices with an approved apprenticeship committee and you are not willing to abide by the terms of and conditions of an apprenticeship program for this project, then (check Box 3) you must send a copy of the DAS-140 form to ALL approved apprenticeship Training Committee for that craft in the County in which the work is being performed.

Request to employ registered apprentices- DAS-142

A contractor on a public works project must employ one (1) hour of apprentice work for every five (5) hours performed by a journeyman.

All contractors must request for dispatch of an apprentice from an apprenticeship program (for each apprenticeable craft or trade) by giving the program actual notice of the request at least 72 hours (business days only) before the date on which apprentices are required. Contractors who do not receive sufficient number of apprentices from their initial request must continue to request apprentices from all other approved apprenticeship committees in the county, if more than one exists, until the proper ratio of apprentices is reached or until all apprenticeship committees (for that trade) have been contacted at least once.

When an apprentice is dispatched, the employer is required to employ the apprentice for at least one full day of work (8 hours) or 20% of the total apprenticeship hours calculated for the project- unless the total number of journeyman hours total under 40 hours for that craft.

Make training fund contributions – CAC 2

Contractors who are awarded public works jobs must make training fund contributions in the amount established in the prevailing wage rate publication for journeymen and apprentices. This nominal fee contributes to the assurance that new apprentices coming into the craft will be guaranteed the highest level of training and as those skilled craftsmen retire, the trade will survive.

Contractors who contribute to an apprenticeship program are entitled to a full credit in the amount of those contributions for each apprentice working on the project and to not more than the specified training contribution amount for journeyman.. Contractors who do not contribute to an apprenticeship program must submit their contributions to the California Apprenticeship Council, PO Box 511283, Los Angeles, CA 90051-7838.

Training fund contributions to the Council are due and payable on the 15th day of the month for work performed during the preceding month. The contribution should be paid by check and be accompanied by a computer generated training fund contribution form (CAC – 2) or a letter containing the following information:

1. The name, address and telephone number of the contractor making the contribution.
2. The contractor's license number.
3. The name and address of the public agency that awarded the contract.
4. The jobsite location, including the county where the work was performed.
5. The contract or project number.
6. The time period covered by the enclosed contributions.
7. The contribution rate and total hours worked by apprenticeable occupation.
8. The name of the program(s) that provide apprentices if any.
9. The number if apprentice hours worked, by apprenticeable occupations and by program.

Comments, suggestions and questions welcome. Email to daspublicworks@dir.ca.gov or call your local district office.

* * * * *

* DAS-140 and DAS-142 forms are not required when the Prime contract is less than \$30,000 or when the company performing the work is a sole proprietor and is the only worker employed by that company on the project.

PUBLIC WORKS CONTRACT AWARD INFORMATION

Contract award information must be sent to your Apprenticeship Committee if you are approved to train. If you are not approved to train, you must send the information (which may be this form) to ALL applicable Apprenticeship Committees in your craft or trade in the area of the site of the public work. Go to: <http://www.dir.ca.gov/das/PublicWorksForms.htm> for information about programs in your area and trade. You may also consult your local Division of Apprenticeship Standards (DAS) office whose telephone number may be found in your local directory under California, State of, Industrial Relations, Division of Apprenticeship Standards.

Do not send this form to the Division of Apprenticeship Standards.

NAME OF YOUR COMPANY	CONTRACTOR'S STATE LICENSE NO
MAILING ADDRESS- NUMBER & STREET, CITY, ZIP CODE	AREA CODE & TELEPHONE NO.
NAME & ADDRESS OF PUBLIC WORKS PROJECT	DATE YOUR CONTRACT EXECUTED
	DATE OF EXPECTED OR ACTUAL START OF PROJECT
NAME & ADDRESS OF PUBLIC AGENCY AWARDED CONTRACT	ESTIMATED NUMBER OF JOURNEYMEN HOURS
	OCCUPATION OF APPRENTICE
THIS FORM IS BEING SENT TO: (NAME & ADDRESS OF APPRENTICESHIP PROGRAM(S))	ESTIMATED NUMBER OF APPRENTICE HOURS
	APPROXIMATE DATES TO BE EMPLOYED

This is not a request for dispatch of apprentices.

Contractors must make a separate request for actual dispatch, in accordance with Section 230.1(a) California Code of Regulations

Check One Of The Boxes Below

1. We are already approved to train apprentices by the _____
Apprenticeship Committee. We will employ and train under their Standards. Enter name of the Committee
2. We will comply with the standards of _____
Apprenticeship Committee for the duration of this job only. Enter name of the Committee
3. We will employ and train apprentices in accordance with the California Apprenticeship Council regulations, including § 230.1 (c) which requires that apprentices employed on public projects can only be assigned to perform work of the craft or trade to which the apprentice is registered and that the apprentices must at all times work with or under the direct supervision of journeyman/men.

Signature _____ Date _____

Typed Name _____

Title _____

**State of California - Department of Industrial Relations DIVISION
OF APPRENTICESHIP STANDARDS**

REQUEST FOR DISPATCH OF AN APPRENTICE – DAS 142 FORM

DO NOT SEND THIS FORM TO DAS

You may use this form to request dispatch of an apprentice from the Apprenticeship Committee in the craft or trade in the area of the public work. Go to: <http://www.dir.ca.gov/DAS/PublicWorksForms.htm> for information about programs in your area and trade. You may also consult your local Division Apprenticeship Standards (DAS) office whose telephone number may be found in your local directory under California, State of, Industrial Relations, Division of Apprenticeship Standards. **Except for projects with less than 40 hours of journeyman work, you must request and employ apprentices in no less than 8 hour increments.**

Date: _____	Contractor Requesting Dispatch:
To Applicable Apprenticeship Committee:	Name: _____
Name: _____	Address: _____
Address: _____	_____
_____	License No. _____
Tel. No. _____ Fax No. _____	Tel. No. _____ Fax No. _____

Project Information:

Contract No. _____

Name of the Project: _____

Address: _____

Dispatch Request Information:

Number of Apprentice(s) Needed: _____ **Craft or Trade:** _____

Date Apprentice(s) to Report: _____ (72 hrs. notice required) **Time to Report:** _____

Name of Person to Report to: _____

Address to Report to: _____

*You may use this form to make your written request for the dispatch of an apprentice. Requests for dispatch must be in writing and submitted at least 72 hours in advance (excluding weekends and holidays) via either first class mail, fax or email. **Proof of submission may be required.** Please take note of California Code of Regulations, Title 8, § 230.1 (a) for all applicable requirements regarding apprenticeship requests and/or visit <http://www.dir.ca.gov/DAS/DASApprenticesOnPublicWorksSummaryOfRequirements.htm>*

DAS 142 (Revised 12/11)

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

CRAFT: # CEMENT MASON

DETERMINATION: NC-23-203-1-2014-2

ISSUE DATE: August 22, 2014

EXPIRATION DATE OF DETERMINATION: June 28, 2015** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

LOCALITY: All localities within Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kings, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba counties.

CLASSIFICATION (JOURNEYPERSON)	Employer Payments					Straight-Time		Overtime Hourly Rate		
	Basic Hourly Rate	Health and Welfare	Pension	Vacation and Holiday	Training	Hours ^d Total	Hourly Rate	Daily 1 1/2X	Saturday ^a 1 1/2X	Sunday and Holiday
Cement Mason	\$30.00	8.15	9.80	5.24 ^b	0.47	8	53.66	68.660	68.660 ^c	83.66
Mastic Magnesite Gypsum, Epoxy, Polyester, Resin and all composition masons, swing or slip form scaffolds	\$30.75	8.15	9.80	5.24 ^b	0.47	8	54.41	69.785	69.785 ^c	85.16

Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

^a Saturdays in the same work week may be worked at straight time if a job is shut down during the normal work week due to inclement weather or major mechanical breakdown (limited to curb and gutter machine, concrete pump, and concrete plant).

^b Includes an amount for supplemental dues.

^c Rate applies to the first 8 hours of work on Saturday. All other hours worked on Saturday are paid at the Sunday/Holiday rate.

^d Where multiple shifts are worked, the day shift shall work eight (8) hours and for such work they shall be paid the regular straight time rate for eight (8) hours; the second (2nd) shift shall work seven and one-half (7 ½) hours, and for such work they shall be paid the regular straight time rate for eight (8) hours; if a third (3rd) shift is worked, they shall work seven (7) hours and for such work they shall be paid eight (8) hours regular straight time pay. No multiple shift shall be started for less than five (5) consecutive days.

RECOGNIZED HOLIDAYS: Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/PWD>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

TRAVEL AND/OR SUBSISTENCE PAYMENT: In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/PWD>. Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

SAMPLE⁵³E

California Apprenticeship Council - Training Fund Contributions

1. Go to this web link: <https://www.dir.ca.gov/DAS/tf/cac2.asp> and add it to your favorites.
2. Fill out the New Easy Web App with the necessary information.
3. Please use your Contractor's License Number without the alpha digit. This number can also be used to look up your contributions on the website at:
<http://www.dir.ca.gov/CA/trainingfund/Tfsearch.html>
4. Select the County and Occupation, then fill in the hours and rate and when you hit "tab" the amount is calculated for you.
5. Once you are done filling out the form and verified your information, print out your invoice.
6. **VERY IMPORTANT:** Mail **both** the **invoice** and your **check** payable to:
California Apprenticeship Council to:

Remit to: CALIFORNIA APPRENTICESHIP COUNCIL
PO BOX 511283
Los Angeles, CA 90051-7838

CONTRACTOR FRINGE BENEFIT STATEMENT

Contract Number / Name:	Contract Location:	Today's Date:
Contractor / Subcontractor Name:		Business Address:

In order that the proper Fringe Benefit rates can be verified when checking payrolls on the above contract, the hourly rates for fringe benefits, subsistence and/or travel allowance payment made for employees on the various classes of work are tabulated below.

Classification:	Effective Date:	Subsistence or Travel Pay: \$ _____
FRINGE BENEFITS	Health & Welfare \$ _____	PAID TO: Name: _____ Address: _____
	Pension \$ _____	PAID TO: Name: _____ Address: _____
	Vacation/ Holiday \$ _____	PAID TO: Name: _____ Address: _____
	Training Other \$ _____	PAID TO: Name: _____ Address: _____

Classification:	Effective Date:	Subsistence or Travel Pay: \$ _____
FRINGE BENEFITS	Health & Welfare \$ _____	PAID TO: Name: _____ Address: _____
	Pension \$ _____	PAID TO: Name: _____ Address: _____
	Vacation/ Holiday \$ _____	PAID TO: Name: _____ Address: _____
	Training Other \$ _____	PAID TO: Name: _____ Address: _____

Classification:	Effective Date:	Subsistence or Travel Pay: \$ _____
FRINGE BENEFITS	Health & Welfare \$ _____	PAID TO: Name: _____ Address: _____
	Pension \$ _____	PAID TO: Name: _____ Address: _____
	Vacation/ Holiday \$ _____	PAID TO: Name: _____ Address: _____
	Training Other \$ _____	PAID TO: Name: _____ Address: _____

Submitted: Contractor / Subcontractor	By: Name / Title
---------------------------------------	------------------

PUBLIC WORKS PAYROLL REPORTING FORM

NAME OF CONTRACTOR OR SUB CONTRACTOR _____ ADDRESS _____
 CONTRACTORS LICENSE # _____ SPECIALTY LICENSE # _____

PAYROLL NO. _____ SELF-INSURED CERTIFICATE # _____ PROJECT OR CONTRACT NO. _____
 WORKERS' COMPENSATION POLICY # _____ PROJECT AND LOCATION _____

(1) NAME, ADDRESS AND SOCIAL SECURITY NUMBER OF EMPLOYEE	(2) N H E O O X I L E I O D M F I P W N T I I T G O I H N I S	(3) WORK CLASSIFICATION	FOR WEEK ENDING							(5) TOTAL HOURS	(6) HOURLY RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS, CONTRIBUTIONS AND PAYMENTS								(9) NET WGS PAID FOR WEEK	CHECK NO.						
			(4) M T W T H F S S Day Date										FED TAX	FICA (SOC SEC)	STATE TAX	SDI	VAC/HOL	HEALTH & WELF	PENSION	TRAINING			FUND ADMIN	DUES	TRV/SUBS	SAVINGS	OTHER*	TOTAL DEDUCTIONS
			Hours Worked Each Day																									

Form A 1-131 (New 2-80)
 (form has been reduced to fit page)

*OTHER - Any other deductions, contributions and/or payment whether or not included or required by prevailing wage determinations must be separately listed. Use extra sheet if necessary

CERTIFICATION must be completed

I, _____, the undersigned, am _____ with the authority to act for and on behalf of _____ (name of business and/or contractor)
 certify under penalty of perjury that the records or copies thereof submitted and consisting of _____ are the originals or true, full and correct copies of the originals which depict the payroll record(s) of the actual disbursements by way of cash, check or whatever form to the individual or individuals named.
 Date: _____ Signature: _____
 A public entity may require a more strict and/or more extensive form of certification.

In accordance with federal and state laws, and with the Public Agency's policy and contract documents, the undersigned contractor herein certifies that they will comply with the foregoing labor law requirements; and fully understands that failure to comply with these requirements will subject them to the penalties cited herein.

The contractor also herein certifies that it has been provided with a copy of the Labor Compliance Program Package for Contractors with includes:

1. Labor Law Requirements Checklist (included herein)
2. The Location of Applicable General Prevailing Wage Rate Determinations
3. Blank Certified Payroll Record form
4. Fringe Benefit Statements
5. State apprenticeship contribution form (CAC2)
6. State apprenticeship requirements and form to register apprentices (DAS-140)
7. Request for apprentices (DAS-142)
8. Copy of the Labor Code relating to Public Works and Public Agencies (Part 7, Chapter 1, Sections 1720-1816 can be found at www.dir.ca.gov).

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE COPIES OF THE LABOR COMPLIANCE PROGRAM PACKAGE TO ALL LISTED SUBCONTRACTORS AND TO ANY SUBSTITUTED SUBCONTRACTORS.

Project Name and Number: _____

Public Agency: _____

Contractor: Name _____

Contractor Address: _____

Contractor Phone: _____ Fax: _____

License Number: _____ Date: _____

I acknowledge that I have been informed and am aware of the foregoing requirements and that I am authorized to make this certification on behalf of _____.
(Name of Contractor)

Signature/Name/Title of Contractor Authorized Representative

VOLUME 3
TECHNICAL SPECIFICATIONS

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SECTION 01 10 00

SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK TO BE DONE

Construction of 8 CCTV Access Point Structures and 2 Cleaning Access Point Structures:

- Mobilization/ demobilization
- Traffic control
- Site investigation and potholing
- Sheeting, shoring, and bracing
- Dewatering
- Access Points installation
- Trench restoration
- Pipe cleaning through pigging

1.02 CONSTRUCTION PROCEDURE AND SEQUENCE

A. GENERAL

The Work under this Contract shall be conducted in a manner which will minimize shutdowns, roadway closures, or traffic obstructions caused by the construction. Shutdowns causing damage to adjacent public and private property shall not be permitted and any damage resulting shall be the sole responsibility of the Contractor.

B. SYSTEM OUTAGE REQUESTS

1. Changes to existing sanitary sewer lines or any new connections thereto must be scheduled to provide the least possible interference or interruptions of flow from John Duckett Pump Station. Prior to any shutdown or flow diversion, all materials, fittings, supports, equipment and tools shall be on the site and all necessary labor scheduled prior to starting any connection work. This may require backup equipment to be available on-site prior to the start of the shutdown in case of equipment breakdown. The Contractor shall notify the Owner's Representative in writing at least 72 hours [three (3) regular work-week days] in advance of any required shutdown for daytime shutdowns and at least 7 (seven) regular work-weekend days for nighttime shutdowns by submitting a System Outage Request (SOR) form which will be reviewed for acceptance by the District. The timing of notification (in advance of any required shutdown) does not include Saturday, Sunday, or Holidays. If a Contractor is requiring a Monday shutdown, the SOR must be submitted by end of day the prior Tuesday.
2. The SOR shall be coordinated with the Owner's Representative and construction

schedule and shall meet the Contractor's planned length of time required to complete said operation.

3. In general, the SOR plan shall include:
 - a. A detailed description of the planned work during the shutdown.
 - b. A specific time schedule for each major work activity coordinated with the required operations of the utility owner.
 - c. Detailed lists of materials, equipment, tools, personnel, etc. (including standby material, equipment, tools, personnel, etc. should the primary material, equipment, tools, personnel, etc. become unavailable) necessary to successfully execute the planned work.
 - d. A contingency plan that shall be initiated in the event that temporary facilities fail or it becomes apparent that the time constraints described in the approved SOR cannot be met. The contingency plan shall conform to all specified outage requirements.
4. All costs for preparing and implementing both the outage and contingency plans shall be borne by the Contractor.
5. Each shutdown duration shall be specifically authorized by the City or be as indicated in the Contract Documents. The shutdown of existing facilities will be performed by City personnel or by Contractor only under City personnel's supervision.

C. UTILITY SERVICE SHUTDOWNS

1. Planned utility service shutdowns to any unit of the Project shall be accomplished during periods of minimum use. In some cases, this will require night or weekend work (with the consent of Owner's Representative) and these costs shall be included in the Contract Price. The Contractor shall program its work so that service will be restored in the minimum possible time and shall cooperate with the District in reducing shutdowns of the utility system to a minimum.
2. No utility shall be disconnected without prior written approval from the utility owner and Owner's Representative. When it is necessary to disconnect a utility, the Contractor shall give not less than 72 hours' notice to the utility owner and to the Owner's Representative for its approval of the Contractor's proposed schedule.

D. CONVEYANCE SYSTEM SHUTDOWNS

1. Conveyance System shutdowns provide for a maximum two (2) hour work window for construction between the hours of 10 pm to 4 am. Bypassing or containment of flow during work hours may be required.

E. LIMITED SHUTDOWN PERIODS – NOT USED

F. BIOASSAY TESTING SCHEDULE – NOT USED

G. WORK SEQUENCE ACTIVITIES AND CONSTRAINTS

1. The work shall proceed in accordance with the following sequence. The Contractor may propose other methods or modifications of the methods described herein in the required Work Sequence Plan submittal. Any alternate methods proposed by the Contractor are subject to approval by the Owner's Representative.

The construction work sequence is as follows:

- a. Existing utility survey at the location of the proposed Access Structures through potholing. The contractor shall submit a pothole report confirming the existing forcemain horizontal location and depth and identifying groundwater. Shop drawing submittal must be favorably reviewed by the District prior to all work to install Cleaning Access Structures and CCTV Access Structures.
- b. Contractor to provide all submittals for pipe material, concrete, precast manhole, bypass pumping plan, forcemain draining plan, shoring design, traffic control, and excavation dewatering plan.
- c. Excavation and preparation work to expose the forcemain at proposed Structure locations unless otherwise noted. All work related to this can only be performed Monday through Friday between 8 am and 5 pm.
- d. Installation of various connections to the forcemain (tees, wyes, gate valves, flange adaptors). All work for installation of such connections, including draining the force main as necessary, can only be performed Monday through Thursday, between 10 pm and 4 am. Contractor is responsible for coordinating with the District to drain the forcemain as required to facilitate the work, and Contractor shall provide all necessary labor and equipment to safely capture and transport the wastewater from the forcemain to a facility indicated by the District. Contractor is responsible for determining how many Access Point Structures they can install per shift, under the constraints of this project.
- e. Installation of concrete manhole structures over the connection points. Manhole installation, backfilling and final grading can only be performed Monday through Friday between 8 am and 5pm.
- f. Cleaning of an approx. length of 5000 ft. of 20" HDPE force main pipe. Cleaning should be performed through pigging, as per cleaning contractor's technical specifications.

1.03 ACCESS FOR OPERATING PERSONNEL

- A. The Contractor's attention is drawn to the fact that during the course of the work of this Contract, the existing facilities at John Duckett Pump Station will be used and maintained by District personnel. The Contractor shall coordinate its work in such a way as to interfere as little as possible with the routine work of existing except in direct pursuit of the work of this Contract and as favorably reviewed by the Owner's Representative. The Contractor shall provide safe access at all times to all existing facilities for operating personnel and equipment.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SECTION 01 14 00

COORDINATION AND SITE CONDITIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for coordinating and sequencing the work under the Contract, and requirements regarding existing site conditions.

1.02 SITE CONDITIONS

- A. Information On Site Conditions:
 - 1. General: Information obtained by the Owner from other sources regarding site conditions, topography, subsurface information, groundwater elevations, existing construction of site facilities as applicable, and similar data will be available for inspection at the office of the Owner upon request. The Owner assumes no responsibility for its accuracy or completeness or for the Contractor's interpretation of such information.
- B. Existing Utilities:
 - 1. Location:
 - a. Contractor shall exercise reasonable care to verify locations of utilities and facilities marked by locating agencies or shown on the Drawings and to determine the presence of those not shown. Immediate and adjacent areas where excavations are to be made shall be thoroughly checked by visual examination for indications of underground facilities, and also checked with electronic metal and pipe detection equipment.
 - b. Where there is reasonable cause to verify the presence or absence of an underground facility, make exploratory excavations prior to proceeding with major excavation in the area.
 - c. Where information on buried facilities is required to verify their nature, shape, configuration, dimensions, materials, or other properties, make exploratory excavations as acceptable to the Owner.
 - 2. Contractor's Responsibilities:
 - a. Where Contractor's operations could cause damage or inconvenience to railway, telegraph, telephone, television, power, oil, gas, water, sewer, or irrigation systems, the Contractor shall make arrangements necessary for the protection of these utilities and services. Replace existing utilities removed or damaged during construction, unless otherwise provided for in these Contract Documents.
 - 1) Rock traps shall be installed in all downstream outlets of manholes. No concrete, pipe, or any debris shall be left in the sewer lines after construction. It is the sole responsibility of the contractor to install and maintain rock traps. Rock trap design shall be approved by the Owner.
 - b. Notify utility offices that are affected by construction operations at least 48 hours in advance. Under no circumstances expose any utility without

first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for the utilities. Contact Underground Services Alert (U.S.A.) at telephone number 1-800-227-2600 for marking prior to digging.

- c. Protect all utility poles from damage. If interfering utility poles will be encountered, notify the Owner at least 5 days in advance of construction operations to permit necessary arrangements with the utility company for protection or relocation of the interfering poles.
 - d. Contractor shall be solely and directly responsible to Owner and operator of such properties for damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of injuries or damage which may result from construction operations under this Contract.
 - e. Neither Owner nor its officers or agents shall be responsible to Contractor for damages as a result of Contractor's failure to protect utilities encountered in the work.
 - f. In event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental damage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration as promptly as possible and pay for repair. Prevent interruption of utility service unless granted by the utility owner.
 - g. In the event Contractor encounters water service lines that interfere with trenching, obtain prior approval of the water utility, shut down the service, dig through, remove service as necessary, and restore service to previous conditions using equal materials.
3. Names of known Utilities: Notify the following applicable utilities if conflicts or emergencies arise during the work:
- a. Gas Mains and Services:
PG&E Engineering: Jason Conihar at (415) 257-3404 or
Mindee Rayburn at (415) 257-3405
Emergency: (800) 743-5000
 - b. Electrical Utilities:
PG&E
Service Planning: (415) 257-3431 or
Al Caballero at (415) 257-3174
Emergency: (800) 743-5000
 - c. Telephone Utilities:
SBC/AT&T Debbie Barrios at (707) 575 2077 or
(707)321 6207
Emergency: (800) 310-2355
 - c. Marin County Public Works Department:
Front Desk: (415) 499-6530
 - d. City of San Rafael:
Front Desk: (415) 485-3355
 - e. Marin Municipal Water District:

Front Desk: (415) 945-1400

f. Comcast:
Customer Service: (866) 690 6996

C. Interfering Structures:

1. Take necessary precautions to prevent damage to existing structures whether on the surface, aboveground, or underground. An attempt has been made to show major structures on the Drawings. While the information has been compiled from the best available sources, its completeness and accuracy cannot be guaranteed.
2. Protect existing structures from damage, whether or not they lie within limits of easements obtained by the Owner. Where existing fences, gates, barns, sheds, buildings, or other structure must be removed to properly carry out work, or are damaged during work, restore them to original condition and to the satisfaction of property owner.
3. Contractor may remove and replace in equal or better than original condition, small structures such as fences, mailboxes, and signposts that interfere with Contractor's operations.

D. Field Relocation:

1. During construction, it is expected that minor relocations of proposed facilities will be necessary. Make such relocations only by direction of the Owner. If existing structures are encountered that prevent construction as shown, notify the Owner before continuing with work so Owner may make necessary field revisions.
2. Where shown or directed by and acceptable to the Owner provide relocation of existing facilities to include piping, utilities, equipment, structures, electrical conduit wiring, electrical duct bank, and other miscellaneous items. Use only new materials for relocation of existing facilities. Match materials of existing facilities, unless otherwise shown or specified. Perform relocations to minimize downtime of existing facilities. Install new portions of existing facilities in their relocated position prior to removing existing facilities, unless otherwise accepted by Owner. Comply with cutting and patching requirements in this section.

E. Monuments and Markers:

1. Preserve and protect survey monuments and markers throughout construction. If damage occurs or removal becomes necessary, immediately notify Owner.
2. All survey markers or monuments which are damaged or removed as a result of the Contractor's operations will be reset by the Owner at the Contractor's expense.
3. In order to allow for properly referencing any existing survey monuments or markers which may be damaged or removed, the Contractor shall provide the Owner with a minimum of 10 working days' notice before proceeding with any work which might damage or remove any existing markers.

F. Easements:

1. Where portions of work will be located on public or private property, easements and permits have been obtained by Owner. Easements will provide for use of property for construction purposes only to the extent indicated on easements.

Copies of these easements and permits will be available from Owner for inspection. Contractor shall determine the adequacy of easements obtained and abide by easement provisions. Confine construction operations to within easement limits or make special arrangements with property owners or appropriate public agency for additional area required.

2. Before final payment will be authorized, Contractor shall furnish the Owner written releases from property owners or public agencies where side agreements or special easements have been made, or where Contractor's operations have not been kept within the Owner's construction right-of-way or property.
3. In the event Contractor is unable to secure written releases, inform the Owner of the reasons.
 - a. Owner or its representatives will examine the site, and Owner will direct Contractor to complete work that may be necessary to satisfy terms of the easement.
 - b. Should Contractor refuse to do this work, Owner reserves the right to have it done by separate contract and deduct the cost of same from the Contract amount, or require the Contractor to furnish a satisfactory bond in a sum to cover legal claims for damages.
 - c. When Owner is satisfied that work has been completed in agreement with the Contract Documents and terms of easements, the right is reserved to waive the requirement for written release if:
 - 1) Contractor's failure to obtain such statement is due to the grantor's refusal to sign, and this refusal is not based upon any legitimate claims that Contractor has failed to fulfill the terms of the easement, or
 - 2) Contractor is unable to contact or has had undue hardship in contacting the grantor.

1.03 SALVAGE OF MATERIALS

- A. Remove material to be salvaged with extreme care so as not to damage it for future use. Damage caused by the Contractor to equipment or material shall be replaced or repaired by the Contractor. Deliver salvaged material to Owner or at a site specified by the Owner. Hauling and disposal shall be at the expense of the Contractor.

1.04 CONNECTING TO EXISTING FACILITIES

- A. Unless otherwise shown or specified, determine methods of connecting new work to existing facilities, and obtain Owner's review and acceptance of connections.
 1. Determine location, elevation, nature, materials, dimensions, and configurations of existing facilities where necessary for connecting new work.
 2. Inspect existing record drawings and shop drawings, conduct exploratory excavations and field inspections, and conduct similar activities as needed.

1.05 PROGRESS MEETINGS

- A. Owner will schedule regular progress meetings at least monthly to review work progress, schedules, and other matters needing discussion and resolution.

1.06 SEQUENCE OF WORK

- A. Time of Work:
 - 1. Work hours are specified by governing agencies having jurisdiction through encroachment permits. If applicable, see Appendix section for encroachment permits from Marin County and City of San Rafael.
 - 2. Work hours specified by other governing agencies through encroachment permits shall be the responsibility of the Contractor. At the sole discretion of the governing agencies, work maybe limited anytime at no additional cost to the Owner.
 - 3. Unless noted otherwise, night work may be scheduled by Contractor only with the written permission of Owner. Such permission, however, may be revoked at any time if Contractor fails to properly execute and control nighttime work.

- B. Overtime Notice: If Contractor for convenience should desire to carry on work at night or outside regular hours, submit written notice to the Owner and allow ample time for satisfactory arrangements to be made for inspecting work in progress. The Owner will be the sole judge of whether on-site inspection is required.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

PART 4 PAYMENT

4.01 GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contactor's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Cutting and patching.
- C. Special procedures.

1.02 PRECONSTRUCTION MEETING

- A. Architect/Engineer will schedule meeting after Notice of Award.
- B. Attendance Required: Architect/Engineer and Contractor.
- C. Agenda:
 - 1. Submission of executed bonds and insurance certificates.
 - 2. Distribution of Contract Documents.
 - 3. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
 - 4. Designation of personnel representing parties in Contract and Architect/Engineer.
 - 5. Procedures and processing of field decisions, submittals, substitution, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 6. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect/Engineer, and those affected by decisions made.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.

3. Remove and replace defective and non-conforming Work.
 4. Remove samples of installed Work for testing.
- C. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.
 - D. Cut masonry and concrete materials using masonry saw or core drill.
 - E. Restore Work with new products in accordance with requirements of Contract Documents.
 - F. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
 - G. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.02 SPECIAL PROCEDURES

- A. Materials: As specified in product sections; match existing with new products for patching and extending work.
- B. Employ skilled and experienced installer to perform alteration work.
- C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- E. Remove debris and abandoned items from area and from concealed spaces.
- F. Prepare surface and remove surface finishes to permit installation of new work and finishes.
- G. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.

PART 4 PAYMENT

4.01 GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contactor's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 33 00

SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements and procedures necessary for scheduling, preparation, and submission of submittals.
- B. Requirements for preparation of progress schedules.

1.02 RELATED WORK SPECIFIED UNDER OTHER SECTIONS

- A. The individual Specification sections in these Contract Documents contain additional and special submittal requirements. Individual sections shall take precedence in the event of a conflict with this section.

1.03 SUBMITTAL PROCEDURES

- A. Owner reserves the right to modify the procedures and requirements for submittals, as necessary to accomplish the specific purpose of each submittal.
- B. Review, acceptance, or approval of substitutions, schedules, shop drawings, lists of materials, and procedures submitted or requested by Contractor shall not add to the Contract amount, and additional costs which may result therefrom shall be solely the obligation of Contractor.
- C. Owner is not precluded, by virtue of review, acceptance, or approval, from obtaining a credit for construction savings resulting from allowed concessions in the work or materials therefor.
- D. Owner is not responsible to provide engineering or other services to protect Contractor from additional costs accruing from submittals.
- E. Delays caused by the need for resubmittal shall not constitute basis for claim.
- F. After checking and verifying all field measurements, make submittals to Owner, in accordance with the schedule of submittals for review.
 - 1. Submittals shall bear a stamp or specific written indication that Contractor has satisfied its responsibilities under the Contract Documents with respect to the review of the submittal.
 - 2. Data shown shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to enable Owner to review the information.
- G. Check samples, and accompany with specific written indication that Contractor has satisfied requirements under the Contract Documents with respect to review of

submittals, and identify clearly as to material, supplier, pertinent data such as catalog numbers and the intended use.

- H. Before submission of each submittal, determine and verify quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto; review and coordinate each submittal with other submittals, requirements of the work, and the Contract Documents.
- I. At the time of each submission, give Owner specific written notice of each variation that the submittal may have from the requirements of the Contract Documents; in addition, make specific notation on each shop drawing submitted to Owner for review and approval of each such variation.

1.04 SCHEDULES

- A. General:
 - 1. Submit estimated progress schedule and preliminary schedule of submittals in duplicate to Owner.
 - 2. Schedules shall be submitted a minimum of 5 days prior to the time scheduled for the preconstruction meeting.
 - 3. Revise and resubmit as specified, and identify all changes made from previous schedule submittals.
 - 4. Failure to resubmit a revised schedule when requested may result in the withholding of monthly progress payments.
- B. Progress Schedule:
 - 1. The Contractor shall prepare and submit to the Owner, a progress schedule showing the dates on which each part or division of the work is expected to be started and finished.
 - 2. The schedule shall be in the form of a CPM or bar chart, and shall show the complete sequence of construction by activity or stages of work.
 - 3. The schedule shall reflect completion of all work within the specified time.
 - 4. Show product lead time for any item which exceeds 4 weeks.
 - 5. Show sufficient detail in breakdown so no activity exceeds 10 working days, excluding submittals and material lead time.
 - 6. Show the average feet per day anticipated for each condition, area, and/or size of pipe.
 - 7. Indicate the number of crews, the makeup of all crews, and the separate tasks to be preformatted by each crew.
 - 8. Information on the progress schedule shall be maintained current at all times. Submit updated schedule to Owner with each progress pay request.
 - 9. The updated schedule shall clearly show the date of the revision, and the revised performance periods. It shall also have an accurate history of the activities completed.
- C. Submittal Listing:
 - 1. Submit listing and schedule for all submittals required by the Specifications for review.

1.05 SHOP DRAWINGS

- A. General:
1. Shop drawings, as defined herein, consist of all drawings, diagrams, illustrations, schedules, and other data which are specifically prepared by or for Contractor to illustrate some portion of the work; and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams, and other information prepared by a manufacturer and submitted by Contractor to illustrate material or equipment for Owner portions of the work.
 2. Submittal of incomplete or unchecked shop drawings will not be acceptable. Shop drawing submittals which do not clearly show Contractor's review stamp or specific written indication of Contractor review will be returned to Contractor for resubmission.
 3. Submittal of shop drawings not required under these Contract Documents and not shown on the schedule of submittals will be returned to Contractor unreviewed and unstamped.
- B. Procedures:
1. Submit to Owner for review and approval in accordance with the accepted schedule of submittals, five copies of shop drawings.
 2. Transmit each submittal on Owner accepted form.
 3. Sequentially number the transmittal forms; resubmittals to have original number with an alphabetic suffix.
 4. Identify project, Contractor, Specification section number, pertinent drawing sheet and detail number(s), products, units and assemblies, and the system or equipment identification or tag number as shown.
 5. Apply Contractor's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information, is in accordance with requirements of the Contract Documents.
 6. Revise and resubmit submittals as required; identify all changes made since previous submittal.
 7. Submittals will be acted upon and transmitted to Contractor not later than 20 working days after receipt.
 8. When shop drawings have been reviewed by Owner, two copies will be returned to Contractor appropriately annotated.
 - a. If major changes or corrections are necessary, shop drawing may be rejected and one set will be returned to Contractor with such changes or corrections indicated.
 - b. Correct and resubmit the shop drawings in the same manner and quantity as specified for the original submittal.

1.06 SAMPLES AND TEST SPECIMENS

- A. Where required in the Specifications, and as determined necessary by Owner, submit test specimens or samples of materials, appliances, and fittings to be used or offered for use in connection with the work. Include information as to their sources, prepay cartage charges, and submit such quantities and sizes for proper examination and tests to establish the quality or equality thereof, as applicable.

- B. Submit samples and test specimens in ample time to enable Owner to make tests or examinations necessary, without delay to the work.
- C. Submit additional samples as required by Owner to ensure equality with the original approved sample and/or for determination of Specification compliance.
- D. Laboratory tests and examinations that Owner elects to make in its own laboratory will be made at Owner 's cost except that, if a sample of any material or equipment proposed for use by Contractor fails to meet the Specifications, Contractor shall bear cost of testing subsequent samples.
- E. Tests required by the Specifications to be performed by an independent laboratory shall be made by a laboratory licensed or certified in accordance with state statues. Submit certified test results of specified tests in duplicate to Owner.
- F. Samples and laboratory services shall be at the expense of Contractor and included in the prices bid for the associated work.

1.07 CONTRACT CLOSEOUT SUBMITTALS

- A. Record Drawings:
 - 1. Each month, or as otherwise agreed, submit to Owner a current listing and description of each change incorporated into the work since the preceding submittal. These changes shall be summarized on a full size set of Drawings in pencil or ink on an ongoing basis. Contractor will prepare a set of record drawings for the project which will include the changes made in materials, equipment, locations, and dimensions of the work. Final payment will not be made until a complete set of the annotated Drawings have been delivered to the Owner.

1.08 CONSTRUCTION PHOTOGRAPHS

- A. Provide photographs in JPEG showing the preconstruction site conditions, construction progress, and the post-construction site conditions. Each photograph shall be labeled in chronological order, formatted consistently, with easily apparent date and time, location taken, and general subject/title. Deliver to Engineer/Owner the photographs in electronic format saved in a CD, DVD, or USB flash drive.
- B. Take exposures of the preconstruction site and the property adjacent to the perimeter of the construction site. Particular emphasis shall be directed to structures both inside and outside the site, or as directed by Owner.
- C. Take exposures monthly showing the progress of construction. The location of these photographs shall be determined by Owner.
- D. Take exposures of the post-construction site and the property adjacent to the perimeter of the site. Particular emphasis shall be directed to structures both inside and outside the site, or as directed by Owner.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

PART 4 PAYMENT

4.01 GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contactor's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 35 23

SAFETY AND HEALTH

PART 1.00 GENERAL

1.01 CONTRACTOR'S RESPONSIBILITY FOR SAFETY

- A. The Contractor certifies that he is experienced and qualified to anticipate and meet the safety and health requirements of this Project pursuant to California Administrative Code, Title 8, "Industrial Relations", and Code of Federal Regulations, Sections 1900 through 1910, "Occupational Safety and Health Standards", and Section 1926 "Construction". For information purposes only the Contractor shall submit to the Owner a copy of his Injury and Illness Prevention Program. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. This requirement will apply continuously twenty-four (24) hours a day every day until final acceptance of the Work and shall not be limited to normal working hours. The duties of the Owner, Engineer and Inspector do not include review of the adequacy of the Contractor's safety measures in, on, or about the site and vicinity.
1. Safety Officer. The Contractor shall designate a fully trained and responsible member of his organization at the site who is experienced in administering, enforcing and overseeing the safety standards contained in the California Administrative Code, Title 8 and 29, and the Code of Federal Regulations, Sections 1900 through 1910 and Section 1926, whose duty shall be the prevention of hazards and accidents and who shall have authority to direct work for the Contractor.
 2. Safety Supervisor. The Contractor shall designate Safety Supervisors for each work site. One Safety Supervisor may be the Safety Officer. The other Safety Supervisors shall work for the Safety Officer. Each shall be fully trained for the type of work being performed and shall have authority to direct the Contractor's work.
 3. Accident Reporting. Any accident occurring within the premise of the Regional Treatment Plant is to be reported to the Owner.

1.02 SAFETY MEASURES

- A. The Contractor shall comply with all laws, ordinances, codes, rules, regulations and lawful orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. The Contractor shall maintain copies of all documents mentioned or referenced in this Section readily available at the site until the Work is completed. In the event the Contractor fails to observe any of the necessary safety provisions, the Owner may stop the work and direct the Contractor to comply with the applicable provisions, or may order the necessary work done by others. All impacts, both monetary and time-related, associated with stoppage of the work in order to comply with the Owner's directives pertaining to safety requirements, and all costs of having the necessary work done by others shall be borne by and be the obligation of the Contractor.

1.03 CONFINED SPACE SAFETY

- A. The Owner employs a "Permit Required" safety standard for all confined space entries per California General Industrial Safety Orders, Section 5157. Work performed in or about wastewater (sewage) facilities, including but not limited to manholes, pipes, tanks,

basins, and structures, carries with it the high potential for exposure of workers and other persons to hazardous conditions. The Contractor is required to be especially alert to these conditions and employ a "permit required" system for all confined space entries as specified in California General Industrial Safety Orders, Section 5157. These conditions may include, but are not limited to, exposure to hydrogen sulfide, carbon dioxide, methane, carbon monoxide and other gases; exposure to atmospheres containing insufficient oxygen to support human life; exposure to wastewater (sewage) which may contain bacteriological, chemical, and other constituents harmful to humans; working in conditions where engulfment or entrapment of personnel may occur (such as in trench excavations); and working in structures with uneven and slippery surfaces and with difficult and limited access. Many of these environments are classified as "confined spaces" in the Code of Federal Regulations, Sections 1900 through 1910 and Section 1926, the California Administrative Code, Title 8, and the State of California's General Industry Safety Orders. The Contractor shall be fully familiar with, and shall strictly adhere to and comply with, the applicable sections of these documents pertaining to confined spaces. In the event of a conflict between applicable requirements, the more restrictive shall apply.

1.04 PERSONAL HYGIENE

- A. Persons involved in the work may be exposed to disease-producing organisms in wastewater (sewage). The Contractor shall require his personnel to observe proper hygienic precautions, including washing of hands and other exposed portions of the body with disinfecting soap and water before eating or smoking.

1.05 PUBLIC SAFETY AND CONVENIENCE

- A. The Contractor shall conduct his work so as to insure the least possible obstruction to traffic and inconvenience to the general public in the vicinity of the work and to insure the protection of persons and property. No road or street shall be closed to the public except with the permission of the Owner and the proper governmental authority. Fire hydrants on or adjacent to the work shall be accessible to fire-fighting equipment. Temporary provisions shall be made by the Contractor to insure the use of sidewalks, private and public driveways and proper functioning of gutters, sewer inlets, drainage ditches and culverts, irrigation ditches and natural water courses.

1.06 WARNINGS AND BARRICADES

- A. The Contractor shall provide and maintain barricades, guards, temporary bridges and walkways, watchmen, night lights and danger signals illuminated from sunset to sunrise, and all other necessary appliances and safeguards to protect the Work, life, property, the public, excavations, equipment, and materials. Barricades shall be of substantial construction and shall be painted such as to increase their visibility at night. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricades, or detours exist. Guard rails shall be provided for bridges and walkways over or adjoining excavations, shafts, and other openings and locations where injury may occur.

1.07 FIRE PREVENTION

- A. The Contractor's Safety Officer shall inspect the entire Work and site, including storage areas, at frequent intervals to verify that fire prevention measures are constantly enforced.
1. Fire Extinguishers and Hoses. The Contractor shall furnish and maintain fully charged fire extinguishers of the appropriate type, supplements with temporary fire hoses wherever an adequate water supply exists, at the places where burning, welding or other operations that may cause a fire are being performed.
 2. Flammable, Hazardous or Toxic Materials. Solvents, gasoline, and other hazardous materials may be in the wastewater (sewage), and therefore, the work site may be hazardous to open flame, sparks, or unventilated occupancy. The Contractor shall take measures to assure his personnel observe proper safety precautions when working in these areas. Only a working supply of flammable, hazardous or toxic materials shall be permitted in or on any of the permanent structures and improvements, and shall be removed there from at the end of each day's operations. The Contractor shall store flammable, hazardous or toxic materials and waste separate from the Work and stored materials for the Work in a manner that prevents spontaneous combustion or dispersion, provides the appropriate level of secondary spill containment, and none shall be placed in any sewer or drain piping nor buried on the Owner's property. It is the Contractor's responsibility to request permission 15 days in advance, in writing, to bring hazardous, toxic, or flammable materials to the Owner's work site. The request will specify the type and quantity of material proposed to be brought on site, where and how it will be stored, what type of secondary containment will be used, where and by whom the material will be used, and what health hazards are associated with the proposed material (Material Safety Data Sheet). The Owner will respond to the Contractor, in writing, within seven days of the receipt of the request as to whether or not the material can be brought on site and of any special requirements the OWNER may have that are not covered in the Contractor's request. The Contractor shall maintain a current and up-to-date copy of all laws, ordinances, codes, rules, regulations and lawful orders of any regulatory authority having jurisdiction or control over flammable, hazardous or toxic materials and, at his expense, shall comply with said laws, ordinances, codes, rules, regulations and lawful orders.

1.08 SAFETY HELMETS, CLOTHING, AND EQUIPMENT

- A. The Contractor shall not permit any person for whom he is responsible or liable to enter or remain on the site of the Work unless the person is equipped with and wearing a safety helmet and other protective clothing and safety equipment conforming to the requirements of California General Industrial Safety Orders, and shall discharge from the site all persons not so equipped. The Contractor shall post conspicuous signs at appropriate locations warning the public and persons engaged upon the Work of this requirement.

1.09 HAZARDOUS AREAS

- A. The Contractor shall not permit or allow any person or persons to enter any pipe or space containing hazardous or noxious substances or gases, or where there is an insufficient amount of oxygen to sustain life and consciousness, or any other hazardous area unless equipped with lawful and appropriate safety equipment and life supporting apparatus, and unless those entering are continually monitored and guarded by and in communication with other persons outside the space or area who are equipped in the same way, can give

an alarm to others for assistance, and initiate immediate rescue operations in the event of mishap.

1.10 EMERGENCIES

- A. Work During an Emergency. The Contractor shall perform any and all operations and shall furnish any materials and equipment necessary during an emergency endangering life or property and, in all cases, shall notify the Owner of the emergency as soon as practicable, but shall not wait for instruction before proceeding to properly protect both life and property. Any additional compensation or extension of Contract Time claimed by the Contractor on account of an emergency shall be applied for as provided in contract documents.
- B. Representatives for Emergencies. The Contractor shall file with the Owner a written list giving the names, addresses, and telephone numbers of at least two of his representatives who can be contacted at any time in case of emergency. The representatives shall be fully authorized and equipped to correct unsafe or inconvenient conditions on short notice. The Contractor shall promptly notify the Owner of all changes in the listing.

1.11 SUBMITTALS

- A. Prior to receiving Notice to Proceed, the Contractor shall submit to the District Project Manager the following: (1) a copy of his Injury and Illness Prevention Program Manual, (2) a list of safety equipment he will maintain on site, (3) the name of his Safety Officer and Safety Supervisor(s) who will be responsible for maintaining safety at each work site, and (4) a description of any job-specific measures he will be using which are not contained in his manual. The Owner shall not review these materials, but shall maintain these materials for record purposes.

1.12 IMPLEMENTATION

- A. It is the Contractor's responsibility to follow his own safety program and provide one or more designated Safety Supervisor(s) at each work site.

1.13 COMMUNICATION

- A. It is the Contractor's responsibility to communicate to the Owner all hazards which they plan to introduce to the work site, whether by procedure or material.

PART 3.00 EXECUTION (Not Used)

PART 4.00 PAYMENT

4.01 GENERAL

Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contractor's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Quality control and control of installation.
- B. Tolerances
- C. References.
- D. Testing and inspection services.
- E. Examination.
- F. Preparation.

1.02 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

- C. Adjust products to appropriate dimensions; position before securing products in place.

1.04 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Architect/Engineer shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.05 TESTING AND INSPECTION SERVICES

- A. Unless noted otherwise, Contractor will employ and pay for specified services of an independent firm to perform testing and inspection.
- B. See Proposal, Bid Item Descriptions, for trench compaction requirements to be certified by a Registered Geotechnical Engineer to be hired by the Contractor.
- C. The independent firm will perform tests, inspections and other services specified in individual specification sections and as required by Architect/Engineer.
 - 1. Laboratory: Authorized to operate at Project location.
 - 2. Laboratory Staff: Maintain full time specialist on staff to review services.
 - 3. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.
- D. Testing, inspections and source quality control may occur on or off project site. Perform off-site testing as required by Architect/Engineer or Owner.
- E. Reports will be submitted by independent firm to Architect/Engineer, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- F. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Architect/Engineer and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

- G. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- H. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent firm on instructions by Architect/Engineer. Payment for re-testing or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.
- I. Testing Agency Responsibilities:
 - 1. Test samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at site. Cooperate with Architect/Engineer and Contractor in performance of services.
 - 3. Perform specified sampling and testing of products in accordance with specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify Architect/Engineer and Contractor of observed irregularities or non-conformance of Work or products.
 - 6. Perform additional tests required by Architect/Engineer.
- J. Testing Agency Reports: After each test, promptly submit two copies of report to Architect/Engineer. When requested by Architect/Engineer, provide interpretation of test results. Include the following:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Name of inspector.
 - 4. Date and time of sampling or inspection.
 - 5. Identification of product and specifications section.
 - 6. Location in Project.
 - 7. Type of inspection or test.
 - 8. Date of test.
 - 9. Results of tests.
- K. Limits On Testing Authority:
 - 1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency or laboratory may not approve or accept any portion of the Work.
 - 3. Agency or laboratory may not assume duties of Contractor.
 - 4. Agency or laboratory has no authority to stop the Work.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

PART 4 PAYMENT

GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contactor's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 50 00

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities required during construction.
- B. Requirements for security and protection of facilities and property.
- C. Requirements for traffic regulation and access to the work.
- D. Temporary controls for protection of environment.

1.02 TEMPORARY UTILITIES

- A. Electric Power:
 - 1. Electric power is not available at the site. Contractor shall make arrangements with PG&E to obtain electrical power.
 - 2. Temporary electric power installations shall meet construction safety requirements of OSHA, state, and other governing agencies.
- B. Water:
 - 1. No water is available at the project site. Contractor shall make arrangements and bear all costs for obtaining and transporting water to the construction areas.
- C. Sewage:
 - 1. Provide and maintain sanitary facilities for Contractor's employees and subcontractor's employees that comply with regulations of local and state health departments.
 - 2. Provide chemical toilets of suitable types and maintain them in a sanitary condition at all times, conforming to code requirements and acceptable to the health authorities. They shall be of watertight construction so that no contamination of the area can result from their use. Make arrangements for frequent emptying of toilets.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 TEMPORARY CONSTRUCTION FACILITIES

- A. Storage Yards and Buildings:
 - 1. The Contractor shall maintain a suitable temporary office at or near the project site.
 - 2. The Contractor shall be responsible for providing the site for the temporary office

- and for a storage and staging area.
3. Store combustible materials (paints, solvents, fuels, etc.) in a well-ventilated building remote from other buildings.

3.02 SAFETY AND PROTECTION

A. Examination of Existing Facilities:

1. After the Contract is awarded and before the commencement of work, Contractor and Owner shall make a thorough examination of all existing buildings, structures, and other improvements in the vicinity of the work, as applicable, which might be damaged by construction operations.
2. Periodic examinations of existing buildings, structures, and other improvements in the vicinity of the work shall be made jointly by authorized representatives of the Contractor, Owner, and the affected property owners. The scope of the examination shall include cracks in structures, settlement, leakage, and similar conditions.
3. Records in triplicate of all observations shall be prepared by the Contractor and each copy of every document shall be signed by the authorized representative of the Owner and of the Contractor. Photographs, as requested by the Owner, shall be made by the Contractor and signed in the manner specified above. One signed copy of every document and photograph will be kept on file in the office of the Owner.
4. These records and photographs are intended for use as indisputable evidence in ascertaining whether and to what extent damage occurred as a result of the Contractor's operations, and are for the protection of the adjacent property owners, the Contractor, and the Owner.

B. Safety Requirements:

1. Contractor shall do whatever work is necessary for safety and be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and property during the Contract period. This requirement shall apply continuously and not be limited to normal working hours.
2. Safety provisions shall conform to Federal and State Departments of Labor Occupational Safety and Health Act (OSHA), and other applicable federal, state, county, and local laws, ordinances, codes, requirements set forth herein, and regulations that may be specified in other parts of these Contract Documents. Where these are in conflict, the more stringent requirement shall be followed. Contractor shall become thoroughly familiar with governing safety provisions and shall comply with the obligations set forth therein.
3. Contractor shall develop and maintain for the duration of the Contract, a safety program that will effectively incorporate and implement required safety provisions. Contractor shall appoint a qualified employee who is authorized to supervise and enforce compliance with the safety program.
4. Owner's duty to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of Contractor's safety supervisor, safety program, or safety measures taken in, on, or near the construction site.
5. As part of safety program, Contractor shall maintain at his office or other well-

known place at the jobsite, safety equipment applicable to the work as prescribed by the governing safety authorities, and articles necessary for giving first-aid to the injured. Established procedures for the immediate removal to a hospital or a doctor's care of persons who may be injured on the jobsite.

6. Contractor shall do all work necessary to protect the general public from hazards, including, but not limited to, surface irregularities or unramped grade changes in pedestrian sidewalk or walkway, and trenches or excavations in roadway. Barricades, lanterns, and proper signs shall be furnished in sufficient amount to safeguard the public and the work.
7. Construct and maintain satisfactory and substantial temporary chain link fencing, solid fencing, railing, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards in streets, sidewalks, floors, roofs, and walkways. Such barriers shall have adequate warning lights as necessary or required for safety.
8. Comply with Owner's safety rules while on Owner property.
9. If death or serious injuries or damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner. In addition, Contractor shall promptly report in writing all accidents whatsoever arising out of, or in connection with, the performance of the work whether on or adjacent to the site, giving full details and statements of witnesses.
10. If claim is made by anyone against Contractor or any subcontractor on account of accident, Contractor shall promptly report the facts in writing, giving full details of the claim.

C. Protection of Work and Property:

1. General:
 - a. Contractor shall employ such means and methods necessary to adequately protect public property and property of the Owner against damage. In the event of damage to such property, immediately restore the property to a condition equal to its original condition and to the satisfaction of the Owner and the owner of said property, and bear all costs therefor.
 - b. Protect stored materials, trees and crops, and other items located adjacent to the proposed work. During construction operations, construct and maintain facilities to enable pedestrian access by all property owners to their property at all times. No person shall be cut off from vehicular access to residence or place of business, unless the Contractor has made special arrangement with the affected person.
 - c. Protect from damage all trees outside the limits of the work and trees within the limits of the work which are designated on the Drawings to remain undisturbed. No trees, except those specifically shown on the Drawings to be removed, shall be removed without approval of the Owner. Dispose of removed trees in a legal manner off the jobsite.
2. Finished Construction:
 - a. Contractor shall assume the responsibility for protection of finished construction and shall repair and restore any and all damage to finished work to its original or better condition.
 - b. At such time temporary facilities and utilities are no longer required for the work, notify Owner of intent and schedule for their removal.

Remove temporary facilities and utilities from the site as Contractor's property and leave the site in such condition as specified, as shown on the Drawings or as directed by the Engineer.

- c. In unfinished areas, leave the site evenly graded in a condition that will restore original drainage, and with an appearance equal to or better than original. Existing planted or landscaped areas shall be restored and be left ready for replanting.

3.03 ENVIRONMENTAL CONTROLS

A. General:

1. The Contractor is executing the work shall maintain affected areas within and outside project boundaries free from environmental pollution that would be in violation of federal, state, or local regulations.

B. Water Pollution Control:

1. Comply with laws, rules, and regulations of the State of California and agencies of the United States Government prohibiting the pollution of lakes, wetlands, streams, or river waters from the dumping of refuse, rubbish, or debris.
2. Divert sewage and waste flow, including storm water flow, interfering wastewater treatment plant. Do not cause or permit action to occur which would cause an overflow to an existing waterway. Prior to commencing excavation and construction, obtain Owner's agreement with detailed plans showing procedures intended to handle and dispose of sewage, groundwater, and storm water flow, including dewatering pump discharges.
3. Contractor shall comply with the procedures outlined in the U.S. Environmental Protection Agency manuals entitled "Guidelines for Erosion and Sedimentation Control Planning and Implementation", "Processes, Procedures and Methods to Control Pollution Resulting from All Construction Activity", and "Erosion and Sediment Control-Surface Mining in Eastern United States".
4. The California Regional Water Quality Control Board has the power, derived from the Porter-Cologne Water Quality Control Act, to impose on the Owner up to \$10,000 per day (or portion thereof) fine for bypassing of sewage flows to the San Francisco Bay. Contractors shall be responsible for violations of Regional Board requirements caused by their operations. If an overflow to the Bay occurs because of the Contractor's operations or neglect, and fines are levied against the Owner, the fines will be considered direct damages caused by the Contractor which the Owner may recover by retention.

C. Waste Material Disposal:

1. Cleaning and disposal shall comply with local ordinances and pollution control laws. Do not burn or bury rubbish or waste materials on the project site. Do not dispose of volatile wastes such as mineral spirits, oil, chemicals, or paint thinner in storm or sanitary drains. Disposal of wastes into streams or waterways is prohibited. Provide acceptable containers for collection and disposal of waste materials, debris, and rubbish.

D. Air Pollution Control:

1. Trash burning will not be permitted on the construction site.

2. Operations of dumping rock and of carrying waste or excess material away in trucks shall be conducted to cause a minimum of dust. Give unpaved streets, roads, detours, or haul roads used in the construction area a dust-preventive treatment, or periodically water to prevent dust. Strictly adhere to applicable environmental regulations for dust prevention.
 3. Sweep work area on daily basis, wet as required to control dust during sweeping operations.
- E. Noise Control:
1. Minimize noise by executing work using appropriate construction methods and equipment. Provide acoustical barriers so noise emanating from tools or equipment will not exceed legal noise levels.

PART 4 PAYMENT

4.01 GENERAL

- A. No separate measurement or payment will be made for work in this section. Payment shall be included as part of the appropriate lump sum or unit price bid items stated in the Proposal.
- B. Payment for furnishing and maintaining the Engineer's field office will be made as part of the lump sum bid amount for mobilization stated in the Proposal. Partial payments will be prorated based on the percent complete of the overall project costs.

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Product substitution procedures.

1.02 PRODUCTS

- A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.
- C. Furnish interchangeable components from same manufacturer for components being replaced.

1.03 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.04 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. For exterior storage of fabricated products, place on sloped supports above ground.

- E. Provide off-site storage and protection when site does not permit on-site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.05 PRODUCT OPTIONS

- A. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

1.06 PRODUCT SUBSTITUTION PROCEDURES

- A. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. A request constitutes a representation that Contractor:
 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 2. Will provide same warranty for Substitution as for specified product.
 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 4. Waives claims for additional costs or time extension which may subsequently become apparent.
 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities having jurisdiction.
- D. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request, or when acceptance will require revision to Contract Documents.
- E. Substitution Submittal Procedure:
 1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
 2. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
 3. Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

PART 4 PAYMENT

4.01 GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contactor's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 71 13

MOBILIZATION

PART 1.00 GENERAL

1.01 SECTION INCLUDES

- A. Work necessary to move in personnel and equipment, set up temporary facilities, and for all other work and operations which must be performed prior to beginning work on the various contract items.

PART 2.00 PRODUCTS

2.01 GENERAL

- A. Provide all materials and equipment required to accomplish the work as specified.

PART 3.00 EXECUTION (Not Used)

PART 4.00 PAYMENT

4.01 GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contactor's proposal and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 01 77 00

CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures to be followed in closing out the Contract.

1.02 FINAL SUBMITTALS

- A. No Contract will be finalized until all of the following have been submitted as required in Section SUBMITTALS:
 - 1. Final shop drawings.
 - 2. Record drawings.
 - 3. Manufacturer's certification of proper installation.
 - 4. Video tapes, construction photographs, including completed project.
- B. No Contract will be finalized until all guarantees, bonds, certifications, licenses, and affidavits required for work or equipment as specified are satisfactorily filed with the Owner.

1.03 RELEASE OF LIENS OR CLAIMS

- A. No Contract will be finalized until satisfactory evidence of release of liens has been submitted to Owner as required by the General Conditions.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 FINAL CLEANING

- A. At completion of work and immediately prior to final inspection, clean entire project according to the following provisions:
 - 1. Leave the structures and site in a complete and finished condition to the satisfaction of the Owner.
 - 2. Remove debris including dirt, sand, and gravel from sewers.
- B. The Contractor shall:
 - 1. Repair, patch, and touch up marred surfaces to specified finish, and match adjacent surfaces.
 - 2. Broom clean paved surfaces; rake clean other surfaces.
 - 3. Remove temporary structures and materials, equipment, and appurtenances not required as part of, or appurtenant to, the completed work.
 - 4. Leave water courses, gutters, and ditches open and in condition satisfactory to Owner.

3.02 FINAL INSPECTION

- A. After final cleaning and upon written notice from the Contractor that the work is completed, Owner will make preliminary inspection with the Contractor present. Upon completion of preliminary inspection, Owner will notify Contractor in writing of particulars in which the completed work is defective or incomplete.
- B. Upon receiving written notice from Owner, Contractor shall immediately undertake work required to remedy defects and complete the work to the satisfaction of Owner.
- C. After the items as listed in Owner's written notice are corrected or completed, inform Owner in writing that required work has been completed. Upon receipt of this notice, Owner, in the presence the Contractor, will make final inspection of the project.
- D. Should the Owner find all work satisfactory at the time of final inspection, Contractor will be allowed to make application for final payment in accordance with provisions of the General Conditions. Should Owner still find deficiencies in the work, Owner will notify Contractor in writing of deficiencies and will not approve Contractor's request for final payment until such time as Contractor has satisfactorily completed the required work.

PART 4 PAYMENT

4.01 GENERAL

- A. Full compensation for the work specified herein shall be considered as included in the applicable lump sum or unit price items stated in the Contactor's Proposal, and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 02 41 00

DEMOLITION

PART 1 - GENERAL

1.01 DESCRIPTION

The Contractor shall remove equipment, piping, and concrete work as necessary for the construction of work as shown on the plans and as specified. All materials removed not claimed by the District shall be disposed of at a legal disposal site.

1.02 SAFETY

The Contractor shall take all necessary precautions with regard to safety in carrying out the demolition work. Suitable barriers shall be erected around the demolition area to protect workmen and the public, and the Contractor shall rigorously comply with applicable safety requirements.

1.03 PAYMENT

The cost of all demolition, salvage, abandonment and disposal of materials and debris shall be included in the bid price for the construction work and no additional compensation will be allowed.

PART 3 - EXECUTION

3.01 REMOVAL AND DISPOSAL OF EQUIPMENT AND MATERIALS

The Contractor shall remove and dispose of materials and debris resulting from the demolition work. All removed materials shall become the sole property of the Contractor and shall be disposed of by the Contractor at a legal disposal site. The Contractor shall take care to deliver all salvaged equipment to the District in good condition.

3.02 SPECIFIC ITEMS TO BE SALVAGED

The following items shall be salvaged and delivered to the District's storage yard.

1. None.

3.03 METHODS AND EQUIPMENT

Before starting work, the Contractor shall inform the District fully as to the method of demolition he proposes to follow, and the amount and character of equipment he proposes to use, which shall be subject to the approval of the District. The approval of the District shall not be considered as relieving the Contractor of the responsibility for the safety of his method or equipment or from carrying out the work in full accordance with the plans and specifications.

3.04 REMOVAL OF OLD CONCRETE

The Contractor shall carefully remove old concrete work structures so as to minimize damage to adjacent concrete work and improvements to remain. All old concrete shall be removed from the site and disposed of at a legal disposal site.

3.05 DISPOSAL OF MATERIALS AND DEBRIS

All materials and debris resulting from the demolition work other than the materials to be retained by the District shall become the sole property of the Contractor and shall be disposed of by the Contractor at a legal disposal site.

END OF SECTION

SECTION 02 50 10

SURFACE RESTORATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Work necessary to replace all pavement, curbs, gutters, sidewalks, drainage facilities, and other street features damaged either directly or indirectly by the operations incidental to the construction of the sewer system, complete.
- B. Included in this section also is the work necessary to restore culverts, catch basins and storm sewers disturbed by the construction of the sewer system, complete.
- C. All other surface features shall be restored to their preconstruction condition and shall be considered incidental to the construction. The Contractor shall include the cost of these features in other items of this section.

PART 2 PRODUCTS

2.01 ROCK FOR SURFACING AND BASE

- A. Rock shall conform to ASTM D 2321-89 for Class 2 Aggregate Base, 3/4-inch maximum.
- B. Submit proof in the form of test results from a commercial testing laboratory or other evidence satisfactory to the Owner to show that the materials meet the quality and gradation requirements.

2.02 CONCRETE

- A. All concrete for work specified in this Section shall be ready-bed conforming to ASTM C 94, Alternate 2. Portland cement shall be Type II or Type V.

2.03 HOT MIX ASPHALT (ASPHALT CONCRETE)

- A. Hot mix asphalt, asphalt cement, and asphalt prime conforming to the latest edition of the State Standard Specifications, Section 39.
- B. See Appendix Section of the Contract Documents for additional encroachment permit requirements by public agencies having jurisdiction.

2.04 BITUMINOUS SEALS

- A. Bituminous seals conforming to the latest edition of the State Standard Specifications, Section 37.

2.05 LIQUID ASPHALT

- A. Liquid asphalt conforming to the latest edition of the State Standard Specifications, Section 93.

2.06 PIPE FOR STORM SEWER REPLACEMENT

- A. Pipe for storm sewer replacement shall conform to the requirements of public agencies having jurisdiction.
- B. Unless noted otherwise, sewer pipe 12 inches and over shall conform to ASTM C 76, Class III. Pipe joints shall conform to the existing pipe.

PART 3 EXECUTION

3.01 CONSTRUCTION PROCEDURE

- A. Prior to construction, the condition of the existing roadway shall be inventoried by representatives of the Public Agency having jurisdiction, the Contractor and the Owner. Any existing damage should be documented and photographed. Unless documented prior to construction, it will be assumed that any other damage resulted from construction, and the cost of repairs shall be borne by the Contractor.
- B. Provide all tracked construction equipment with smooth "street pads." Protect existing pavement by placing pads under all tracked equipment if necessary. All work shall be carried out in such a manner as to minimize any potential damage to the existing roadway. Excessive surface damage shall be repaired as directed by the Owner.
- C. Replace all bituminous pavement damaged with asphalt concrete regardless of original type.
- D. In addition to the requirements set forth herein, the work shall conform to the applicable workmanship requirements of the state highway or municipal specifications.

3.02 HOT MIX ASPHALT (ASPHALT CONCRETE) PAVEMENT REPLACEMENT

- A. Subgrade:
 - 1. Bring the crushed rock trench backfill to a smooth, even grade at the correct distance below the top of the existing pavement surface so as to provide adequate space for the base course and pavement. Trim existing pavement to a straight line to remove any pavement which has been damaged or which is broken and unsound to provide a smooth, sound edge for joining the new pavement.
 - 2. Compact the subgrade to a minimum of 95 percent of maximum density as determined by ASTM D 1557 (or California Test 231). Accomplish supplementary compaction where required with approved mechanical vibrating or impact type tampers.
- B. Prime Coat: After the subgrade has been compacted and leveled, apply an asphalt prime coat, specified above, at 0.25 to 0.45 gallon per square yard, to the surface of the subgrade and to the edges of the existing pavement. Also, tack coat cast iron manhole frames and concrete surfaces which will be in contact with the new asphalt.
- C. Asphalt Concrete:

1. Asphalt concrete shall conform to the requirements of the latest edition of the State Standard Specifications, Section 39, for required temperature of asphalt concrete for delivery and installation.
2. Place the asphalt concrete on the prepared subgrade over the trench to a depth of not less than 4 inches or the depth of the adjacent pavement, whichever is greater, but not for more than 6 inches. Place asphalt concrete after the prime coat has set. If the thickness is greater than 4 inches, place the surfacing in two lifts. Spread and level the asphalt concrete with hand tools or by use of a mechanical spreader, depending upon the area to be paved. Bring the asphalt concrete to the proper grade and compact by rolling or the use of hand tampers where rolling is impossible or impractical.
3. Roll with power rollers capable of providing compression of 200 to 300 pounds per linear inch. Begin the rolling from the outside edge of the replacement progressing toward the existing surfacing, lapping the existing surface at least 1/2 the width of the roller. If existing surfacing bounds both edges of the replacement, begin rolling at the edges of the replacement, lapping the existing surface at least 1/2 the width of the roller, and progress toward the center of the replacement area. Overlap each preceding track by at least 1/2 the width of the roller and make sufficient passes over the entire area to remove all roller marks and to produce the desired result, as determined by the Owner.
4. The finished surface of the new compacted paving shall be flush with the existing surface and shall conform to the grade and crown of the adjacent pavement.
5. Immediately after the new paving is compacted, all joints between new and original asphalt pavement shall be painted with hot asphalt or asphalt emulsion and be covered with dry paving sand before the asphalt solidifies.

D. Surface Smoothness: The surface smoothness of the replaced pavement shall be such that when a straightedge is laid across the patched area between the edges of the old surfacing and the surface of the new pavement, the new pavement shall not deviate from the straightedge more than 1/4 inch.

3.03 WEATHER CONDITIONS

- A. Asphalt shall not be applied to wet material. Asphalt shall not be applied during rainfall, sand or dust storms, or any imminent storms that might adversely affect the construction. The Owner will determine when surfaces and material are dry enough to proceed with construction. Asphalt concrete shall not be placed:
 1. When the atmospheric temperature is lower than 40 degrees F.
 2. During heavy rainfall.
 3. When the surface upon which it is to be placed is wet.
- B. Asphalt for prime coat shall not be applied when the surface temperature is less than 50 degrees F. Exceptions will be permitted only in special cases and only with prior written approval of the Owner.

3.04 PROTECTION OF STRUCTURES

- A. Provide whatever protective coverings may be necessary to protect the exposed portions of bridges, culverts, curbs, gutters, posts, guard fences, road signs, and any other structures from splashing oil and asphalt from the paving operations. Remove any oil, asphalt, dirt, or

any other undesirable matter that may come upon these structures by reason of the paving operations.

- B. Where water valve boxes, manholes, catch basins, or other underground utility appurtenances are within the area to be surfaced, the resurfacing shall be level with the top of the existing finished elevation of these facilities. If it is evident that these facilities are not in accordance with the proposed finished surface, notify the Owner to have the proper authority contacted in order to have the facility altered before proceeding with the resurfacing around the obstruction. Consider any delays experienced from such obstructions as incidental to the paving operation. No additional payment will be made. Protect all covers during asphalt application.

3.05 EXCESS MATERIALS

- A. Dispose of all excess materials. Make arrangements for the disposal and bear all costs or retain any profit incidental to such disposal.

3.06 CONTRACTOR'S RESPONSIBILITY

- A. Settlement of replaced pavement over trenches within the warranty period shall be considered the result of improper or inadequate compaction of the subbase or base materials. The Contractor shall promptly repair all pavement deficiencies noted during the warranty period at the Contractor's sole expense.

3.07 SIDEWALKS, CURBS, AND GUTTERS

- A. Replace concrete sidewalks, curbs, and gutters to the same section width, depth, line, and grade as that removed or damaged. Cut ends of existing curb and gutter to a vertical plane. Install two No. 4 reinforcing bar dowels in curb, and three No. 4 reinforcing bar dowels in sidewalk. Dowels to extend a minimum of 6 inches into old and new concrete. Prior to replacing the sections, properly backfill and compact the trench to prevent subsequent settlement.
- B. Saw cut ends of existing curbs and gutters to a vertical plane at the nearest score lines. Construct forms to match existing. Place concrete and finish exposed surfaces similar to adjacent curbs and gutters.
- C. Replace concrete sidewalks up to the nearest scored joints and make replacement in a manner that will avoid a patched appearance. Provide a minimum 2-inch thick compacted leveling course of clean 3/4-inch minus crushed rock or gravel of quality hereinbefore specified. Finish concrete surface similar to the adjacent sidewalks. Score joints and finish edges with a steel edging tool.

3.08 STORM SEWERS

- A. All storm sewers and catch basins that are removed because of interference with the new construction shall be removed so as to do the least possible damage to the pipe or basin. Dispose of pipe that is in too poor condition for reuse because of age, physical condition, or other reasons, and install new pipe.

- B. Replace all pipe to the previously existing lines and grades. Pipe 15 inches and smaller shall be laid on a minimum 4-inch thick gravel base. Use a minimum 6-inch thick gravel base under pipe 18 inches and larger.
- C. Reinstall catch basins in their original locations and reconnect to the drainage system in a manner equal to the original. If the existing catch basins are damaged beyond repair by the operations, construct new basins of similar size, cross section, and design as the original at the Contractor's sole expense.

3.09 PAVEMENT STRIPPING AND MARKING

- A. Replace stripping and pavement markers as required to conform to that which previously existed.
- B. Application of thermoplastic traffic stripes and pavement markings shall be in accordance with Section 84 of the latest edition of the State Standard Specifications.
- C. Application of painted traffic stripes and pavement markings shall be in accordance with Section 84 of the latest edition of the State Standard Specifications.
- D. Placement of pavement markers shall be in accordance with Section 85 of the latest edition of the State Standard Specifications.

PART 4 PAYMENT

4.01 GENERAL

- A. No separate measurement or payment will be made for work in this section. Payment shall be included as part of the applicable unit price or lump sum bid stated in the Proposal.

END OF SECTION

SECTION 03 30 00

CAST-IN-PLACE CONCRETE FLATWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. This section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mix design, placement procedures, and finishes.
- B. Included Work:
 - 1. All concrete for cast-in-place manhole bottoms to this specification.
 - 2. Cement Slurry around manhole structures.

1.2 RELATED SECTIONS

1.3 REFERENCE STANDARDS

- A. State of California, Department of Transportation (CalTrans), 2018 Standard Specifications. Also referred to as "State Specifications."

1.4 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For each concrete mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Indicate amounts of mix water to be withheld for later addition at Project site.
- C. Formwork Shop Drawings shall be prepared by or under the supervision of a qualified Professional Engineer and shall detail fabrication, assembly, and support of formwork.
 - 1. Shoring and Re-shoring: Indicate proposed schedule and sequence of stripping formwork, shoring removal, and installing and removing re-shoring.
- D. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated, based on comprehensive testing of current materials.
- E. Material Certificates: Signed by manufacturers certifying that each of the following items complies with requirements:
 - 1. Cementitious materials and aggregates.
 - 2. Form materials and form-release agents.
 - 3. Admixtures.
 - 4. Curing materials.
 - 5. Bonding agents.
 - 6. Adhesives.

7. Vapor retarders.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed concrete Work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
 1. Manufacturer must be certified according to the National Ready Mixed Concrete Association's Certification of Ready Mixed Concrete Production Facilities. Submit Certifications to Owner's Representative
- C. Testing Agency Qualifications: An independent testing agency, acceptable to the Owner, qualified according to ASTM C 1077 and ASTM E 329 to conduct the testing indicated, as documented according to ASTM E 548.
 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
- D. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, each aggregate from one source, and each admixture from the same manufacturer.
- E. Welding: Qualify procedures and personnel according to AWS D1.4, "Structural Welding Code--Reinforcing Steel."
- F. ACI Publications: Comply with the following, unless more stringent provisions are indicated:
 1. ACI 301, "Specification for Structural Concrete."
 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle steel reinforcement to prevent bending and damage.
 1. Avoid damaging coatings on steel reinforcement.
 2. Repair damaged epoxy coatings on steel reinforcement according to ASTM D 3963.

PART 2 – PRODUCTS

2.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 1. Plywood, metal, or other approved panel materials.
 2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:
 - a. High-density overlay, Class 1, or better.

- b. Medium-density overlay, Class 1, or better, mill-release agent treated and edge sealed.
 - c. Structural 1, B-B, or better, mill oiled and edge sealed.
 - d. B-B (Concrete Form), Class 1, or better, mill oiled and edge sealed.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or approved equivalent material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch (19 by 19 mm), minimum.
- D. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
 - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- E. Form Ties: Factory-fabricated, removable, or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
 - 1. Furnish units that will leave no corrodible metal closer than 1 inch (25 mm) to the plane of the exposed concrete surface.
 - 2. Furnish ties that, when removed, will leave holes not larger than 1 inch (25 mm) in diameter in concrete surface.
 - 3. Furnish ties with integral water-barrier plates to walls indicated to receive damp proofing or waterproofing.

2.2 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type II
- B. Normal-Weight Aggregate: ASTM C 33, uniformly graded, and as follows:
 - 1. Class: Moderate weathering region, but not less than 3M.
 - 2. Combined Aggregate Gradation: Well graded from coarsest to finest with not more than 18 percent and not less than 8 percent retained on an individual sieve, except that less than 8 percent may be retained on coarsest sieve and on No. 50 (0.3-mm) sieve, and less than 8 percent may be retained on sieves finer than No. 50 (0.3 mm).
 - 3. Aggregate: In accordance with the requirements of the Las Gallinas Valley Sanitary District specifications. The recycled concrete material shall meet or exceed the specified requirements. When recycled material is used for concrete base, exposed concrete applications, such as cast-in-place manhole bottom the Sodium Sulfate Soundness test (ASTM C88) is waived. Recycled concrete material will not be allowed in structural concrete or decorative concrete with an exposed aggregate finish.”
- C. Water: Potable and complying with ASTM C 94.
- D. Controlled Low Strength Material (CLSM), 2 sack cement slurry, that shall consist of at least 188 lbs. of cement for each cubic yard of material.

2.3 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain no more than 0.1 percent water-soluble chloride ions by mass of cementitious material and to be compatible with other admixtures and cementitious materials. Do not use admixtures containing calcium chloride.
- B. Air-Entraining Admixture: ASTM C 260.
- C. Water-Reducing Admixture: ASTM C 494, Type A.

2.4 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) dry.
- C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.
- E. Clear, Solvent-Borne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.

2.5 RELATED MATERIALS

- A. Reglets: Fabricate reglets of not less than 0.0217-inch thick galvanized steel sheet. Temporarily fill or cover face opening of reglet to prevent intrusion of concrete or debris.
- B. Dovetail Anchor Slots: Hot-dip galvanized steel sheet, not less than 0.0336-inch thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.
- C. Concrete Test Cylinders: The Contractor shall supply four (4) standard concrete test cylinders per 100 cubic yards or fraction thereof for every concrete pour.

2.6 CONCRETE MIXES

- A. Prepare design mixes for each type and strength of concrete determined by either laboratory trial mix or field test data bases, as follows:
 - 1. Proportion normal-weight concrete according to ACI 211.1 and ACI 301.
- B. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the laboratory trial mix basis.
- C. Proportion normal-weight concrete mix as follows:
 - 1. Compressive Strength (28 Days, psi):
 - a. Cast-in-Place manhole bottom – Class 6-3000-3/4” max aggregate
 - 2. Maximum Slump: 4 inches, except Class 5.5-3000-1½” which shall be 3 inches.

- D. Cementitious Materials, Exposed to Deicers: For concrete exposed to deicers, limit percentage, by weight, of cementitious materials other than Portland cement according to ACI 301 requirements.
- E. Cementitious Materials, General: Limit percentage, by weight, of cementitious materials other than Portland cement in concrete as follows:
1. Fly Ash: 25 percent.
 2. Combined Fly Ash and Pozzolan: 25 percent.
 3. Ground Granulated Blast-Furnace Slag: 50 percent.
 4. Combined Fly Ash or Pozzolan and Ground Granulated Blast-Furnace Slag: 50 percent Portland cement minimum, with fly ash or pozzolan not exceeding 25 percent.
 5. Silica Fume: 10 percent.
 6. Combined Fly Ash, Pozzolans, and Silica Fume: 35 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
 7. Combined Fly Ash or Pozzolans, Ground Granulated Blast-Furnace Slag, and Silica Fume: 50 percent Portland cement minimum, with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
- F. Maximum Water-Cementitious Materials Ratio as follows:
1. Maximum W/CM Ratio of 0.45.
- G. Air Content, General: Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content stated below.
- H. Air Content, 1-inch Aggregate: Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content as follows within a tolerance of plus 1 or minus 1.5 percent, unless otherwise indicated:
- Air Content: 6 percent for 1-inch- (25-mm-) nominal maximum aggregate size.
- I. Do not air entrain concrete to trowel-finished interior floors and suspended slabs. Do not allow entrapped air content to exceed 3 percent for those applications.
- J. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- K. Admixtures: Use admixtures according to manufacturer's written instructions.
1. Use water-reducing admixture or high-range water-reducing admixture (superplasticizer) in concrete, as required, for placement and workability.
 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.
 4. Use corrosion-inhibiting admixture in concrete mixes where indicated.
- L. Concrete Test Cylinder: The Contractor shall provide one set of four (4) concrete test cylinders per 100 cubic yards of concrete or portions thereof for every concrete pour.

2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94 and ASTM C 1116. Furnish batch ticket information.
 - 1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.
 - 1. For mixer capacity of 1 cu. yd. (0.76 cu. m) or smaller, continue mixing at least one and one-half minutes, but not more than five minutes after ingredients are in mixer, before any part of batch is released.
 - 2. For mixer capacity larger than 1 cu. yd. (0.76 cu. m), increase mixing times by 15 seconds for each additional 1 cu. yd. (0.76 cu. m).
 - 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mix type, mix time, quantity, and amount of water added. Record approximate location of final deposit in structure.

2.9 CEMENT SLURRY MIXING

- A. Cement/sand slurry shall be mixed in a transit mixer, with certification tags required.

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until concrete structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117. Curbs, gutters and sidewalks shall be set within 0.03' of designated grades.
- C. Construct forms tight enough to prevent loss of concrete mortar.
- D. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical. Kerf wood inserts for forming keyways, reglets, recesses, and the like, for easy removal.
 - 1. Do not use rust-stained steel form-facing material.
- E. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

- F. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- G. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- H. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- I. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- J. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement or pouring concrete.

3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use Setting Drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor bolts, accurately located, to elevations required.
 - 2. Install reglets to receive top edge of foundation sheet waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
 - 3. Install dovetail anchor slots in concrete structures as indicated.

3.3 REMOVING AND REUSING FORMS

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work, that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F (10 deg C) for 24 hours after placing concrete provided concrete is hard enough to not be damaged by form-removal operations and provided curing and protection operations are maintained.
- B. Leave formwork for beam soffits, joists, slabs, and other structural elements, that supports weight of concrete in place until concrete has achieved at least 70 percent of 28- day design compressive strength. Determine compressive strength of in-place concrete by testing representative field- or laboratory-cured test specimens according to ACI 301. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- C. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.
- D. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by owner's representative.

3.5 CONCRETE INSTALLATION

- A. Mixed concrete shall be discharge within 1-½ hours or before the mixer drum has revolved 300 revolutions, whichever comes first after the introduction of the mixing water to the cement and aggregates. When the concrete temperature exceeds 30 degrees C, 85 degrees F, the time shall be reduced to 45 minutes. Concrete shall be placed within 15 minutes after it has been discharged from the transporting unit. Concrete shall be handled from mixer or transporting unit to forms in a continuous manner until the approved unit of operation is completed. Adequate scaffolding, ramps and walkways shall be provided so that personnel and equipment are not supported by in-place reinforcement. Placing will not be permitted when the sun, heat, wind, or limitations of facilities furnished by the Contractor prevent proper consolidation, finishing and curing. Sufficient placing capacity shall be provided so that concrete can be kept free of cold joints.
- B. Before placing concrete, verify and obtain approval of owner’s representative that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- C. Do not add water to concrete during delivery, at Project site, or during placement, unless approved by owner’s representative.
- D. Before placing concrete, water may be added at Project site, subject to limitations of ACI 301.
 - 1. Do not add water to concrete after adding high-range water-reducing admixtures to mix.
- E. Deposit concrete continuously or in layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation.
- F. Deposit concrete in forms in horizontal layers no deeper than 24 inches (600 mm) and in a manner to avoid inclined construction joints. Place each layer while preceding layer is still plastic, to avoid cold joints.
 - 1. Consolidate placed concrete with mechanical vibrating equipment. Use equipment and procedures for consolidating concrete recommended in ACI 309R.
 - 2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the vibrator. Place vibrators to rapidly penetrate placed layer and at least 6 inches (150 mm) into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix constituents to segregate.
- G. Cold-Weather Placement: Comply with ACI 306.1 and as follows:
 - 1. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 2. When air temperature has fallen to or is expected to fall below 40 deg F (4.4 deg C), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F (10 deg C) and not more than 80 deg F (27 deg C) at point of placement.
 - 3. Do not use frozen materials or materials containing ice or snow. Do not place concrete on

frozen subgrade or on subgrade containing frozen materials.

4. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.
- H. Hot-Weather Placement: When hot-weather conditions exist, place concrete according to recommendations in ACI 305R and as follows:
1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option, at no additional cost to Owner.
 2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

I. Concrete Placement When Water Is Present:

Concrete shall be deposited either by a tremie or concrete pump. The methods and equipment used shall be subject to approval. Concrete buckets shall not be used for underwater placement of concrete except to deliver concrete to the tremie. The tremie shall be watertight and sufficiently large to permit a free flow of concrete. The concrete shall be deposited so that it enters the mass of the previously placed concrete from within, displacing water with a minimum disturbance to the surface of the concrete. The discharge end of the pump line or tremie shaft shall be kept continuously submerged in the concrete. The underwater seal at start of placing shall not produce undue turbulence in the water. The tremie shaft shall be kept full of concrete to a point well above the water surface. Placement shall proceed without interruption until the concrete has been brought to the required height. The tremie shall not be moved horizontally during a placing operation, and a sufficient number of tremies shall be provided so that the maximum horizontal flow of concrete will be limited to 0.15 feet. Concrete shall not be deposited in running water or in water with a temperature below 35 degrees F.

3.6 FINISHING FORMED SURFACES INSTALLATION

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding ACI 347R limits for class of surface specified.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding 1/8 inch (3 mm) in height.
 1. Apply to concrete surfaces exposed to public view or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, damp proofing, veneer plaster, or painting.
 2. Do not apply rubbed finish to smooth-formed finish.

3.7 CLSM INSTALLATION

1. CLSM shall not be placed on uncertified fill, or incompetent soil nor below water.
2. CLSM shall not be placed on a sloping surface with a gradient steeper than 5:1 (horizontal to

vertical)

3.8 CONCRETE PROTECTION AND CURING INSTALLATION

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with recommendations in ACI 305R for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing by one or a combination of the methods indicated under 3.8D.
- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces, by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with one of the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch (300-mm) lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture- retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
 - b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
 - c. Cure concrete surfaces to receive floor coverings with either a moisture- retaining cover or a curing compound that the manufacturer recommends for use with floor coverings.
 - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - 4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.9 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Owner's representative. Remove and replace concrete that cannot be repaired and patched to owner's representative's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one-part Portland cement to two and one-half parts fine aggregate passing a No. 16 (1.2-mm) sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
 - 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch (13 mm) in any dimension in solid concrete but not less than 1 inch (25 mm) in depth. Make edges of cuts perpendicular to concrete surface.
Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form- tie voids with patching mortar or cone plugs secured in place with bonding agent.
 - 2. Repair defects on surfaces exposed to view by blending white Portland cement and standard Portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 - 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by owner's representative.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during concrete placement. Sampling and testing for quality control may include those specified in this Article.
- B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mix exceeding 5 cu. yd. (4 cu. m), but less than 25 cu. yd. (19 cu. m), plus one set for each additional 100 cu. yd. (38 cu. m) or fraction thereof.
 - a. When frequency of testing will provide fewer than five compressive- strength tests for each concrete mix, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 - 2. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mix. Perform additional tests when concrete consistency appears to change.
 - 3. Air Content: ASTM C 231, pressure method, for normal-weight concrete; ASTM C 173, volumetric method, for structural lightweight concrete; one test for each composite sample,

- but not less than one test for each day's pour of each concrete mix.
4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F (4.4 deg C) and below or when 80 deg F (27 deg C) and above, and one test for each composite sample.
 5. Unit Weight: ASTM C 567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.
 6. Compression Test Specimens: ASTM C 31; cast and laboratory cure one set of four standard cylinder specimens for each composite sample. Cast and field cure one set of four standard cylinder specimens for each composite sample.
 7. Compressive-Strength Tests: ASTM C 39; test two laboratory-cured specimens at 7 days and two at 28 days.
 - a. Test two field-cured specimens at 7 days and two at 28 days.
 - b. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at age indicated.
- C. When strength of field-cured cylinders is less than 85 percent of companion laboratory- cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
- D. Strength of each concrete mix will be satisfactory if every average of any three-consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi (3.4 MPa).
- E. Test results shall be reported in writing to owner's representative, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-and 28-day tests.
- F. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Owner's Representative but will not be used as sole basis for approval or rejection of concrete.
- G. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as determined by owner's representative. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42 or by other methods as determined by Owner's Representative.

END OF SECTION

SECTION 31 23 11

TRENCHING AND BACKFILLING FOR UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes (but is not necessarily limited to):
 - 1. Work to the lines and grades indicated on the Drawings and as described herein.
 - 2. Excavate, remove and dispose of AC pavement and concrete as indicated on the Drawings.
 - 3. Construct, support and maintain all traffic routing and public safety requirements outlined in the approved Traffic Control Plan.
 - 4. Support and protect adjoining properties and structures.
 - 5. Support and work around existing utilities.
 - 6. Handle and dispose of all excavated groundwater.
 - 7. Trench excavation and backfill for utility lines
 - 8. Backfill and compaction testing.
 - 9. Basic construction mitigation measures for emissions and fugitive dust.
 - 10. Stockpile management.
- B. Pollution controls including stormwater and dust management in accordance with the Contract Document General Conditions.

1.2 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract.
- B. Section 31 23 19, “Dewatering”
- C. Section 33 05 10, “Precast Concrete Utility Structures”
- D. Section 33 31 23, “Sanitary Sewer Force Main Piping System”

1.3 REFERENCE STANDARDS

- A. 29 Code of Federal Regulations Part 1926 Safety and Health Regulations for Construction
- B. Standard Specifications, State of California Department of Transportation, Latest Edition.
- C. ASTM International Standards.
- D. Las Gallinas Valley Sanitary District Ordinance Code, Title 2, Chapter 1 “Sanitary Code of Las Gallinas Valley Sanitary District of Marin County”.

1.4 SUBMITTALS

- A. Provide for each type soil material to be used on project, with testing results indicating compliance with requirements specified, for approval prior to start of work.
- B. Shoring and Sheeting Plan must be submitted no later than 15 days prior to starting work.

1.5 SHEETING, SHORING, AND BRACING

- A. For all excavations greater than five (5) feet in depth, Contractor shall design, maintain and install sheeting, shoring and/or bracing, Sheeting, shoring and/or bracing to be designed and installed per regulatory requirements of Cal/OSHA, California State Labor Code and UBC. Design shall take into account Project soils, seismic requirements and other constraints.
- B. Where sheet piling is used as shoring, and is to be removed after backfilling, it shall be placed a minimum of two (2) feet away from existing pipes/conduits.

1.6 QUALITY ASSURANCE

- A. Contractor shall verify shrinkage characteristics of all soils to be used on the site as engineered fill. The Owner will not be responsible for additional costs associated with variations in shrinkage or bulking factors and related earthwork quantities.
- B. All quality assurance testing required by this Section shall be performed by the Owner's Testing Agency. Re-testing required as a result of failed tests shall be at the Contractor's expense.

1.7 TOLERANCES:

- A. Earthwork shall be constructed within a vertical tolerance of +0.1 foot, unless otherwise shown. Grading shall be executed to maintain slopes and drainage.

1.8 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. If Contractor encounters live utilities not indicated, protect the same from damage and immediately notify the Owner's Representative and the affected utility provider. Do not proceed until further instructions are received from the Owner's Representative.

1.9 LAND MONUMENTS

- A. Contractor shall notify the Owner's Representative of any existing federal, state, county, and private land monuments encountered. Owner will make arrangements to have monuments "tied-out" and replaced and/or relocated. Monuments destroyed by Contractor, which were not previously shown to the Owner's Representative, shall be replaced at the Contractors expense.

PART 2 – PRODUCTS

2.1 COMPACTION EQUIPMENT

- A. Compaction equipment shall be of suitable type, adequate to obtain satisfactory break-down of materials and specified densities to form a dense fill.

- B. Compaction equipment shall be operated in accordance with the manufacturer’s instructions and recommendations. Equipment shall be maintained to deliver manufacturer’s rated comparative effort. If inadequate densities are obtained, larger and/or different types of additional equipment capable of achieving specified densities shall be used.

2.2 MOISTURE CONTROL EQUIPMENT

- A. Equipment for applying water shall be of a type and quality which is adequate for the work, does not leak, and is equipped with a distributor bar or other approved device to assure uniform application. Equipment for mixing and drying materials shall consist of blades, discs or other equipment.

2.3 LINER MATERIAL

- A. Base Liner: The base liner for the stockpiles shall be made of cross-linked polyethylene or high-density polyethylene with a minimum thickness of 1020-mils (two layers of 10 mil is an acceptable alternative).
- B. Cover Liner: The cover liner for stockpiles shall be made of cross-linked polyethylene or high-density polyethylene with a minimum thickness of 10-mils.
- C. The bermed sides of the soil staging areas shall be constructed using 1 foot of soil or K Rail wrapped in base liner. K Rail shall comply with CalTrans Temporary Railing Type K if utilized.

2.4 PIPE BEDDING AND INITIAL BACKFILL

- A. The Pipe Bedding and Initial Backfill will meet the following requirements:

Gradation		
Sieve Size	Percent Passing	Test Procedures
1 inch	100	ASTM D422 or ASTM C136/C117
¾ inch	90	
No. 200	<15	
Other Material Requirements		
Sand Equivalent	30 min	ASTM D2419

- B. Existing native soils do not meet the requirements for Pipe Bedding and Initial Backfill and will not be used.

2.5 INTERMEDIATE BACKFILL

- A. The Intermediate Backfill will meet the following requirements:

Gradation		
Sieve Size	Percent Passing	Test Procedures
3 inch	100	ASTM D422 or ASTM C136/C117
¾ inch	80-100	
No. 4	40-70	
No. 200	More than 15	
Plasticity		
Liquid Limit	Less than 40	ASTM D4318
Plasticity Index	Less than 20	
Expansion Potential	Less than 20	ASTM D4829

- B. Existing native soils may be used as Intermediate Backfill provided it is dried and aerated to at least 3 percent of the optimum moisture content and approved in writing by the District Engineer.
- C. Class II aggregate base meeting the requirements of the CalTrans Standard Specifications Section 26 may be used as Intermediate Backfill. No recycled material shall be provided.

2.6 DRAIN ROCK

- A. ¾-inch drain rock meeting the requirements of Class I Type B per CalTrans Standard Specifications Section 68-1.025.

2.7 BURIED WARNING AND IDENTIFICATION TAPE

- A. Buried warning and identification tape shall be metallic core or metallic-faced, acid and alkali resistant, polyethylene plastic warning tape manufactured specifically for warning and identification of buried utility lines. Provide tape on rolls, 3 inch minimum width, color coded as specified below for the intended utility with warning and identification imprinted in bold black letters continuously over the entire tape length. Warning and identification to read, “CAUTION, BURIED (intended service) LINE BELOW” or similar wording. Color and printing shall be permanent, unaffected by moisture or soil.

- 1. Warning Tape Color Codes
 - a. Red: Electric
 - b. Yellow: Gas
 - c. Orange: Telephone and Other Communications
 - d. Blue: Water Systems
 - e. Green: Sewer Systems
 - f. Purple: Reclaimed Water

- B. Detectable Warning Tape for Non-Metallic Piping
 - 1. Detectable warning tape shall be polyethylene plastic tape conforming to the width, color and printing requirements specified above, but additionally containing integral wires, foil backing, or other means of enabling detection by a metal detector when tape is buried up to 3 feet deep. Minimum thickness of tape shall be 0.10 mm. Tape shall have a minimum strength of 1500 psi lengthwise and 1250 psi crosswise. Encase metallic element of the tape in a protective jacket or provide other means of corrosion protection.

2.8 TEMPORARY STEEL PLATE

- A. Temporary steel plate trench bridging shall be of steel construction capable of supporting HS-20 loading.

PART 3 – EXECUTION

3.1 GENERAL

- A. Trench excavation and backfill shall be performed in accordance with these Specifications and District requirements.
- B. Surplus Material: Surplus excavated material, if any, shall be off-hauled from the site and disposed of in accordance with Laws and Regulations, at the Contractor's expense.

3.2 EMISSIONS AND DUST CONTROL

- A. Contractor shall implement careful sequencing of the Work, all necessary engineering controls, and active management to prevent generation of visible dust including the dispersal and off-site migration of fugitive dust.
- B. If visible dust is generated Contractor shall stop work activity immediately to implement additional dust control measures. Contractor shall not resume Work until visible dust has been mitigated. Contractor shall not employ dust control methods that result in ponded water or surface erosion.
- C. Contractor shall assume responsibility for all damages, delays, government-imposed penalties or fines, and claims which result from Contractor's emissions and dust control practice.

3.3 BASIC CONSTRUCTION MITIGATION MEASURES FOR EMISSIONS AND FUGITIVE DUST

- A. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved roads and driveways) shall be watered two times per day.
- B. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- C. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- D. All vehicle speeds on unpaved roadway and driveway shall not exceed 15 miles per hour (mph).
- E. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- F. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control

measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

- G. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- H. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The District's phone number shall also be visible to ensure compliance with applicable regulations.
- I. All trucks and equipment, including their tires, shall be cleaned off prior to leaving the site.

3.4 MATERIAL PLACEMENT AND STOCKPILE MAINTENANCE

- A. Contractor shall only stockpile materials within staging areas.
- B. Contractor shall stockpile all materials on Base Liner Material.
- C. Excavated soil, concrete, asphalt debris shall be stockpiled separately and may be stockpiled or placed in storage bins.
- D. Contractor shall stockpile materials away from edge of excavations and no closer than 2 feet from site structures.
- E. Contractor shall cover and manage all on-site stockpiles to prevent windblown dust at all times, including non-work hours. The stockpile shall be covered with a cover liner. Stockpile covers shall be secured with appropriate ballast materials.
- F. During all phases of on-site soil management, contractor shall comply with the BAAQMD emissions and fugitive dust control requirements.
- G. Contractor shall protect stockpiles from storm water run-on/runoff. This shall include, at a minimum, installing berms around soil stockpiles.
- H. Contractor shall maintain stockpiles until the stockpiled material is transported off-site.
- I. Stockpiles of soil shall be constructed by the Contractor such that a berm surrounds each stockpile and water cannot penetrate seams in the base liner. All stockpile runoff shall be contained within the berm, collected and managed by the Contractor in accordance with applicable Federal, State and Local requirements.

3.5 PAVEMENT EXCAVATION

- A. The removal of pavement, sidewalk, parking strip and other roadway structures shall be performed in accordance with the District requirements, unless otherwise specified herein. Saw cuts in concrete pavement and parking strip shall be of sufficient size to provide neat, regular and vertical edges, but shall not be less than 3/4-inch in depth. All slurry generated during saw cutting operations must be captured and contained using a wet vacuum.

3.6 TRENCH EXCAVATION

- A. All Trench Excavation shall be performed in accordance with the District requirements, unless otherwise specified herein.
 - 1. The trench shall be excavated so that the barrel of the pipe will have an even bearing along its entire length, and with sufficient clearance provided for any necessary operations in connection with the laying of the pipe. Bell holes shall be excavated for each pipe bell or joint.
- B. The trench shall be excavated in a manner to avoid existing structures, property, and other obstructions encountered during the progress of the work. The Contractor shall support, protect, maintain, and provide for the safe operation and use of all such structures and property so encountered. Should the Contractor damage any structure or property during the progress of the work, he shall immediately notify the Owner's Representative and shall arrange for the immediate repair of the same at his expense.

3.7 TEMPORARY STEEL PLATE BRIDGING

- A. The plates must extend beyond the edge of the trench wall to adequately support the traffic loads on it. All steel trench plates shall extend beyond the edges of the trench wall a minimum of twelve (12") inches.
- B. Plates shall be secured and ramped on all sides with a trench plate securing device, to ensure a smooth transition from the road surface to the top of the plate surface and back to the road surface.
- C. The contractor is responsible for maintenance of the steel plates, shoring, and trench plate securing systems, and ensuring that they meet minimum specifications. Contractor will be charged for cost of corrective measures if required.
- D. The plates shall be secured to prevent any movement and to allow safe and unobstructed traffic flow.

3.8 TRENCH BACKFILLING

- A. All trench backfill shall be furnished and placed in accordance with the project Drawings and these Specifications, unless otherwise specified herein.
- B. All trench backfill shall be placed in uniform horizontal layers as described below and each layer shall be satisfactorily compacted as by means of suitable mechanical equipment in a uniform and systematic manner. The fill should be constructed in layer such that the surface of each layer is nearly level.
- C. Trench backfill should be compacted based on the following requirements:
 - 1. Pipe Bedding and Initial backfill compaction shall be performed as follows:
 - a. The initial backfill consists of the embedment material and the material adjacent, around, and over the pipe. The pipe should be supported on at least 4 inches of granular bedding and in accordance with the pipe manufacturer's recommendations. As the pipe will likely be at an elevation below the groundwater table after construction, the pipe embedment materials and material around the

pipe be similar materials and placed to at least a thickness of 6 inches above the top of the pipe.

- b. Trench backfill material is placed and tested by the Owner’s Materials Testing Agency or their representative to determine in-place density.
- c. Contractor performs a minimum of two passes with a vibratory plate.
- d. Geotechnical Engineer will test the in place density to determine the increase of in place density.
- e. Contractor performs an additional two passes with a vibratory plate.
- f. Geotechnical Engineer will test the in place density to determine the increase of in place density.
- g. Steps d and e above will be repeated until the Geotechnical Engineer determines that the increase of in place density is less than 0.5 pounds per cubic foot.

2. Intermediate Fill will be compacted to meet the following requirements per ASTM D-1557 Test Methods:

Area to be Compacted	Minimum Relative Compaction	Moisture Content Required
Intermediate Backfill	≥90 percent	0 to 3% > optimum moisture
Upper 12 inches of Intermediate Backfill	≥95 percent	0 to 3% > optimum moisture

- D. Where ordered by the Owner’s Representative, overexcavate unstable trench bottom to a depth of 12 to 18 inches and place crushed rock in the trench bottom encapsulated in a layer of non-woven filter fabric, pe District’s standards.
- E. Warning and identification tape shall be placed parallel to the centerline of the pipe in the trench backfill at an elevation of 18 inches above the top of the pipe, unless otherwise indicated.
- F. Trench backfill shall not be jetted in place. Backfill material shall be mechanically compacted; hydro-compaction of backfill material not allowed.

END OF SECTION

SECTION 31 23 19

DEWATERING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Specifications and procedure for the de-watering of excavations and disposal of water.

1.2 SUBMITTALS

- A. Prior to installation of the de-watering system, submit shop drawings and design data indicating the following:
 - 1. The proposed type of de-watering system
 - 2. Arrangement, location and depths of system components
 - 3. Complete description of equipment and instrumentation to be used, with installation, operation and maintenance procedures
 - 4. Methods of disposal of pumped water
 - 5. Necessary permits for water disposal

1.3 RELATED REQUIREMENTS

- A. Section 03 30 00 “Cast-in-Place Concrete”
- B. Section 33 05 10, “Precast Concrete Utility Structures”
- C. Section 33 31 23, “Sanitary Sewer Force Main Piping System”

PART 2 PRODUCTS

2.1 EQUIPMENT

- A. Furnish all materials, tools, equipment, facilities, and services as required for providing the necessary de-watering work and facilities.
- B. Provide backup equipment as necessary for the replacement and for unanticipated emergencies.

PART 3 EXECUTION

3.1 DE-WATERING

- A. Keep excavation and cast-in-place concrete base for manholes reasonably free from water during construction.
- B. Disposal of water shall not damage property or create a public nuisance.
- C. Have on hand pump equipment and machinery in good working condition for emergencies and workmen available for its operation.
- D. De-watering systems shall operate continuously while the cast-in-place concrete base for manholes are poured.
- E. Groundwater shall be controlled to prevent softening of the bottom of excavations, or formation of “quick” conditions.
- F. De-watering systems shall not remove natural soils.
- G. Control surface runoff to prevent entry or collection of water in excavations.
- H. Extracted groundwater shall be stored, transported and disposed of and/or treated and discharged in accordance with applicable local, state and federal requirements.

END OF SECTION

SECTION 33 05 10

PRECAST CONCRETE UTILITY STRUCTURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This specification is for all precast concrete utility structures called for on the Drawings and Technical Specifications.

1.2 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals governed by this section necessary to provide and install precast concrete utility as specified herein and on the Drawings.

1.3 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract
- B. Section 03 30 00. "Cast-In-Place Concrete"
- C. Section 31 23 11, "Trenching and Backfill for Utilities"
- D. Section 31 23 19, "Dewatering"
- E. Section 33 31 23, "Sanitary Sewer Pressure Piping System"

1.4 REFERENCE STANDARDS

- A. American Association of State Highway and Transportation Officials (AASHTO).
- B. ASTM International.
- C. Las Gallinas Valley Sanitary District Ordinance Code, Title 2, Chapter 3 "Regulating the Construction and Installation of Sanitary Sewer Facilities in Areas Underlain by Bay Mud".

PART 2 - PRODUCTS

2.1 STANDARD SANITARY SEWER PRECAST MANHOLE

- A. Precast concrete manhole with 60-inch interior diameter HDPE lined, rated for H20 loading in conformance with ASTM C478 (current edition) as manufactured by Jensen Precast, Old Castle Precast, or favorably reviewed equivalent.
- B. External Joint Wrap, Cretex Specialty “Manhole Wrap” (262-542-8153), press seal gasket corp. “EZ-WRAP” (800-342-7325), or approved equal.
- C. Ram-nek Joint Sealant or approved equal.
- D. Hydrophilic Waterstop, DE NEEF Swellseal or approved equal.
- E. Riser-Wrap (or eq.) Water Infiltration Sealing System.

2.2 VALVE VAULT

- A. Precast concrete valve vault with the dimensions shown on the Drawings in conformance with ASTM C478 (current edition) as manufactured by Jensen Precast, Old Castle Precast, or favorably review equivalent.

2.3 MANHOLE FRAME AND COVER

- A. Provide 36-inch inside diameter manhole frame and cover rated for H20 loading as manufactured by Neenah Foundry (Model R-1565-A) or favorably reviewed equivalent.

PART 3 – EXECUTION

3.1 GENERAL

- A. Excavate for precast structures in accordance with the requirements of Section 31 23 11.

3.2 SUBGRADE

- A. Provide level subgrade for working surface.
- B. Place clean drain rock to the dimensions required on the drawings.

3.3 PRECAST STRUCTURE INSTALLATION

- A. If required by drawings, pour manhole base against firm native material to the dimensions shown on the Drawings.
- B. Place precast sections in accordance with manufacturer’s installation instructions.

- C. Each manhole joint shall be fitted with RAM-NEK joint compound as depicted on the plans.
- D. Each joint shall be fitted with Cretex (or eq.) external concrete joint wrap as depicted on plans.
- E. Each pipe penetration shall be furnished with hydrophilic waterstop, per plans.
- F. Each manhole shall be wrapped with Riser-Wrap (or eq.) per plans.
- G. Backfill in accordance with Section 31 23 11.

3.4 SAFE MANHOLE ENTRY

- A. Manhole's shall be considered a confined space. The Contractor shall conform to all applicable Federal and State occupational safety and health standards, rules, regulations and orders.
- B. The atmospheric condition in the manhole's shall be tested for possible oxygen deficiency and the presence of poisonous, toxic or explosive gases before entering. Sufficient ventilation shall be provided to ensure the safety of workers working in the manhole. The Contractor is required to provide all safety equipment for manhole entry and appropriate attire is required for those who are working in a manhole.
- C. Specific attention is directed also to OSHA safety rules, regulations and precautions to be taken by the Contractor before entering manholes, trenches, and other structures with respect to physical and chemical hazards which may be present.

3.5 TESTING

- A. Perform vacuum testing of all manholes in accordance with ASTM C1244 (Current Revision).
- B. Contractor shall complete the test in accordance with the following requirements:
 1. Preparation of the manhole prior to testing shall include plugging all lift holes and temporarily plugging all pipes entering and existing the manhole, taking care to securely brace the pipes and plugs to prevent them from being drawn into the manhole.
 2. The test head shall be placed at the inside top of the cone section and the seal inflated in accordance with the manufacturer's recommendation.
 3. A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valve closed, the time shall be measured for the vacuum to drop to 9 inches. The manhole shall pass if the time is greater than 60 seconds for a 48" diameter manhole, 75 seconds for 60" diameter, and 90 seconds for 72" diameter.
 4. If the manhole fails the initial test, necessary repairs shall be made with a non-shrink grout while the vacuum is still being drawn. Retesting shall proceed until a satisfactory test is obtained.

END OF SECTION

SECTION 33 31 23

SANITARY SEWER FORCE MAIN PIPING SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Force Main piping and fittings.
 - 2. Couplings.
 - 3. Valves.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract
- B. Section 03 30 00, "Cast-In-Place Concrete"
- C. Section 31 23 19, "Dewatering"
- D. Section 31 23 11, "Trenching and Backfill for Utilities"
- E. Section 33 05 10, "Precast Concrete Utility Structure"

1.3 REFERENCE STANDARDS

- A. The American National Standards Institute (ANSI)
- B. The American Society for Testing and Materials (ASTM)
- C. The American Society of Mechanical Engineers, Boiler and Pressure Vessel Code (ASME)
- D. Plumbing and Drainage Institute (PDI)
- E. Underwriters Laboratories Inc. (UL)
- F. Las Gallinas Valley Sanitary District Ordinance Code, Title 2, Chapter 3 "Regulating the Construction and Installation of Sanitary Sewer Facilities in Areas Underlain by Bay Mud".

PART 2 - PRODUCTS

2.1 Piping and fittings

A. Polyethylene Pipe and fittings

Polyethylene pipe and fittings shall be SDR 17 consisting of virgin high molecular weight polyethylene, specified under ASTM D3350 as having a cell classification of PE345434C. Pipe shall have a Manning “n” factor of 0.009 for gravity flow.

B. Ductile Iron Backup Ring to be used with HDPE flange adapter shall be ANSI B16.5 Class 150, with Fusion Bonded epoxy resin surface finish and ASTM A536 material. Stainless steel nuts and bolts shall be used.

C. Ductile Iron Blind Flange, ASTM A536, Pressure Class 150# with Fusion Bonded epoxy resin surface finish. Stainless steel nuts and bolts shall be used.

D. The manufacturer shall furnish a certified statement that the pipe has been manufactured and tested in accordance with these specifications.

2.2 Couplings

A. Electrofusion couplings shall be HDPE to be used for SRD 17 or thicker, 200 psi rating.

2.3 Valves

A. Gate Valve: 18” Ductile Iron Resilient Wedge Gate Valve, Flanged end connections (both ends), non rising stem, fusion bonded epoxy coating, 250 psi maximum pressure rating, wrench valve operator. ASTM Specifications: ASTM A-126 Class B, ASTM A-536, ASTM B-138, ASTM B-584, ASTM B-98, ASTM D-2000, ASTM F-593, ASTM F-594.

B. Stem extension, Carbon Steel with Centering Plate, end connection type: swivel nut, fitting size: 2”, fusion bonded epoxy coating.

C. 18” PVC pipe schedule 40, plain end connections.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A. Inspection:

1. Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.

2. Verify that all pipe may be installed in accordance with all pertinent codes and regulations, the original design, and the referenced standards.
- B. Discrepancies:
1. In the event of discrepancy, immediately notify the Owner's Representative.
 2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

3.2 HANDLING

- A. The Contractor shall provide and use proper implements, tools and facilities for the safe and proper handling and protection of the pipe, all as recommended by the manufacturer. Pipe shall be handled in such a manner as to avoid damage to the pipe material or any coating and especially to the ends.
- B. When damaged pipe cannot be repaired to the satisfaction of the Owner's Representative, it shall be removed from the job.
- C. Pipe shall be stored in a safe location, protected from the elements where damage there from could result.
- D. The pipe shall be carefully lowered in the trench to prevent damage. Under no circumstances shall pipe be dropped or dumped into trenches. Remove foreign matter and dirt from the inside of the pipe and keep it clean during and after laying.
- E. The Contractor shall take care to keep from damaging the pipe by heavy loads and unnecessary compactive effort especially for shallow lifts. All damaged pipe shall be replaced. Normally, repairs will not be acceptable.

3.3 INSTALLATION

- A. General: Install all pipes in strict accordance with plans, profiles, typical sections and with manufacturers' recommendations as approved by the Owner's Representative. All to comply with CAL OSHA Trenching and Shoring regulations.
- B. Pressure pipe: Pressure pipe shall be laid in accordance with plans and profiles and typical sections. Before new pipe is placed the subgrade material shall be graded so that pipe will rest firmly on undisturbed granular material for its full length.

In general, this should be accomplished by over-excavation, adding stabilization material as required, the inclusion of imported bedding material as shown on the plans. All adjustments to line and grade shall be made by scraping away or filling in the bedding to the body of the pipe and in no case by wedging a blocking. Pipe shall be laid on an unyielding foundation to proper line and grade with uniform bearing under the full length of the pipe with slight hand excavation for the coupling to allow for its thickness.

1. Where soft, wet or spongy conditions are encountered in the trench at pipe sub-grade, this foundation situation shall be corrected by the use of imported stabilization material.
 2. All pipe, especially the ends, shall be carefully cleaned before the pipe is joined. Whenever work ceases for any reason, the end of the pipe shall be closed with a watertight fitting, plug or cover. The interior of the pipe shall be kept free from dirt, foreign material or debris as the work progresses and the pipe shall be cleaned after completion.
 3. Pressure line shall be laid to the line and grade shown on the plans. In instances where grade shows constant uphill grade to structures or air relief valve, the Contractor shall take all precautions necessary to secure continual smooth alignment to such appurtenances.
- C. Pipe shall be butt welded in accordance with ASTM D2657. The joints shall be leak-proof, thermal, butt joints. All fusing shall be done using tools recommended by the pipe supplier and approved by the District. Operators shall be certified by the pipe manufacturer. The fusing machine shall have hydraulic pressure control for fusing two pipe ends together.
- D. The ends of pipe shall be trimmed to form perpendicular faces before fusing. The heating plate on the fusing machine shall be electrically heated and thermostatically controlled and shall contain a temperature gauge for monitoring temperature. The heating plate shall be subject to periodic inspection, using a temperature stick, to assure even heating.
- E. The tensile strength of yield of the butt fusion joints shall not be less than the pipe. A specimen of pipe cut across the butt fusion joints shall be tested in accordance with ASTM D638. Any material may be rejected for failure to meet any of the requirements of this specification. The acceptance of any deviation from these specifications shall be subject to the approval of the District.
- F. Joints between pipe sections shall be smooth on the inside and internal projection beads shall not be greater than 3/16 on an inch. The internal bead shall be removed during the fusing process with a tool specifically designed for that purpose.
- G. Electrofusion couplings

3.4 PROTECTION, BARRICADES, ETC.

- A. Pipe strung out along the trench or stored where it can be damaged or where injury may result to the public or employees shall have special precautions taken to prevent damage from occurring. Pipe shall not be spread along trenches for extended periods prior to its actual use. Pipe shall be stored in a safe location out of the traveled way and properly barricaded with suitable lights provided to prevent vehicular damage.

- B. Where pipe is stored off of a right-of-way, the Contractor shall be required to obtain a letter of consent from the affected property owner prior to storage in such locations. Such letters shall be obtained and given to the Owner's Representative prior to use of private property.
- C. The "Manual of Warning Signs, Lights, and Devices for Use in Performance of Work Upon Highways" issued by CalTrans shall be used as a minimum for the safety requirements to be used on this work.

3.5 LAYING, BEDDING

- A. All buried pipe shall be laid on a prepared bed as hereinbefore specified. After laying, additional bedding material shall be added to a depth of about two-thirds of the pipe depending upon diameter, after which it shall be tamped with a suitable tool to secure uniform full-length bedding up to the mid-point of the pipe. Additional bedding material shall then be placed to the depth shown in the standard details of the Plans and compacted by mechanical methods. Refer to trenching Standard Details for Las Gallinas Valley Sanitary District.
- B. Take necessary precautions to prevent uplift and floating of the pipe prior to backfilling.
- C. Water in trenches shall be removed by pumping and not allowed to flow through the pipe.

3.6 CUTTING PIPE

- A. General: Cut pipe for inserting valves, fittings, closure pieces, and as otherwise required, in a neat and workmanlike manner without damaging the pipe or lining and so as to leave a smooth end at right angles to the axis of the pipe.
- B. HDPE and ductile iron pipe: Cut pipe with milling-type cutter, rolling pipe cutter, abrasive saw cutter, or with sledge and cold cutter. Do not flame cut.
- C. Dressing cut ends:
 - 1. Dress cut ends of pipe in accordance with the type of joint to be made.
 - 2. Dress cut ends of mechanical joint pipe to remove sharp edges or projections which may damage the rubber gasket.
 - 3. Dress cut ends of push-on joint pipe by beveling, as recommended by the coupling or adapter manufacturer.

3.7 APPURTENANCES

- A. General: See plans for the location of valves to be installed as a portion of the pipe.

- B. **Joining Flanged Joint Pipe:** Prior to connecting flanged pipe, the faces of the flanges shall be thoroughly cleaned of all oil, grease, and foreign material. The rubber gaskets shall be checked for proper fit and thoroughly cleaned. Care shall be taken to assure proper seating of the flanged gasket. Bolts shall be tightened so that the pressure on the gasket is uniform. Torque-limiting wrenches shall be used to insure uniform bearing insofar as possible. If joints leak when the hydrostatic test is applied, the gaskets shall be removed and reset and bolts re-tightened.

3.8 CLEANING

- A. Care shall be taken to keep the pipe clean at all times during the installation. Prior to testing the pipe shall be flushed so that the velocities of 5 feet per second are obtained sufficient to clean the entire length of pipe.
- B. If the Contractor digs out any sections subsequent to this where debris could enter the line, the line shall be again flushed through the section that was disturbed.

3.9 TESTS

- A. **General:** Upon completion of this portion of the work, and prior to its acceptance by the Owner, make all required tests and secure all required approvals from agencies having jurisdiction.
- B. **Hydrostatic testing:**
 - 1. **General:** Conduct pressure and leakage tests on all pipelines. Furnish all necessary equipment and material and make all taps in the pipe as required. All pipe testing is to be hydrostatic.

Furnish the following equipment and materials for the tests:

<u>Amount</u>	<u>Description</u>
2	Approved graduated containers
2	Approved pressure gauges
1	Hydraulic force pump with suitable hose and suction pipe as required

Conduct the tests on buried pipe after the trench has been completely backfilled. The Contractor may, if field conditions permit, partially backfill the trench and leave the joints open for inspection and conduct an initial test. The acceptance test shall not, however, be conducted until all backfilling has been completed. Conduct the tests on exposed piping after the piping has been completely installed, including all supports and hangers.

2. Pressure Pipe Procedure: After the pipe has been laid and backfilled and final compaction has been obtained, the Contractor shall test pressure pipe between each valve section or pipe run. The pipe shall be slowly filled with water so that air is removed and the pipe shall be tested hydrostatically at 150 percent of the working pressure (at the lowest point in the line) for a minimum of one hour. Reaction blocking pipe restraints and the like shall be installed prior to test.

All exposed pipe, fittings, valves and joints shall be examined during the test for seepage or other defects. Defects noted by this test shall be removed and replaced by the Contractor with sound material. Afterwards, the test shall be repeated to the satisfaction of the Owner's Representative.

In addition, a leakage test shall be conducted after the pressure test has been satisfactorily completed. The duration of each leakage test shall be two hours and during the test the main shall be subjected to a pressure of 100 psi. Leakage shall not exceed that as shown in Table 3 of AWWA Standard C600-64 or not in excess of 10 gallons per day per inch diameter per mile, whichever is less.

If any test discloses leakage greater than specified, the Contractor shall at his own expense locate and repair the defective joints until the leakage is within the specified allowance.

3. Requirements for Exposed Pipelines: All exposed pipelines shall have no visible leakage during the specified test period. Any exposed pipeline with leakage shall be repaired or replaced.

3.10 REPAIRS

- A. Only new pipe free from defects shall be installed. Portions of broken pipe or short lengths may be used providing they are properly cut back and used as stubs, or short lengths required at structures for flexible joints.
- B. Broken or leaking sections of pipe must be replaced. Repair clamps will not be approved.

3.11 FINAL CLEANING

- A. Prior to final acceptance, all pipelines installed under this Section shall be flushed out and all accumulated construction debris and other foreign matter removed. Cleaning shall be done in a manner that will keep flushed debris from entering equipment and in a manner approved by the Owner's Representative.

END OF SECTION

SECTION 33 31 24

UTILITY PIG CLEANING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Specifications and procedure for cleaning a force main sanitary sewer using utility pigging method.

1.2 SUBMITTALS

- A. Prior to begin the utility pig cleaning procedure, the contractor shall submit to the District for favorable review the following documents:
 - 1. Mobilization/ Demobilization Plan.
 - 2. Traffic Control Plan (if work will be conducted in the right of way).
 - 3. Forcemain Bypassing Plan (if necessary), including emergency backup plan.
 - 4. Wastewater and collected sewage collection and disposal plan.
 - 5. A safety/hazard assessment.
 - 6. Pipeline specific planning and approach document to safely pig the pipeline. Document should include all pertinent details launching, running, and receiving all pipe pigs.
 - 7. Final Report.

PART 2 CONTRACTOR REQUIREMENTS, PRODUCTS AND EQUIPMENT

2.1 CONTRACTOR REQUIREMENTS

- A. Pigging should be completed by a company with at least 5-years direct experience pigging sanitary sewer force mains. Reference list should show at least ten (10) projects over the last 3-years.

2.2 PRODUCTS

- A. Pigging shall be performed with foam pigs, contractor to provide technical specifications.

2.2 EQUIPMENT

- A. Furnish all materials, tools, equipment, facilities, and services as required for providing the necessary pipe cleaning through utility pigging method.
- B. Provide backup equipment as necessary for the replacement and for unanticipated emergencies.
- C. Baker tanks or trucks shall be provided to collect wastewater after cleaning pipe.

PART 3 EXECUTION

3.1 UTILITY PIG CLEANING:

- A. Contractor to assess vertical bends within the pipe based on As-Built information provided by the District and inform the District on the efficacy of pig cleaning at those bends.
- B. Pigging contractor to submit a project specific plan on collecting and disposing sewage from the cleaned pipeline.
- C. Cleaning Contractor to provide pig launching and receiving platforms to be attached to the access structures indicated by the District.
- D. Pigging to be performed progressively with foam pigs, as per Contractor's recommendation.
- E. Contractor is responsible for all labor, equipment, products and technologies to launch and retrieve the pigs at the connection points indicated by the District. In case of failure to retrieve the pigs at the connection point indicated by the District, it is Contractor's responsibility to retrieve the pig along the line, to no additional cost to the District.
- F. Above ground markers (AGMs) should be utilized where appropriate to track pig's progression. All pigs should be outfitted with a transmitter for locating purposes.
- G. Pigging company to monitor and log data for all flow rates, pressure and pig progression through the pipeline. All data to be included in the Final Report submitted to the District.
- H. Contractor is responsible for any accident spilling, and District retains the right to assess the cost of cleanup to be imposed upon the Contractor.

END OF SECTION

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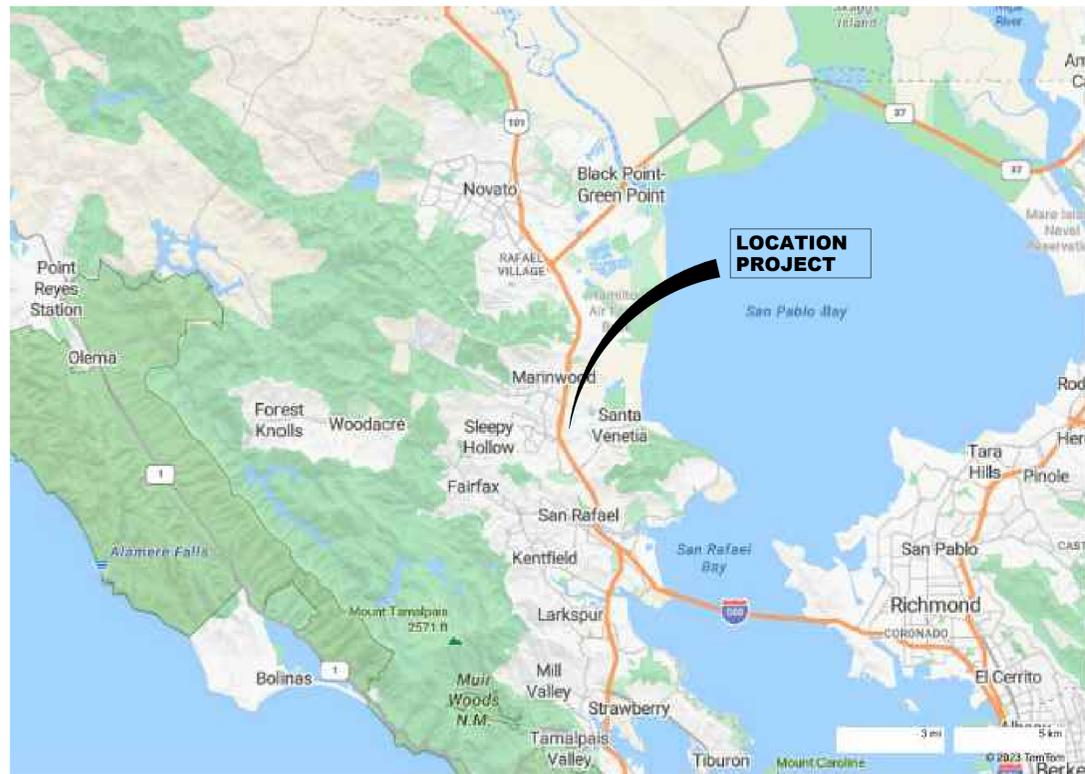
**VOLUME 4
DRAWINGS**

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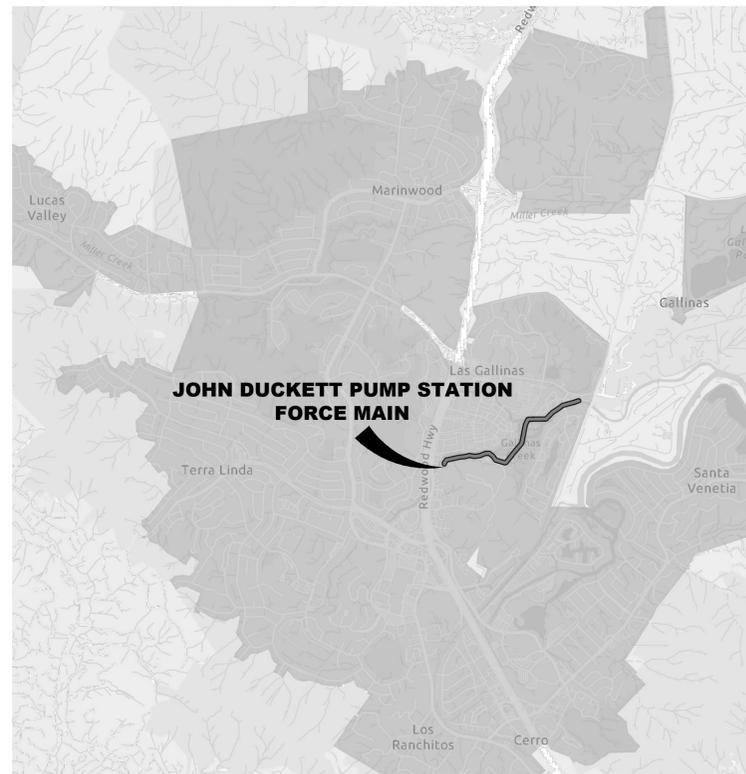


MARIN COUNTY, CALIFORNIA

**JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT
ISSUE FOR BID**



VICINITY MAP
SCALE: NONE



SITE LOCATION
SCALE: NONE

INDEX TO DRAWINGS	
SHEET	TITLE
C-1.0	TITLE SHEET
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C-2.0	SITE PLAN
C-2.1	SITE PLAN (STA 0+0.00 TO STA 13+50.00)
C-2.2	SITE PLAN (STA 13+50.00 TO STA 30+50.00)
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C-3.1	ACCESS STRUCTURE LOCATION DETAILS
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C-3.3	DETAILS
C-3.4	DETAILS
C-3.5	DETAILS

DATE:	3/31/2023
SCALE:	AS NOTED
DESIGNED:	MQ
DRAWN:	IT
CHECKED:	JT
PROJ. ENGR:	MQ



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DATE	DESCRIPTION OF REVISIONS	APP'D
03/31/2023	ISSUE FOR BID	



TITLE SHEET
LAS GALLINAS VALLEY SANITARY DISTRICT
JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET	C-1.0
JOB NO.	311004

ABBREVIATIONS

SYMBOLS

GENERAL NOTES

ABND	ASBESTOS CEMENT
@	AT
AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ACI	AMERICAN CONCRETE INSTITUTE
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BOT	BOTTOM
BFV	BUTTERFLY VALVE
BV	BALL VALVE
CARV	COMBINATION AIR RELEASE VALVE
CB	CATCH BASIN
CDF	CONTROLLED DENSITY FILL
CIPP	CURED-IN-PLACE PIPE
CIR	CIRCLE
CONC	CONCRETE
CONT	CONTINUED
CY	CUBIC YARD
CL	CENTERLINE
CLR	CLEAR, CLASS
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COORD	COORDINATE
CPLG	COUPLING
CTE	CONNECT TO EXISTING
CV	CHECK VALVE
D, DIA	DIAMETER
DEG	DEGREE
DET	DETAIL
DI	DUCTILE IRON
DWG	DRAWING
E	EAST
EL, ELEV	ELEVATION
EF	EACH FACE
ELECT	ELECTRICAL
(E),EX,EXIST	EXISTING
EW	EACH WAY
EXP	EXPOSED, EXPANSION
FG	FINISH GRADE
FM	FORCE MAIN
FT	FOOT OR FEET
G	GAS
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
INV, IE	INVERT ELEVATION
LF	LINEAR FEET
L.O.W.	LIMIT OF WORK
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MON	MONUMENT
N	NORTH
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NO	NUMBER
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER, OVERFLOW DRAIN
(OH)	OVERHEAD
PAE	PUBLIC ACCESS EASEMENT
PROP	PROPOSED
PS	PUMP STATION
PSI	POUNDS PER SQUARE INCH
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
R, RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCW	RECLAIMED WATER
REINF	REINFORCED, REINFORCING, REINFORCE
REQD	REQUIRED
ROW	RIGHT OF WAY
R/R	RAILROAD
RT	RIGHT
S	STEEL
SCH	SCHEDULE
SD	STORM DRAIN
SDI	STORM DRAIN INLET
SDMH	STORM DRAIN MANHOLE
SPEC	SPECIFICATIONS
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
ST	STREET
STA	STATION
STD	STANDARD
TEMP	TEMPORARY
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED
USA	UNDERGROUND SERVICE ALERT
VAR	VARES
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/, W/O	WITH, WITHOUT
W	WATER, WEST

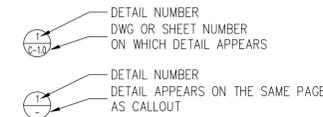
EXISTING UTILITIES, EASEMENTS AND CONTOUR LINES

	EXISTING 20" OD HDPE FM SS LINE
	EXISTING WATERLINE
	EXISTING SS - OUTSIDE SCOPE OF PROJECT
	EXISTING STORM DRAIN
	EXISTING GAS LINE
	EXISTING ELECTRIC LINE
	EXISTING UTILITY EASEMENT
	CONTOUR LINE

PROPOSED UTILITIES AND STRUCTURES

	NEW 20" OD HDPE FM SS LINE
	PROPOSED FORCEMAIN ACCESS STRUCTURE
	GATE VALVE
	CONCRETE
	ASPHALT
	AGGREGATE BASE
	POTHOLING LOCATION, IF NOT THE SAME AS PROPOSED FORCEMAIN ACCESS STRUCTURE

TYPICAL DETAIL NUMBERING



GR-GENERAL REQUIREMENTS

- GR-1) AS USED IN THESE GENERAL NOTES: "DRAWINGS" MEANS THE LATEST DRAWINGS, UON. "SPECIFICATIONS" MEANS THE LATEST PROJECT SPECIFICATIONS, UON. "CONTRACT DOCUMENTS" IS DEFINED AS THE ENGINEER OF RECORD FOR THE FINAL CONDITION. "DESIGN PROFESSIONALS" IS DEFINED AS THE OWNER'S CIVIL ENGINEER.
- "CONTRACTOR" IS DEFINED TO INCLUDE ANY OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS.
- GR-2) THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE PROJECT WORK WITH THE CIVIL AS WELL AS ANY OTHER APPLICABLE TRADES.
- GR-3) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE INSTALLATION, AND REMOVAL OF TEMPORARY BRACING AND OTHER REQUIRED CONSTRUCTION SUPPORTS, FOR NEW AND EXISTING STRUCTURES, AS NECESSARY TO COMPLETE THE PROJECT. NO PORTION OF THE PROJECT WHILE UNDER CONSTRUCTION IS INTENDED TO BE STABLE IN THE ABSENCE OF THE TEMPORARY SUPPORTS AND BRACES. CONTRACTOR SHALL RETAIN A STRUCTURAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED TO ASSIST TEMPORARY BRACING INSTALLATION AND REMOVAL AND OTHER CONSTRUCTION SUPPORTS.
- GR-4) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS NECESSARY TO PERFORM THE WORK SHOWN IN THESE PLANS FROM THE APPROPRIATE AGENCIES, SEE SPECIFICATIONS.
- GR-5) THE SPECIFICATIONS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS.
- GR-6) IN CASES OF CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS AND OTHER DISCIPLINES OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONALS AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK.
- GR-7) APPLY DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.
- GR-8) ONLY USE DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS. DIMENSIONS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
- GR-9) ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS, IF NOT INDICATED ON DRAWINGS.
- GR-10) THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES FROM DAMAGE, UON.
- GR-11) THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED.
- GR-12) ELEVATIONS INDICATED ON DRAWINGS ARE BASED ON COUNTY OF NORTH MARIN LIDAR INFORMATION.
- GR-13) THE CONTRACTOR SHALL PROVIDE ACCESS FOR INGRESS AND EGRESS FOR PRIVATE PROPERTY ADJACENT TO WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
- GR-14) THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO ENSURE SAFETY.
- GR-15) THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF THE JOB SITE.
- GR-16) THE DISTRICT DOES NOT SPECIFY, NOR RECOMMEND THE USE OR INSTALLATION OF ANY MATERIAL OR EQUIPMENT WHICH IS MADE FROM, OR WHICH CONTAINS ASBESTOS FOR USE IN THE CONSTRUCTION OF THESE IMPROVEMENTS. ANY PARTY INSTALLING OR USING SUCH MATERIALS OR EQUIPMENT SHALL BE SOLELY RESPONSIBLE FOR ALL INJURIES, DAMAGES, OR LIABILITIES OF ANY KIND, CAUSED BY THE USE OF SUCH MATERIALS OR EQUIPMENT. THE PROVISIONS OF THIS NOTE SHALL APPLY UNLESS THEY ARE EXPRESSLY WAIVED IN WRITING BY THE DISTRICT.
- GR-17) THE CONTRACTOR SHALL OBTAIN A COPY OF THE NPDES PERMIT FROM THE DISTRICT AND SHALL MEET AND FOLLOW ALL REQUIREMENTS IN EFFECT AT THE TIME OF CONSTRUCTION.
- GR-18) TRENCHES SHALL NOT BE LEFT OPEN OVERNIGHT IN PUBLIC STREET AREAS OR PEDESTRIAN PATHS. CONTRACTOR SHALL BACKFILL TRENCHES, OR PLACE STEEL PLATING AND / OR HOT MIX ASPHALT AS REQUIRED TO PROTECT OPEN TRENCHES AT THE END OF EVERY WORK DAY.
- GR-19) THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR THE ENTIRE PROJECT AT ALL TIMES. THE SITE SHALL BE SPRINKLED AS NECESSARY TO PREVENT DUST NUISANCE. IN THE EVENT THE CONTRACTOR NEGLECTS TO USE ADEQUATE MEASURES TO CONTROL DUST, THE DISTRICT RESERVES THE RIGHT TO TAKE WHATEVER MEASURES ARE NECESSARY TO CONTROL DUST AND CHARGE THE COST TO THE CONTRACTOR.
- GR-20) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY NOTIFY THE DISTRICT REPRESENTATIVE UPON DISCOVERY OF ANY FIELD CONFLICTS.
- GR-21) ANY DEVIATIONS OR CHANGES IN THESE PLANS WITHOUT THE OFFICIAL APPROVAL OF THE DISTRICT REPRESENTATIVE SHALL ABSOLVE THE DISTRICT OF ANY AND ALL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.
- GR-22) SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR EXPLAINED IN THESE PLANS, THE CONTRACTOR SHALL NOT CONTACT THE DISTRICT DIRECTLY BUT THROUGH THE DISTRICT REPRESENTATIVE RESPONSIBLE FOR THIS CONTRACT IN THE FIELD.
- GR-23) ALL DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THE DRAWINGS AND THE ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DISTRICT REPRESENTATIVE.
- GR-24) PROVIDE A SITE SAFETY PLAN FOR RECORD PRIOR OF MOBILIZATION. THE SAFETY PLAN MUST BE USED FOR THE ENTIRE DURATION OF THIS WORK BY THE CONTRACTOR AND ALL HIS SUBCONTRACTORS. THE DISTRICT SHALL BE ENTITLED TO WITHHOLD THE PAYMENT FOR THE NEXT APPLICATION FOR PAYMENT IF THE CONTRACTOR FAILS TO SUBMIT A SITE SAFETY PLAN.
- GR-25) DURING CONSTRUCTION, THE PUBLIC STREETS SHALL BE CLEANED DAILY TO REMOVE ANY ACCUMULATION OF MUD AND DEBRIS RESULTING FROM THIS CONSTRUCTION.

FAILURE TO SUBMIT PROJECT SCHEDULE: IF THE CONTRACTOR FAILS TO SUBMIT A PROJECT SCHEDULE WITHIN THE TIME PERIOD SPECIFIED IN SECTION 5.8 OF THE GENERAL CONDITIONS, OR THE UPDATED SCHEDULE TO WHICH THE DISTRICT HAS TAKEN UNCORRECTED EXCEPTIONS, THE DISTRICT SHALL BE ENTITLED TO WITHHOLD THE PAYMENT FOR THE NEXT APPLICATION OF PAYMENT SUBMITTED AFTER THE SCHEDULE OR UPDATED SCHEDULE BECOMES LATE. SEE CONTRACT DOCUMENTS FOR DETAILED REQUIREMENTS.

FAILURE TO SUBMIT AS-BUILT PLANS: CONTRACTOR SHALL PROVIDE TO THE DISTRICT REPRESENTATIVE A REDLINES COPY OF THE "AS-BUILT" PLANS FOR REVIEW AND PREPARATION OF RECORD DRAWINGS A MINIMUM OF THREE DAYS AFTER THE APPLICATION FOR FINAL PAYMENT. IF THE CONTRACTOR FAILS TO SUBMIT THE REDLINED COPY WITHIN THE TIME PERIOD SPECIFIED, THE DISTRICT SHALL BE ENTITLED TO WITHHOLD THE FINAL PAYMENT UNTIL CONTRACTOR SUBMITS A REDLINED COPY ACCEPTABLE TO THE DISTRICT REPRESENTATIVE. SEE CONTRACT DOCUMENTS FOR DETAILED REQUIREMENTS.

A-ARCHEOLOGICAL NOTES

- A-1) IN THE EVENT THAT AN ARCHEOLOGICAL FEATURE, SUCH AS CONCENTRATION OF ARTIFACTS OR CULTURALLY MODIFIED SOIL DEPOSITS INCLUDING TRASH PITS OLDER THAN FIFTY YEARS OF AGE, ARE DISCOVERED AT ANY TIME DURING CONSTRUCTION OF THE PROJECT, ALL WORK SHALL BE HALTED IN THE VICINITY OF THE FIND, THE DISTRICT REPRESENTATIVE SHALL BE NOTIFIED, AND A QUALIFIED ARCHEOLOGIST SHALL BE CONTACTED IMMEDIATELY TO MAKE AN EVALUATION. IF WARRANTED BY THE CONCENTRATION OF ARTIFACTS OR SOIL DEPOSITS, FURTHER WORK IN THE DISCOVERY AREA SHALL BE MONITORED BY AN ARCHEOLOGIST.
- A-2) IN HUMAN REMAINS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK SHALL STOP IN THE IMMEDIATE VICINITY OF THE FIND AND THE COUNTY CORONER AND A QUALIFIED ARCHEOLOGIST SHALL BE NOTIFIED IMMEDIATELY SO THAT AN EVALUATION CAN BE PERFORMED. THE REMAINS ARE DEEMED TO BE NATIVE AMERICAN OR PREHISTORIC, THE CORONER SHALL CONTACT THE NATIVE AMERICAN HERITAGE COMMISSION SO THAT A "MOST LIKELY DESCENDANT" CAN BE DESIGNED.

C-CONFINED SPACES:

C-1) WHILE WORKING ON THE PROJECT, THE CONTRACTOR AND ALL THE SUBCONTRACTORS SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL CONFINED SPACE ENTRY PROCEDURES AND REQUIREMENTS FOR ALL THE PERMIT SPACE ENTRIES. THE FOLLOWING SPACES ARE HEREBY DESIGNATED PERMIT SPACES: MANHOLES, VALE PITS, UNDERGROUND PITS.

PR-PROJECT NOTES:

- PR-1) EXISTING UNDERGROUND UTILITIES ARE SHOWN TO THE BEST AVAILABLE INFORMATION AND MIGHT NOT FULLY AND ACCURATELY REFLECT FIELD ALIGNMENTS.
- PR-2) PRIOR TO STARTING WORK, CONTRACTOR SHALL OBTAIN THE LATEST U.S.A. TO MARK ALL EXISTING UTILITIES WITHIN A MINIMUM OF 25 FEET FROM THE PIPELINE ALIGNMENT, OR AN AREA THAT CONTRACTOR FEELS WILL BE AFFECTED BY HIS CONSTRUCTION OPERATION AND EQUIPMENT. .
- PR-3) CONTRACTOR SHALL PROTECT ALL PRIVATE PROPERTIES IN AND AROUND THE CONSTRUCTION SITE AND SHALL REPLACE AND RESTORE ALL PROPERTIES THAT MAY BECOME DAMAGED DURING CONSTRUCTION TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE DISTRICT.

PR-4) CONTRACTOR SHALL COORDINATE HIS WORK AND MUST COMPLY WITH THE REQUIREMENTS OF ALL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OF THE PROJECT SITE.

PR-5) THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL THE WORK PERFORMED BY HIS SUBCONTRACTORS, WITHOUT EXCEPTION.

PR-6) THE CONTRACTOR SHALL IDENTIFY THE RESPONSIBLE CONTACT PERSON, WHO IS AN EMPLOYEE WITH THE CONTRACTOR, AND A 24-HR TELEPHONE NUMBER TO CALL FOR ANY DUST, NOISE AND OTHER CONSTRUCTION RELATED ISSUES.

PR-7) THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE RIGHT-OF-WAY AND EASEMENTS OBTAINED FOR THIS PROJECT, UON. THIS SHALL INCLUDE, BUT NOT B E LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF TRENCH EXCAVATIONS, AND STOCKPILED NEW MATERIALS.

PR-8) CONTRACTOR SHALL EXERCISE DUE CAUTION DURING CONSTRUCTION TO PROTECT ALL EXISTING PIPES WHICH ARE TO REMAIN. ANY DAMAGE RESULTING FROM CONTRACTOR OPERATIONS SHALL BE REPAIRED AS DIRECTED BY THE DISTRICT'S REPRESENTATIVE, AT NO ADDITIONAL COST TO THE DISTRICT.

PR-9) CONTRACTOR SHALL COMPLY WITH THE LAS GALLINAS VALLEY SANITARY DISTRICT STANDARD SPECIFICATIONS AND DRAWNGS AVAILABLE FROM THE DISTRICT.

PR-10) CONTRACTOR SHALL NOTIFY THE DISTRICT'S REPRESENTATIVE IMMEDIATELY UPON DISCOVERY OF ANY POTENTIAL FIELD CONFLICTS.

PR-11) DISTRICT STAFF ARE AVAILABLE 7:00 AM - 2:00 PM MONDAY-FRIDAY. ANY STAFF RESPONSE THAT MIGHT BE REQUIRED AFTER THOSE HOURS BY THE CONTRACTOR WILL BE BACKCHARGED TO THE CONTRACTOR FOR REIMBURSEMENT.

PR-12) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS NECESSARY TO PERFORM THE WORK SHOWN ON THESE PLANS FROM THE APPROPRIATE AGENCIES, PRIOR TO COMMENCING WORK.

PR-13) THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL SOUND CONTROL AND NOISE LEVEL RULES, REGULATIONS AND ORDINANCES WHICH APPLY TO ANY WORK PERFORMED UNDER THE CONTRACT, EACH INTERNAL COMBUSTION ENGINE USED ON THE PROJECT SHALL BE EQUIPPED WITH A MUFFLER RECOMMENDED BY THE MANUFACTURER. NO INTERNAL COMBUSTION ENGINE SHALL BE OPERATED ON THE PROJECT WITHOUT SAID MUFFLER, NOISE LEVEL SHALL BE KEPT TO THE SATISFACTION OF THE DISTRICT.

PR-14) UON. TRENCH COMPACTION REQUIREMENTS FOR ALL TRENCHES ABOVE THE PIPELINE,I.E., INITIAL BACKFILL AND BEDDING ZONES, INTERMEDIATE BACKFILL AND SUBGRADE SECTIONS, SHALL BE A MINIMUM OF 96% RELATIVE COMPACTION.

PR-15) A REGISTERED CIVIL ENGINEER AND/OR GEOTECHNICAL ENGINEER OR TESTING FIRM HIRED BY THE CONTRACTOR, MUST CERTIFY THAT THE COMPACTION REQUIREMENTS ARE MET. SUBMIT CERTIFICATION TO THE DISTRICT.

PR-16) CONTRACTOR SHALL LOCATE AND FIELD VERIFY EXISTING MONUMENTS PRIOR TO CONSTRUCTION AND RESTORE PER CONSTRUCTION STANDARDS OF THE CITIES OF MARIN AND COUNTY OF MARIN. IN ADDITION, CONTRACTOR SHALL FIELD VERIFY, PROTECT AND/OR RESTORE PROPERTY LINE AND OTHER MASKERS IMPACTED DURING CONSTRUCTION.

PR-17) ANY WORK RELATED TO EXCAVATION AND PREPARATION WORK RELATED TO EXPOSING THE FORCEMAIN AT PROPOSED STRUCTURE LOCATIONS CAN ONLY BE PERFORMED MONDAY THROUGH FRIDAY BETWEEN 8 AM AND 5 PM.

PR-18) ANY WORK RELATED TO MANHOLE INSTALLATION, BACKFILLING AND FINAL GRADING CAN ONLY BE PERFORMED MONDAY THROUGH FRIDAY BETWEEN 8 AM AND 5PM.

PR-19) SEE CITY OF SAN RAFAEL AND MARIN COUNTY PUBLIC WORKS AGENCIES' ENCROACHMENT PERMITS FOR DETAILED REQUIREMENTS.

PR-PROJECT NOTES CONTINUED:

PR-20) ALL EXCAVATION AND PREP WORK TO EXPOSE THE FORCE MAIN AT STRUCTURE LOCATIONS CAN BE PERFORMED MONDAY THROUGH FRIDAY BETWEEN XX:XX AM AND 5 PM.

PR-21) EACH CLEANING ACCESS STRUCTURE AND EACH CCTV ACCESS STRUCTURE CAN ONLY BE INSTALLED BETWEEN 10 PM AND 4 AM MONDAY THROUGH THURSDAY.

PR-22) MANHOLE INSTALLATION, BACKFILLING, AND FINAL GRADING CAN BE PERFORMED MONDAY THROUGH FRIDAY BETWEEN XX:XX AM AND 5 PM.

PR-23) CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH DISTRICT TO DRAIN FORCE MAIN AS REQUIRED TO FACILITATE THE WORK.

PR-24) CONTRACTOR SHALL PROVIDE ALL VACTOR TRUCKS, BAKER TANKS, AND RELATED EQUIPMENT REQUIRED TO CAPTURE AND HANDLE ALL WASTEWATER INCLUDING TRUCKING CAPTURED WASTEWATER TO A LOCATION DESIGNATED BY THE DISTRICT FOR DUMPING.

PU-PUMP STATION & FORCE MAIN SHUTDOWN REQUIREMENTS:

PU-1) THE CONTRACTOR SHALL COORDINATE WITH DISTRICT PERSONNEL FOR SHUTDOWN OF EXISTING PUMPING FACILITIES AND / OR UTILITIES. FORCEMAIN SHUTDOWNS (E.G. SYSTEM OUTAGE REQUESTS (SORs)), SHALL BE APPROVED AND SCHEDULED THE THE DISTRICT'S SOLE DISCRETION.

PU-2) ALL SOR'S MUST BE REQUESTED IN WRITING ON THE DISTRICT'S FORMS. SOR'S MUST BE MADE A MINIMUM THREE DAYS IN ADVANCE OF DAYTIME SHUTDOWNS AND A MINIMUM OF 7 DAYS IN ADANCE OF NIGHTTIME SHUTDOWNS.

PU-3) REQUIRED SHUTDOWN SHALL LAST NO LONGER THAN TWO HOURS BETWEEN 9:00 AM AND 4:00 PM, AND WILL BE SUBJECT FOR SCHEDULING BY THE DISTRICT. DAYTIME SHUTDOWNS CAN OCCUR NO MORE THAN 2 TIMES DURING THE CONSTRUCTION PERIOD.

PU-4) NIGHTTIME SHUTDOWNS CAN OCCUR BETWEEN THE HOURS OF 10:00 PM AND 4:00 AM, AND CANNOT OCCUR MORE THAN 2 TIMES DURING THE CONSTRUCTION PERIOD.

PU-5) DURING WET WEATHER EVENTS, FACILITIES MUST BE FULLY OPERABLE AND NO SHUTDOWNS ARE ALLOWED. DISTRICT CAN STOP PLANNED SHUTDOWNS PRIOR TO PREDICTED WET WEATHER EVENTS OR ACTUAL WET WEATHER EVENTS AT NO COST TO THE DISTRICT.

PU-6) THE CONTRACTOR SHALL PROVIDE AN EROSION CONTROL PLAN FOR DISTRICT REVIEW PRIOR TO COMMENCING CONSTRUCTION ACTIVITY.

PU-7) THE CONTRACTOR SHALL PROVIDE ONE STANDBY 5,000 GALLON VACUUM TRUCK WITH SUFFICIENT SUCTION AND PUMPING CAPACITIES TO MEET PEAK FLOW DEMANDS AND TRANSPORT SEWAGE TO A LOCATION DESIGNATED BY THE DISTRICT FOR DUMPING.

PB-TEMPORARY BYPASS PUMPING REQUIREMENTS:

PB-1) THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING AND MAINTAINING ADEQUATE TEMPORARY PUMPING CAPACITY THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. FAILURE TO PROVIDE TEMPORARY BYPASS PUMPING WHERE REQUIRED, AND AS OUTLINED HEREIN, PRIOR TO START TO WORK SHALL CAUSE THE DISTRICT TO ASSESS \$1,000 PER INCIDENT AGAINST THE CONTRACTOR TO COVER DISTRICT'S STAFF TIME AND MISCELLANEOUS EXPENSES.

PB-2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROPERTY DAMAGES, SPILLS, CLEANUP, ETC., INCLUDING FINES AS MAYBE IMPOSED BY REGULATORY AGENCIES AS A RESULT OF NOT PROVIDING OR PROPERLY MAINTAINING AN APPROPRIATE BYPASS PUMPING SYSTEM, AND/OR FAILURE TO RESPOND TO ALARMS OR OVERFLOWS. IN ADDITION, THE DISTRICT WILL CHARGE THE CONTRACTOR AN EXTRA \$10 PER GALLON OF SEWAGE SPILLED DURING CONSTRUCTION.

PB-3) THE CONTRACTOR SHALL SUBMIT A BYPASS PUMPING PLAN FOR REVIEW AND APPROVAL BY THE DISTRICT PRIOR TO START OF CONSTRUCTION.

PB-4) SEE SPECIFICATIONS FOR ADDITIONAL BYPASS PUMPING REQUIREMENTS.

PB-5) THE CONTRACTOR SHALL PROVIDE TWO PUMPS (ONE STANDBY), EACH WITH SUFFICIENT PUMPING CAPACITY TO CONVEY PEAK DAILY FLOW OF THE FORCE MAIN BEING BYPASSED. AT A MINIMUM, CONTRACTOR SHALL PROVIDE 1000 GPM FOR LINES LARGER THAN 10 INCHES.

PB-6) THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO GENERATORS (ONE STANDBY), EACH CAPABLE OF RUNNING BOTH PUMPS SIMULTANEOUSLY.

PB-7) BYPASS LINES SHALL BE CONTINUOUS LEAK PROOF HDPE, OR EQUIVALENT. CONTRACTOR SHALL FLUSH THE BYPASS LINES WITH POTABLE WATER DISCHARGED INTO THE EXISTING SANITARY SEWER SYSTEM.

PB-8) DISCHARGE OF SEWAGE INTO WATERWAYS IS STRICTLY PROHIBITED.

PB-9) IF TEMPORARY PUMPS ARE OUT OF SERVICE, OR FAIL DURING THE COURSE OF BYPASS PUMPING OPERATION, THE CONTRACTOR SHALL IMMEDIATELY PROVIDE OR COORDINATE A MINIMUM OF TWO 5,000 GALLON VACUUM TRUCKS WITH SUFFICIENT SUCTION AND PUMPING CAPACITIES TO MEET PEAK FLOW DEMANDS AND TRANSPORT SEWAGE TO A LOCATION DESIGNATED BY THE DISTRICT FOR DUMPING. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DISTRICT ON-CALL OPERATOR IN THE EVENT OF A PUMP FAILURE.

U-EXISTING UTILITIES:

U-1) EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS MAY OR MAY NOT HAVE BEEN SHOWN BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE PREPARATION OF THESE PLANS. ALL INVERTS ARE BASED ON AS-BUILTS.

U-2) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY LOCATION OF UTILITIES AND INVERTS PRIOR TO CONSTRUCTION THROUGH THE CONTRACTOR'S POTHOLING PROGRAM. A POTHOLING REPORT NEEDS TO BE SUBMITTED TO THE DISTRICT FOR FAVORABLE REVIEW BEFORE ANY CONSTRUCTION WORK IS TO TAKE PLACE.

U-3) ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATION SO THE EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED AND MERGED IN THE CONTRACT UNIT PRICE.

U-4) ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE DISTRICT, AT THE CONTRACTOR'S SOLE EXPENSE.

U-5) ALL CONTRACTOR WORK AROUND EXISTING UTILITIES SHALL BE IN CONFORMANCE WITH CALIFORNIA GOVERNMENT CODE 4216.

DATE:	3/31/2023
SCALE:	AS NOTED
DESIGNED:	MQ
DRAWN:	IT
CHECKED:	JT
PROJ. ENGR:	MQ



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San Francisco, CA 94134
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DATE	DESCRIPTION OF REVISIONS	APPD
03/31/2023	ISSUE FOR BID	



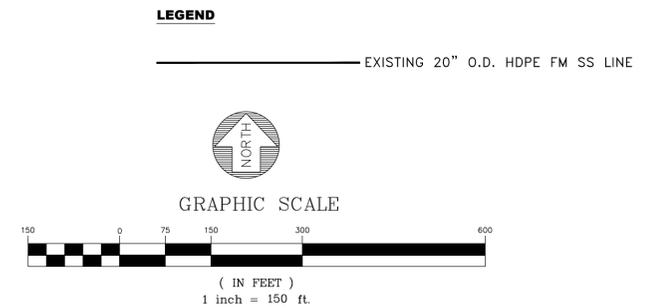
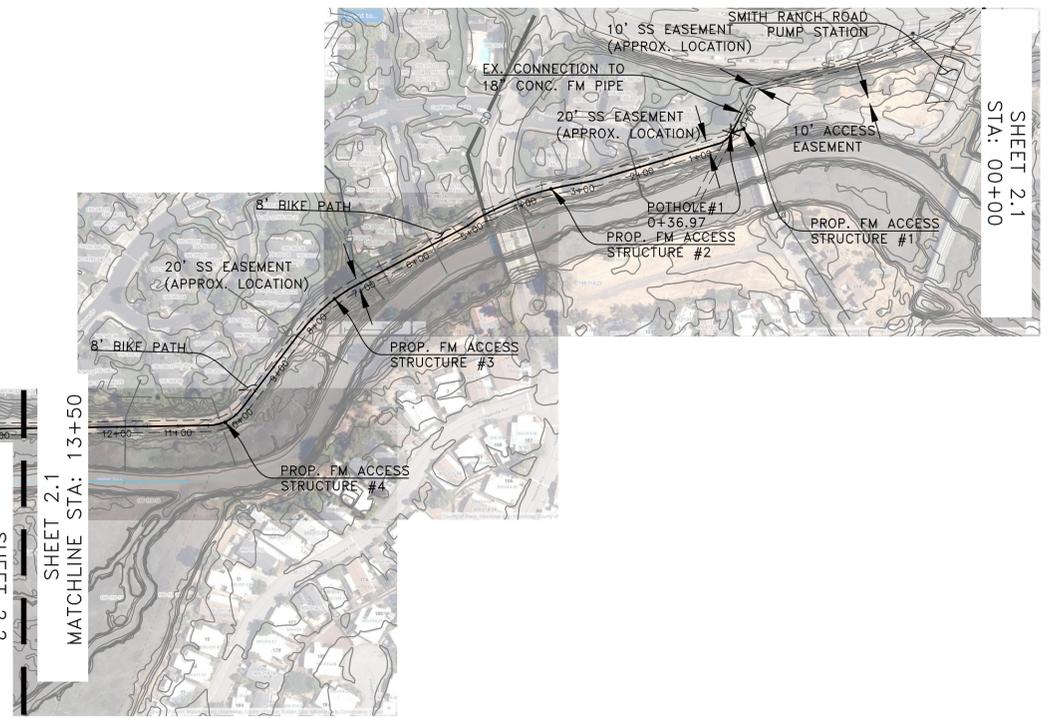
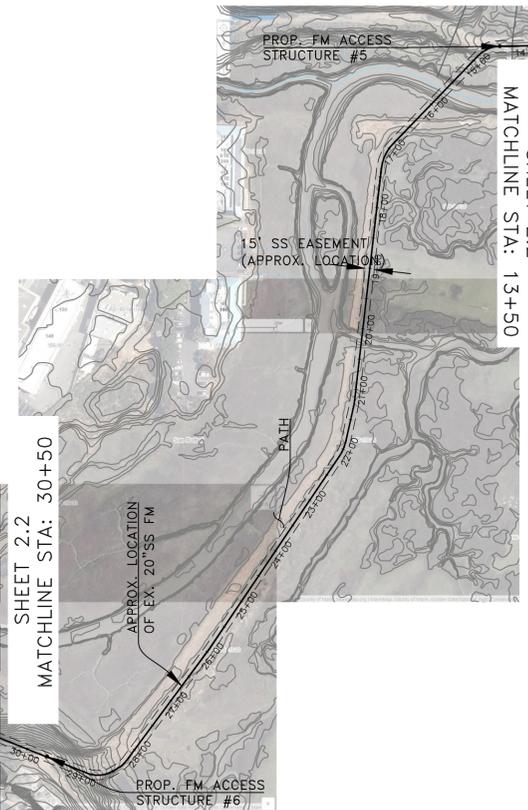
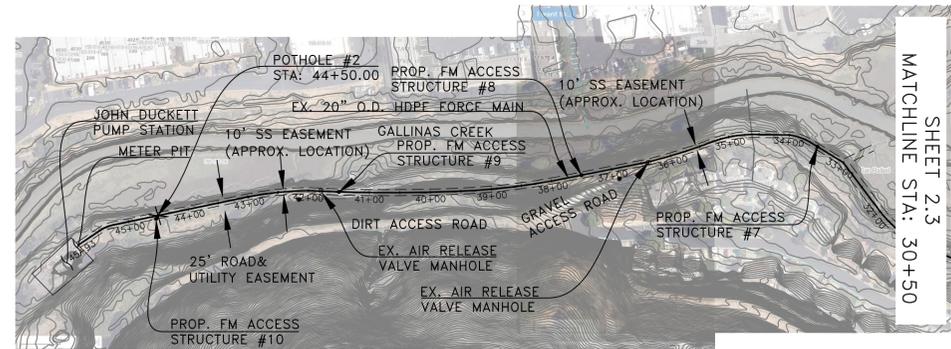
SIGNED ON: 03/31/2023

SYMBOLS, ABBREVIATIONS AND GENERAL NOTES

LAS GALLINAS VALLEY SANITARY DISTRICT
JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET	C-1.1
JOB NO.	311004

FM ACCESS STRUCTURES LOCATION		
STRUCTURE #	STATION (OFFSET = 0.00', UON)	TYPE
1	0+21.68, OFFSET 14.30'	CLEANOUT ACCESS DETAIL 2, SHEET 3.3
2	3+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
3	7+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
4	10+21.60	CCTV ACCESS DETAIL 1, SHEET 3.3
5	14+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
6	29+65.28	CCTV ACCESS DETAIL 1, SHEET 3.3
7	33+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
8	37+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
9	41+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
10	44+54.18, OFFSET 4.17'	CLEANOUT ACCESS DETAIL 1, SHEET 3.4

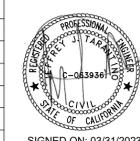


- NOTES**
- FORCEMAIN ACCESS STRUCTURES #2 TO #9 (DETAIL 1, SHEET 3.3) TO BE USED FOR CCTV. FORCEMAIN ACCESS STRUCTURES #1 AND #10 TO BE USED FOR CLEANING.
 - CONTRACTOR TO VERIFY LOCATION, DEPTH OF ALL EXISTING UTILITIES AT THE LOCATIONS NOTED ON THESE PLANS. A POTHOLING REPORT NEEDS TO BE SUBMITTED TO THE DISTRICT FOR FAVORABLE REVIEW BEFORE ANY CONSTRUCTION WORK IS TO BEGIN.
 - ALL PROPOSED LOCATIONS FOR ACCESS STRUCTURES ARE ALSO PROPOSED POTHOLE LOCATIONS, EXCEPT FOR PROPOSED STRUCTURES #1 AND #10, WHERE THE PROPOSED LOCATIONS OF POTHOLES ARE AS CALLED OUT ON THESE DRAWINGS.
 - ALL EXISTING UTILITIES ARE NOTED ONLY AS APPROXIMATE, POTHOLING IS REQUIRED TO VERIFY LOCATION OF ALL EXISTING UTILITIES. NOT ALL EXISTING UTILITIES ARE NOTED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY.
 - ALL INVERTS ARE BASED ON AS-BUILTS, EXACT INVERTS TO BE VERIFIED ON THE FIELD THROUGH CONTRACTOR'S POTHOLING PROGRAM.
 - DUE TO CREEK VICINITY AND GROUND WATER, FM ACCESS STRUCTURES MAY BE INUNDATED W/WATER. MAINTENANCE CREW TO DRAIN/VACUUM WATER FROM ACCESS STRUCTURES PRIOR TO ENTERING.

DATE:	3/31/2023
SCALE:	AS NOTED
DESIGNED:	MQ
DRAWN:	IT
CHECKED:	JT
PROJ. ENGR:	MQ

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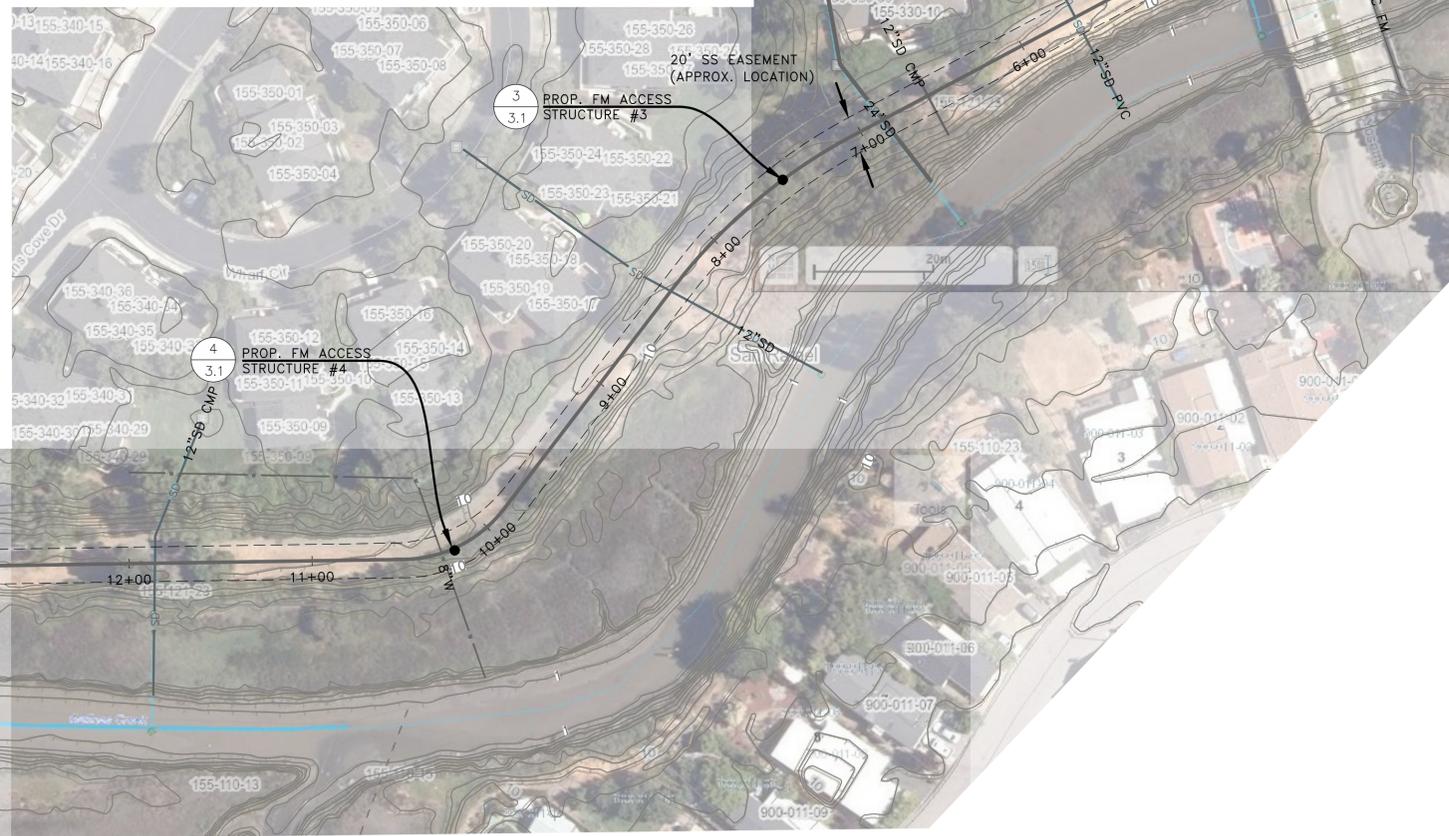
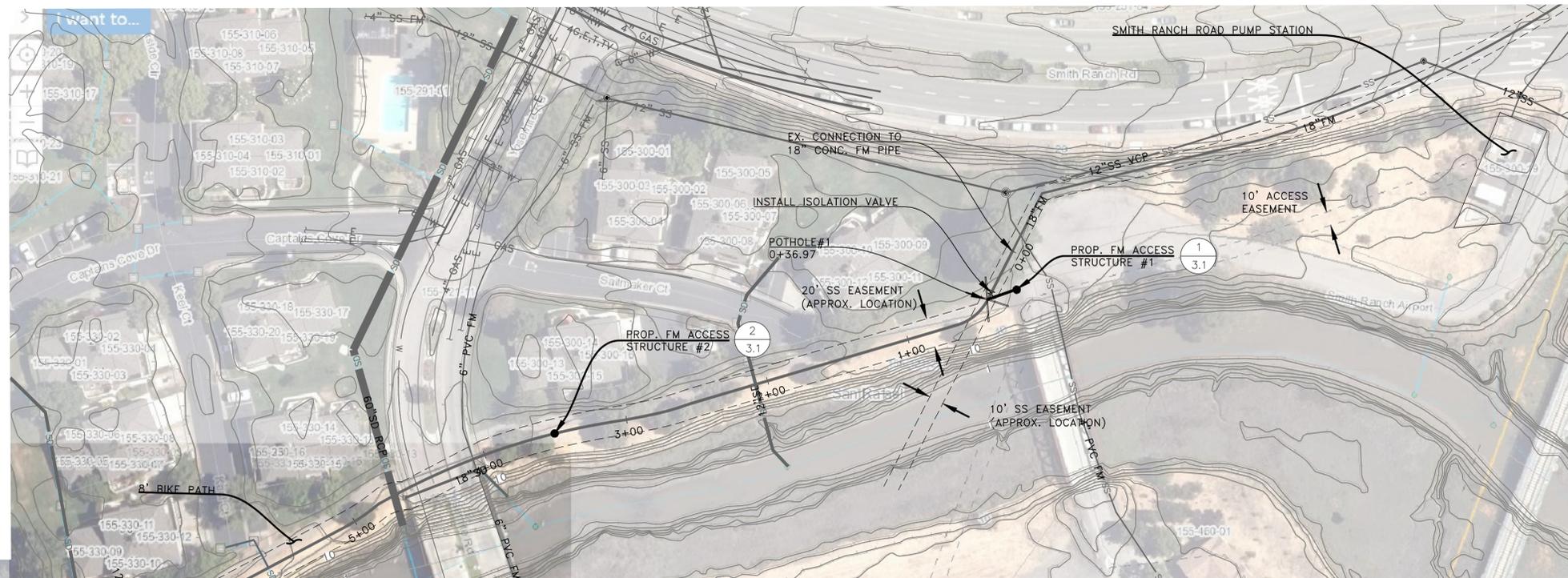
DATE	DESCRIPTION OF REVISIONS	APP'D
03/31/2023	ISSUE FOR BID	



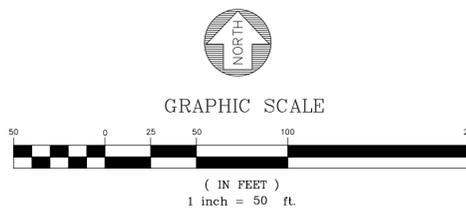
SITE PLAN
 LAS GALLINAS VALLEY SANITARY DISTRICT
 JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET	C-2.0
JOB NO.	311004

FM ACCESS STRUCTURES LOCATION		
STRUCTURE #	STATION (OFFSET = 0.00', UON)	TYPE
1	0+21.68, OFFSET 14.30'	CLEANOUT ACCESS DETAIL 2, SHEET 3.3
2	3+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
3	7+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
4	10+21.60	CCTV ACCESS DETAIL 1, SHEET 3.3
5	14+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
6	29+65.28	CCTV ACCESS DETAIL 1, SHEET 3.3
7	33+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
8	37+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
9	41+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
10	44+54.18, OFFSET 4.17'	CLEANOUT ACCESS DETAIL 1, SHEET 3.4



SEE SHEET C-2.2
MATCHLINE STA 13+50



NOTES

1. FORCEMAIN ACCESS STRUCTURES #2 TO #9 (DETAIL 1, SHEET 3.3) TO BE USED FOR CCTV. FORCEMAIN ACCESS STRUCTURES #1 AND #10 TO BE USED FOR CLEANING.
2. CONTRACTOR TO VERIFY LOCATION, DEPTH OF ALL EXISTING UTILITIES AT THE LOCATIONS NOTED ON THESE PLANS. A POTHOLOGING REPORT NEEDS TO BE SUBMITTED TO THE DISTRICT FOR FAVORABLE REVIEW BEFORE ANY CONSTRUCTION WORK IS TO BEGIN.
3. ALL PROPOSED LOCATIONS FOR ACCESS STRUCTURES ARE ALSO PROPOSED POTHOLE LOCATIONS, EXCEPT FOR PROPOSED STRUCTURES #1 AND #10, WHERE THE PROPOSED LOCATIONS OF POTHOLES ARE AS CALLED OUT ON THESE DRAWINGS.
4. ALL EXISTING UTILITIES ARE NOTED ONLY AS APPROXIMATE, POTHOLOGING IS REQUIRED TO VERIFY LOCATION OF ALL EXISTING UTILITIES. NOT ALL EXISTING UTILITIES ARE NOTED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY.
5. ALL INVERTS ARE BASED ON AS-BUILTS, EXACT INVERTS TO BE VERIFIED ON THE FIELD THROUGH CONTRACTOR'S POTHOLOGING PROGRAM.
6. DUE TO CREEK VICINITY AND GROUND WATER, FM ACCESS STRUCTURES MAY BE INUNDATED W/WATER. MAINTENANCE CREW TO DRAIN/VACUUM WATER FROM ACCESS STRUCTURES PRIOR TO ENTERING.

DATE:	3/31/2023
SCALE:	AS NOTED
DESIGNED:	MQ
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CHECKED:	JT
PROJ. ENGR:	MQ



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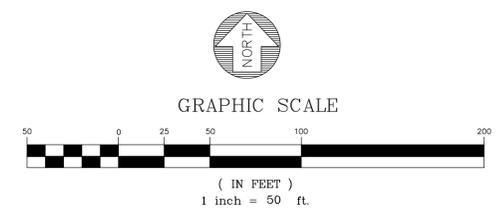
SITE PLAN (STA 0+0.00 TO STA 13+50)
LAS GALLINAS VALLEY SANITARY DISTRICT
JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET	C-2.1
JOB NO.	311004

SEE SHEET C-2.3 MATCHLINE STA 30+50



FM ACCESS STRUCTURES LOCATION		
STRUCTURE #	STATION (OFFSET = 0.00', UON)	TYPE
1	0+21.68, OFFSET 14.30'	CLEANOUT ACCESS DETAIL 2, SHEET 3.3
2	3+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
3	7+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
4	10+21.60	CCTV ACCESS DETAIL 1, SHEET 3.3
5	14+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
6	29+65.28	CCTV ACCESS DETAIL 1, SHEET 3.3
7	33+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
8	37+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
9	41+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
10	44+54.18, OFFSET 4.17'	CLEANOUT ACCESS DETAIL 1, SHEET 3.4



- NOTES**
- FORCEMAIN ACCESS STRUCTURES #2 TO #9 (DETAIL 1, SHEET 3.3) TO BE USED FOR CCTV. FORCEMAIN ACCESS STRUCTURES #1 AND #10 TO BE USED FOR CLEANING.
 - CONTRACTOR TO VERIFY LOCATION, DEPTH OF ALL EXISTING UTILITIES AT THE LOCATIONS NOTED ON THESE PLANS. A POTHOLING REPORT NEEDS TO BE SUBMITTED TO THE DISTRICT FOR FAVORABLE REVIEW BEFORE ANY CONSTRUCTION WORK IS TO BEGIN.
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SEE SHEET C-2.1 MATCHLINE STA 13+50

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SITE PLAN (STA 13+50.00 TO STA 30+50.00)
 LAS GALLINAS VALLEY SANITARY DISTRICT
 JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

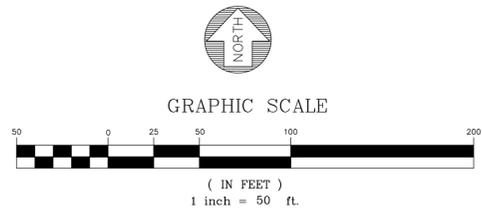
SHEET	C-2.2
JOB NO.	311004



SEE SHEET C-2.2
MATCHLINE STA 30+50

FM ACCESS STRUCTURES LOCATION

STRUCTURE #	STATION (OFFSET = 0.00', UON)	TYPE
1	0+21.68, OFFSET 14.30'	CLEANOUT ACCESS DETAIL 2, SHEET 3.3
2	3+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
3	7+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
4	10+21.60	CCTV ACCESS DETAIL 1, SHEET 3.3
5	14+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
6	29+65.28	CCTV ACCESS DETAIL 1, SHEET 3.3
7	33+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
8	37+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
9	41+50.00	CCTV ACCESS DETAIL 1, SHEET 3.3
10	44+54.18, OFFSET 4.17'	CLEANOUT ACCESS DETAIL 1, SHEET 3.4



NOTES

- FORCEMAIN ACCESS STRUCTURES #2 TO #9 (DETAIL 1, SHEET 3.3) TO BE USED FOR CCTV. FORCEMAIN ACCESS STRUCTURES #1 AND #10 TO BE USED FOR CLEANING.
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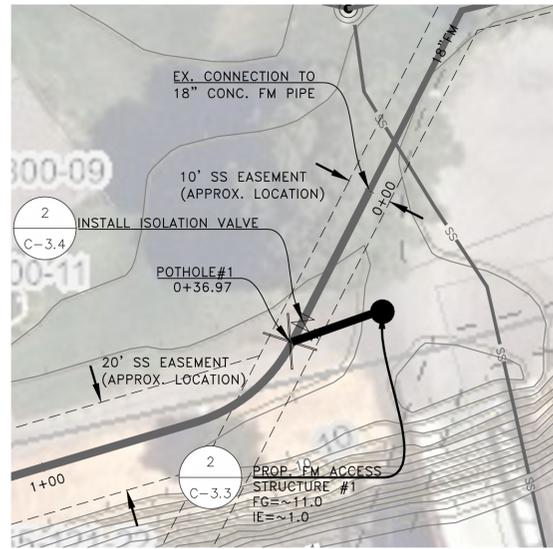
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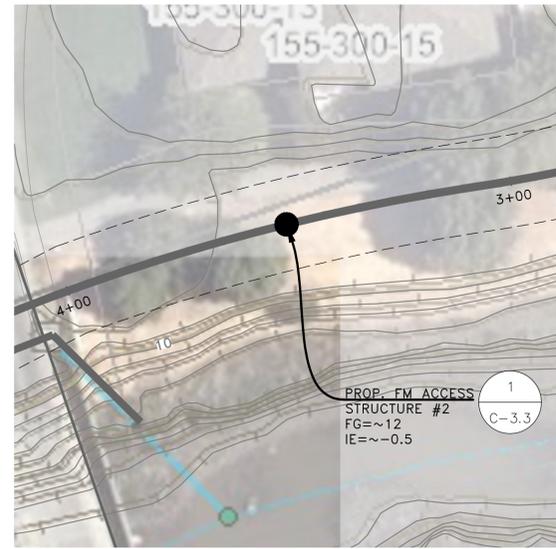


SITE PLAN (STA 30+50.00 TO STA 45+93.00)
LAS GALLINAS VALLEY SANITARY DISTRICT
JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET	C-2.3
JOB NO.	311004



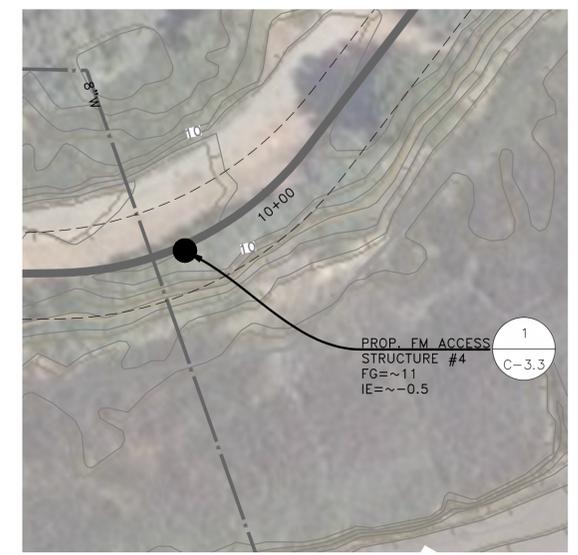
1 PROP. FM ACCESS STRUCTURE #1
 STA: 0+21.68
 OFFSET: 14.30 FT. LEFT



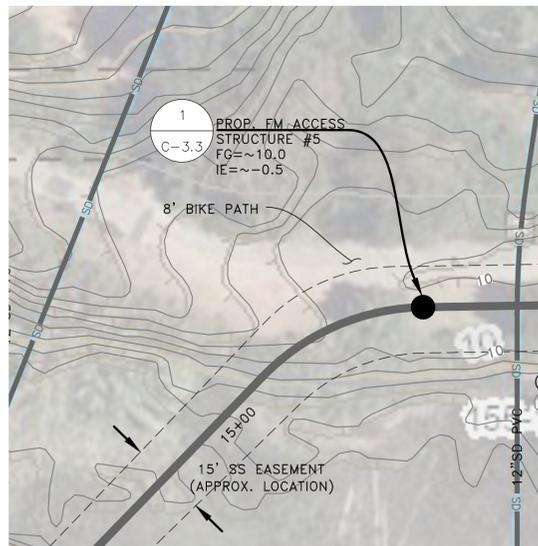
2 PROP. FM ACCESS STRUCTURE #2
 STA: 3+50.00



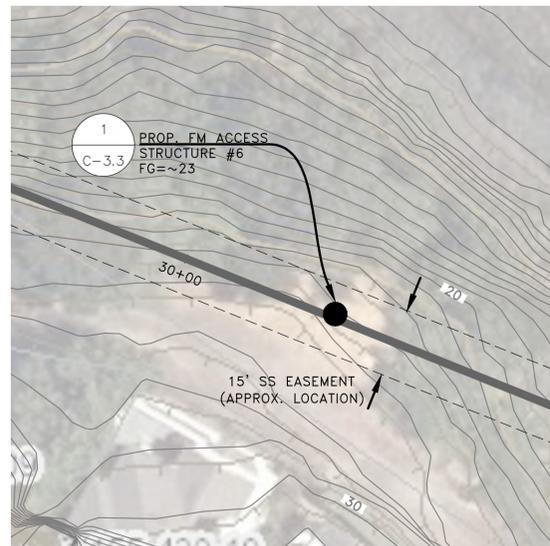
3 PROP. FM ACCESS STRUCTURE #3
 STA: 7+50.00



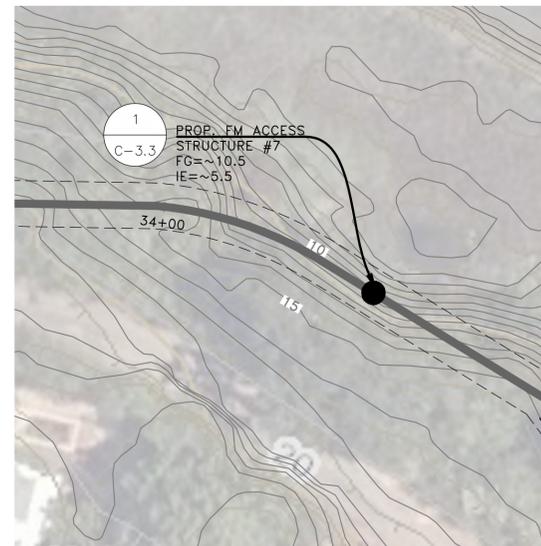
4 PROP. FM ACCESS STRUCTURE #4
 STA: 10+21.60



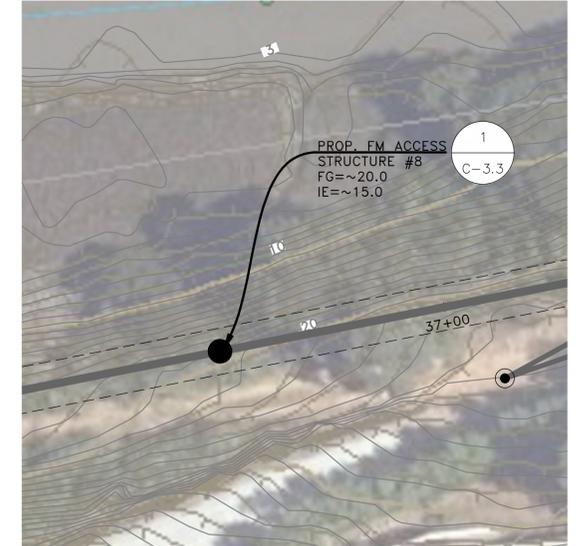
5 PROP. FM ACCESS STRUCTURE #5
 STA: 14+50.00



6 PROP. FM ACCESS STRUCTURE #6
 STA: 29+65.28



7 PROP. FM ACCESS STRUCTURE #7
 STA: 33+50.00



8 PROP. FM ACCESS STRUCTURE #8
 STA: 37+50.00

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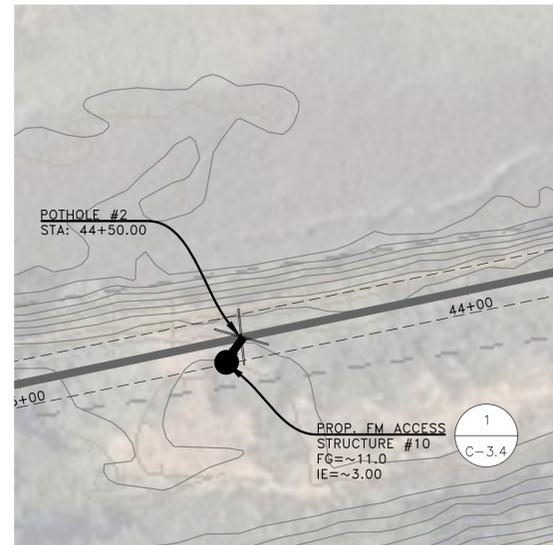
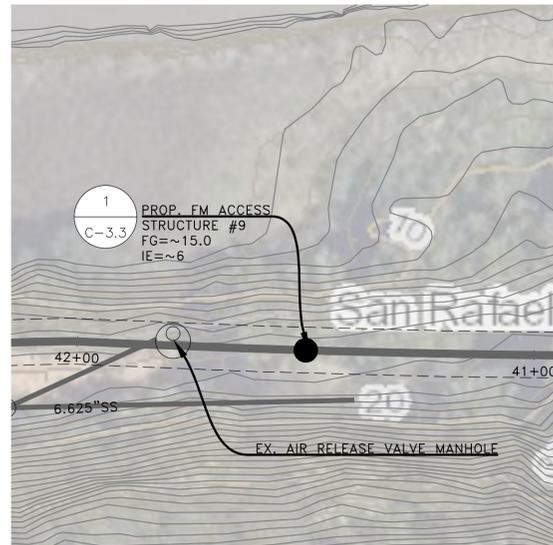
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ACCESS STRUCTURE LOCATION DETAILS
 LAS GALLINAS VALLEY SANITARY DISTRICT
 JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET
C-3.1
 JOB NO.
311004



1
-
PROP. FM ACCESS STRUCTURE #9
STA: 41+50.00

2
-
PROP. FM ACCESS STRUCTURE #10
STA: 44+54.18
OFFSET: 4.17 FT LEFT.

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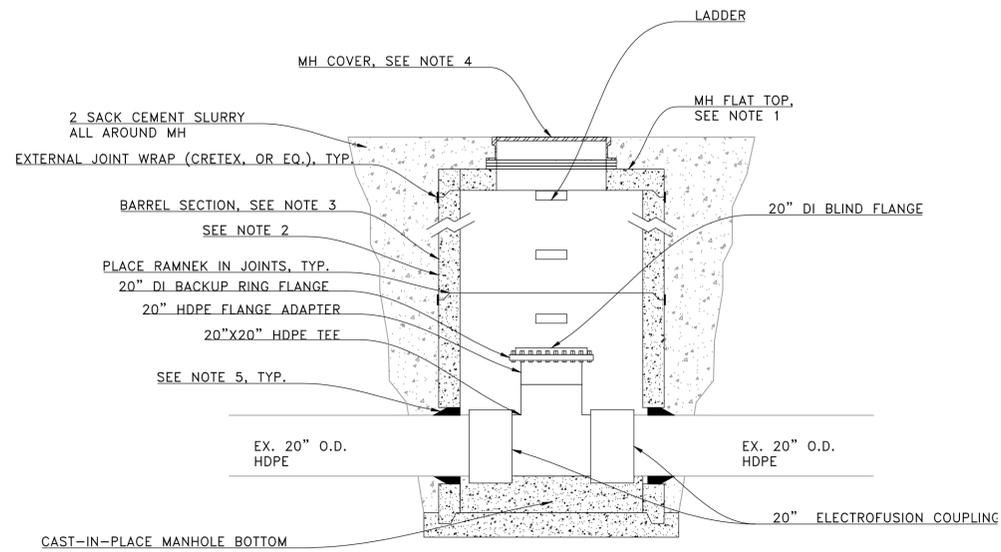
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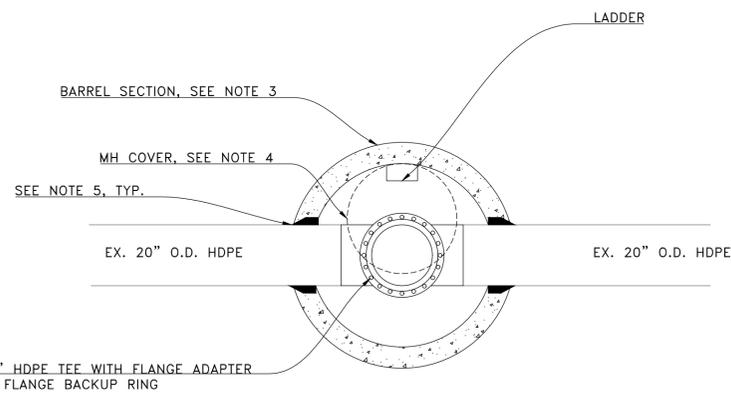


ACCESS STRUCTURE LOCATION DETAILS
LAS GALLINAS VALLEY SANITARY DISTRICT
JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET
C-3.2
JOB NO.
311004

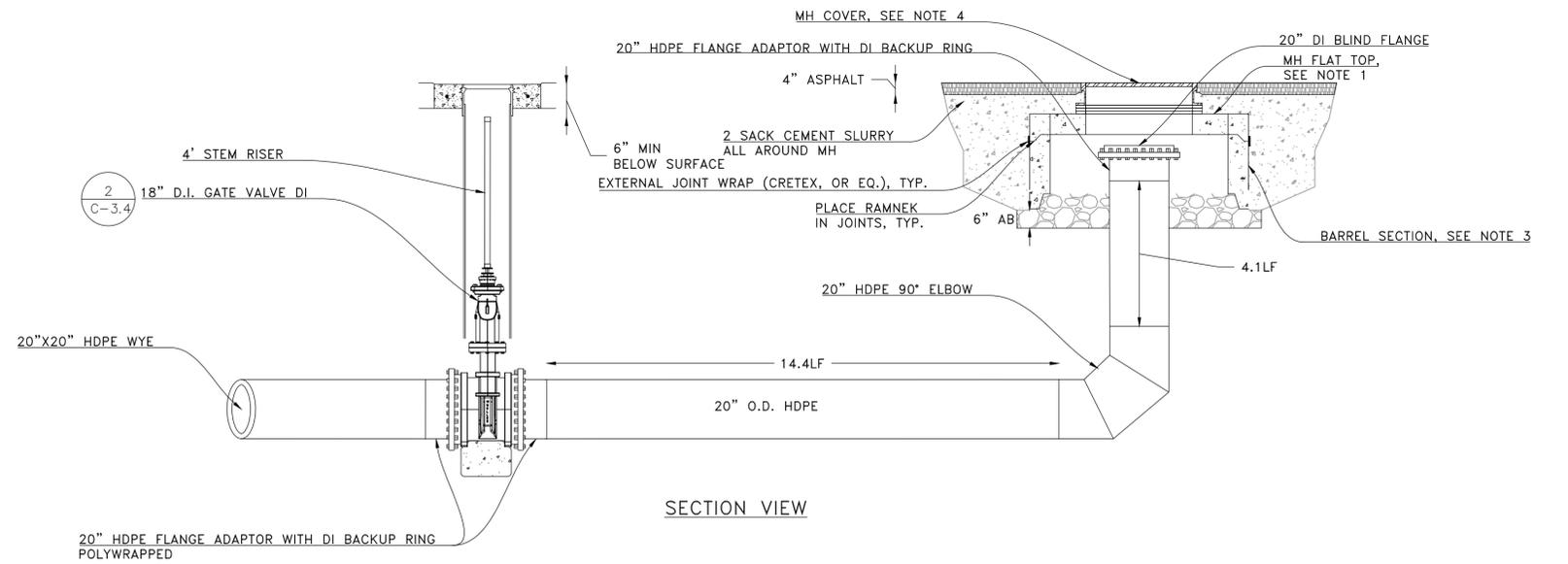


SECTION VIEW

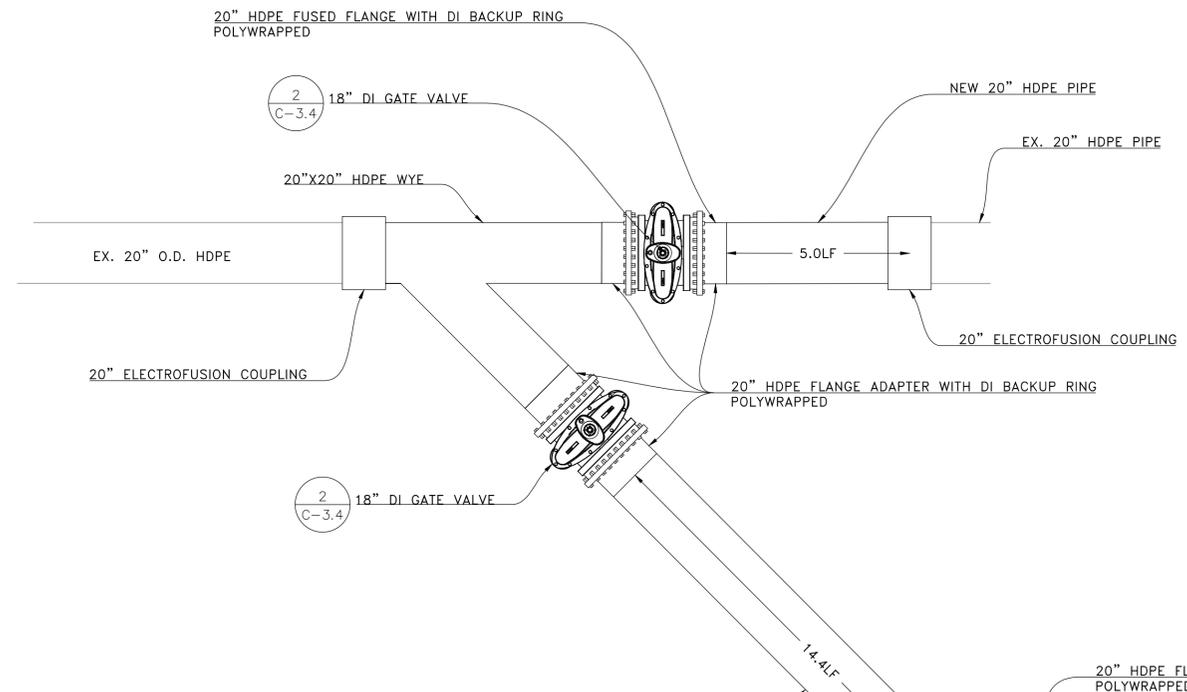


PLAN VIEW

1 PROPOSED CCTV INSPECTION ACCESS STRUCTURE
1"=5'



SECTION VIEW



PLAN VIEW

2 PROPOSED FM CLEANOUT ACCESS STRUCTURE #1, STA: 0+21.68 OFFSET 14.30'
1"=5'

NOTES

- 60" DIA. PRECAST CONCRETE MH FLAT TOP WITH 36" DIA. MH FRAME.
- EXTERNAL MANHOLE AND PIPE GROUNDWATER INFILTRATION SEALING SYSTEM (GPT RISER-WRAP, OR EQ.).
- 60" DIA. PRECAST CONCRETE MH BARREL SECTION, HDPE LINED.
- 36" DIA. HDPE MH COVER, H-20 LOADING RATED.
- APPLY HYDROPHILIC WATERSTOP (DENEUF SWELLSEAL OR EQ.) AROUND HDPE PIPE FOR MANHOLE CONNECTION.
- HDPE PIPE AND FITTINGS ARE SDR17, UNLESS SPECIFIED OTHERWISE.
- ALL BURIED DUCTILE IRON FITTING AND VALVES TO BE POLYWRAPPED.

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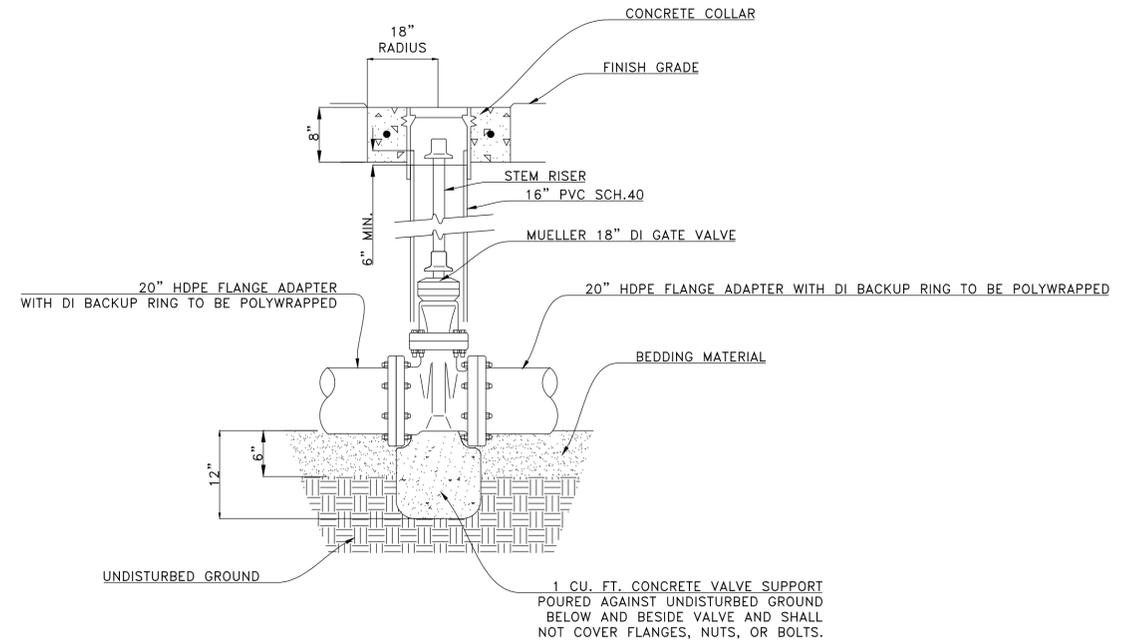
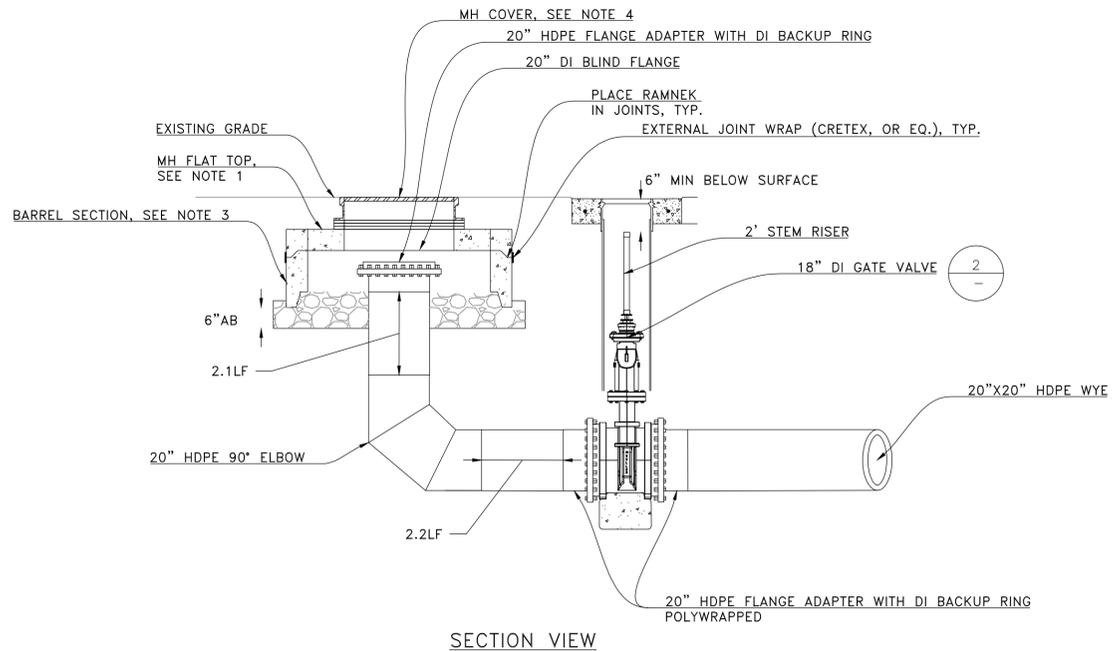
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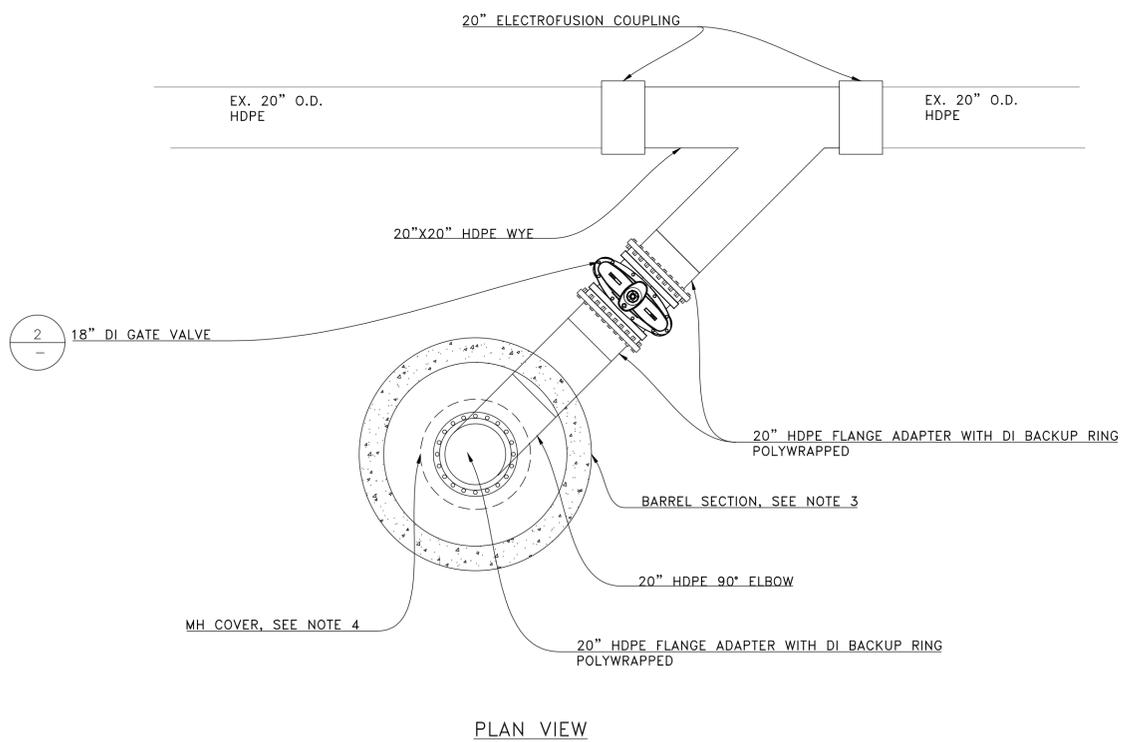
DETAILS
LAS GALLINAS VALLEY SANITARY DISTRICT
JOHN DUCKETT FORCE MAIN ACCESS STRUCTURES PROJECT

SHEET	C-3.3
JOB NO.	311004



NOTES:

- "CONCRETE" SHALL BE PORTLAND CEMENT CONCRETE WITH A MINIMUM STRENGTH OF 3000 PSI.



1 PROPOSED FM CLEANOUT ACCESS STRUCTURE #10, STA: 44+54.18, OFFSET 4.17'
1"=2.5'

NOTES

- 60" DIA. PRECAST CONCRETE MH FLAT TOP WITH 36" DIA. MH FRAME.
- EXTERNAL MANHOLE AND PIPE GROUNDWATER INFILTRATION SEALING SYSTEM (GPT RISER-WRAP, OR EQ.).
- 60" DIA. PRECAST CONCRETE MH BARREL SECTION, HDPE LINED.
- 36" DIA. HDPE MH COVER, H-20 LOADING RATED.
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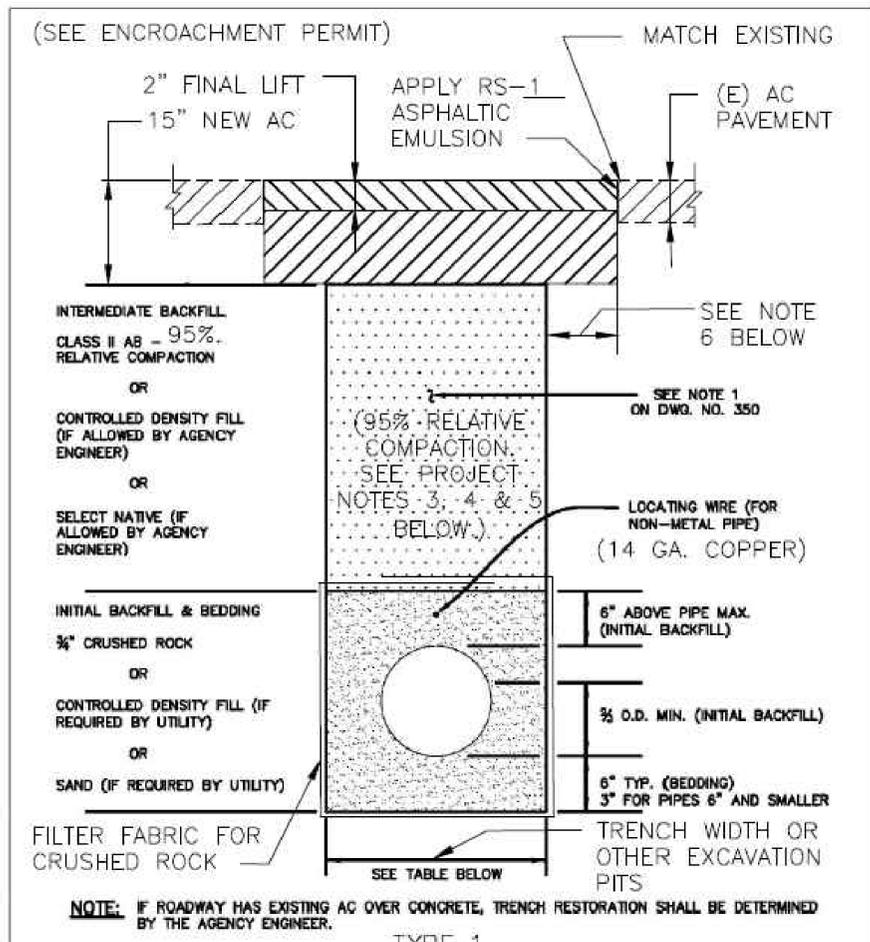
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NOTE: IF ROADWAY HAS EXISTING AC OVER CONCRETE, TRENCH RESTORATION SHALL BE DETERMINED BY THE AGENCY ENGINEER.

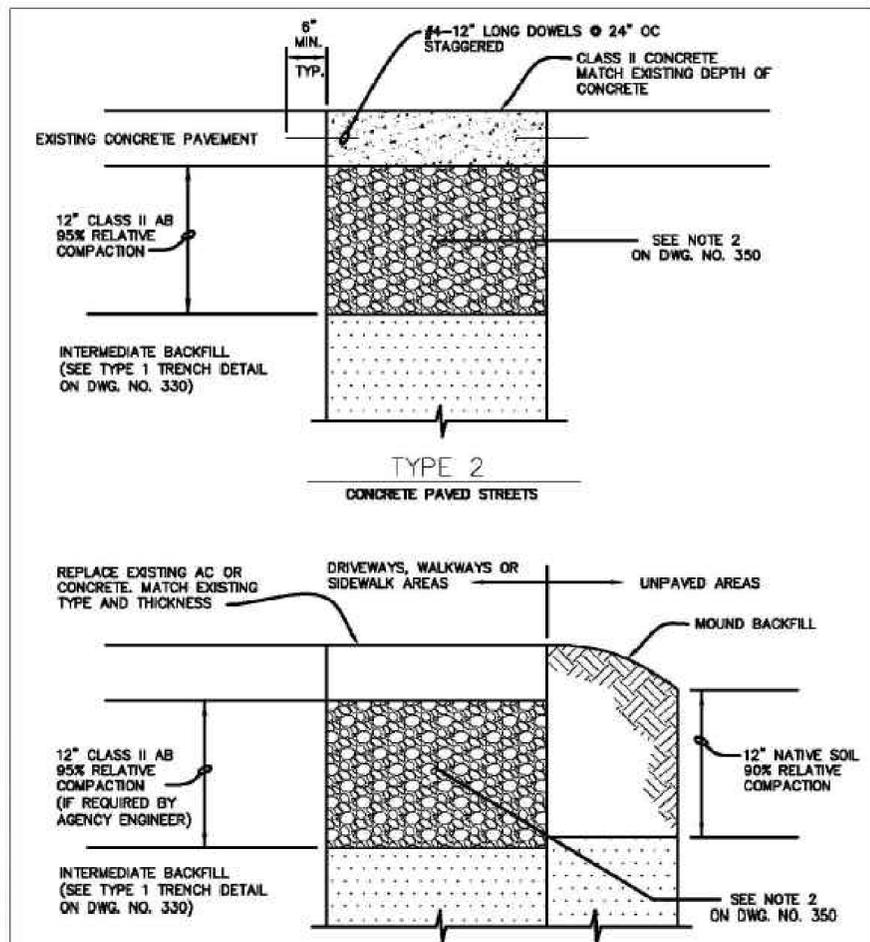
TYPE 1
ASPHALT CONCRETE PAVED STREETS

CONDUIT SIZE	LESS THAN 6"	6" TO 24"	OVER 24" TO 60"	OVER 60"
TRENCH WIDTH	O.D. + 12"	O.D. + 24"	O.D. + 24"	O.D. + 24"

FOR PIPES WITH MORE THAN 36" OF COVER, THE AGENCY ENGINEER MAY ALLOW A REDUCED TRENCH WIDTH INCLUDING A CHANGE TO A SELF-COMPACTING ENGINEERED TYPE OF INITIAL BACKFILL MATERIAL.

Las Gallinas VALLEY SANITARY DISTRICT	TRENCH DETAILS SHEET 1 OF 3 (FOR PAVED STREETS)	REV.	DATE	BY	MAY 2008
					DWG. NO. 330

① STANDARD TRENCH DETAIL NTS



NOTE: FOR TRENCHES IN UNPAVED SHOULDERS, TOP 12" SHALL BE CLASS II AB 95% RELATIVE COMPACTION.

TYPE 2
CONCRETE PAVED STREETS

TYPE 3
AREAS OTHER THAN STREETS IN THE PUBLIC RIGHT OF WAY

Las Gallinas VALLEY SANITARY DISTRICT	STANDARD TRENCH BACKFILL & RESURFACING SHEET 2 OF 3	REV.	DATE	BY	MAY 2008
					DWG. NO. 340

② STANDARD TRENCH DETAIL NTS

- (SEE ENCROACHMENT PERMIT)
- MATERIAL AND COMPACTION REQUIREMENT FOR TRENCH BACKFILL
- INTERMEDIATE BACKFILL SHALL BE CLASS II AGGREGATE BASE. SUITABLE NATIVE OR IMPORTED GRANULAR MATERIAL MAY BE USED IF ALLOWED BY AGENCY ENGINEER. RELATIVE COMPACTION SHALL BE AT LEAST 95%. SEE PROJECT NOTE 3.
 - CLASS II AGGREGATE BASE SHALL CONFORM TO THE STATE STANDARD SPECIFICATIONS. MINIMUM RELATIVE COMPACTION SHALL BE 95%. IF PAVEMENT HAVING A STRUCTURAL SECTION GREATER THAN 15" IS CUT, ADDITIONAL BASE MATERIAL MAY BE REQUIRED BY THE AGENCY ENGINEER. BASE SHALL BE PLACED AND COMPACTED PRIOR TO PLACING OF TEMPORARY PAVING.
 - TESTING OF MATERIALS AND PERFORMANCE SHALL BE IN CONFORMANCE WITH THE METHODS STATED IN THE LATEST EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, EXCEPT THAT RELATIVE COMPACTION MAY BE TESTED BY AASHTO METHOD T180, ASTM D-1557, OR TEST METHOD CALIF. 231 (NUCLEAR DENSITOMETER).
 - PLACE AC IN 3" MAX. LIFTS, EXCEPT FINAL LIFT SHALL BE 2 1/2" MAX. ADDITIONAL THICKNESS AND LIFTS OF ASPHALT CONCRETE MAY BE REQUIRED TO MATCH EXISTING STRUCTURAL SECTION ON MAJOR ROADS, OR PER LOCAL JURISDICTION REQUIREMENTS.
 - "JETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
 - THE USE OF PEA GRAVEL (OR SIMILAR ROUNDED AGGREGATE), IS NOT PERMITTED.
 - THE USE OF CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE AGENCY ENGINEER PRIOR TO PLACEMENT.
 - TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE AGENCY ENGINEER. TRIMMING SHALL BE BY SAWCUT OR ROTARY GRINDER.
 - THE SURFACE COURSE OF TRENCH RESTORATION SHALL EXTEND TO THE LIP OF GUTTER IF THE EDGE OF TRENCH IS WITHIN 4' OF THE LIP OF GUTTER, AND TO THE EDGE OF PAVEMENT IF THE EDGE OF TRENCH IS WITHIN 4' OF AN UNPAVED SHOULDER.
 - CONTRACTOR MUST SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.

Las Gallinas VALLEY SANITARY DISTRICT	TRENCH NOTES SHEET 3 OF 3	REV.	DATE	BY	MAY 2008
					DWG. NO. 350

③ STANDARD TRENCH DETAIL NTS

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JOB NO.	311004