

100% Submittal



ROSS VALLEY SANITARY DISTRICT

Woodland Capacity and Creek Crossing Project (Project No. 956)

Pre-Bid Conference: See Section 00010, Notice Inviting Bids

Bid Opening: See Section 00010, Notice Inviting Bids

PROPOSAL, NOTICE TO CONTRACTORS, AND SPECIFICATIONS

February 2023

**THE SPECIFICATIONS CONTAINED HEREIN HAVE BEEN PREPARED BY OR UNDER THE
DIRECTION OF THE FOLLOWING LICENSED ENGINEER FOR USE IN CONJUNCTION WITH THE
TECHNICAL SPECIFICATIONS IN THE ROSS VALLEY SANITARY DISTRICT STANDARD
SPECIFICATIONS AND STANDARD PLANS, DATED JUNE 2020:**



KOUROSH IRANPOUR, P.E.
Engineer in Responsible Charge

2960 KERNER BOULEVARD, SAN RAFAEL, CA, 94901

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TABLE OF CONTENTS

Division 00	Procurement and Contracting Requirements
00010	Notice Inviting Bids
00100	Instructions to Bidders
00200	Information Available to Bidders
00300	Bid Form
00310	Bid Schedule
00410	Bid Guaranty Bond
00420	Certification of Bidder's Experience and Qualifications
00430	Designation of Subcontractors
00440	Site Visit Affidavit
00480	Non-Collusion Affidavit
00490	Affidavit of Safety Compliance
00500	Construction Agreement
00610	Bond of Faithful Performance
00620	Payment Bond
00630	Escrow Agreement
00700	General Conditions
00800	Supplementary General Conditions
Division 01	General Requirements
01010	Summary of Work
01025	Measurement and Payment
01035	Modification Procedures
01050	Field Engineering
01060	Regulatory Requirements and Permits
01090	References
01150	Partnering
01200	Project Meetings
01300	Submittals
01310	Progress Schedules
01322	Web Based Document Control
01345	RFI's and Clarifications
01400	Quality Control
01510	Temporary Utilities
01560	Temporary Controls
01580	Materials and Equipment
01710	Final Clean-Up
01720	Project Record Documents
01740	Warranties and Bonds
Division 02	Site Work
	See RVSD Standard Specifications (June 2020) for additional technical specifications

Appendix A – Project Plans

Appendix B – Sample Encroachment Permits

Appendix C – CCTV Logs

Appendix D – Marin County Pavement Restoration Standards

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

SECTION 00010

NOTICE INVITING BIDS

Notice is hereby given that individual sealed bids will be received by the ROSS VALLEY SANITARY DISTRICT ("District") in their office located at 2960 Kerner Blvd., San Rafael, CA 94901-5517, at any time prior to **2:00 P.M. on xxxxxxxx, 2023** for furnishing all labor, materials, equipment, and services for the construction of improvements designated as:

WOODLAND CAPACITY AND CREEK CROSSING PROJECT

Bids will be publicly opened, examined, and declared on said day and hour and broadcast via live-stream video. Bidders who would like to observe the bid opening may watch the live-stream video broadcast by accessing the following link: <https://us06web.zoom.us/j/4373479597>. Any Bids received after the specified time and date will not be considered.

A **non-mandatory pre-bid meeting** will be held at **10:00 A.M. on xxxx, 2023** via live-stream video broadcast by accessing the following link: <https://us06web.zoom.us/j/4373479597>.

To bid the Work, interested bidders must purchase the Contract Documents from BPX Printing at a cost of \$70 per set, plus shipping. Copies of the Contract Documents shall be obtained by logging on to <http://www.rvsdplanroom.com/> or by calling BPX Printing at 510-559-8299. Contract Documents include Bid Documents, Specifications, full-size (22-inch by 34-inch) Plans and Appendices. Return of the documents is not required, and the amount paid for the documents is non-refundable. All bidders must purchase a complete bid set from the BPX Printing prior to bid opening to be considered responsive and to receive addenda notifications.

The Engineer's Estimate of Probable Cost is **\$\$\$\$\$\$**, and all work shall be completed within calendar days from the date established in Section **00800-1.01, TIME ALLOWED FOR COMPLETION**.

The project is generally described as follows: replace existing pipelines by open-cut and removal and replacement (~60LF), replacing existing sanitary sewer by pipe bursting (~6,400 LF), including sawcut, excavation and backfill, shoring, replacing laterals, disconnecting and reinstating lateral connections, abandoning existing sewer pipelines and manholes, removing existing cleanouts and manholes, constructing new manholes and property line cleanouts, asphalt concrete pavement restoration, CCTV inspection, traffic control, project signs, and bypass pumping of sanitary sewer flow. All of said work is to be done in accordance with the Contract Documents as described above, at the places and in the particular locations, of the form, sizes and dimensions and of the materials, and to the lines and grades and at the elevations as shown on the Plans and Specifications made therefore and approved by the District.

Under California Laws and Regulations, the District shall inform all prime contractors of public works, to the extent feasible of relevant public work requirements. Therefore, the District hereby

advises all bidders that the successful bidder shall: Employ the appropriate number of apprentices on the job site as set forth in California Labor Code 1777.5;

1. Provide worker's compensation coverage, as set forth in California Labor Code Sections 1860 and 1861;
2. Keep and maintain the records of work performed on the public works project, as set forth in California Labor Code Section 1812;
3. Keep and maintain the records required under California Labor Code Section 1776 which shall be subject to inspection pursuant to California Labor Code Section 1776 and California Code of Regulations, Division 1, Chapter 8, Subchapter 3, Article 6, Section 16400 (e); and
4. Be subject to other requirements imposed by law.

Bidders are hereby notified that, pursuant to the provisions of California Labor Code, Sections 1770 et. seq., the District has obtained from the Director of the Department of Industrial Relations, the general prevailing rate of per diem wages and the general prevailing rate for holidays, Saturdays and Sundays, and overtime work in the locality in which the work is to be performed for each craft, classification, or type of worker required to execute the contract. A copy said prevailing rate of the per diem wages are on file at the District offices, 2960 Kerner Blvd, San Rafael, CA 94901. Said prevailing rates of per diem wages will be made available to any interested party upon request, and a copy thereof shall be posted at the job site.

The District will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rates on file as aforesaid. The possibility of a wage increase is one of the elements to be considered by the Contractor in determining his/her or its Bid and will not, under any circumstances, be considered as the basis of a claim against the District on the Contract.

The successful Bidder and its subcontractors shall employ workers which consistently display and demonstrate proper moral, ethical and professional conduct to all fellow workers, employees and representatives of the District and other involved parties.

Pursuant to the provisions of California Labor Code Section 6707, each Bid submitted in response to this Notice to Contractors shall contain, as a Bid item, adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life and limb in trenches and open excavation, which shall conform to applicable safety orders. By listing this sum, the Bidder warrants that its action does not convey tort liability to the District, the Design Consultant, the Construction Manager, and each of their employees, agents, and sub consultants.

Each Bid must conform and be responsive to the invitation, the Plans and Specifications, and all documents comprising the pertinent Contract Documents. Each Bid shall be presented under sealed cover and shall be accompanied by a certified check, cashier's check, cash or bidder's bond, made payable to the District, in an amount not less than ten (10) percent of the bid. The said check shall be given as a guarantee that the Bidder will execute the Contract in conformity with the form of agreement contained within the Contract Documents, and will furnish bonds and insurance policies

as specified within ten (10) days after notification of the award of the Contract to the successful Bidder.

Addenda issued during the time of bidding shall be covered in the Contractor's Bid and shall become part of the Contract Documents.

Bidders shall develop and submit bids at their own expense. The District will not reimburse any costs associated with the development and submittal of any and all Bids.

The District reserves the right to reject any or all bids, to waive any informality in a bid, and to make awards to the lowest responsive, responsible bidder as it may best serve the interest of the District.

No Bidder may withdraw its bid for a period of ninety (90) days after the date set for the opening thereof.

Any Bid protest must be submitted in writing to the District, 2960 Kerner Blvd, San Rafael, CA 94901, 4:00 p.m. of the 5th business day following Bid opening. The initial protest document must identify the protestant and contain a complete statement of the basis for the protest with reference to any portion of the bid documents which the protestant relies on as the basis of the protest. The above time and content requirements are mandatory, and failure to comply therewith shall constitute a waiver of any further right to pursue a bid protest, including filing a Government Code claim or legal proceedings. Bid protests shall be acted upon by the District's Board.

At the successful Contractor's option, securities may be substituted for the required retention, in accordance with the provisions of Section 22300 of the State of California Public Contract Code.

In accordance with the provisions of California Public Contract Code Section 3300, the District has determined that the Contractor shall possess a valid **Class A – General Engineering** license.

Per the provisions of California Business and Professions Code Section 7028.15, a Bid submitted to the District by a Contractor who is not licensed in accordance with Chapter 9 of the California Business and Professions Code shall be considered non-responsive and shall be rejected by the District.

No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions for bid purposes only under Labor Code section 1771.1(a)]. No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

By: _____ / s /
Steve Moore, PE, General Manager,
ROSS VALLEY SANITARY DISTRICT

Date: _____

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

SECTION 00100

INSTRUCTIONS TO BIDDERS

ARTICLE 1 – GENERAL

The work to be performed is described in the Contract Documents titled **Woodland Capacity and Creek Crossing Project** –dated xxxx, 2022 and prepared by Harris & Associates.

All Bidders shall carefully examine the Contract Documents and satisfy themselves as to their sufficiency; and shall not at any time after the submission of the bid dispute or complain of such Contract Documents and the directions explaining them or interpreting them, nor assert that there is any misunderstanding in regard to the location, extent, nature of amount of work to be performed. The Bidder shall notify the District of any discovered conflicts, errors or discrepancies in the Contract Documents prior to the submission of its Bid. Intended Bidders shall have visited the site of the Work and familiarized themselves with the conditions there existing as well as all other conditions relating the construction and labor under which the work will be performed and affecting cost, progress or performance of the Work. The submitting of a Bid shall be considered an acknowledgement on the part of the Bidder of its familiarity with conditions at the site of work.

Bids for the Work shall be made on the forms contained in the following sections and shall include the following completed documents:

<u>SECTION</u>	<u>TITLE</u>
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00300	BID FORM
00310	BID SCHEDULE
00410	BID GUARANTY BOND
00420	BIDDER'S EXPERIENCE AND QUALIFICATIONS
00430	DESIGNATION OF SUBCONTRACTORS
00440	SITE VISIT AFFIDAVIT
00480	NON-COLLUSION AFFIDAVIT
00490	AFFIDAVIT OF SAFETY COMPLIANCE

A complete set of Bid forms shall be placed in an envelope, sealed, and addressed to:

ROSS VALLEY SANITARY DISTRICT
Attn: Steve Moore, General Manager
2960 Kerner Blvd., San Rafael, CA 94901
BID: Woodland Capacity and Creek Crossing Project

A non-mandatory pre-bid meeting will be held for the project at the time and place stipulated in Section 00010, **NOTICE INVITING BIDS**. The conference will be conducted by the District. Sub-contractors and other interested parties are invited and encouraged to attend.

The District reserves the right to postpone the date and time for receiving and/or opening of Bids at any time prior to the date and time established in the Notice Inviting Bids. Postponement notices may be emailed or faxed and will subsequently be mailed to planholders of record in the form of addenda.

Addenda may be issued to all planholders during the Bid period. Any and all addenda issued shall become a part of the Contract Documents and shall be fully considered by all Bidders during formation of Bids.

Bids shall be made on the blank bid forms prepared by the District and issued separately from these Contract Documents. Bid forms included in these Contract Documents shall be used for reference only.

Bids shall give the prices proposed in figures, shall give all other information requested herein, and shall be signed by the Bidder or an authorized representative, including address. By submission of a proposal on the separate forms provided by the District, the Bidder attests that the Bidder has purchased a complete set of these Contract Documents and is aware of its entire contents. Bidder is required to provide a complete Bid on all schedules listed in Section 00310, **BID SCHEDULE**.

Bids must be received by the District at the above address before the time set for the opening of Bids as provided in Section 00010, **NOTICE INVITING BIDS**.

After the expiration of the time for submission of Bids, all Bids will be publicly opened, read, declared, and referred to the District Board of Directors for action.

ARTICLE 2 – BID PRICES

Bid prices shall include everything necessary for the completion of construction and fulfillment of the Contract. Bid prices shall include all federal, state and local taxes. Costs for developing, submitting, and presenting Bids are the sole responsibility of the Bidder and claims for reimbursement will not be accepted by the District.

If the product of a unit price and an estimated quantity does not equal the extended amount quoted, the unit price shall govern, and the correct product of the unit price and the estimate quantity shall be deemed to be the amount Bid. If the sum of two or more items in a bidding schedule does not equal the total amounts quoted, the individual item amounts shall govern and the correct total shall be deemed to be the amount Bid.

ARTICLE 3 – BIDDER'S SIGNATURE AND AUTHORITY

If the Bid is made by an individual, Bidder's name, signature, and post office address must be shown; if made by a firm or partnership, a list of the partners, and the signature of at least one of the general partners must be shown; if made by a corporation, the Bid shall show the name of the state under the laws of which the corporation is chartered, the name and post office address of the corporation, and the title of the person who signs on behalf of the corporation. If the Bid is made by a corporation, a certified copy of the bylaws or resolution of the Board of Directors of the corporation shall be furnished showing the authority of the officer signing the Bid to execute

contracts on behalf of the corporation. If the Bid is made by a joint venture, the Bid shall be signed by a representative of one of the joint venture firms. Additionally, the Bid shall include a copy of the resolution or agreement empowering the representative to execute the Bid and bind the joint venture.

ARTICLE 4 – BID IRREGULARITIES

Each Bid and the information requested shall be enclosed in a sealed envelope and labeled as specified herein. Bidders are warned against making erasures or alterations of any kind, and Bids which contain omissions, erasures, or irregularities of any kind may be rejected. No oral, telegraphic, electronic (including e-mail), facsimile, or telephonic bids or modifications will be considered.

ARTICLE 5 – MODIFICATION OF BID

Modification of a Bid already received will be considered only if the modification is received prior to the time established for receiving Bids. Modifications shall be made in writing, executed, and submitted in the same form and manner as the original Bid.

ARTICLE 6 – SUBCONTRACTORS AND MAJOR SUPPLIERS

In accordance with California Public Contracting Code Section 4100, et seq., each Bid shall have listed in Section 00430, **DESIGNATION OF SUBCONTRACTORS**, the name, portion of work to be performed, and location of the place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the Work or improvement, or of any subcontractor licensed by the State of California who, under subcontract to the Bidder, will specifically fabricate and install a portion of the Work or improvement according to Plans contained in the Contract Documents, in an amount in excess of one-half of one percent of the Bidder's total bid, or \$10,000, whichever is greater.

If the Contractor fails to designate in its proposal a subcontractor for any portion of the Work as required above, the Bidder shall be deemed to have agreed to perform such portion of the Work itself and shall not be permitted to subcontract said portion of the Work without the written permission of the District in accordance with applicable law.

ARTICLE 7 – BID GUARANTY BOND AND CONTRACT AWARD

Bids shall be accompanied by one of the following forms of Bidder's Security: Cash or; a certified or cashier's check payable to the District; or a Bidder's Bond (Bid Guaranty Bond) executed by an admitted surety made payable to the District. The Bidder's Security shall be in an amount not less than ten (10) percent of the aggregate of the Bid. Said Bidder's Security shall be a guarantee that the Bidder, if awarded the Work, will within ten (10) days after award: (1) enter into a Contract in specified form, (2) furnish a bond of faithful performance and a labor and material bond, and (3) furnish specified insurance policies. In case of refusal or failure to enter into said Contract, or to provide said bonds and insurance policies the Bidder's Security shall be forfeited to the District, the proceeds therefrom being hereby agreed upon as liquidated damages to the District on account of the delay in the execution of the Contract and required bonds and the performance of the Work

thereunder, and the necessity of accepting a higher or less desirable Bid resulting from such failure or refusal to execute the Contract and the bonds as required.

Upon the execution of the Contract and the approval on behalf of the District of the accompanying bonds and insurance policies, all certified checks that accompany Proposals and that have not heretofore been returned, will be returned, each to its maker.

Award of the Contract will be made within ninety (90) days after the opening of Bids to the lowest responsive, responsible bidder complying with these instructions, the Section 00010, **NOTICE INVITING BIDS**, and such other pertinent provisions of the Contract Documents as may apply. The Award of the Contract may be made after the ninetieth (90th) day after the opening of the Bids if mutually agreed to by both the District and the successful Bidder in writing. If award is made, it will be based on the lowest responsive, responsible Bid whose base Bid and alternate(s) as listed in Section 00300, **BID FORM**, yields the lowest total Contract price. Selection of any or all alternates shall be at the sole discretion of the District. The District reserves the right to reject any or all Bids, and to waive any informality in Bids received.

ARTICLE 8 – CONTRACTOR'S LICENSE

Each Bidder shall be licensed in accordance with the provisions of the Contractor's License Law of California as stipulated in Section 00010, **NOTICE INVITING BIDS**.

ARTICLE 9 – WORK PERCENTAGES

The Contractor shall perform with its own organization no less than the work percentage specified in Section 01010-1.07, **WORK PERCENTAGES**.

ARTICLE 10 – COLLUSION

If the District has reason to believe that collusion exists among Bidders, the District will reject the Bids of the known participants in such collusion and may, at its option, require that all Bidders certify under penalty of perjury, that no collusion has occurred or exists. The District also, at its option, may reject all Bids received. In accordance with Public Contract Code Section 7106, the Contractor shall complete and file with its proposal the Non-Collusion Affidavit in Section 00480. Public Contract Code Section 7106 requires that the affidavit must be duly sworn.

ARTICLE 11 – INTERPRETATIONS

No oral representations or interpretations will be made to any Bidder as to the meaning of the Contract Documents. Requests for an interpretation shall be made in writing and delivered to the following address at least ten (10) days before the Bids are opened as provided in Section 00010, **NOTICE INVITING BIDS**.

Requests should be made to Phil Benedetti, Project Manager, Ross Valley Sanitary District at 2960 Kerner Blvd., San Rafael, CA 94901, Telephone (415)259-2949 and e-mail: pbenedetti@rvsd.org

ARTICLE 12 – WITHDRAWAL OF BID

In accordance with Public Contract Code Section 5101 and 5103, within five (5) days after the opening of Bids, a Bidder may withdraw its Bid providing the Bidder can establish to the District's satisfaction that a mistake was made in preparing the Bid. A Bidder desiring to withdraw shall give written notice to the District, specifying, in detail, how the mistake occurred and how the mistake made the Bid materially different than it was intended to be. Withdrawal will not be permitted for mistakes resulting from errors in judgment or carelessness in inspecting the site of the Work or in reading the Contract Documents.

ARTICLE 13 – BID PROTEST

Any Bid protest must be submitted in writing to the District General Manager before 4:00 p.m. on the fifth (5th) working day following Bid opening.

- A. The initial protest document must contain a complete statement of the basis for the protest, and all supporting documentation.
- B. The party filing the protest must have actually submitted a Bid for the Work. A subcontractor or supplier of a party submitting a Bid for the Work may not submit a Bid protest. A party may not rely on the Bid protest submitted by another Bidder, but must timely pursue its own protest.
- C. The protest must refer to the specific portion of the Bid document which forms the basis for the protest.
- D. The protest must include the name, address and telephone number of the person representing the protesting party.
- E. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest which may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.
- F. The District will give the protested Bidder five (5) working days after the receipt of the protest to submit a written response. The responding Bidder shall transmit the response to the protesting Bidder concurrent with delivery to the District.
- G. The procedure and time limits set forth in this paragraph are mandatory and are the Bidder's sole and exclusive remedy in the event of Bid protest. The Bidder's failure to comply with these

procedures shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings

H. If the District determines that a protest is frivolous, the protesting Bidder may be determined to be non-responsible and that bidder may be determined to be ineligible for future contract awards.

(Continued on next page)

ARTICLE 14 – BIDDERS CHECKLIST

This checklist has been prepared and furnished to aid Bidders in including all necessary supporting information with their Bid. Bidder's submittals shall include the following, in addition to any other materials which Bidder may wish to submit:

<u>Item</u>	<u>Checked</u>
Bid Form (Section 00300)	_____
Bid Schedule (Section 00310)	_____
Bid Guaranty Bond (Section 00410)	_____
Certification of Bidder Experience and Qualifications (Section 00420)	_____
Designation of Subcontractors (Section 00430)	_____
Site Visit Affidavit (Section 00440)	_____
Non-Collusion Affidavit (Section 00480)	_____
Affidavit of Safety Compliance (Section 00490)	_____

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SECTION 00200

INFORMATION AVAILABLE TO BIDDERS

ARTICLE 1 – SUBSURFACE CONDITIONS

Subsurface investigation for project design of this project has been conducted at the site of the Work. The Geotechnical Report, by Miller Pacific., is available for reference in Appendix B. Additional geotechnical information determined by seismic refraction is included in Appendix F. Upon review of the Contract Documents, referenced documents, and personal site inspection, the Bidders may develop reasonable interpretation of subsurface conditions. Contractors, as bidders, are required to make a personal inspection of the site and otherwise satisfy themselves as to the conditions affecting the work as detailed in these Contract Documents.

ARTICLE 2 – RECORD DRAWINGS AND ADDITIONAL INFORMATION

Previous construction activities have occurred at portions of the site. Section 00800-Article 5, **RECORD DRAWINGS AND ADDITIONAL INFORMATION**, lists known available information for review by Bidders.

ARTICLE 3 – ACCESS FOR CONTRACTOR’S PRE-BID SITE INVESTIGATION

Additional access to the site(s) for investigations may be requested to assist the Bidders in the development of their Bid. This access shall be scheduled in advance with the District. These access requests shall be made through the District contact, as provided in Section 00100-Article 11, **INTERPRETATIONS**.

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SECTION 00300

BID FORM

To the:

Date: _____

ROSS VALLEY SANITARY DISTRICT
2960 Kerner Boulevard
San Rafael, CA 94901

Name of Bidder: _____

Business Address: _____

The undersigned as bidder declares that it has purchased a complete set of the Contract Documents directly from the District Offices, and carefully examined the location of the proposed work, the Contract Documents, and the plans and specifications therein referred to, and the bidder proposes and agrees if this proposal is accepted, that it will contract with the ROSS VALLEY SANITARY DISTRICT ("District") all labor, materials, necessary machinery, tools, apparatus, and other means of construction and services, and do all the work specified in the Contract in the manner and time hereinafter set forth required for the construction of the work involved in the improvements designated as:

Woodland Capacity and Creek Crossing Project

ADDENDUM RECEIPT: The receipt of the following Addenda to the Contract Documents is acknowledged:

Addendum No. _____ Date _____

Addendum No. _____ Date: _____

Addendum No. _____ Date: _____

The bidder proposes and agrees to contract with the ROSS VALLEY SANITARY DISTRICT to perform all the above work, including subsidiary obligations as defined in said specifications for the prices indicated in Section 00310, **BID SCHEDULE**:

The Total Base Bid amount will be determined by the sum total of all bid item amounts in the Bid Schedule. Bid Items include all labor, material, equipment and services required in the Contract Documents or necessary to complete the Work. If the District awards a contract for the Work, it will be to the responsible bidder who submits the lowest responsive bid. The low bid will be determined by **Total Base Bid**.

The undersigned has filled in all information required herein and understands that failure to do so is grounds for rejecting the bid by the District.

The District reserves the right to change, delete or add new work to the Contract as set forth in the Contract Documents.

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

The undersigned understands that the District reserves the sole right to reject any or all bids and to waive any informality in bids received. Award will be made which, in the judgment of the District, is in the best interest of the District.

It is agreed that this Bid may not be withdrawn within a period of ninety (90) days after the date set for the opening thereof, except as allowed in Public Contract Code Section 5100 et seq.

Enclosed herewith is the Bidders security in the form of _____ (certified check, cashier's check, bond or cash) for not less than ten (10) percent of the total amount of this proposal and the undersigned agrees that, in case of its default in executing the Contract and the necessary bonds after award and due notice thereof, the said check or bond and the money payable thereon shall become and remain the property of the District, as liquidated damages without proof of loss within ten (10) days of notice of default by District. In the event bidder provides the District with a Proposal Guaranty Bond, it shall be on the form enclosed herewith in Section 00410, **BID GUARANTY BOND** and be issued by a corporate surety Agency. The corporate surety shall be authorized to conduct surety business in California. At its discretion, the District may request that a certified copy of the certificate of authority of the surety issued by the Insurance Commissioner of the State of California be submitted to the District. The surety must be listed on the List of Acceptable Sureties published by the U.S. Department of Treasury, Circular 570 current as of the date bids are received. The Bond and Corporate Surety will be reviewed and approved by the District's counsel.

In accordance with the Contract Documents, the undersigned further agrees to so plan the Work and to prosecute it with such diligence that said Work shall be commenced within ten days after the date of Contract execution and Notice to Proceed and shall be completed within the time specified in Section 00800-1.01, **TIME ALLOWED FOR COMPLETION**.

The undersigned agrees, if awarded the Contract, that there shall be paid by the undersigned and by all subcontractors under him, to all laborers, workers and mechanics employed in the execution of such Contract or any subcontract thereunder, not less than the general Federal or State prevailing rate of per diem wages, and rates for overtime and legal holidays in the locality in which the work is to be performed, as ascertained and determined, pursuant to the Federal or State statute thereto applicable, by the District. The representations made herein, including the bidder's licensing information hereinafter furnished, are made under penalty of perjury. The undersigned understands that any bid not containing accurate licensing information, or containing any information which is subsequently proven false, shall be considered non-responsive, and shall be rejected by the District.

Date _____ at _California

Contractor _____

By _____

Printed Title _____

Contr. License No. _____

(State of California)

License Classification _____

Expiration Date _____

Dated _____

Address _____

Telephone _____

Nature of Firm (Corporation, Partnership, etc)

Names of Individual Members, or Names & Titles of Officers

Corporation Organized under the Laws of the State of

<Corporate Seal or Notarial Acknowledgement of Signature>

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SECTION 00310					
BID SCHEDULE					
Woodland Capacity and Creek Crossing Project					
Item No.	Item Description	Unit	Estimate	Unit Bid Cost	Total Bid Price
1	Mobilization and Demobilization	LS	1		
2	Traffic Control	LS	1		
3	Overexcavation and Special Pipe Foundation (Revocable if not used)	CY	10		
4	Rock Excavation (Revocable if not used)	CY	15		
5	Trench Sheet piling, Shoring and Bracing	LS	1		
6	AC Surface Upheaval Repair (Revocable if not used)	SF	1400		
7	PCC Pavement/Slab Excavation (Revocable if not used)	CY	100		
8	Sag Repair for HDPE SS	LF	100		
9	HMA Surface Restoration Including 2" Mill per Detail 2/D-01	TON	184		
10	Bid Allowance for Districts Use	LS	1	\$200,000	\$200,000
Subtotal: Misc.					
11. Sanitary Sewer Improvements: PP-01 to PP-04 Woodland Rd					

11a	Remove and Replace or Construct New SSCO at Property Line	EA	7		
11b	Disconnect/Reconnect Sewer Lateral To Main for Pipe Bursting	EA	7		
11c	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 5'-10')	EA	2		
11d	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 10'-15')	EA	1		
11e	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 15'-20')	EA	1		
11f	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 20'-25')	EA	1		
11g	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length > 25')	FT	2		
11h	Abandon Existing SSMH	EA	3		
11i	Remove Existing SSMH	EA	2		
11j	Install new SSMH	EA	1		
11k	Construct New Overflow SSMH	EA	1		
11l	Install new 12" SS by Horizontal Directional Drilling	FT	245		
11m	Install new 8" SS by Horizontal Directional Drilling	FT	245		
11n	Remove and Replace Existing 8" SS with 12" SS by Open Trench	FT	115		
11o	Remove and Replace Existing 8" SS with 10" SS by Open Trench	FT	37		
11p	Abandon existing 6-inch ss by filling	FT	665		

11q	Abandon existing 8-inch ss by filling	FT	305		
11r	Abandon existing 10-inch ss by filling	FT	41		
Subtotal: Woodland Rd					
12. Sanitary Sewer Improvements: PP-05 to PP-09. Woodland Rd					
12a	Remove and Replace or Construct New SSCO at Property Line	EA	10		
12b	Disconnect/Reconnect Sewer Lateral To Main for Pipe Bursting	EA	10		
12c	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 5'-10')	EA	4		
12d	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 10'-15')	EA	1		
12e	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 15'-20')	EA	2		
12f	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length > 25')	EA	3		
12g	Pipe Burst Existing 6" with 8" SS	FT	934		
12h	Pipe Burst Existing 6" with 10" SS	FT	532		
12i	Remove and Replace Existing 6" SS With 10" SS by Open Trench	FT	625		
12j	Remove and Replace existing SSMH	EA	4		
Subtotal: Woodland Rd					
13. Sanitary Sewer Improvements: PP-10 to PP-11. Woodland Rd/Acorn Way Easement					
13a	Remove and Replace or Construct New SSCO at Property Line	EA	5		

13b	Disconnect/Reconnect Sewer Lateral To Main for Pipe Bursting	EA	5		
13c	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 0'-5')	EA	2		
13d	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 5'-10')	EA	1		
13e	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 10'-15')	EA	2		
13f	Pipe Burst Existing 6" with 6" SS	FT	296		
13g	Remove and Replace Existing 6" SS With 6" SS by Open Trench	FT	175		
13h	Remove and Replace Existing SSCO/SSLH with New SSMH	EA	2		
13i	Remove and Replace Existing SSMH	EA	3		
Subtotal: Woodland Rd/Acron Way Easement					
14. Sanitary Sewer Improvements: PP-12. Woodland Rd Easement					
14a	Remove and Replace or Construct New SSCO at Property Line	EA	2		
14b	Disconnect/Reconnect Sewer Lateral To Main for Pipe Bursting	EA	2		
14c	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 5'-10')	EA	1		
14d	Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4" SS (Length 10'-15')	EA	1		
14e	Pipe Burst Existing 6" with 6" SS	FT	375		
Subtotal: Woodland Rd Easement					

Grand Total	
--------------------	--

BID SUMMARY

BASE BID SCHEDULE:	TOTAL PRICE IN FIGURES	\$
	TOTAL PRICE IN WORDS	

****END OF SECTION****

SECTION 00410

BID GUARANTY BOND

(To Accompany Bid)

KNOW ALL PERSONS BY THESE PRESENTS:

THAT _____, hereinafter called the Principal, and _____, hereinafter called the Surety, are jointly and severally held and firmly bound unto the ROSS VALLEY SANITARY DISTRICT, San Rafael, California, a public entity, hereinafter called the Obligee, each in the penal sum of ten percent of the total amount of the Base Bid Proposal of the Principal for the Work, this sum not to exceed _____ dollars of lawful money of the United States for the payment whereof unto the Obligee, the Principal and Surety jointly and severally bind themselves forever.

WHEREAS, the Principal is herewith submitting its offer for the fulfillment of Obligee's Contract for:

Woodland Capacity and Creek Crossing Project

NOW, THEREFORE, the condition of this obligation is such that if the Principal is awarded the Contract, and if the Principal within the time specified in the proposal for such Contract enters into, executes and delivers to the Obligee an agreement in the form specified in the Contract Documents complete with evidences of insurance specified in the Contract Documents, and if the Principal within the time specified in the proposal gives to the Obligee the payment and performance bonds specified in the Contract Documents, then this obligation shall be void; otherwise, the Principal and Surety will pay unto the Obligee the difference in money between the total amount of the proposal of the Principal and the amount for which the Obligee legally contracts with another party to fulfill the Contract if the latter amount be excess of the former, but in no event shall the Surety's liability exceed the penal sum hereof.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable under this obligation as Principal, and that nothing of any kind or nature whatsoever that will not discharge the Principal shall operate as a discharge or a release of liability of the Surety.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be binding upon and inure to the benefit of the Principal, the Surety and the Obligee and their respective heirs, executors, administrators, successors and assigns.

SIGNED AND SEALED THIS _____ day of _____, 20 .

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

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SECTION 00420

CERTIFICATION OF BIDDER'S EXPERIENCE AND QUALIFICATIONS (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 on the nature, extent, and inherent conditions of the work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the particular facilities which may create, during the construction program, unusual or peculiar unsafe conditions hazardous to persons and property. Bidder expressly acknowledges that it is aware of such peculiar 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.

ARTICLE 1 – BIDDER QUESTIONNAIRE

If the answer to any of questions 1 through 4 is “no”, the Bidder’s bid will be rejected.

Answering “yes” to questions 5 through 12 may result in the rejection of a Bidder’s bid.

1. Bidder possesses a valid and current California Contractor’s license 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 00800-Article 2, **INDEMNITY AND INSURANCE**.
☐ Yes ☐ No
3. Bidder has current Workers’ Compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code section 3700 et seq.
☐ Yes ☐ No
4. Bidder and all subcontractors are registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
☐ Yes ☐ No
5. Has your contractor’s license been revoked at any time in the last five (5) years?
☐ Yes ☐ No

If the answer is yes to question 5, please explain: _____

6. 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

If the answer is yes to question 6, please explain: _____

7. 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

If the answer is yes to question 7, please explain: _____

8. 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

If the answer is yes to question 8, please explain: _____

9. In the last five (5) years, have you or your firm been a party to a claim, mediation, arbitration, lawsuit or any other proceeding involving work that you or your firm performed?

☐ Yes ☐ No

If so, please provide the following information as to each such proceeding:

(I) The name, address and telephone numbers of all parties to the proceeding. _____

(I) The general nature of the claims being made against or by your firm. _____

(II) The outcome of the proceeding. _____

10. Have you or your firm ever requested payment of more money than any of your clients have been willing to pay?

☐ Yes ☐ No

As to each such request, please state:

(II) The name, address and telephone number of the client. _____

(III) The amount and nature of your claim. _____

(IV) The nature of the client's position. _____

(V) The outcome of your claim. _____

11. In conformance with Public Contract Code Section 10162, has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

☐ Yes ☐ No

If the answer is yes to question 11, please explain: _____

12. In conformance with Public Contract Code Section 10285.1 (Chapter 376 §1, Stats. 1985), has the Bidder been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Public Contract Code Section 10285.1.

☐ Yes ☐ No

If the answer is yes to question 12, please explain: _____

ARTICLE 2 – CONTRACTOR’S STATEMENT OF EXPERIENCE

The Bidder shall provide evidence of experience qualifications as required below on the Project Description Worksheets and supplemental sheets as required. All projects shall be of similar size and complexity that indicate the Bidder's experience as specified below. The Contractor shall provide, as part of the bid, the listing of experience qualifications of the staff to be used that at minimum meets the specified requirements, and the information to verify the qualifications.

The failure to provide the project experience information, including but not limited to correct Owner Representative contact name and number, is grounds for rejection of the Bid in the sole discretion of District.

1.1 Open-Cut Construction (Replacement and New Installation)

The Contractor shall provide evidence of experience qualifications as required below. All projects shall be of similar size and complexity that indicate the Contractor’s experience as specified below.

A. Required experience

1. Installation Contractor:

- a. Minimum of five (5) successfully completed projects completed in the last ten (10) years that demonstrates experience with construction of sanitary sewer mains with a minimum pipe diameter of 8 inches, constructed with C900 Polyvinyl Chloride (PVC) pipe using open-cut methods, rapid reinstatement to existing facilities in the event of an emergency, work in limited access locations, and work with equipment size restrictions that indicate the Bidder’s experience as a Contractor.
- b. Provide a minimum of five (5) reference projects. Each of five (5) referenced open-cut construction projects shall have been in service in the owner’s system for at least one (1) year and free of defects. For each project listed, the Contractor shall complete and provide all of the information listed in the “PROJECT DESCRIPTION WORKSHEET: OPEN-CUT”.

2.1 Pipe Bursting (Section 02345)

The Contractor shall provide evidence of experience qualifications as required below. All projects shall be of similar size and complexity that indicate the Contractor’s experience as a qualified Contractor as specified below. The Bidder shall provide, as part of the bid, the listing and evidence of experience qualifications of the staff to be used that at minimum meets the specified requirements, and the information to verify the qualifications.

A. Required experience

1. Installation Contractor:

- a. Minimum of six (6) successfully completed projects totaling at least 20,000 linear feet of pipe bursting installation with a minimum of 5,000 linear feet with a minimum host pipeline diameter of 8 inches.
- b. Minimum of three (3) pipe bursting projects of similar diameter, length, soil type and installation conditions successfully completed within the last three (3) years. For each

project listed, the Contractor shall complete and provide all of the information listed in the “PROJECT DESCRIPTION WORKSHEET: PIPE BURSTING”.

1. Personnel: Name and qualification information shall be provided (on the project description worksheets and/or supplemental sheets) showing that the proposed personnel meet the following requirements:
 - a. Field Superintendent:
 - 1) Shall be assigned to the project, present in the field full time, and supervise and be onsite during all pipe bursting pipe rehabilitation operations.
 - 2) Pipe Bursting Supervisory Field Experience: Minimum of 20,000 linear feet of successfully installed pipe bursting with a minimum pipe diameter of 6 inches, and a minimum of five (5) successfully completed projects in the U.S. in the past five (5) years. Provide a minimum of five (5) reference projects for pipe bursting supervisory field experience.
 - 3) Sewage Flow Control: At least one (1) year of sewage flow control supervisory field experience.
 - 4) Tenure with Installation Contractor: Minimum of one (1) year.
 - b. Installation Crew: At least three (3) persons from the pipe bursting installation crew shall have a minimum of one (1) year of pipe bursting experience, have at least one (1) year of tenure with installation Contractor, and be on the project site at all times.
 - c. Fusion Welding of High Density Polyethylene (HDPE) pipelines (Section 15066) Technicians: Fusion equipment shall be operated only by technicians who have been certified by the pipe manufacturer or supplier and who have a minimum of three (3) years of experience fusion welding 4-inch or larger diameter HDPE pipelines. Provide certification information.

3.1 Sewage Flow Control and Bypass Pumping (Section 02145)

Contractor shall have a minimum of five (5) sewage flow control, blockage, and sewage bypass pumping projects of similar complexity and duration within the past ten (10) years.

(Project Description Worksheets start on next page)

PROJECT DESCRIPTION WORKSHEET: OPEN-CUT

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

PROJECT DESCRIPTION WORKSHEET: OPEN-CUT

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

PROJECT DESCRIPTION WORKSHEET: OPEN-CUT

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

PROJECT DESCRIPTION WORKSHEET: OPEN-CUT

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

PROJECT DESCRIPTION WORKSHEET: OPEN-CUT

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

PROJECT DESCRIPTION WORKSHEET: PIPE BURSTING

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

[BIDDER TO PROVIDE ADDITIONAL COPIES OF THIS SHEET IF NECESSARY
TO LIST ALL PROJECTS REQUIRED TO BE LISTED BY THIS SECTION]

PROJECT DESCRIPTION WORKSHEET: PIPE BURSTING

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

[BIDDER TO PROVIDE ADDITIONAL COPIES OF THIS SHEET IF NECESSARY
TO LIST ALL PROJECTS REQUIRED TO BE LISTED BY THIS SECTION]

PROJECT DESCRIPTION WORKSHEET: PIPE BURSTING

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

[BIDDER TO PROVIDE ADDITIONAL COPIES OF THIS SHEET IF NECESSARY
TO LIST ALL PROJECTS REQUIRED TO BE LISTED BY THIS SECTION]

PROJECT DESCRIPTION WORKSHEET: HORIZONTAL DIRECTIONAL DRILLING

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

[BIDDER TO PROVIDE ADDITIONAL COPIES OF THIS SHEET IF NECESSARY
TO LIST ALL PROJECTS REQUIRED TO BE LISTED BY THIS SECTION]

PROJECT DESCRIPTION WORKSHEET: HORIZONTAL DIRECTIONAL DRILLING

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

[BIDDER TO PROVIDE ADDITIONAL COPIES OF THIS SHEET IF NECESSARY
TO LIST ALL PROJECTS REQUIRED TO BE LISTED BY THIS SECTION]

PROJECT DESCRIPTION WORKSHEET: HORIZONTAL DIRECTIONAL DRILLING

Project Name: _____

Owner: _____

Owner's Representative: _____

Owner's Telephone No.: _____

Installation Method: _____

Installation Contractor: _____

Total Length of Successfully Installed Pipe (feet): _____

Length by Diameter of Successfully Installed Pipe (inches | feet): _____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

_____ in | _____ ft

Construction Cost: \$ _____

Construction Time: _____ Calendar Days

Date of Substantial Completion: _____

Sewage Flow Control and Bypass Pumping Qualifying Experience: ☐ Yes ☐ No

Project Description: _____

(Owner representative and phone number shall be current and accurate.)

[BIDDER TO PROVIDE ADDITIONAL COPIES OF THIS SHEET IF NECESSARY
TO LIST ALL PROJECTS REQUIRED TO BE LISTED BY THIS SECTION]

ARTICLE 3 – CONTRACTOR SAFETY STANDARDS

Contractor shall provide the following information relating to its safety record:

- Experience Modification Rate (EMR)
- Recordable Incident Rate (RIR)
- Lost Time Incident Rate (LTIR)

The following safety guidelines shall be used to analyze each bidder's responsibility. The Bidder shall each meet at least two of the three minimum safety standards as specified hereinafter. Bidder shall submit the appropriate completed proposal forms in paragraphs A. to C. as part of the Bid.

If Bidder cannot satisfy two of the three minimum safety standards, Bidder shall be required to provide the services of a third-party safety consultant specializing in the type of work to be performed that is acceptable to the District. The third party safety consultant will be used in the capacity of reviewing the Contractor's Site Safety Plan and Project Safety Plans, providing periodic monitoring and reporting of site safety at a frequency to be determined by the District, not to exceed two visits per week, reviewing special safety hazards not addressed in the Contractor's safety plans and reviewing and evaluating the safety incidents that occur during the project. The cost of the third party safety consultant shall be solely and exclusively borne by the Contractor.

(continued on next page)

A. Experience Modification Rate

Experience Modification Rate (EMR or Exmod): Experience modification rates are calculated by the insurance industry as a way to determine equitable workers' compensation insurance premiums. It is calculated as a three-year moving average. Due to the particular safety hazards inherited in working in a wastewater collection, handling, treatment and/or disposal environment, the District has deemed it necessary that a Bidder shall have a current three-year average EMR of **1.2** or lower.

The following information will be used to analyze your responsibility to safely construct this project. You shall not have a three-year average Workers' Compensation EMR greater than **1.2**.

Enter your Experience Modification Rate for the last three complete years
(available from your insurance carrier).

<u>Year</u>	<u>EMR</u>
20_____	_____
20_____	_____
20_____	_____
Three-Year Average	= _____

Company Name:

Contact Name: _____ Telephone: _____

To verify the above information, the District will contact the Bidder's Workers' Compensation Insurance carrier. You shall authorize your carrier to release this information.

Workers' Compensation Insurance Company:

Contact Name: _____ Telephone: _____

Do not write in this space

Qualified []

Not Qualified []

EMR Information Verified []

B. Recordable Incident Rate

Recordable Incident Rate (RIR): The RIR is a measure of the frequency of injuries and is a measure of all occupational injuries and illnesses that occur within an organization. It is calculated from the OSHA Log 300 form. Due to the particular safety hazards inherited in working in a wastewater collection, handling, treatment and/or disposal environment, the District has deemed it necessary that a Bidder shall have a current three-year average RIR of **5.1** or lower.

The following information will be used to analyze your ability to safely construct this project. You shall not have a three-year average Recordable Incident Rate greater than **5.1**. This value is based on 2016 U.S. Bureau of Labor Statistics data for industry group **Water and sewer line and related structures construction** using **California private industry averages**.

Incident rate information is on your OSHA Log 300. Please calculate the RIR as follows.

$$\frac{\text{Total number of recordable incidents} \times 200,000}{\text{Total employees hours worked}} = \text{RIR}$$

<table border="1" style="width: 100%; border-collapse: collapse;"><tr><th colspan="2" style="text-align: center;">Recordable Incidents</th></tr><tr><th style="text-align: center;">Year</th><th style="text-align: center;">Number</th></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr></table>	Recordable Incidents		Year	Number	20____	_____	20____	_____	20____	_____	<table border="1" style="width: 100%; border-collapse: collapse;"><tr><th colspan="2" style="text-align: center;">Total Employee Hours Worked</th></tr><tr><th style="text-align: center;">Year</th><th style="text-align: center;">Hours</th></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr></table>	Total Employee Hours Worked		Year	Hours	20____	_____	20____	_____	20____	_____
Recordable Incidents																					
Year	Number																				
20____	_____																				
20____	_____																				
20____	_____																				
Total Employee Hours Worked																					
Year	Hours																				
20____	_____																				
20____	_____																				
20____	_____																				
<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;">Enter your Total Recordable Incident Rate for each of the last three complete years.<table style="width: 100%; margin-top: 10px;"><tr><th style="text-align: center;">Year</th><th style="text-align: center;">RIR</th></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20____</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">Three-Year Average=</td><td style="text-align: center;">_____</td></tr></table></div>		Year	RIR	20____	_____	20____	_____	20____	_____	Three-Year Average=	_____										
Year	RIR																				
20____	_____																				
20____	_____																				
20____	_____																				
Three-Year Average=	_____																				
<p>Company Name: _____</p> <p>Contact Name: _____ Telephone: _____</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px; text-align: center;"><p>Do not write in this space</p><p>Qualified [] Not Qualified [] RIR Information Verified []</p></div>																					

C. Lost Time Incident Rate

Lost Time Incident Rate (LTIR): The LTIR is an indicator of the severity of a company's occupational injuries. The LTIR deals only with incidents that result in time away from work, job restriction, or transfer. Like the RIR, the information needed to calculate the LTIR is derived OSHA Log 300 form. Due to the particular safety hazards inherited in working in a wastewater collection, handling, treatment and/or disposal environment, the District has deemed it necessary that a Bidder shall have a current three-year average LTIR of **2.1** or lower.

The following information will be used to analyze your responsibility to safely construct this Project. You shall not have a three-year average Lost Time Incident Rate greater than **2.1**. This value is based on 2016 U.S. Bureau of Labor Statistics data for industry group **Water and sewer line and related structures construction** using **California private industry averages**.

Incident rate information is on your OSHA Log 300. Please calculate the LTIR as follows.

$$\frac{\text{Total number of lost-time incidents} \times 200,000}{\text{Total employees hours worked}} = \text{LTIR}$$

<table border="1" style="width: 100%; border-collapse: collapse;"><tr><th colspan="2" style="text-align: center;">Lost-Time Incidents</th></tr><tr><th style="text-align: center;">Year</th><th style="text-align: center;">Number</th></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr></table>	Lost-Time Incidents		Year	Number	20__	_____	20__	_____	20__	_____	<table border="1" style="width: 100%; border-collapse: collapse;"><tr><th colspan="2" style="text-align: center;">Total Employee Hours Worked</th></tr><tr><th style="text-align: center;">Year</th><th style="text-align: center;">Hours</th></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr></table>	Total Employee Hours Worked		Year	Hours	20__	_____	20__	_____	20__	_____
Lost-Time Incidents																					
Year	Number																				
20__	_____																				
20__	_____																				
20__	_____																				
Total Employee Hours Worked																					
Year	Hours																				
20__	_____																				
20__	_____																				
20__	_____																				
<p>Enter your Total Lost-Time Incident Rate for each of the last three complete years.</p> <table style="width: 100%;"><tr><th style="text-align: center;">Year</th><th style="text-align: center;">LTIR</th></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">20__</td><td style="text-align: center;">_____</td></tr><tr><td style="text-align: center;">Three-Year Average=</td><td style="text-align: center;">_____</td></tr></table>		Year	LTIR	20__	_____	20__	_____	20__	_____	Three-Year Average=	_____										
Year	LTIR																				
20__	_____																				
20__	_____																				
20__	_____																				
Three-Year Average=	_____																				
<p>Company Name: _____</p> <p>Contact Name: _____ Telephone: _____</p>																					
<div style="border: 1px solid black; padding: 10px; background-color: #f0f0f0;"><p>Do not write in this space</p><p>Qualified [] Not Qualified [] LTIR Information Verified []</p></div>																					

By my signature below, I hereby certify under penalty of perjury of the laws of the State of California that all statements in this bid and on the bid forms is wholly true and accurate.

Signed this _____ day of _____, 20____.

Name of Bidder

Contractor's License No.

Expiration Date

Signature of Bidder

Title of Signatory

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

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SECTION 00430

DESIGNATION OF SUBCONTRACTORS

(To Accompany Bid)

In accordance with California Public Contract Code, Section 4100 et seq., as amended, the following is submitted concerning subcontractors: Each Bidder shall set forth below (a) the name, the location of the place of business, and the California contractor license number of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater; and (b) the portion of the Work (type and trade) which will be done by each such subcontractor.

Name of Subcontractor	Business Location	License No.	Description of Work to Perform

If a Contractor fails to specify a subcontractor or, if a Contractor specifies more than one subcontractor for the same portion of work to be performed under the Contract in excess of one-half (1/2) of one percent (1%) of the contractor's total Bid for any portion of the Work as above stated, the Contractor agrees that he/she is fully qualified to perform that portion himself/herself, and that the Contractor shall perform that portion himself/herself. Subcontractors work for which no subcontractor was designated in the original Bid and which is in excess of one-half (1/2) of one percent (1%) of the total Contract Price, will be allowed only with written consent of the District in accordance with applicable law. The Contractor shall provide to the District the license number of each listed subcontractor within ten (10) days of issuance of the Notice to Proceed.

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

SECTION 00440

**SITE VISIT AFFIDAVIT TO BE EXECUTED
BY BIDDER, NOTARIZED AND SUBMITTED WITH BID
(To Accompany Bid)**

State of California)
) ss.
County of _____)

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

is _____ of _____
(Title of Representative) (Contractor's Legal Name)

the party making the foregoing Bid, has visited the Project site 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

(Certificate of Acknowledgment to be executed by Notary on following page)

ACKNOWLEDGMENT

State of California

County of _____

On _____ before me, _____,
(here insert name and title of the officer)

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

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

WITNESS my hand and official seal.

Signature _____

(Seal)

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

SECTION 00480

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED
BY BIDDER, NOTARIZED AND SUBMITTED WITH BID
(To Accompany Bid)**

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

is _____ of _____ the party making the foregoing Bid;
(Title of Representative) (Contractor's Name)

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.

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

Signature

Date

(Certificate of Acknowledgment to be executed by Notary on following page)

ACKNOWLEDGMENT

State of California

County of _____

On _____ before me, _____,
(here insert name and title of the officer)

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

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

WITNESS my hand and official seal.

Signature _____

(Seal)

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

SECTION 00490
AFFIDAVIT OF SAFETY COMPLIANCE
 (To Accompany Bid)

CONTRACTOR SAFETY OPERATIONS REQUIREMENTS

(To be submitted with Contractor's Safety Program prior to commencing work)

PART A - Safety Programs

Please indicate below whether your firm has the following written safety programs. If any of the programs listed do not apply to your operations or this project, please make note of this in the "Comments" column. Include any information that you think would be helpful to us in making this assessment. Those programs that are indicated as mandatory must be available for review before commencing work on this project. Other safety programs may be requested if it is later determined that they are applicable to the Project, and as such, must be made available for review upon request, at no additional charge to the District.

Program		Written Program		Program meets Cal/OSHA Criteria		Sub will Provide	Project Employees Trained		Training Documented		Comments
Mandatory	Name	Yes	No	Yes	No		Yes	No	Yes	No	
YES	Injury and Illness Prevention										
YES	Hazard Communication										
YES	Confined Space Operations										
	Respiratory Protection										
YES	Emergency Response										
YES	Hearing Conservation										
YES	Lockout/Tagout										
YES	New Employee Orientation										
YES	Excavation Safety										
YES	Code of Safe Practices										
YES	Personal Protective Equipment (PPE)										
YES	Drugs/Alcohol										
YES	Traffic Control Safety										
YES	Fall Prevention Plan ¹										

¹ If conventional fall protection measures cannot be used.

PART B - Safety Equipment

Identify what safety equipment will be available and used for this project.

Type	Description / Comments
<input type="checkbox"/> Gas Detectors	
<input type="checkbox"/> Ventilation Equipment	
<input type="checkbox"/> Approved Harnesses and Lanyards	
<input type="checkbox"/> Mechanical Hoists	
<input type="checkbox"/> Fire Extinguishers	
<input type="checkbox"/> First Aid Kits	
<input type="checkbox"/> Respirators	
<input type="checkbox"/> Hard Hats	
<input type="checkbox"/> Hearing Protection	
<input type="checkbox"/> Safety Goggles	
<input type="checkbox"/> Steel Toed Footwear	
<input type="checkbox"/> Hand Protection	
<input type="checkbox"/> Fall Protection	
<input type="checkbox"/> Confined Space Rescue Equipment	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

PART C - Specialized Training and Certification

Identify the areas of specialized training or certification that will have been completed by employees who will be assigned to this project. Be prepared to provide documentation as requested.

<input type="checkbox"/>	CPR / First Aid	<input type="checkbox"/>	Fork Lift Operation
<input type="checkbox"/>	Cranes / Hoists Operation	<input type="checkbox"/>	Heavy Equipment Operation
<input type="checkbox"/>	Powder-Actuated Tools Use	<input type="checkbox"/>	Confined Space Operations and Rescue
<input type="checkbox"/>	Respirators	<input type="checkbox"/>	Trenching and Shoring Competent Person
	<input type="checkbox"/> Air-Supplying	<input type="checkbox"/>	Welding
	<input type="checkbox"/> Air-Purifying	<input type="checkbox"/>	Asbestos Abatement
<input type="checkbox"/>	Scaffolding	<input type="checkbox"/>	Flagging
<input type="checkbox"/>	Traffic Control		

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

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SECTION 00500
AGREEMENT FOR THE CONSTRUCTION OF
Woodland Capacity and Creek Crossing Project

THIS AGREEMENT, made and executed, in triplicate, this _____ day of _____, 20____, between the ROSS VALLEY SANITARY DISTRICT ("District"), San Rafael, California, and _____ ("Contractor").

The District and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

W I T N E S S E T H:

1. That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by and under the conditions expressed in the two bonds, bearing even date with these presents, and hereunto annexed, shall do all the work and furnish all the materials necessary to construct and complete in good workmanlike and substantial manner the project entitled: **Woodland Capacity and Creek Crossing Project** in strict conformity with the Contract Documents prepared therefore, which said Contract Documents are hereby specially referred to and by said reference made a part hereof.
2. In consideration of the mutual covenants and agreements of the parties herein contained and to be performed, the Contractor hereby agrees to complete the Work in accordance with the terms and conditions stipulated in the Contract Documents for the sum of _____ (\$_____) computed in accordance with Contractor's accepted proposal dated _____, 20____, which accepted proposal is incorporated herein by reference thereto as if herein fully set forth. Compensation shall be based upon any lump sum bid items plus the unit prices stated in the Bid Schedule times the actual quantities or units of work and materials performed or furnished. The further terms, conditions, and covenants of this Agreement are set forth in the Contract Documents, each of which is by this reference made a part hereof. Payments are to be made to the Contractor in accordance with the provisions of the Contract Documents and the Technical Specifications in legally executed and regularly issued warrants of the District, drawn on the appropriate fund or funds as required by law and order of the District thereof.
3. Contractor shall provide the materials and perform the Work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and District shall pay the same at the time, in the manner and upon the conditions above set forth; and the said parties for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of the covenants herein contained.

4. The Contractor and any subcontractor performing or contracting any work shall comply with all applicable provisions of the California Labor Code for all workers, laborers and mechanics of all crafts, classifications or types, including, but necessarily limited to the following:
- (a) The Contractor shall comply with all applicable provisions of Section 1810 to 1815, inclusive, of the California Labor Code relating to working hours. The Contractor shall, as a penalty to the District, forfeit the sum of twenty-five dollars (\$25) for each worker employed in the execution of the Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one calendar week, unless such worker receives compensation for all hours worked in excess of eight (8) hours at not less than 1-1/2 times the basic rate of pay.
 - (b) The Contractor and any subcontractor under him shall pay not less than the higher of the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations or the Secretary of Labor (Davis Bacon). The Contractor is hereby advised that copies of the general State and Federal prevailing rates of per diem wages and the general prevailing rate for holidays, Saturdays and Sundays and overtime work in the locality in which the work is to be performed for each craft, classification, or type of worker required to execute the Contract, are on file in the office of the District, which copies shall be made available to any interested party on request. The Contractor shall post a copy of both State and Federal prevailing rates of per diem wages at each job site.
 - (c) As required by Section 1773.1 of the California Labor Code, the Contractor shall pay travel and subsistence payments to each worker needed to execute the Work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this Section.
 - (d) To establish such travel and subsistence payments, the representative of any craft, classification, or type of workman needed to execute the contracts shall file with the Department of Industrial Relations fully executed copies of collective bargaining agreements for the particular craft, classification or type of work involved. Such agreements shall be filed within ten (10) days after their execution and thereafter shall establish such travel and subsistence payments whenever filed thirty (30) days prior to the call for bids.
 - (e) The Contractor shall comply with the provisions of Section 1775 of the California Labor Code and shall, as a penalty to the District, forfeit up to fifty dollars (\$50) for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of per diem wages for each craft, classification, or type of worker needed to execute the contract. The Contractor shall pay each worker an amount equal to the difference between the prevailing wage rates and the amount paid worker for each calendar day or portion thereof for which a worker was paid less than the prevailing wage rate. Contractor is required to pay all applicable penalties and back wages in

the event of violation of prevailing wage law, and Contractor and any subcontractor shall fully comply with California Labor Code Section 1775, which is incorporated by this reference as though fully set forth herein.

- (f) As required under the provisions of Section 1776 of the California Labor Code, Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Said payroll shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:
- (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
 - (2) A certified copy of all payroll records enumerated in Paragraph 4(f), herein, shall be made available for inspection or furnished upon request to the District, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
 - (3) A certified copy of all payroll records enumerated in Paragraph 4(f), herein, shall be made available upon request by the public for inspection or for copies thereof; provided, however, that a request by the public shall be made through the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph 4(f) herein, the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal offices of the Contractor.

The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.

Each Contractor shall file a certified copy of the records, enumerated in Paragraph 4(f) with the entity that requested the records within ten (10) days after receipt of a written request. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor awarded the contract or performing the contract shall not be marked or redacted. The Contractor shall inform the District of the location of the records enumerated under Paragraph 4(f) including the street address, city and county, and shall, within five (5) working days, provide a notice of change of location and address. The Contractor shall have ten (10) days in which to comply subsequent to receipt of

written notice specifying in what respects the Contractor must comply with this Paragraph 4(f). In the event that the Contractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or the District, forfeit \$25.00 dollars for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. Responsibility for compliance with Paragraph 4(f) lies with the Contractor.

- (g) The Contractor and any subcontractors shall, when they employ any person in any apprenticeable craft or trade, apply to the joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the construction site for a certificate approving the Contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected; and shall comply with all other requirements of Section 1777.5 of the California Labor Code. The responsibility of compliance with California Labor Code Section 1777.5 during the performance of this contract rests with the Contractor. Pursuant to California Labor Code Section 1777.7, in the event the Contractor willfully fails to comply with the provisions of California Labor Code Section 1777.5, the Contractor shall be denied the right to bid on any public works contract for up to three (3) years from the date noncompliance is determined and be assessed civil penalties.
- (h) 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 California Labor Code, 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 California Labor Code, which requires 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 Employer's Liability limits of \$1,000,000 per accident before commencing the performance of the work of this Contract.

The Notice to Proceed with the Work under this Contract will not be issued, and the Contractor shall not commence work, until the Contractor submits written evidence that it has obtained full Workers' Compensation Insurance coverage for all persons whom it employs or may employ in carrying out the work under this Contract. This insurance shall be in accordance with the requirements of the most current and applicable state Workers' Compensation Insurance Laws. In accordance with the provisions of Section 1861 of the California Labor Code, the Contractor in signing this agreement certifies to the District as true the following statement: "I am aware of

the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this Contract."

A subcontractor is not allowed to commence work on the project until verification of Workers' Compensation Insurance coverage has been obtained and verified by the Contractor and submitted to the District for the District's review and records.

- (i) In accordance with the provisions of Section 1727 of the California Labor Code, the District, before making payment to the Contractor of money due under a contract for public works, shall withhold and retain therefrom all wages and penalties which have been forfeited pursuant to any stipulation in the contract, and the terms of Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). But no sum shall be withheld, retained or forfeited, except from the final payment, without a full investigation by either the Division of Labor Standards Enforcement or by the District.
5. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of the instrument and the bid proposal of said Contractor, then this instrument shall control, and nothing herein contained shall be considered as an acceptance of the said terms of said proposal conflicting herewith.
6. The Contractor agrees to provide and maintain insurance coverage, and to indemnify and save harmless the parties named and in the manner set forth in Section 00800-Article 2, **INDEMNITY AND INSURANCE**.

The duty of Contractor to indemnify and save harmless, as set forth herein, shall include a duty to defend as set forth in Section 2778 of the California Civil Code; provided, however, that nothing herein shall be construed to require Contractor to indemnify against any responsibility or liability in contravention of Section 2782 of the California Civil Code.

7. The Contractor shall diligently prosecute the work so that it shall be substantially completed within the time specified in Section 00800-1.01, **TIME ALLOWED FOR COMPLETION**.
8. Except as otherwise may be provided herein, Contractor hereby expressly guarantees for one (1) full year from the date of the Substantial Completion of the work under this Agreement and acceptance thereof by the District, to repair or replace any part of the work performed hereunder which constitutes a defect resulting from the use of inferior or defective materials, equipment or workmanship. If, within said period, any repairs or replacements in connection with the work are, in the opinion of the District, rendered necessary as the result of the use of inferior or defective materials, equipment or workmanship, Contractor agrees, upon receipt of notice from District, and without expense to District, to promptly repair or replace such material or workmanship and/or correct any and all defects therein. If Contractor, after such notice, fails to proceed promptly to comply with the terms of this guarantee, District may perform the work necessary to effectuate such correction and recover the cost thereof from the Contractor or its sureties.

In special circumstances where a particular item of work or equipment is placed in continuous service before substantial completion of the Work, the correction period for that item may start to run from an earlier date. This date shall be agreed upon by the Contractor and District on or before the date the item is placed in continuous service.

Any and all other special guarantees which may be applicable to definite parts of the work under this Agreement shall be considered as an additional guarantee and shall not reduce or limit the guarantee as provided by Contractor pursuant to this paragraph during the first year of the life of such guarantee.

9. The Contractor shall provide, on the execution of this Agreement, a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of amount bid, which bond shall be on the form provided by the District in Section 00610, **BOND OF FAITHFUL PERFORMANCE**, and be conditioned upon the faithful performance of all Work required to be performed by the Contractor under this Agreement. Said bond shall be liable for any and all penalties and obligations which may be incurred by Contractor under this Agreement. The corporate surety bond shall be issued by a corporate surety approved by the District's counsel. The corporate surety shall be authorized to conduct business in California. At its discretion, the District may request that a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner of the State of California be submitted by the surety to the District. At its discretion, the District may also require the insurer to provide copies of its most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.
10. In addition to the bond required under Paragraph 9, hereof, Contractor shall furnish a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of amount of bid, which bond shall be on the form provided by the District in Section 00620, **PAYMENT BOND**, and conform strictly with the provisions of Chapter 7, Title 15, Part 4, Division 3, of the Civil Code of the State of California, and all amendments thereto. The corporate surety bond shall be issued by a corporate surety approved by the District's counsel. The corporate surety shall be authorized to conduct business in California. At its discretion, the District may request that a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner of the State of California be submitted by the surety to the District. At its discretion, the District may also require the insurer to provide copies of its most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.
11. The Contractor may substitute securities for the amounts retained by the District to ensure performance of the Work in accordance with the provisions of Section 22300 of the Public Contract Code.
12. The Contractor shall be provided the time period specified in Section 01300-1.03, **MATERIAL AND EQUIPMENT SUBSTITUTIONS**, for submission of data substantiating a request for a substitution of an "or equal" item.

13. As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches five feet or more in depth, the Contractor shall submit in advance of excavations, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety in Title 8, Subchapter 4, Article 6, California Code of Regulations, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor, and all costs therefore shall be included in the price named in the Contract for completion of the work as set forth in the Contract Documents. Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this Section shall be construed to impose tort liability on the District and the Design Consultant nor any of their agents, consultants, or employees. The District's review of the Contractor's excavation plan is only for general conformance to the California Construction Safety Orders.

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

14. In accordance with Section 7104 of the Public Contract Code, whenever any work involves digging trenches or other excavations that extend deeper than four feet below the surface, the provisions of Section 00700-7.02, **DIFFERING SITE CONDITIONS**, shall apply.
15. In accordance with Section 7103.5 of the Public Contract Code, the Contractor and subcontractors shall conform to the following requirements. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act [Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods, materials or services pursuant to this Contract or the subcontract. Such assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgment by the parties.
16. In accordance with Section 4552 of the Government Code, the Contractor shall conform to the following requirements. In submitting a Bid to the District, the Contractor offers and agrees that if the Bid is accepted, it will assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act [Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchase of goods, materials, or services by the Contractor for sale to the District pursuant to the Bid. Such assignment shall be made and become effective at the time the District tenders final payment to the Contractor.

17. Pursuant to Public Contract Code Section 7100, the acceptance by the Contractor of an undisputed payment made under the terms of the Contract shall operate as, and shall be, a release to the District, and their duly authorized agents, from all claim of and/or liability to the Contractor arising by virtue of the Contract related to those amounts. Disputed contract claims in stated amounts may be specifically excluded by the Contractor from the operation of the release.
18. In accordance with California Business and Professions Code Section 7030, the Contractor is required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning the Contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.
19. The acceptance of each payment made to Contractor under this Agreement shall constitute a warranty that all subcontractors, laborers and material suppliers on the Project have been paid for all work, material, labor provisions, provender, equipment, or other supplies and efforts made toward the construction of improvements.
20. **INDEMNIFICATION.** Contractor shall indemnify, defend with counsel acceptable to District, and hold harmless to the fullest extent permitted by law, the District and its officers, officials, employees, agents and volunteers, Design Consultant, Construction Manager, and its consultants for the Work and their respective agents and employees and each of their respective agents and employees (collectively "the Indemnified Parties") in accordance with the requirements of Section 00800-2.01E, **Indemnification**.
21. **SEVERABILITY.** If any term or portion of this Agreement is held to be invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement shall continue in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement this _____ day of _____, 20_____.

CONTRACTOR

By: _____

Title: _____

ROSS VALLEY SANITARY DISTRICT

By: _____

Steve Moore, General Manager

ATTEST:

By: _____

Andrea P. Clark, District Counsel

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

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SECTION 00610

BOND OF FAITHFUL PERFORMANCE

KNOW ALL PERSONS BY THESE PRESENTS: that, WHEREAS, the Board of Directors of the ROSS VALLEY SANITARY DISTRICT, has awarded to:

hereinafter designated as the "Principal", a Contract for constructing

Woodland Capacity and Creek Crossing Project

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract:

NOW, THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the ROSS VALLEY SANITARY DISTRICT, in the penal sum of (\$ _____), lawful money of the United States, being not less than one hundred (100) percent of the Contract amount, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounded Principal, it or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and faithfully perform the covenants, conditions, and agreements said Contract and any alterations made as therein provided, on it or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the ROSS VALLEY SANITARY DISTRICT, its officers and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the said Contract, the above obligation in the amount of _____ Dollars, (\$ _____), being not less than one hundred (100) percent of the Contract amount, shall hold good for a period of one (1) year after the Substantial Completion and acceptance of the said Work; and through the expiration of Warranty Period; and such additional time thereafter as may be specified in the Contract Documents. If the above bounded Principal, it or its heirs, executors, administrators, successors or assigns shall fail to make full, complete and satisfactory repair and replacements or totally protect the said ROSS VALLEY SANITARY DISTRICT from loss or damage made evident during said Warranty Period, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done, the above obligation in said sum of _____ Dollars, (\$ _____), shall remain in full force and virtue otherwise the above obligation shall be void.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the Contract Documents accompanying the same shall 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 Contract, or to the Work, or to the Contract Documents.

In the event the ROSS VALLEY SANITARY DISTRICT, or its successors or assigns, shall be the prevailing party in an action brought upon this bond, then in addition to the penal sum hereinabove specified, we agree to pay to said ROSS VALLEY SANITARY DISTRICT or its successors or assigns, a reasonable sum on account of attorney's fees in such action, which sum shall be fixed by the court.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their seals this _____ day of _____ 20____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

ATTEST:

Principal Secretary

Principal

(SEAL) By _____

Witness as to Principal

Address

Address

Witness to Surety

Surety

Address

Address

Telephone

Attorney-in-Fact

Address

If Principal is a partnership, all partners must execute BOND.

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

SECTION 00620

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: that, WHEREAS, the Board of Directors of the ROSS VALLEY SANITARY DISTRICT has awarded to:

_____,
hereinafter designated as "Principal", a Contract for construction of:

Woodland Capacity and Creek Crossing Project

WHEREAS, said Principal is required to furnish a bond in connection with said Contract, providing that if said Principal, or any of it or its subcontractors, shall fail to pay for any materials, provisions, or other supplies or teams used in, upon, for or about the performance of the Work contracted to be done, or for any work or labor thereon of any kind, the Surety of this bond will pay the same to the extent hereinafter set forth:

NOW, THEREFORE, we, the Principal and _____, as Surety, are held and firmly bound unto the ROSS VALLEY SANITARY DISTRICT, in the penal sum of _____ Dollars, (\$ _____), lawful money of the United States, being not less than one hundred percent of the Contract amount, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if said Principal, it or its heirs, executors, administrators, successors, or assigns, shall fail to pay for any materials, provisions, or other supplies or teams used in, upon, for or about the performance of the Work contracted to be done, or for any work or labor thereon of any kind, as required by the provisions of Act of the Legislature of the State of California entitled "An Act to secure the payment of persons who furnished materials, contractors in the performance of such work and prescribing the duties of certain public officers with respect thereto", approved May 10, 1919, as amended, (California Civil Code Section 3247, et seq.), and provided that the persons, companies, or corporations so furnishing said materials, provisions, or other supplies, teams, appliances, or power to be used in, upon for, or about the performance of the Work contracted to be executed or performed, or any person, power for or contributing to said Work to be done, or any person who performs work or labor upon same, or any person who supplies both work and materials therefore, shall have complied with the provisions of said Act, then said Surety will pay the same in or to any amount not exceeding the amount herein above set forth, and also will pay in case suit is brought upon this bond, such reasonable attorney's fee as shall be fixed by the court, awarded and taxed as in the above-mentioned statute provided.

This bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under said Act, so as to give a right of action to them or their assigns in any suit brought upon this bond.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the Work to be performed thereunder, or the Contract Documents 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 Contract, or to the Work, or to the Contract Documents.

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

ATTEST:

Principal Secretary

Principal

(SEAL) By _____

Witness as to Principal

Address

Address

Witness to Surety

Surety

Address

Address

Telephone

Attorney-in-Fact

Address

If Principal is a partnership, all partners must execute BOND.

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

SECTION 00630

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

Woodland Capacity and Creek Crossing Project

This Escrow Agreement is made and entered into by and between; the ROSS VALLEY SANITARY DISTRICT, whose address is 2960 Kerner Blvd., San Rafael, CA 94901-5517; hereinafter called "District", and _____

(Contractor)

whose address is _____
hereinafter called "Contractor", and _____

(Escrow Agent)

whose address is _____
hereinafter called "Escrow Agent."

For the 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 which meet the requirements set forth in said Section 22300, with Escrow Agent, as a substitute for retention earnings required to be withheld by District pursuant to the Agreement for the District Site Improvements entered into between District and Contractor for _____
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 a substitute for Contract earnings, the Escrow Agent shall notify the District within five (5) 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 District, and shall designate the Contractor as the beneficial Owner.
2. District shall make progress payments to 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 investment of the payments into securities. All terms and conditions of this Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the 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 Contractor and shall be subject to withdrawal by Contractor at any time and from time 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 (7) days' 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 moneys 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 (5) to (8), inclusive, of this Agreement, and 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:

Title

Name

Signature

Address

On Behalf of Escrow Agent:

Title

Name

Signature

Address

On Behalf of Contractor:

Title

Name

Signature

Address

At the time the Escrow Account is opened, 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:

Title

Title

Name

Name

Signature

Signature

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

SECTION 00700

GENERAL CONDITIONS

ARTICLE 1 - GENERAL

1.01 CONTRACT AGREEMENT

A Bidder to whom award is made shall execute a written Agreement and required supplementary documents and submit them to the District within ten (10) days after the Notice of Award has been received by the Bidder at the address given in Section 00300, **BID FORM**. The Agreement shall be made in the form adopted by the District and incorporated in Section 00500, **AGREEMENT**.

If the lowest responsive, responsible Bidder to whom award is made fails to enter into the Contract, as herein provided, the Bidder's Security will become the property of the District, and an award may be made to the next lowest responsive, responsible Bidder, and such Bidder shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made. A corporation, limited liability company, partnership, or joint venture to which an award is made will be required, before the Agreement is finally executed, to furnish evidence of its legal existence and evidence that the officer signing the Agreement and bonds for the entity is duly authorized to do so in the form as stated in Section 00100-Article 3, **BIDDER'S SIGNATURE AND AUTHORITY**.

In the event the Contractor is a joint venture of two or more contractors, the grants, covenants, provisos and claims, rights, power, privileges and liabilities of the contract shall be construed and held to be several as well as joint. Any notice, order, direct request or any communication required to be given or that may be given by the District to the Contractor under this Contract, shall be well and sufficiently given to all persons being the Contractor if given to any one or more of such persons. Any notice, request or other communication given by any one of such persons to the District under this Contract shall be deemed to have been given by and shall bind all persons being the Contractor.

If any part of the work to be done under this Contract is subcontracted, the subcontract shall be in writing and shall provide that all work to be performed thereunder shall be performed in accordance with the terms of the Agreement. The subcontracting of any or all of the work to be done will in no way relieve the Contractor of any part of its responsibility under the Contract. Certified copies of subcontract agreements will be provided by the Contractor to the District upon request.

Equipment supplied under this Contract shall be furnished in accordance with a written agreement, and such agreement shall provide that any equipment supply shall be performed in accordance with the terms of the Contract Documents. Certified copies of agreements for equipment supply will be provided by the Contractor to the District upon request.

The Contractor shall not assign, transfer, convey, or otherwise dispose of the Contract, or its right, title, or interest therein, or its power to execute such Contract, to any other person, firm, or corporation without previous consent in writing of the District.

1.02 WRITTEN NOTICE AND SERVICE THEREOF

Any notice to any party relative to any part of this Contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted, by certified or registered mail, to said party at its last given address, or delivered in person to the said party or its authorized representative of the work. This includes notice of change of address.

1.03 RIGHTS OF ACTION

No right of action shall accrue upon or by reason of this Agreement to or for the use or benefit of anyone other than the parties to this Agreement. The parties to this Agreement are the Contractor and the District.

1.04 PLANS AND SPECIFICATIONS

The Contract Documents are complementary; what is called for by one is as binding as if called for by all. It is the intent of the parties for the Drawings and Specifications to describe a functionally complete and operable Project (and all parts thereof) to be constructed in accordance with the requirements of the Contract Documents. Any work, materials or equipment that may reasonably be inferred from the requirements of the Contract Documents or from prevailing custom or trade usage as being required to produce this intended result will be furnished and performed whether or not specifically called for. When words or phrases that have a well-known technical or construction industry or trade meaning are used to describe Work, materials or equipment, such words or phrases shall be interpreted in accordance with that meaning. The intent of the Drawings specifically includes the intent to depict construction that complies with all applicable laws, codes and standards. Subject to applicable law, including but not limited to California Public Contract Code Section 4100 et seq., and the terms of this Contract governing subcontracting, the Divisions and Sections of the Specifications and identifications of any Drawings shall not control Contractor in dividing the Work among subcontractors or suppliers or delineating the work to be performed by any specific trade.

Reasonably implied parts of the Work shall be performed as “incidental work” even though absent from the Drawings and Specifications. “Incidental” work shall be performed by Contractor without extra cost to District. Incidental work includes any work not shown on Drawings nor described in the Specifications, which is necessary or required to make each installation satisfactory, legally operable, functional, consistent with the intent of the Drawings and Specifications or the requirements of the Contract Documents. Incidental work shall be treated as if fully described in Specifications and shown on Drawings, and expense thereof shall be included in the Bid Price. Incidental work includes, but is not limited to, tasks required to be performed under Division 1 **GENERAL REQUIREMENTS** of the Specifications.

Upon Notice to Proceed, the Contractor may obtain from the District, free of charge, two (2) copies of the conformed Plans (half- size) and Specifications. The Contractor may also obtain from the District, free of charge, two (2) sets of full-size prints of the Plans. Additional sets of the Plans and Specifications may be procured at the cost of printing and binding. The Owner will also provide one electronic copy of the conformed Plans and Specifications upon receipt of an executed release from the Contractor. The Owner will furnish the release form at the Contractor's request.

Both the Plans and Specifications will be conformed by incorporating all addenda which may have been issued during the bid period to the original bid documents. These "Issued for Construction" documents will be provided no later than the date of the Notice to Proceed. The "Issued for Construction" documents will be produced for the convenience and efficiency of all parties involved with construction. In the event of a discrepancy or failure to include a specific item of any addendum, the addendum as issued during the bid period shall take precedence over the "Issued for Construction" documents. Additional sets of the Plans and Specifications may be procured at the cost of printing and binding.

The Contractor shall keep on the work site a copy of the Plans and Specifications and shall at all times give the District access thereto. Any Drawings included in the Specifications shall be regarded as part thereof and of the Contract. Anything mentioned in these Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in these Specifications, shall be of like effect as though shown or mentioned in both. The District will furnish from time to time such drawings, plans, profiles, and information, as it may consider appropriate for the Contractor's guidance. Unless otherwise provided in the Contract Documents, it shall be the duty of the Contractor to see that all provisions are complied with in detail irrespective of the inspections given the work during its progress by the authorized official or its representatives. Any failure on the part of the Contractor to observe the Contract Documents will be sufficient cause for the rejection of the work at any time before its acceptance.

Wherever reference specifications are referred to in these Specifications without designation of year, the reference is to the current or revised specification effective at the time of the District receiving bids, unless otherwise referenced in Section 01060, **REGULATORY REQUIREMENTS AND PERMITS.**

1.05 APPLICABILITY OF ALL PARAGRAPHS OF SPECIFICATIONS

The technical specifications are presented in paragraphs for convenience. However, this presentation does not necessarily delineate trades or limits of responsibility. All paragraphs of the Plans and Specifications are interdependent and applicable to the project as a whole.

The Specifications and all notes on the Drawings are directed to the Contractor and all Work shall be performed by the Contractor even though phrases such as "the Contractor shall" or "shall be done by the Contractor" are omitted. Where terms such as "approved," "acceptable," "favorably reviewed," "review," "selected," "directed," "equivalent,"

“equal,” or “satisfactory” are used, it shall mean by or to the District and/or Design Consultant.

1.06 CONTRACT INTERPRETATION BY THE DISTRICT

Any discrepancies found between the Contract Documents and site conditions or any inconsistencies or ambiguities in the Contract Documents shall be immediately reported, in writing, to the District. Questions regarding the meaning and intent of the Contract Documents shall be referred in writing by the Contractor to the District with a Request for Information. The District shall respond to the Contractor in writing with a decision within fifteen (15) days of receipt of the request, or if it is necessary to extend this period, the District shall notify the Contractor in writing as to when a decision will be provided.

Work done by the Contractor after its discovery of such discrepancies, inconsistencies or ambiguities without such notice and prior to response from the District shall be done at the Contractor’s risk.

1.07 ORDER OF PRECEDENCE

In resolving inconsistencies among two or more sections of the Contract Documents, precedence shall be given in the following order:

1. Addenda, Supplemental Agreements and Change Orders, the one dated later having precedence over another dated earlier.
2. Construction Agreement in the Contract Documents
3. Permits
4. Contract Documents (not including the Construction Agreement)
5. District Standard Specifications
6. District Standard Drawings
7. Appendices to the District Standard Drawings
8. Marin County Uniform Construction Standards
9. State Standard Specifications

Figure dimensions on Drawings shall govern over scaled dimensions, and detailed Drawings shall govern over general or standard Drawings. Addenda/Change Order drawings govern over standard drawings, Contract drawings govern over standard drawings, and Large-Scale drawings govern over small-scale drawings.

1.08 BONDS

The successful Bidder shall, at the time of signing the Agreement, furnish the Bond of Faithful Performance (Section 00610) and the Payment Bond (Section 00620) executed by an admitted surety authorized to conduct business in California and be made payable to the "Sanitary District No. 1 of Marin County."

The Payment Bond shall be in amount equal to one hundred percent (100%) of the Contract amount and shall be for payment of just claims for materials, equipment, labor and subcontractors employed by the Contractor thereon.

The Bond of Faithful Performance shall be in an amount equal to one hundred percent (100%) percent of the Contract amount and shall be for the faithful performance of the Contract, and for the fulfillment of such other requirements as may be provided by Law. The performance bond shall remain in effect to guarantee the repair and replacement of defective equipment, materials, and workmanship, and payment of damages sustained by the District on account of such defects, discovered within one (1) year after final acceptance by the District, for the Work performed under the Contract which, shall remain in effect for a period of one (1) year, to guarantee the repair and replacement, and payments for damages.

Attorneys-in-fact, who sign bid bonds or contract bonds, must file with each bond a notarized and effectively dated copy of their power of attorney as required on bond forms supplied by the District for Contractor use in Sections 00610 and 00620.

The surety company shall familiarize itself with all of the conditions and provisions of this Contract, and it waives the right of special notification of any change or modification of this Contract or of extension of time, or of decreased or increased work, or of the cancellation of the Contract, or of any other act or acts by the District or its authorized agents under the terms of this Contract; and failure to so notify the aforesaid surety companies of changes shall not relieve the surety companies of their obligations under this Contract.

1.09 PENALTY FOR COLLUSION

If, at any time, it is found that the person, firm, or corporation to whom the Contract has been awarded has, in presenting any Bid or Bids, colluded with any other party or parties, then the Contract may at the District's sole election be declared null and void, and the Contractor and its sureties shall be liable for loss or damage which the District may suffer thereby, and the District may advertise for new Bids.

1.10 RIGHTS AND REMEDIES

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to, and not a limitation of, any duties, obligations, rights, and remedies otherwise imposed or available by law.

No action or failure to act by the District or the Design Consultant shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

ARTICLE 2 - CONTRACT ADMINISTRATION

2.01 ADMINISTRATION OF THE CONTRACT

The District's Representative and the Construction Manager will provide administration of the Contract as hereinafter described. These parties are designated in Section 00800-1.05, **CONTRACT ADMINISTRATION**. If the status of any of the above parties should change, the District will provide written notice to the Contractor of such change.

In case of the termination of the employment of the Construction Manager, the District shall appoint a Construction Manager whose status under the Contract Documents shall be that of the former Construction Manager.

2.02 DISTRICT'S REPRESENTATIVE

- A. General -The District's Representative has the authority to act on behalf of the District on change orders, progress payments, Contract decisions, acceptability of the Contractor's work, and early possession.
- B. Change Orders - The District's Representative has the authority to accept or reject Change Orders and cost proposals submitted by the Contractor.
- C. Progress Payments - The District's Representative has the authority to accept or reject requests for progress payments which have been submitted by the Contractor.
- D. Acceptability of Work - The District's Representative has the authority to make the final determination of the acceptability of the Work. The District's Representative also has the authority to accept or reject the Design Consultant's or the Construction Manager's recommendations regarding retention of defective work as provided.

2.03 CONSTRUCTION MANAGER

- A. General - The Construction Manager is a representative of the District employed to act as advisor and consultant to the District in construction matters related to the Contract. The term Construction Manager may include more than one individual to perform Contract administration and construction observation. Hereinafter, the term Construction Manager includes any and all designated representatives working under the direction of the Construction Manager.

All instructions to the Contractor and all communications from the Contractor to the District or the Design Consultant shall be forwarded through the Construction

Manager. The Construction Manager will have authority to act on behalf of the District only to the extent provided in the Contract Documents. The District has delegated its authority to the Construction Manager to make initial decisions regarding questions which may arise as to the quality or acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work under the Contract. The Construction Manager shall interpret the intent and meaning of the Contract and shall make initial decisions with respect to the Contractor's fulfillment of the Contract and the Contractor's entitlement to compensation. The Contractor shall look initially to the Construction Manager in matters relating to the Contract.

The Construction Manager's authority to act under Section 00700-2.01, **ADMINISTRATION OF THE CONTRACT**, and any decision made by it in good faith either to exercise or not to exercise such authority, shall not be interpreted or construed as control or responsibility of any of the work performed under this Contract.

- B. Representative - The Construction Manager will observe the progress, quality, and quantity of the Work to determine, in general, if the Work is proceeding in accordance with the provisions of the Contract Documents. The Construction Manager shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work.

In accordance with the provisions detailed elsewhere in these General Conditions, the Construction Manager will make decisions relative to all matters of interpretation or execution of the Contract Documents.

- C. Observation and Inspections of Construction - The Construction Manager shall observe the construction and shall have the authority to reject work and materials which do not conform to the Contract Documents, and to require special inspection or testing.

Observation and inspection by an inspector is not an authorization to revoke, alter, or waive any requirements of the Specifications. Observation and inspection is the authorization to call the attention of the Contractor to any failure of the Work, materials or workmanship to conform to the Contract Documents. The inspector shall have this authority including the ability to reject materials or, in any emergency, suspend the Work. The Contractor may appeal any such issue which it disagrees with to the Construction Manager for decision. If the decision of the Construction Manager is not satisfactory to the Contractor, the Contractor may appeal such decision to the District's Representative.

- D. Acceptability of the Work - The Construction Manager has the authority to make a recommendation as to the acceptability of the Work.

- E. Change Orders - The Construction Manager has the authority to initiate Change Orders; to reject Change Orders proposed by the Contractor or Design Consultant; to negotiate and recommend acceptance of Change Orders; or to order minor changes in the Work at no cost to the District.
- F. Construction Schedule - The Construction Manager has the authority to review and recommend acceptance of the Progress Schedule submitted by the Contractor at the start of the Work and subsequent significant revisions for conformance to the specified sequence of work and logic.
- G. Progress Payments - The Construction Manager has the authority to recommend acceptance or rejection of requests for progress payments which have been submitted by the Contractor.
- H. Final Payment - The Construction Manager, with the assistance of the Design Consultant, will conduct inspections to determine the dates of Substantial Completion of the Work and final completion of the Work, and will receive and forward to the District, for the District's review, written warranties, and related documents required by the Contract and assembled by the Contractor.

2.04 DESIGN CONSULTANT

- A. General - The Design Consultant will have the authority to act on behalf of the District only to the extent provided in the Contract Documents.
- B. Interpretations - The Design Consultant has the authority to be the initial interpreter of the technical requirements of the Contract Documents. Either party to the Contract may make written request to the Construction Manager for interpretations necessary for the proper execution or progress of the Work. The Construction Manager shall refer such written requests to the Design Consultant, who will render such interpretations. Where the Contractor has requested an interpretation from the Construction Manager, or been notified by the Construction Manager that such interpretation has been requested by the District, any work done before receipt of such interpretations, if not in accordance with same, shall be removed and replaced or adjusted as directed by the Construction Manager without additional expense to District.
- C. Acceptability of the Work - The Design Consultant has the authority to make a recommendation as to the acceptability of the Work. The Design Consultant has the authority to recommend acceptance regarding the retention of defective work.
- D. Submittal - The Design Consultant shall receive, through the Construction Manager, shop drawings, product data and samples for review in accordance with Section 01300, **SUBMITTALS**.

The Design Consultant has the authority to review and take other appropriate action upon the Contractor's submittal such as shop drawings, product data and

samples, but only for conformance with the design concept of the Work and the information given in the Contract Documents.

ARTICLE 3 - DISTRICT

3.01 GENERAL

The District, acting through the District's Representative, shall have the authority to act as the sole judge of the Work and materials with respect to both quantity and quality as set forth in the Contract.

3.02 ATTENTION TO WORK

The District's, Construction Manager's and Design Consultant's representatives are designated in Section 00800-1.05, **CONTRACT ADMINISTRATION**. The Construction Manager's designated representative will normally be available at the Site of the Work. An alternate representative will be designated when the designated Construction Manager's representative is not available at the Site of the Work.

3.03 OBSERVATION AND INSPECTION

In addition to the Construction Manager's designated representative, the District may provide one or more inspectors to the Construction Manager to observe the work and with the same authority as provided for in Section 00700-2.03C, **Observation and Inspections of Construction**.

Separate and independent from the observations and inspections above, the project may be inspected by Building Department or Fire Department officials for code compliance. Such inspectors shall have the authority provided to them by local jurisdiction.

If laws or regulations of any public body having jurisdiction other than the District require any work to specifically be inspected, tested, or approved, the Contractor shall pay all costs in connection therewith. The Contractor shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with the District's or the Construction Managers acceptance of a supplier of materials or equipment proposed as a substitution or equal to be incorporated in the Work, or of materials or equipment submitted for review prior to the Contractors purchase thereof for incorporation in the Work. The cost of all inspections, tests, and approvals in addition to the above which are required by the Contract Documents shall be paid by the District (unless otherwise specified), except for the cost of any reinspections or retesting made necessary by the Work not complying with the Contract Documents, the cost of which shall be borne by the Contractor.

The Construction Manager will make, or have made, such inspections and tests as the Construction Manager deems necessary to see that the Work is being accomplished in accordance with the requirements of the Contract Documents. Unless otherwise

specified in the Supplementary Conditions or elsewhere in the Contract Documents, the cost of such inspection and testing will be borne by the District. If such inspections or tests reveal non-compliance with the requirements of the Contract Documents, the Contractor shall bear the cost of corrective measures deemed necessary by the Construction Manager, as well as the cost of subsequent reinspection and retesting. Neither observations by the Construction Manager nor inspections, tests, or approvals by others shall relieve the Contractor from the Contractor's obligation to perform the Work in accordance with the Contract Documents.

All inspections, tests, or approvals other than those required by laws or regulations of any public body having jurisdiction shall be performed by organizations acceptable to the Construction Manager.

If any Work (including the work of others) that is to be inspected, tested, or approved is covered without written concurrence of the Construction Manager, it must, if requested by the Construction Manager, be uncovered for observation. Such uncovering shall be at the Contractor's expense unless the Contractor has given the Construction Manager timely notice (which in no event shall be less than two (2) full work days prior to any such performance or covering, as applicable), the Contractor's intention to cover the same and the Construction Manager has not acted with reasonable promptness in response to such notice.

If any Work is covered contrary to the written request of the Construction Manager, it must, if requested by the Construction Manager, be uncovered by the Contractor for the Construction Manager's observation and replaced by the Contractor, all at the Contractor's expense.

If the Construction Manager considers it necessary or advisable that covered Work be observed by the Construction Manager or inspected or tested by others, the Contractor, at the Construction Manager's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as the Construction Manager may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, the Contractor shall bear all direct, indirect, and consequential costs and damages of such uncovering, exposure, observation, inspection, and testing and of satisfactory reconstruction, including but not limited to fees and charges of Construction Manager, Design Consultant and other professionals. However, if such Work is not found to be defective, the Contractor shall be allowed an appropriate increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction; and if the parties are unable to agree as to the amount or extent thereof, the Contractor may make a claim therefor as provided in Paragraph 00700-7.03, Resolution of Disputes.

3.04 DISTRICT'S RIGHT TO USE OR OCCUPY

The District reserves the right, prior to Substantial Completion, to occupy, or use, any completed part or parts of the Work, providing these areas have been approved for occupancy by the District. The exercise of this right shall in no way constitute an acceptance of such parts, or any part of the Work, nor shall it in any way affect the dates and times when progress payments shall become due from the District to the Contractor or in any way prejudice the District's rights in the Contract, or any bonds guaranteeing the same. The Contract shall be deemed completed only when all the Work contracted has been duly and properly performed and accepted by the District.

Prior to such occupancy or use, the District and Contractor shall agree in writing regarding the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents.

In exercising the right to occupy or use completed parts of the Work prior to the Substantial Completion thereof, the District shall not make any use which will materially increase the cost to the Contractor, without increasing the Contract Amount, nor materially delay the completion of the Contract, without extending the time for completion.

The part or parts of the Work, if any, which the District anticipates the use or occupancy of prior to Substantial Completion are noted in Section 01010-1.03, **OCCUPANCY REQUIREMENTS**. Failure to include a part of the Work in the above referenced section shall not limit the District's right to use or occupy parts of the Work not listed.

3.05 DISTRICT'S RIGHT TO CARRY OUT THE WORK

If the Contractor should neglect to prosecute the Work properly or fail to perform any provision of the Contract, and fails within five days after receipt of written notice from the District to commence and continue correction of such neglect or deficiency with diligence and promptness, the District may, and without prejudice to any other remedy, make good such default, neglect or failure.

The District also reserves the right to perform any portion of the Work due to an emergency threatening the safety of the Work, public, District, and any property or equipment.

In either case, a Change Order shall be issued unilaterally deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies and/or for performing such work, including compensation for the Design Consultant's and District's additional services made necessary by such default, neglect, failure, or emergency.

3.06 DISTRICT'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

The District reserves the right to perform work related to the Project with the District's own forces, and to award separate Contracts in connection with the Project or other work on the Site. If the Contractor claims that delay, damage, or additional cost is involved because of such action by the District, the Contractor shall make such claim as provided elsewhere in the Contract Documents.

When separate Contracts are awarded for different portions of the Project or other work on the Site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Agreement.

The District will provide for the coordination of the work of the District's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate therewith as provided in Section 00700-4.10, **COOPERATION WITH OTHER CONTRACTORS**.

3.07 RESPONSIBILITY OF THE DISTRICT

The District shall not be held responsible for the care or protection of any material or parts of the Work prior to the final Acceptance, except as expressly provided in these Specifications.

ARTICLE 4 - CONTRACTOR

4.01 STATUS OF CONTRACTOR AND SUBCONTRACTORS

- A. It is stipulated and agreed that the Contractor shall be an independent contractor in the performance of this Contract and shall have complete charge of persons engaged in performance of the Work. The Contractor shall perform the Work in accordance with its own methods, subject to compliance with the requirements of the Contract.
- B. Subcontractors will not be recognized as having a direct relationship with the District. The persons engaged in the Work, including employees of subcontractors and suppliers, will be considered employees of the Contractor and their work shall be subject to the provisions of the Contract. References in these Contract Documents to actions required of subcontractors, manufacturers, suppliers, or any person other than the Contractor, the District or the Construction Manager shall be interpreted as requiring that the Contractor shall require such subcontractor, manufacturer, supplier or person to perform the specified action.

The Contractor shall not employ any subcontractors that are not properly licensed in accordance with State law or in violation of Public Contract Code Section 4100, et. seq. Prior to commencement of any work by a subcontractor, the Contractor shall submit verification to the Construction Manager that the subcontractor is properly licensed for the work it will perform.

Contractor shall be fully responsible to District for the performance, acts and omissions of its subcontractors, and of persons directly or indirectly employed by them. Each subcontract shall expressly incorporate by reference the terms of this Contract, including the following provisions:

1. Each subcontractor shall carry insurance as required by this Contract, and provide evidence of such insurance, as provided in Section 00800-2.01, **INSURANCE**.
2. Each subcontractor shall be obligated to defend, indemnify, and hold the District their officers, employees and agents harmless from all claims arising from the subcontractor's portion of the Work in the same manner as Contractor.
3. Each subcontractor shall grant District a license to use its drawings and design materials as provided in the Agreement.
4. Each subcontract shall acknowledge the District's right to suspend or terminate the Contract, and waive any right to anticipate profits in the event of such termination.

The removal and/or substitution of any subcontractor listed in Section 00430, **DESIGNATION OF SUBCONTRACTORS**, shall be made by the Contractor and District as provided for in Public Contract Code Section 4100 et seq.

4.02 CONTRACTOR'S REPRESENTATIVE

The Contractor shall designate in writing, before starting work, an authorized representative who shall have complete authority to represent and to act for the Contractor. Said authorized representative, or designated alternate, that has the authority to act in matters relating to the Contract, shall be personally present at the work site at all times while work is actually in progress on the Contract. During periods when work is suspended, arrangements acceptable to the Construction Manager shall be made for any emergency work that may be required. The Contractor's authorized representative, or designated alternate(s) shall be fluent and proficient in the English language in order to understand, receive, and carry out oral and written communications or instructions relating to all job functions and responsibilities.

When the Contractor consists of two or more persons, firms, partnerships, or corporations functioning on a joint venture basis, said Contractor shall designate in writing to the Construction Manager, the name of their authorized representative who shall have supreme authority to direct the Work and to whom orders will be given by the Construction Manager, to be received and obeyed by the Contractor.

Information shall include the representative's name, street address, town, and telephone number, and the mailing address if different from the street address.

The Contractor shall give its personal attention to and shall supervise the Work to the end that it shall at all reasonable times be prosecuted faithfully; and when the authorized representative or designated alternate is not personally present on the Work, the representative shall at all reasonable times be represented by a competent superintendent or foreman who shall receive and obey all instructions or orders given under this Contract, and who shall have full authority to supply materials, tools, and labor without delay, and who shall be the legally appointed representative of the Contractor. The Contractor shall be liable for the faithful observation of any instructions delivered to the Contractor or to its authorized representative.

4.03 LANDS AND RIGHTS OF WAY

With the approval of the Construction Manager, the Contractor may use portions of the District's site for storage of construction equipment, materials and field offices. The District will not accept any responsibility for damage or loss of the Contractor's equipment or materials stored on any project related site caused by vandalism, nature, theft, or otherwise, suffered by the Contractor. Protection of all construction equipment, stores, and supplies shall be the sole responsibility of the Contractor. Where additional work space is desired by the Contractor, it shall be the Contractor's sole responsibility and expense to obtain such a space for its use.

4.04 FEES AND PERMITS

The requirements for fees and permits are specified in Section 01060-1.02, **FEES AND PERMITS**.

4.05 COMPLIANCE WITH LAWS

The Contractor shall keep itself and its subcontractors fully informed of all existing and future legislated State and Federal Laws and City and County ordinances and regulations which in any manner affect those engaged or employed in the Work, or the materials and equipment used in the Work, or which in any way affect the conduct of the Work, and all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the Drawings, Specifications, or in any other part of this Contract, in relation to any such law, ordinance, regulation, order or decree, the Contractor shall forthwith report of the same to the Construction Manager in writing. The Contractor shall at all times observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees; and shall protect, defend, indemnify, and hold harmless the District, the Construction Manager, the Design Consultant, and all of their officers, agents, employees and servants against any claim or liability arising from or based upon the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor itself or by its employees.

A. Particular attention is called to the following:

1. The Contractor shall abide by and shall include in its contracts and agreements with subcontractor(s) for the performance of Work on the

District's Project a copy of the provisions the California Labor Code Sections 1771, 1775, 1776, 1777.5, 1813, and 1815.

2. Eight Hour Day Limitation – In accordance with the provisions of Division 2, Part 7, Chapter 1, Article 3 of the Labor Code, State of California, and in particular Sections 1810 to 1815 inclusive, thereof, eight (8) hours labor shall constitute a day's work and no laborer, worker, or mechanic in the employ of said Contractor, or any subcontractor doing or contracting to do any part of the Work contemplated by this Contract, shall be required or permitted to work more than eight (8) hours in any one calendar day, and forty (40) hours in any one calendar week unless compensated at not less than time and a half as set forth in California Labor Code Section 1815. However, if the prevailing wage determination requires a higher rate of pay for overtime than is required under said Section 1815, then the overtime rate must be paid, as specified in California Code of Regulations Title 8, Group 3, Section 16200(a)(3)(F). The Contractor and each subcontractor shall also keep an accurate record showing the names and actual hours worked of all workers employed by them in connection with the work contemplated by this Contract, which record shall be open at all reasonable hours for the inspection of the District or its officers or agents and by the Division of Labor Standards Enforcement of the Department of Industrial Relations, their deputies or agents; and it is hereby further agreed that said Contractor shall forfeit as a penalty to the Authority, the sum of twenty-five and No/100 Dollars (\$25.00) for each laborer, worker or mechanic employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such laborer, worker or mechanic is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in one calendar week in violation of this stipulation.

- B. 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 Standard's 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.

- C. 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."

- D. 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, or sex 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."

- E. Worker's Compensation Insurance - The provisions of Section 00800-2.01B, Worker's Compensation Insurance, shall be considered as repeated herein.
- F. Lateral and Subjacent Supports - Attention is directed to Section 832 of the Civil Code of the State of California relating to lateral and subjacent supports, and wherever structures or improvements adjacent to the excavation may be damaged by such excavation, the Contractor shall comply with this law. As provided in Labor Code Section 6707, a separate bid item is provided for costs of shoring and bracing of excavations five feet or more in depth.
- G. Safety Standards - The Contractor shall comply with all applicable provisions of the Safety and Health Regulations of Construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act (40 USC 327 et seq.) as set forth in Title 29, C.F.R., CAL/OSHA, and the

regulations issued thereunder. Compliance shall be the Contractor's sole responsibility, and neither the District nor the Design Consultant shall have any liability for non-compliance. See Section 00700-4.07, **SAFETY**, for additional safety requirements.

4.06 COMPLIANCE WITH ENVIRONMENTAL LAWS

During construction, the Contractor shall comply with all pertinent requirements of Federal, State, and local environmental laws and regulations, including, but not limited to, the Federal Clean Air Act, State and local air pollution and noise ordinances, construction site erosion control regulations. Specific requirements are further specified in Section 01060, **REGULATORY REQUIREMENTS AND PERMITS**, and Section 01560, **TEMPORARY CONTROLS**.

4.07 SAFETY

- A. 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, and all other applicable Federal, State, County, and local laws, ordinances, codes, 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 apply and shall be followed by the Contractor.

No provision of the Contract Documents shall be interpreted to make the District, Design Consultant or any party other 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 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 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 Design Consultant, nor the Construction Manager or each of 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.

The Contractor shall indemnify, defend and hold District, Design Consultant, Construction Manager 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 Section 00800-2.01E, **Indemnification**.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the District. In addition, the Contractor shall furnish the District 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 District 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 District, giving full details of the claim.

- B. Safety Program - 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 submit to the District a Contractor Safety Program that provides for the implementation of all of the Contractor's safety responsibilities in connection with the Work at the site and the coordination of that program and its associated procedures and precautions with safety programs, precautions and procedures of each of its subcontractors and other prime Contractors performing work at the site. The Contractor shall be solely responsible for initiating, maintaining, monitoring, coordinating, and supervising all safety programs, precautions, and procedures in connection with the Work and for coordinating its programs, precautions, and procedures of the other prime contractors and subcontractors performing the Work at the site. The Safety Program should contain all the necessary elements for the Contractor to

administer its program on site. At a minimum, this written Safety Program shall address the elements required by Labor Code Section 6401.7.

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

- C. 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.

The 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 work 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.

- D. Safety and Protection - The Contractor shall take all necessary protection to prevent damage, injury, and loss to:
1. All employees on the Project, employees of all subcontractors, and other persons and organizations who may be affected thereby;
 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
 3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction.

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 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.

- E. 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 therefore shall be included in the price named in the Contract for completion of the Work as set forth in the Contract Documents. Nothing in this section shall be deemed to allow the use of a shoring, 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 nor any of each of their agents, consultants, or employees. 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 District the "competent person(s)" with the authority and responsibilities designated in the Construction Safety Orders.

- F. Safety Emergencies - In emergencies affecting the safety or protection of persons or the Work or property at the 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.
- G. Safety Violations - Should the Contractor fail to correct a condition, the District shall have the right to notify the Contractor through the District that an unsafe condition may exist and must be corrected or the work in question can be stopped in accordance with Section 00700-6.06A, **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.

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

- H. Equipment Safety Provisions - The completed Work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary 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 electrically 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.
- I. Confined Spaces – The Work 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. Including 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).
- J. Public Safety and Convenience - 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 fire fighting 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.

4.08 PROVISIONS FOR HANDLING EMERGENCIES

It is possible that emergencies may arise during the progress of the Work that may require special treatment or make advisable extra shifts of labor forces to continue the Work for twenty-four (24) hours per day. These emergencies may be caused by damage or possible damage to nearby existing structures or property by reason of the Work under construction, or by storm, accidents, or leakage. The Contractor shall be prepared in case of such emergencies to make all necessary repairs and shall promptly execute such work

when required by the Construction Manager. The determinations made by the Construction Manager for handling emergencies shall be final and conclusive upon the parties.

Upon start of the Work, Contractor shall provide means for immediate emergency notification of Contractor's designated representative and designated emergency alternates.

4.09 NONSTANDARD WORKING HOURS

The Contractor may be required to prosecute the Work at night or outside of the normal working hours defined in Section 01560-1.07, **WORKING HOURS**. Such work may be required due to project and/or operational constraints as defined in Section 01010, **SUMMARY OF WORK**, or if emergencies arise as provided for in Section 00700-4.08, **PROVISIONS FOR HANDLING EMERGENCIES**. When required, ordered, or permitted to work at night, the Contractor shall provide sufficient and satisfactory lighting and other facilities therefore. For work outside of the normal working hours, the Contractor shall receive no extra payment, but compensation shall be considered as having been included in the price stipulated for the Work, except for authorized work performed outside of the Contract requirements.

4.10 COOPERATION WITH OTHER CONTRACTORS

This Paragraph shall serve as notice to the Contractor that the District may let other contracts for other work at or near the site of this work. The Contractor shall afford other contractors reasonable opportunity for the delivery and storage of their materials and the execution of their work, and shall properly connect and coordinate its work with theirs.

Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work or in the vicinity of the Work to be done under this Contract, the Contractor shall so conduct its operations as to interfere to the least possible extent with the Work of such other forces or contractors.

Any difference or conflicts which may arise between the Contractor and any other forces or contractors, creating delays or hindrance to each other, shall be adjusted as determined by the Construction Manager.

Section 01010, **SUMMARY OF WORK**, indicates anticipated other potential construction activities within or adjacent to Work to be performed in this Contract.

ARTICLE 5 - CONTROL OF WORK AND MATERIAL

5.01 MEANS, METHODS AND APPLIANCES

The means, methods and appliances adopted by the Contractor shall be planned and executed to, in the opinion of the Construction Manager, produce the highest grade quality of work and will enable the Contractor to complete the Work in the time agreed upon. The District and Construction Manager shall not supervise, direct, or have control

over, or be responsible for, Contractor's means, methods and appliances of construction or for the safety precautions and programs incident thereto, or for any failure of Contractor to comply with laws and regulations applicable to the furnishing or performance of Work. However, if at any time the means, methods and appliances appear inadequate or of inferior quality, the Construction Manager may order the Contractor to improve their character or efficiency, and the Contractor shall conform to such order; failure of the Construction Manager to order such improvement of methods of efficiency will not relieve the Contractor from its obligation to perform satisfactory work and to finish it in the time agreed upon.

5.02 CHARACTER OF WORKERS

None but competent forepersons and workers shall be employed on work requiring special qualifications; and, when required by the Construction Manager, the Contractor shall remove from the work any person who commits trespass, or is, in the opinion of the Construction Manager, disorderly, dangerous, insubordinate, incompetent, or otherwise objectionable. Such discharge shall not be the basis of any claim for compensation or damages against the Construction Manager, the District, or any of its officers or representatives.

5.03 MATERIALS AND WORKMANSHIP

Unless otherwise indicated in these Specifications, materials and equipment for the construction work shall be the best grade in quality of a manufacturer regularly engaged in the production of such materials and equipment or materials and equipment of comparable character. All materials must be of the specified quality and equal to approved samples, if samples have been submitted. All work shall be done and completed in the best workmanlike manner, obtainable in the local market. All permanent materials and equipment shall be new unless otherwise specified.

Notwithstanding any omission from these Specification or the Drawings it shall be the duty of the Contractor to call the Construction Manager's attention to apparent errors or omissions and request instructions before proceeding with the Work. The Construction Manager may, by appropriate instructions correct errors and supply omitted information. Such instructions shall be as binding upon the Contractor as though contained in the original Specifications or Drawings.

Materials or workmanship that is unsatisfactory, faulty or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referred in the Contract Documents; or work that has been damaged prior to the Construction Manager's recommendation of final payment; shall be considered defective and will be subject to rejection.

All defective work or materials shall be promptly removed from the premises by the Contractor, whether in place or not, and shall be replaced or renewed in such manner as the Construction Manager may direct. All materials and workmanship of whatever

description shall be subjected to the inspection of, and rejection by, the Construction Manager if not in conformance with the Contract Documents.

Upon failure on the part of the Contractor to comply with any order of the Construction Manager made under the provisions of this Paragraph 00700-5.03, the Construction Manager shall have authority to cause defective work to be remedied, or removed and replaced, and unauthorized work to be removed, and to deduct the costs thereof from any monies due or to become due the Contractor. The time, cost and compliance requirements stipulated in Paragraph 00700-3.05, **DISTRICT'S RIGHT TO CARRY OUT THE WORK**, shall also apply for this Paragraph 00700-5.03. Contractor shall bear all direct, indirect and consequential costs and damages due to defective work or materials, whether or not the defective work or materials are corrected or accepted with a reduction in the Contract Price, including without limitation compensation for the Design Consultants, the Construction Managers and City's additional services made necessary by such defective work or materials, notwithstanding any other provision of the Contract Documents.

Any defective material or workmanship, or any unsatisfactory or imperfect work which may be discovered before the final Acceptance of the Work or within the applicable statute of limitations period, shall be corrected immediately on the requirement of the District or Construction Manager, without extra charge, notwithstanding that it may have been overlooked in previous inspections and estimates. Failure to inspect work shall not relieve the Contractor from any obligation to perform sound and reliable work as herein described.

5.04 EXISTING UTILITIES

- A. 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 construction.

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

- B. 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.

Pursuant to Government Code Section 4216.2 the Contractor shall contact the appropriate regional notification center at least two (2) working days before, but not more than 14 calendar days prior to commencing any excavation. The Contractor shall request that the utility owners conduct a utility survey and mark or otherwise indicate the location of their service.

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 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 in the Contract Documents, 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.

- C. 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 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.

The District shall 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 00700-7.01, **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. Requests for extensions of time arising out of utility relocation or repair delays shall be filed in accordance with Section 01310-1.05, **TIME IMPACT ANALYSES**.

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 indicates 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 Contract.

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.

ARTICLE 6 - PROGRESS OF THE WORK

6.01 COMMENCEMENT OF WORK

Within thirty (30) calendar days after receipt of the required bonds and evidences of insurance and the executed Agreement from the Contractor, written Notice to Proceed will be given by the District to Contractor. Notwithstanding other provisions of the Contract, the Contractor shall not be obligated to perform work, and the District shall not be obligated to accept or pay for work performed by the Contractor, or otherwise pay or reimburse Contractor for expenses incurred by the Contractor, prior to Notice to Proceed. The Contractor shall provide the required Contract bonds and evidences of insurance prior to Notice to Proceed and commencing work at the site.

The Contractor shall commence the Work covered by this Contract within ten (10) days after the date established in the Notice to Proceed for the commencement of Contract Time.

The Contractor shall give the Construction Manager written notice not less than two (2) working days in advance of the actual date on which the work will be started. The Contractor shall be entirely responsible for any delay in the Work, which may be caused by its failure to give such notice.

6.02 CONTRACT TIME

Time shall be of the essence of the Contract. The Contractor shall prosecute the Work so that the various portions of the project shall be Substantially Complete and ready for use within the time specified in Section 00800-1.01, **TIME ALLOWED FOR COMPLETION**. It is expressly understood and agreed by and between the Contractor and the District that the Contract time for completion of the Work described herein is a reasonable time taking into consideration the average climatic and economic conditions and other factors prevailing in the locality and the nature of the Work. The Contractor is hereby advised that the Contractor's Bid is to be based on the entire Contract Time and the Contractor shall include its field and home office overhead costs in the Bid for the entire Contract Time.

6.03 DELAYS

- A. Notice of Delays - When the Contractor foresees a delay in the prosecution of the Work or any material portion thereof, and, in any event, immediately upon the

occurrence of a delay, the Contractor shall notify the Construction Manager in writing of the probability of the occurrence and the estimated extent of the delay, and its cause. The Contractor shall take immediate steps to prevent, if possible, the occurrence or continuance of the delay. The Contractor agrees that no claim shall be made for delays which are not called to the attention of the Construction Manager at the time of their occurrence.

- B. Non-Excusable Delays - Non-excusable delays in the prosecution of the Work shall include delays which could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its subcontractors, at any tier level, or suppliers. The Contractor shall receive no compensation for such delay.
- C. Excusable Delays - Excusable delays in the prosecution or completion of the Work shall include delays which result from causes beyond the control of the Contractor and District and which could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its subcontractors, at any tier level, or suppliers. The Contractor shall receive no compensation for such delay. Excusable delays are as further defined below.
 - 1. Abnormal Delays - Delays caused by acts of god, fire, floods, tidal waves, earthquakes, strikes, labor disputes, freight embargoes, and significant shortages of materials shall be considered as excusable delays insofar as they prevent the Contractor from proceeding with at least seventy-five (75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical activity item(s) on the latest Favorably Reviewed Progress Schedule.
 - 2. Weather Delays - Should inclement weather conditions or the conditions resulting from weather prevent the Contractor from proceeding with seventy-five (75) percent of the normal labor and equipment force engaged in the current critical activity item on the latest Favorably Reviewed Progress Schedule for a period of at least five (5) hours per day toward completion of such operation or operations, and the crew is dismissed as a result thereof, it shall be a weather delay day. If at any time District and Contractor disagree regarding the extent to which inclement weather conditions exist, the District may determine, in its sole discretion, that such conditions do not warrant an excusable delay. Weather delays are not compensable.
 - 3. Material Shortages - Upon the Contractor's submission of proof that is to the satisfaction of the Construction Manager, shortages of material may be acceptable as grounds for granting a time extension. In order that such proof may be satisfactory and acceptable to the Construction Manager, it must be demonstrated by the Contractor that the Contractor has made every effort to obtain such materials from all known sources within reasonable reach of the proposed Work. Only the physical shortage of

material, caused by unusual circumstances, will be considered under these provisions as a cause for extension of time, and no consideration will be given to any claim that material could not be obtained at a reasonable, practical, or economical cost or price, unless it is shown to the satisfaction of the Construction Manager that such material could have been obtained only at exorbitant prices entirely out of line with current rates, taking into account the quantities involved and usual practices in obtaining such quantities. A time extension for shortage of material will not be considered for material ordered or delivered late or whose availability is affected by virtue of the mishandling of procurement. The above provisions apply equally to equipment to be installed in the Work.

- D. **Compensable Delays** - Compensable delays in the prosecution or completion of the Work shall include delays that occur through no fault of the Contractor and prevent the Contractor from proceeding with at least seventy-five (75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical activity item(s) on the latest Favorably Reviewed Progress Schedule due to the following cause(s) only:
1. Delays due solely to the actions and/or inactions of the District.
 2. Delays due to differing site conditions as defined in Section 00700-7.02, **DIFFERING SITE CONDITIONS**.
 3. Delays due to other Contractors employed by the District who interfere with the Contractor's prosecution of the Work as defined above.
- E. **Concurrent Delays** - Concurrent delays are those delay periods when the prosecution of the Work is delayed during the same period of time due to causes from a combination of the delays defined in Sections 00700-6.03B, **Non-Excusable Delays**, 00700-6.03C, **Excusable Delays**, or 00700-6.03D, **Compensable Delays**. During such concurrent delay periods, time extensions may be granted by the District in accordance with Section 00700-6.04, **TIME EXTENSIONS**; however, the Contractor shall not be compensated for its overhead costs as defined in Section 00700-6.04C, **Indirect Overhead**, and the District shall not assess its actual costs as defined in Section 00700-6.04A, **Non-Excusable Delays**.

6.04 TIME EXTENSIONS

- A. **Non-Excusable Delays** - The District, at its sole option and discretion, may grant an extension to milestone or completion dates for non-excusable delays. If the District grants an extension of time for non-excusable delays, the Contractor agrees to pay the District's actual costs, including charges for engineering, inspection and administration incurred during the extension. Contractor shall not be entitled to any compensation if the District chooses to grant an extension of time for non-excusable delays.

- B. Excusable or Compensable Delays – If District determines, in its sole discretion, that Contractor is delayed in the performance of its Work in accordance with and as defined in Sections 00700-6.03C, **Excusable Delays**, or 00700-6.03D, **Compensable Delays**, then milestone and Contract completion dates may be extended by the District for such time that, in the District’s and Construction Manager’s determination, the Contractor’s completion dates will be delayed, provided that the Contractor strictly fulfills the following:
1. The Contractor shall provide notification, in accordance with Section 00700-6.03A, **Notice of Delays**, and submit in writing a request for an extension of time to the Construction Manager stating at a minimum the probable cause of the delay and the number of days being requested. The time extension request shall be submitted in accordance with the requirements of Section 01310-1.06, **TIME IMPACT ANALYSES**.
 2. If requested by the Construction Manager, the Contractor shall promptly provide sufficient information to the Construction Manager to assess the cause or effect of the alleged delay, or to determine if other concurrent delays affected the Work.
 3. Weather Delays. The Contractor will be granted a non-compensable time extension for weather caused delays, pursuant to Section 00700-6.03 C2, **Weather Delays**, over and above an allowance as provided for in Section 00800-1.03, **WEATHER DAYS**. No time extensions for weather delays will be granted until the total number of weather days exceeds this allowance.

Should the Contractor fail to fulfill any of the foregoing, which are conditions precedent to the right to receive a time extension, the Contractor waives the right to receive a time extension.

During such extension of time, neither extra compensation for engineering, inspection, and administration nor damages for delay will be charged to the Contractor. It is understood and agreed by the Contractor and District that time extensions due to excusable or compensable delays will be granted only if such delays involve controlling operations which would prevent completion of the whole Work within the specified Contract time.

Should the Contractor fail to complete the Work within the time specified in the Contract, as extended in accordance with this clause if appropriate, the Contractor shall pay to the District liquidated damages in accordance with Section 00700-6.05, **LIQUIDATED DAMAGES**.

- C. Indirect Overhead - The Contractor may be entitled to reimbursement of indirect overhead expenses for periods of time when the Work is delayed as defined in Section 00700-6.03D, **Compensable Delays**. Reimbursement for indirect

overhead shall not be made for concurrent delays as defined in Section 00700-6.03E, **Concurrent Delays**.

The compensation described in Section 01035-1.05, **MARK-UP ALLOWANCES**, includes provisions for reimbursement of indirect overhead expenses for Change Order work. Compensation as described in this section shall reasonably consider the indirect overhead included in the Mark-Up Allowance, as follows:

1. If District and Contractor agree that the Mark-Up Allowance does not provide sufficient compensation for a compensable delay associated with changed work, this section shall apply.
2. Upon application of this section as provided in Section 00700-6.04 C1, an amount equal to the entire Mark-Up Allowance for all Change Order work shall be deducted from the indirect overhead compensation as calculated based on Sections 00700 6.04 C3 (Indirect Field Overhead) and 6.04 C4 (Indirect Home Office Overhead) below.

As a condition precedent to any reimbursement of indirect overhead expense, the Contractor must fulfill all conditions as provided in Section 00700-6.04B, **Excusable or Compensable Delays**. No additional markup for overhead or profit shall be provided for such reimbursable indirect overhead expenses.

Payment to the Contractor for indirect overhead expenses will be made only for the extended Contract time granted for compensable delay(s) which meet the following criteria: The compensable delay(s) period is (are) required to complete the work following the entire depletion of the original Contract time plus any time extensions granted for delays other than compensable time extensions.

3. Indirect Field Overhead - For those compensable allowable delay periods as defined in Section 00700-6.04C1, **Indirect Overhead**, the Contractor shall be reimbursed for its indirect field overhead based on:
 - a. Actual invoice costs for on-site field offices and temporary utilities as described in Section 01560, **TEMPORARY CONTROLS**, and Section 01510, **TEMPORARY UTILITIES**.
 - b. Actual indirect labor costs, as determined consistent with Section 01035-1.03, **FORCE ACCOUNT PAYMENT**, for field office staff.
 - c. Fair rental values acceptable to the Construction Manager as described in Section 01035-1.03, **FORCE ACCOUNT PAYMENT**, for construction equipment idled due to the delay.
4. Indirect Home Office Overhead - For those allowable delay periods as defined in Section 00700-6.04C1, Indirect Overhead, the Contractor shall

be reimbursed for its unabsorbed home office overhead based on the following formula:

$$\frac{\text{ContractAwardAmount}(\$)}{\text{OriginalContractTime}(\text{Days})} * 0.03 = \text{DailyHomeOfficeOverhead}(\$ / \text{day})$$

The Contract Award Amount is the total amount in the executed Agreement (Section 00500). The Contract Time is as provided in Section 00800-1.01, **TIME ALLOWED FOR COMPLETION**.

As it is impractical to determine the actual home office overhead, such reimbursement shall constitute full payment for any and all home office overhead expenses for such periods of time for the Contractor and all subcontractors, whether greater or less than actual. Distribution of the markup amount among the Contractor and all subcontractors and suppliers is the responsibility of the Contractor. The Contractor agrees to indemnify, defend and hold the District harmless for any indirect overhead claims from its subcontractors.

6.05 LIQUIDATED DAMAGES

- A. Owner and the Contractor recognize that time is of the essence of this Agreement and that the Owner will suffer substantial and significant financial loss if the Work is not completed within the time specified in Section 00800-1.01, **TIME ALLOWED FOR COMPLETION**, and required milestone work in Section 00800-1.02 herein, plus any extensions thereof allowed in accordance with Section 00700-6.04 of the General Conditions. The District and Contractor hereby acknowledge and agree that it is and will be difficult and/or impossible to ascertain and determine the actual damage the District will sustain in the event of and by reason of the Contractor's failure to fully perform the Work or to fully perform all of its Contract obligations that have accrued by the time for completion as specified in Section 00800-1.01 herein and/or as specified for completion of any scheduled operations or works described in Section 00800-1.02. It is, therefore, agreed in accordance with California Government Code Section 53069.85 that the Contractor will pay compensation to the Owner by way of liquidated damages (and not as a penalty) for the detriment resulting therefrom in the amount set forth in Section 00800-1.02, **DAMAGES FOR DELAYS**, per day for each and every calendar day that expires after the time for completion specified in Section 00800-1.01 herein and/or as specified for completion of any scheduled operations or works described in Section 00800-1.02 except as otherwise provided by extension of time pursuant to Section 00700-6.04 of the General Conditions. It is further understood and agreed 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 this Contract was made, and that the Owner may deduct liquidated damages sums in accordance with this provision from any payments due or that may become due the Contractor.

- B. Liquidated damages will continue to accrue at the stated rate until Substantial Completion of the Work. Contractor agrees to pay all accrued liquidated damages immediately upon request of the District, and if they are not timely paid, the District may deduct such liquidated damages from amounts due or that become due to the Contractor for performance of the Work, in addition to exercising any other rights and remedies available to the District under the Contract Documents or applicable law. Liquidated damages may not be waived or reduced by the Owner unless expressly waived or reduced in writing by the Construction Manager.

6.06 SUSPENSION OF WORK

- A. If the Contractor fails to correct defective work as required by Section 00700-5.03, **MATERIALS AND WORKMANSHIP**, 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, or any portion thereof. The suspension of Work shall remain in effect until the cause for such order has been eliminated. This right of the District to stop 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. The District's concurrence that the condition or cause has been eliminated will be provided in writing to the Contractor.
- B. 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 monies due the Contractor under the Contract.
- C. 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, or for the District's own convenience. 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 provide the provisions as stipulated in Section 00700-6.06B, SUSPENSION OF WORK, above. Such additional work shall be compensated as provided for in Section 00700-Article 7, CHANGES IN THE WORK.

6.07 RIGHT TO TERMINATE CONTRACT

If at any time the Contractor is determined to be in material breach of the Contract, notice thereof in writing will be served upon the Contractor and its sureties, and should the Contractor neglect or refuse to provide means for a satisfactory compliance with the Contract, as directed by the Construction Manager, within the time specified in such notice, the District or the District's Representative in such case shall have the authority to terminate the operation of the Contract.

Upon such termination, the Contractor shall discontinue the Work, or such parts of it as the District may designate. Upon such termination, the Contractor's control shall terminate and thereupon the District or its fully authorized representative may take possession of all or any part of the Contractor's materials, tools, equipment, and appliances upon the premises and use the same for the purposes of completing the Work and hire such force and buy or rent such additional machinery, tools, appliances, and equipment, and buy such additional materials and supplies at the Contractor's expense as may be necessary for the proper conduct of the Work and for the completion thereof; or the District may employ other parties to carry the Contract to completion, employ the necessary workers, substitute other machinery or materials and purchase the materials contracted for, in such manner as the District may deem proper; or the District may annul and cancel the Contract and reissue the Work or any part thereof. Any excess of cost arising therefrom over and above the Contract price will be charged against the Contractor and its sureties, who will be liable therefore.

In the event of such termination, all monies due the Contractor or retained under the terms of this Contract shall be held by the District; however, such holdings will not release the Contractor or its sureties from liability for failure to fulfill the Contract. Any excess cost over and above the Contract amount incurred by the District arising from the termination of the operations of the Contract and the completion of the Work by the District as above provided shall be paid for by the Contractor. The Contractor shall be entitled to credit against such excess costs and contract funds held by the District. Any contract funds remaining after all valid claims for completion of the Work have been paid, shall be paid to the Contractor sixty (60) days after completion of the Work.

If at any time before completion of the Work under the Contract, it shall be determined by the District that it impossible, impractical, undesirable, or otherwise against the interests of the District to complete the Work, or if the Work shall be stopped by an injunction of a court of competent jurisdiction or by order of any competent authority, the District may, upon ten (10) days written notice to the Contractor, discontinue the Work and terminate the Contract for its convenience. Upon service of such notice of termination, the Contractor shall discontinue the Work in such manner, sequence, and at such times as the Construction Manager may direct. The Contractor shall have no claim for damages for such discontinuance or termination, nor any claim for anticipated profits on the work thus dispensed with, nor any other claim except for the work actually performed up to the time of discontinuance, including any extra work ordered by the Construction Manager to be done, nor for any claim for liquidated damages.

ARTICLE 7 - CHANGES IN THE WORK

7.01 CHANGE ORDERS

- A. Without invalidating the Contract and without notice to sureties or insurers, the District through the Construction Manager, may at any time or from time to time, order additions, deletions, or revisions in the Work; these will be authorized by Field Directive, Field Order, or Change Order. A Change Order will not be issued for a Field Directive unless the Construction Manager concurs with an appeal by the Contractor that such Field Directive is a change in the scope of the Contract. The Contractor shall comply promptly with the requirements for all Change Orders, Field Orders, or Field Directives. The work involved in Change Orders shall be executed under the applicable conditions and requirements of the Contract Documents. If any Field Order causes an increase or decrease in the Contract Amount or an extension or shortening of the Contract Time, an equitable adjustment will be made by issuing a Change Order. By the acceptance of a Change Order, the Contractor waives any claim for additional time or additional compensation or remuneration for the cumulative impact of multiple change orders, not included in the Change Order, for the work covered by that Change Order. Additional or extra work performed by the Contractor without written authorization of a Field Order or Change Order will not entitle the Contractor to an increase in the Contract Amount or an extension of the Contract Time.
- B. Compensable extra work shall be that work required for the completed project, but not shown or detailed on the Contract Drawings, and not called for in the Contract Documents, and not constituting “incidental work” as defined in Section 00700 1.04, **PLANS AND SPECIFICATIONS**. Such work shall be governed by all applicable provisions of the Contract Documents. In giving instructions, the Construction Manager shall have authority to make minor changes in the Work, not involving extra cost, and not inconsistent with the purposes of the Work; but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the District through the Construction Manager, and no claim for an addition to the total amount of the Contract shall be valid unless so ordered.
- C. In case any change increases or decreases the work shown, the Contractor shall be paid for the work actually done at a mutually agreed upon adjustment to the Contract price, based upon the provisions of Section 01035, **MODIFICATION PROCEDURES**.
- D. If the Contractor refuses to accept a Change Order, the District may issue it unilaterally. The Contractor shall comply with the requirements of the Change Order. The District shall provide for an equitable adjustment to the Contract Price, and compensate the Contractor accordingly. If the Contractor does not agree that the adjustment is equitable, it may submit a claim in accordance with Section 00700 7.03, **RESOLUTION OF DISPUTES**.

7.02 DIFFERING SITE CONDITIONS

Pursuant to Public Contract Code Section 7104, the Contractor shall promptly, and before such conditions are disturbed, notify the District in writing, of any:

- A. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
- B. Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids.
- C. Unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.

The District shall promptly investigate the conditions, and if it finds that the conditions do materially differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work the District shall cause to be issued a Change Order under the procedures provided in Section 00700-7.01, **CHANGE ORDERS**.

In the event that a dispute arises between the District and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties, Section 00700-7.03, **RESOLUTION OF DISPUTES**.

No claim of the Contractor under this clause shall be allowed unless the Contractor has promptly given the notice required. The Contractor's failure to give notice of differing site conditions within twenty-four (24) hours of their discovery or before they are disturbed shall constitute a waiver of all claims in connection therewith, whether direct or consequential in nature, including any claims for an increase in the Contract Price and/or an extension of the Contract Time.

7.03 RESOLUTION OF DISPUTES

- A. Resolution of Claims - Claims pertaining to this Agreement for three hundred and seventy-five thousand dollars (\$375,000) or less which cannot be resolved between the parties shall be resolved pursuant to the provisions of Public Contract Code commencing at Section 20104.

1. Claims Not Exceeding \$375,000 - Said Code sections provide in part that: Under the law (starting at Public Contract Code Section 20104.2) construction claims of \$375,000.00 or less on local public agency construction contracts must be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment.

The District must respond in writing to any written claim of three hundred seventy-five thousand dollars (\$375,000) or less within sixty (60) days [or, in the case of claims of less than fifty thousand dollars (\$50,000), within forty-five (45) days] of receipt of 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 claimant.

If additional information is thereafter required, it shall be requested and provided, pursuant to Public Contract Code Section 20104.2, upon mutual agreement of the District and the claimant.

The District's written response to the claim, as further documented, shall be submitted to the claimant within thirty (30) days [or, for claims of less than \$50,000, within fifteen (15) days] after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.

If the claimant disputes the District's written response (or if the District fails to respond within the time periods prescribed above) the claimant may notify the District, in writing, within fifteen (15) days of receipt of the District's response or within fifteen (15) days of the District's failure to respond within the times prescribed, respectively, and demand an informal settlement conference. The District must then schedule a settlement conference within thirty (30) days.

Following the settlement conference, if the claim or any portion remains in dispute, the claimant may file a claim as required by the claims statute commencing at California Government Code Section 910. The time within which a Government Code claim must be filed is tolled from the time the claimant submits the Public Contract Code claim until the time when the claim is denied.

2. Claims Equal to or Exceeding \$375,000 - Unless this Contract provides otherwise, all claims between the District and the Contractor that are not resolved between the parties and are not governed by Public Contract Code Section 20104 shall be resolved according to the procedures established in Public Contract Code Section 20104 with the following exceptions:

- a. The District must respond in writing to any written claim equal to or greater than three hundred seventy-five thousand dollars (\$375,000) within sixty (60) 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 claimant, or may advise the Contractor in writing within thirty (30) days of receipt of the claim when the review and response to the claim will be furnished.
- B. Resolution of Claims – PCC § 9204. This Contract is subject to the claims resolution procedures set forth in Public Contract Code § 9204. A “Claim,” as it relates to this provision, means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:
 1. A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the District.
 2. Payment by the District of money or damages arising from work done by, or on behalf of, the Contractor pursuant to the Contract and payment for which is not otherwise expressly provided or to which the Contractor is not otherwise entitled.
 3. Payment of an amount that is disputed by the District.

Upon receipt of a Claim, District shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide Contractor with a written statement identifying what portion of the Claim is disputed and what portion is undisputed.

The Contractor shall furnish reasonable documentation to support the Claim.

If District needs approval from its governing body to provide Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, the District shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the District issues its written statement.

If the Contractor disputes the District’s written response, or if the District fails to respond to a Claim within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in

dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the District shall schedule a meet and confer conference within 30 days for settlement of the dispute.

Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the District shall provide the Contractor with a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the District issues its written statement. Any disputed portion of the Claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the District and the Contractor sharing the associated costs equally. The District and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the Claim remaining in dispute shall be subject to the dispute resolution process provided for in this Contract.

The mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code section 20104.4 (or any related provision in this Contract) to mediate after litigation has been commenced.

If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against District because privity of contract does not exist, the Contractor may present to the District a claim on behalf of a subcontractor or lower tier subcontractor. Within 45 days of receipt of this written request, the Contractor shall notify the subcontractor in writing as to whether the Contractor presented the claim to the District and, if the Contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

Any Claim that remains unresolved after mediation shall be litigated in California State Superior Court, and shall be venued in the Marin County Superior Court.

To the extent that any Claim deadlines stated herein are inconsistent, the shorter timeframe shall apply.

ARTICLE 8 - PAYMENT

8.01 BASIS OF PAYMENT

- A. General - The Contractor shall accept the compensation, as herein provided, as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to the completed Work and for performing all work contemplated and embraced under the Contract; also for loss or damage arising from the nature of

the Work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the Work, also for all expenses incurred in consequence of the suspension or discontinuance of the Work as herein specified; and for completing the Work according to the Contract Documents. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material. Notwithstanding any other provision of the Contract Documents, if Contractor disputes any determination by the District with regard to payment, Contractor shall not be entitled to stop work pending resolution of such payment dispute, but shall expeditiously continue to prosecute the Work unless directed otherwise by the District.

No compensation will be made in any case of loss of anticipated profits. This includes the event of the termination of the Contract, and therefore no compensation will be made to the Contractor for the loss of anticipated profits associated with the terminated work. Increased or decreased work involving supplemental agreements will be paid for as provided in such agreements.

Full compensation for conforming to all of the provisions of the Contract Documents shall be considered as included in the prices paid for the various Contract items of work and no additional compensation will be allowed therefore.

- B. Payment for Patents and Patent Infringement - All fees or claims for any patented invention, article, or arrangement that may be used upon, or in, any manner connected with the performance of the work or any part thereof shall be included in the price bid for doing the work, and the Contractor and its sureties shall defend, protect, indemnify, and hold the District, the Construction Manager, and Design Consultants, together with all their officers, agents, and employees harmless against liability of any nature or kind for any and all costs, legal expenses, and damages made for such fees or claims and against any and all suits and claims brought or made by the holder of any invention or patent, or on account of any patented or unpatented invention, process, article, or appliance manufactured for or used in the performance of the Contract, including its use by the District, unless otherwise specifically stipulated in the Contract. Before final payment is made on the Contract, the Contractor shall furnish an affidavit to the District regarding patent rights for the project. The affidavit shall state that all fees and payments due as a result of the work incorporated into the project or methods utilized during construction have been paid in full. The Contractor shall certify in the affidavit that no other fees or claims exist for work in this project.
- C. Payment of Taxes - The Contractor shall pay and shall assume exclusive liability for all taxes levied or assessed on or in connection with its performance of this Contract, whether before or after acceptance of the work, including, but not limited to, State and local sales and use taxes, Federal and State payroll taxes or assessments, and excise taxes, including any taxes or assessments levied or increased during the performance period of the work. No separate allowance will

be made therefore, and all costs in connection therewith shall be included in the total amount of the Contract price.

8.02 PARTIAL PAYMENTS

- A. General - In consideration of the faithful performance of the work prosecuted in accordance with the provisions of these Specifications and the Contract, the District will pay the Contractor for all such work installed on the basis of unit prices and/or percentage completion of lump sum Bid Items. Amounts earned for lump sum work will be based on accepted Cost Breakdown (Section 01025, **MEASUREMENT AND PAYMENT**).

Payments will be made by the District to the Contractor on estimates duly certified and approved by the Construction Manager, based on the Lump Sum or unit price value of equipment installed and tested, labor and materials incorporated into said permanent work by the Contractor during the preceding month. Payments will not be made for temporary construction unless specifically provided for in the Contract Documents.

Partial payments will be made monthly based on work accomplished as of a day mutually agreed to by the District and the Contractor. Additionally, the Contractor shall submit a detailed statement of the Contractor's request for payment of acceptable materials and equipment on hand in compliance with Section 00700-8.02B, **Partial Payments: Inclusion of Materials on Hand**. Each payment request shall list each Change Order executed prior to date of submission, including the Change Order Number.

Upon receipt of Contractor's requests for payment, the District shall act in accordance with the following:

1. The Construction Manager shall review the submitted estimates, as soon as practicable after receipt for the purpose of determining that the estimates are a proper request for payment, and shall prepare a certified estimate of the total amount of work done.
2. Any request for payment determined not to be a proper payment request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven (7) days after receipt. A request for payment returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the request for payment is not proper.
3. The number of days available to the District to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the District exceeds the seven (7) day return requirement set forth in Section 00700-8.02 A2 above, in which case payment shall be made not later than the last day of such reduced period following receipt of the undisputed and properly submitted request for payment.

If requested, the Contractor shall provide such additional data as may be reasonably required to support the partial payment request. The Construction Manager will be available to meet to discuss the partial payment request prior to its resubmittal(s). When the Contractor's estimate of amount earned conforms to the Construction Manager's evaluation, the Contractor shall submit to the Construction Manager a properly completed and signed progress payment request. The Construction Manager will submit the recommended progress payment request for the District's approval and processing. Payment will be made by the District to the Contractor in accordance with District's normal accounts payable procedures; the District shall retain amounts in accordance with Section 00700 8.03, **RIGHT TO WITHHOLD AMOUNTS**.

No such estimate or payment shall be required to be made, when in the judgment of the Construction Manager, the Work is not proceeding in accordance with the provisions of the Contract, or when in the Construction Manager's judgment the total value of the Work done since the last estimate amounts to less than one thousand dollars (\$1,000).

Subject to the provisions of this section, the District shall pay the Contractor within thirty (30) days after receipt of undisputed and properly submitted requests for payment from the Contractor. In accordance with Public Contract Code Section 20104.50, if the District fails to pay an undisputed request for payment within the allotted thirty (30) days, the District shall pay interest to the Contractor equivalent to the legal rate as set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

- B. Partial Payments: Inclusion of Materials on Hand - Materials, as used herein, shall be considered to be those items which are fabricated and manufactured material and equipment. Only those materials for which the Contractor can transfer clear title to the Owner will be qualified for partial payment. The Contractor may request payment of seventy-five (75) percent of the actual net cost of these materials. The request for partial payment will be subject to retention as provided elsewhere in the Contract Documents.

To receive partial payment for materials and equipment not incorporated in the Work, it shall be necessary for the Contractor to submit to the Construction Manager a list of such materials, at least seven (7) days prior to submitting the monthly estimate of amount earned for work completed. At the Construction Manager's sole discretion, it will approve items for which partial payment is to be made subject to the following:

1. Only materials which have received Favorable Review of shop drawings will qualify.
2. Equipment and materials will only be eligible if given conditional or final acceptance by the Design Consultant and are in apparent compliance with Favorably Reviewed Shop Drawings.

3. Eligible equipment or materials must be delivered and properly stored, protected, and maintained in a manner Favorably Reviewed by the Construction Manager, at the job site.
 4. The Contractor's actual net cost for the materials must be supported by paid invoices of suppliers, or other documentation requested by the Construction Manager.
 5. Materials or equipment delivered to the Site less than thirty (30) days prior to their scheduled incorporation in the Work shall not qualify.
 6. Final payment shall be made only for materials actually incorporated in the Work and, upon acceptance of the Work, all materials remaining for which advance payments had been made shall revert to the Contractor, unless otherwise agreed, and partial payments made for these items shall be deducted from the final payment for the Work.
 7. Partial payments for materials and equipment on hand shall not be deemed to be final payment for the material nor relieve the Contractor of its obligations under the Contract.
- C. Effect of Payment – Payment will be made by Owner based on the District's observations at the site and the data comprising the progress payment request. Payment will not be a representation that the District has:
1. Made exhaustive or continuous on-site inspections to check the quality or quantity of Work;
 2. Reviewed construction means, methods, techniques, sequences or procedures;
 3. Reviewed copies of requisitions received from subcontractors and material suppliers and other data requested by Owner to substantiate Contractor's right to payment;
 4. Made examination to ascertain how or for what purpose Contractor has used money previously paid on account of the Contract Sum; or
 5. Accepted all or part of the Work.

8.03 RIGHT TO WITHHOLD AMOUNTS

- A. Retention - The District will withhold from each of the partial payments and retain as part security, five (5) percent of the amount earned until the final payment.
- B. Other Withholds - In addition to the amount which the District may otherwise retain under the Contract, the District may withhold a sufficient amount or

amounts of any payment or payments otherwise due the Contractor, as in District's judgment may be necessary to cover and/or remedy:

1. Defective work not remedied.
2. A reasonable doubt that the Contract can be completed for the balance then unpaid.
3. Damage to another contractor or third party, or to property.
4. Failure of the Contractor to maintain Record Documents current as required in Section 01720, **PROJECT RECORD DOCUMENTS**.
5. Cost of insurance arranged by the District due to cancellation or reduction of the Contractor's insurance.
6. Failure to submit, revise, resubmit or otherwise conform to the requirements herein for preparing and maintaining a construction schedule as required in Section 01310, **PROGRESS SCHEDULES**.
7. Failure to make proper submissions, as specified herein.
8. Payments due the District from the Contractor.
9. The Contractor's neglect or unsatisfactory prosecution of the Work including additional engineering and administrative costs related to construction and/or shop drawing errors and the failure to clean up.
10. Provisions of law that enable or require the District to withhold such payments in whole or in part.
11. Stop Notice claims filed by Contractor's subcontractors, of any tier, or its material suppliers.

When the above reasons for withhold amounts are removed, payment will be made to the Contractor for amount withheld because of them.

8.04 SECURITY SUBSTITUTION FOR WITHHOLDS

For any retention of amount earned by the Contractor under Sections 00700-8.02, **PARTIAL PAYMENTS**, or 00700-8.07, **FINAL INSPECTION AND PAYMENT**, the Contractor may substitute securities as provided in Section 22300 of the Public Contract Code, as amended, which states, in part, as follows:

“Provisions shall be included in any invitation for bid and in any contract documents to permit the substitution of securities for any moneys withheld by a public agency to ensure performance under a contract; however, substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmers Home

Administration of the United States Department of Agriculture, pursuant to the Consolidated Farm and Rural Department Act (7 U.S.C. Sec. 1921 et seq.), and where federal regulations or policies, or both, do not allow the substitution of securities. At the request and expense of the contractor, securities equivalent to the amount withheld shall be deposited with the public agency, or with a state or federally chartered bank in the State of California as the escrow agent, who shall then pay those monies to the contractor. Upon satisfactory completion of the contract, the securities shall be returned to the contractor.”

“Alternatively, the contractor may request and the District shall make payment of retentions earned directly to the escrow agent at the expense of the contractor. At the expense of the contractor, the contractor may direct the investment of the payments into securities and the contractor shall receive the interest earned on the investments upon the same terms provided for in this section for securities deposited by the contractor. Upon satisfactory completion of the contract, the contractor shall receive from the escrow agent all securities, interest and payments received by the escrow agent from the District, pursuant to the terms of this section.”

...

“The contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.”

...

Any Contractor wishing to exercise this option shall give notice to the District and shall thereafter execute an escrow agreement substantially similar to the form in Section 00630, **ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION**.

8.05 WARRANTY OF TITLE

No material, supplies, or equipment to be incorporated or installed in the Work under this Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the Work and agrees upon completion of all Work to deliver the premises, together with all improvements and appurtenances constructed or placed thereon by the Contractor, to the District free from any claim, liens, security interest, or charges. The Contractor further agrees that neither the Contractor nor any person, firm, or corporation furnishing any materials or labor for any work covered by this Contract shall have any right to a lien upon the premises or any improvement or appurtenances thereon, provided that this shall not preclude the Contractor from installing metering devices and other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. In the event of the installation of any such metering device or equipment, the Contractor shall advise the Owner as to the legal District thereof.

Nothing contained in this paragraph, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the District. The provisions of this Paragraph shall be inserted in all subcontracts and material contracts, and notice of its provisions shall be given to all persons furnishing materials for the work when no formal Contract is entered into for such materials.

8.06 SUBSTANTIAL COMPLETION

When the Contractor considers that the Work is Substantially Complete, the Contractor shall notify the Construction Manager in writing. Upon receipt of the notification, the Construction Manager, the District and/or their authorized representatives will make inspection, to determine if the Work and administrative requirements are sufficiently complete in accordance with the Contract Documents so the District can occupy or utilize the Work for its intended use. If items are found which prevent such use or occupancy, the Construction Manager shall notify the Contractor in writing of such items by issuing a Corrective Work Item List.

Upon the completion of such corrective work, the Contractor shall so notify the Construction Manager in writing. The Construction Manager shall inspect the Work to determine its acceptability for Substantial Completion and for determination of the status of any other items which are required to meet the terms of Substantial Completion as listed in the Contract Documents. Upon verification that the project is Substantially Complete, the Construction Manager shall prepare a Certificate of Substantial Completion and the Punch List. The Certificate shall establish the date of Substantial Completion and the responsibilities of the District and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, commencement of warranties required by the Contract Documents, and shall fix the time, not to exceed sixty (60) days, within which the Contractor shall finish all items on the Punch List or remaining work or administrative requirements accompanying the Certificate. When the preceding provisions have been approved by both the District and the Contractor, they shall sign the Certificate to acknowledge their written acceptance of the responsibilities assigned to them in such Certificate. By such acknowledgment, the Contractor agrees to pay the District's actual costs including, but not limited to, charges for engineering, inspection and administration incurred due to the failure to complete the Punch List within the time period provided in the Certificate of Substantial Completion.

8.07 FINAL INSPECTION AND PAYMENT

Upon completion of the Work, including all items on the Punch List, and upon completion of final cleaning, the Contractor shall so notify the Construction Manager in writing. Upon receipt of the notification, the Construction Manager, the District and/or their authorized representatives will make the final inspection, to determine the actual status of the Work in accordance with the terms of the Contract. If materials, equipment, workmanship or administrative requirements are found which do not meet the terms of the Contract, the Construction Manager shall prepare a Final Inspection List of such

items and submit it to the Contractor. Following completion of the work to correct all items in the Final Inspection List the Contractor shall notify the Construction Manager. The Construction Manager shall, in turn, notify the District that the Work has been completed in accordance with the Contract. Final determination of the acceptability of the Work shall be made by the District. After completion of the Work, but prior to its Acceptance by the District, the last partial payment will be made to the Contractor in accordance with Section 00700-8.02, **PARTIAL PAYMENTS**, with the right to subtract therefrom any Liquidated Damages owed to the District (provided that failure to subtract any portion of Liquidated Damages owed to the District shall not be a waiver of the District's right to collect Liquidated Damages at any time thereafter).

After receipt of the last partial payment, but prior to Acceptance of the Work by the District, the Contractor shall send a letter to the Construction Manager. The letter, pursuant to California Public Contract Code Section 7100, shall state that acceptance of the final payment described below shall operate as and shall be, a release to the District, the Construction Manager, the Design Consultant, and their duly authorized agents, from all claim of and/or liability to the Contractor arising by virtue of the Contract related to those amounts. Disputed Contract claims in stated amounts previously filed as provided in Section 00700-7.03, **RESOLUTION OF DISPUTES**, may be specifically excluded by the Contractor from the operation of the release.

Following receipt of all required submittals and the Construction Manager's written statement that construction is complete and recommendation that the District accept the project, the District will take formal action on Acceptance.

Within ten (10) days of the Acceptance by the District of the completed Work embraced in the Contract, the District will cause to be recorded in the office of the County Recorder a Notice of Completion.

Thirty-five (35) days after recording the Notice of Completion of the work involved in the Contract, the District will pay the Contractor in lawful money such sums of money as may be due the Contractor including all sums retained but excluding such sums as have previously been paid the Contractor or as may be needed to cover outstanding stop notice claims or disputes. This payment will constitute the final payment to the Contractor under this Contract except for outstanding stop notice claims and disputed amounts.

In the event of a dispute between the District and the Contractor, the District may in accordance with Public Contract Code Section 7107 withhold from the final payment an amount of one hundred fifty (150) percent of the disputed amount.

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

SECTION 00800

SUPPLEMENTARY GENERAL CONDITIONS

ARTICLE 1 - MODIFICATIONS TO THE GENERAL CONDITIONS

1.01 TIME ALLOWED FOR COMPLETION

In accordance with the provisions of Section 00700-6.02, **CONTRACT TIME**:

- **Substantial Completion of Entire Project** shall be completed within **Two Hundred (200)** consecutive calendar days from the date established in the Notice to Proceed for the commencement of Contract Time. Substantial Completion shall be as defined in Section 00800 – Article 6, **SUBSTANTIAL COMPLETION**. All other work shall be completed as part of the total allowed project time frame with the additional days for Final Completion.
- **Final Completion of Entire Project** shall be completed within **Thirty (30)** consecutive calendar days from Substantial Completion.

1.02 DAMAGES FOR DELAYS

In accordance with the provisions of Section 00700-6.05, **LIQUIDATED DAMAGES**, for the period of time that any portion of the Work remains unfinished after the time fixed for the Substantial Completion in Section 00800-1.01, **TIME ALLOWED FOR COMPLETION**, as modified by extensions of time granted by the District, it is understood and agreed by the Contractor and the District that the Contractor shall pay the District the damages listed below:

	Dollars Per Day Liquidated Damages (Amount in Dollars)
2. Substantial Completion of Entire Project	\$3,000
3. Final Completion of Entire Project	\$2,000

1.03 WEATHER DAYS

In accordance with the provisions of Section 00700-6.03 C2, **Weather Delays**, an allowance of thirty (30) working days of weather caused delay have been included in the time allowed for completion. This allowance represents a reasonable assessment of anticipated lost working days based on historical weather patterns. These weather days shall be included in the Contractor's schedule as specified in Section 01310-1.03, **WEATHER CONDITIONS**.

1.04 CONSTRUCTION NOISE

Contractor shall minimize the amount of construction noise as much as practical in order to minimize impact to the adjacent private properties. Contractor shall ensure all truck back up warning alarms are turned off within the Work area. Contractor shall provide flaggers and other necessary measures to ensure safe truck back-up movements.

Contractor shall conform to the local jurisdictional agencies noise ordinances and noise levels due to construction shall not exceed 89 dBA at 50 feet beyond the Project boundaries.

1.05 CONTRACT ADMINISTRATION

The following project representative is hereby designated by the District:

Steve Moore, General Manager

1.06 DESIGN CONSULTANT

The Design Consultant for this project is Harris & Associates, Inc..

1.07 CONSTRUCTION MANAGER

The Construction Manager for this project will be selected by May 4, 2021.

ARTICLE 2 - INDEMNITY AND INSURANCE

2.01 INSURANCE

Within ten (10) days after award of the Contract, the Contractor shall promptly obtain, at its own expense, all the insurance required by Section 00800-Article 2, **INDEMNITY AND INSURANCE**, and submit coverage verification for review and approval by the District prior to the District's execution of the Contract.

The Notice to Proceed with the Work under this Contract will not be issued, and the Contractor shall not commence work, until the below specified insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors, has been established to the District's satisfaction. Such insurance shall remain in full force and effect at all times during the prosecution of the Work and until the final completion and Acceptance thereof. In addition, the Commercial General Liability Insurance shall be maintained for a minimum of five (5) years after final completion and acceptance of the Work. The Notice to Proceed does not relieve the Contractor of the duty to obtain such insurance as required herein.

The Contractor shall not allow any subcontractors to commence work on its subcontract until all insurance required of the subcontractor, meeting all the requirements stated herein, has been obtained and verified by the Contractor. Contractor shall ensure that District is an additional insured on insurance required from subcontractors. The insurance liability limits specified in

Section 00800-Article 2, **INDEMNITY AND INSURANCE**, shall apply for all subcontractors listed in Section 00430, **DESIGNATION OF SUBCONTRACTORS**. The Contractor shall designate the insurance liability limits for all other subcontractors. For Commercial General Liability coverage, subcontractors shall provide coverage with a format at least as broad as CG 20 38 04 13.

Companies writing the insurance under this article shall be licensed to do business in the State of California or be permitted to do business under the Surplus Line Law of the State of California. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the District.

All policies of insurance required herein shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' (10 days for nonpayment of premium) written notice to the District.

Contractors shall include all costs for all insurance in the Bids.

Nothing contained in these insurance requirements is to be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from its operations under this Contract.

Any failure of the Contractor to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the District, Project Manager and the Design Consultant and Construction Manager and their officers, officials, employees, agents or volunteers.

A. **MINIMUM SCOPE AND LIMITS OF INSURANCE**

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$5,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), with limits no less than **\$5,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employers' Liability insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Contractors' Pollution Legal Liability** with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, the District requires and shall be entitled to the broader coverage and/or

higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the District.

Self-Insured Retentions

Self-insured retentions must be declared to and approved by the District. At the option of the District, either: the Contractor shall cause the insurer to reduce or eliminate such self-insured retentions as respects the District, its officers, officials, employees, and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claim administration, and defense expenses. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or District.

Waiver of Subrogation

Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain and shall submit to the District any endorsement that may be necessary to effect this waiver of subrogation. **The Workers' Compensation policy shall be endorsed with a waiver of subrogation** in favor of the District for all work performed by the Contractor, its employees, agents and subcontractors.

Claims Made Policy for Contractors' Pollution Legal Liability

If the coverage for Contractors' Pollution Legal Liability insurance is written on a claims-made coverage form:

1. The retroactive date must be shown, and this date shall be before the execution date of the contract or the beginning of contract work.
2. Insurance shall be maintained and evidence of insurance shall be provided for at least five (5) years after completion of contract work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, or start of work date, the Contractor shall purchase extended reporting period coverage for a minimum of five (5) years after completion of contract work.
4. A copy of the claims reporting requirements shall be submitted to the District for review upon request.

Special Risks or Circumstances

District reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

B. OTHER INSURANCE PROVISIONS

The aforementioned insurance policies shall contain, or shall be endorsed to contain, the following provisions:

1. **The District, its officers, officials, employees, and volunteers, and the Project Manager, Design Engineer and the Construction Manager and their officers,**

partners, employees, and agents, shall be covered as additional insureds on the CGL policy, Automobile liability, and Pollution Legal Liability with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85; or, **either** CG 20 10, CG 20 26, CG 20 33, or CG 20 38 **and** CG 20 37 forms if later revisions used).

2. For any claims related to this project, the **Contractor's insurance coverage shall be primary** insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the District, its officers, officials, employees, and volunteers, and the Design Engineer, Project Manager and the Construction Manager and their officers, partners, employees, and agents. Any insurance or self-insurance maintained by the District, its officers, officials, employees, or volunteers, and the Design Engineer and Construction Manager and their officers, partners, employees, and agents, shall be excess of the Contractor's insurance and shall not contribute with it.

C. VERIFICATION OF COVERAGE

Contractor shall furnish the District with original certificates, policy declaration pages, and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this Contract. All certificates and endorsements are to be received and approved by the District before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The District reserves the right to require complete, certified copies of all required insurance policies, including all endorsements, required by these specifications, at any time.

D. INDEMNIFICATION

To the fullest extent permitted by Law, the Contractor and each subcontractor as to its portion of the Work shall indemnify, defend and hold harmless the District, *the Project Manager* and the Design Consultant and Construction Manager and their agents, consultants and employees from and against all liability, claims, damages, losses and expenses, including but not limited to attorneys' fees and other litigation costs, arising out of or in any way connected to the performance of the Work, provided that any such liability, claim, damage, loss or expense is attributable to bodily injury, sickness, disease, or death (including that sustained by Contractor's or Subcontractor's employees), or to injury to or destruction of tangible property (other than the Work itself) including but not limited to the loss of use resulting therefrom, but only to the extent caused by the Contractor, or Subcontractor, or anyone directly or indirectly employed by them or for whose acts they may be liable, and whether or not such claim, damage, loss or expense is caused in part by a party indemnified

hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist.

Contractor's and subcontractor's duty to indemnify and save harmless shall include the duty to defend as set forth in California Civil Code Section 2778; provided, that nothing herein contained shall be construed to require Contractor or subcontractor to indemnify indemnities against any responsibility or liability in contravention of California Civil Code Section 2782.

2.02 INSURANCE DURING GUARANTEE PERIOD

Contractor shall maintain the above described worker's compensation, public liability and property damage insurance and comprehensive general liability insurance in force during the entire performance of all work the Contractor or its subcontractors during the guarantee period.

2.03 INJURY OR ILLNESS REPORTS

The Contractor shall furnish the District with a copy of the Employer's Report of Injury as required by CAL/OSHA 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 District with a copy of the Employer's Report of injury involving any subcontractor on this project.

2.04 NOTIFICATION OF INSURANCE COMPANIES

The Contractor shall advise all insurance companies to familiarize themselves with all of the conditions and provisions of this Contract, and they shall be deemed to have waived any right of special notification of any change or modification of this Contract or of extension of time, or of decreased or increased work, or of the cancellation of the Contract, or of any other act or acts by the District or its authorized employees and agents, under the terms of this Contract, and failure to so notify the aforesaid insurance companies of changes shall in no way relieve the insurance companies of their obligation under this Contract.

ARTICLE 3 - NOT USED

ARTICLE 4 - NOT USED

ARTICLE 5 - RECORD DRAWINGS AND ADDITIONAL INFORMATION

The following record information is available for review by the Contractor at the District's offices. The District makes no warranty as to the accuracy of this information.

There are no record drawings for the project site.

The CCTV Inspection pipeline condition assessment report is included in the appendices.

ARTICLE 6 - SUBSTANTIAL COMPLETION

Substantial completion of the Project as required by Section 00700-8.06, **SUBSTANTIAL COMPLETION**, requires that the following portions of the Work must be completed in accordance with the requirements of the Contract Documents:

- Completion of the Work as required by the Contract Documents to allow the District to occupy and utilize the Project for its intended purpose; and,
- Completion of the Corrective Work Item List as described in Section 00700-8.06, **SUBSTANTIAL COMPLETION**
- Portions of the Work not essential to utilization, which can be completed without interruption of the District's operations, may be completed after the Work is substantially complete, and may include the following items:
 - Final Site Clean-Up
 - Completion of the Punch List prepared by the District in accordance with Section 00700-8.06, **SUBSTANTIAL COMPLETION**.

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

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SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

The Work involves repair of District sanitary sewer pipelines and installation of new pipelines as located and described in Section 00010, **NOTICE INVITING BIDS**. Plans are included in the appendices. Closed-circuit television (CCTV) inspection reports and available sewer lateral cards are included in the appendices.

The project is generally described as follows: construct new diversion sanitary sewer pipelines and replace existing pipelines by open-cut and removal and replacement (~60 LF), replacing existing sanitary sewer by pipe bursting (~6,400 LF), including sawcut, excavation and backfill, shoring, replacing laterals, disconnecting and reinstating lateral connections, abandoning existing sewer pipelines and manholes, removing existing cleanouts and manholes, constructing new manholes and property line cleanouts, asphalt concrete pavement restoration, CCTV inspection, traffic control, project signs, and bypass pumping of sanitary sewer flow.

1.02 WORK SEQUENCE AND CONSTRAINTS

A. General:

1. The work activities associated with the project shall be completed in compliance with these specifications.
2. The Contractor shall schedule and sequence their work in order to complete the Work by the specified completion date.
3. Contractor shall construct facilities in accordance with regulatory, environmental and permit constraints listed in Section 01060, **REGULATORY REQUIREMENTS AND PERMITS**.
4. The District's wastewater collection system must remain operational at all times. Flow blockage and bypass pumping are requirements of this project. See Section 02145, **SEWAGE FLOW CONTROL AND BYPASSING**.
5. Work hours specified in the permits and these Specifications shall mean the work hours to perform all activities related to the construction within a particular work zone, including but not limited to, traffic control set up and take down, construction of project facilities, testing, daily site clean up, Storm Water Pollution Prevention Plan compliance, site restoration, and other activities that normally take place within a construction zone.

6. Contractor shall construct facilities in accordance with conditions of the encroachment permits listed in these specifications and the Storm Water Pollution Prevention Plan prepared by the Contractor.
 7. Contractor shall comply with the verbal command of the Chief of Police / Marin County Sheriff (whichever has jurisdiction), the local Captain of the Highway Patrol, and the Fire Department Chief and/or Fire Marshall with jurisdiction, or their designee and immediately stop all work and reopen through traffic where work is occurring in the event of a declared emergency by any one of the three individuals that hold that position within their agency. Work stoppage shall be considered a full day of work and no additional compensation shall be allowed as part of this project.
- B. Traffic Control and Haul Routes:
1. During non-work hours, the Contractor shall keep all lanes of traffic open and clear. All trenches shall be backfilled or covered with suitable steel plates and open to traffic. No equipment, construction material or excavated material that will interfere with traffic shall be stored on streets or roadways at any time.
 2. Traffic control shall be in accordance with Contractor submitted traffic control plans approved by the local city/county Public Works Department. Contractor shall note traffic control/phasing plans included in this bid package.
 3. Truck haul routes shall be as shown on the plans and approved by the pertinent city/county jurisdiction.
- C. Attention is brought to the traffic control plans and Section 01560-1.07, **WORKING HOURS**.
- D. Archeological monitoring may be required for some sites. Contractor shall coordinate efforts of archeological monitoring, if needed, with the Construction Manager and with Section 01060-1.07 **CULTURAL RESOURCES**.
- E. A qualified biologist, retained by the District, will perform pre-construction survey of all sites. Contractor shall coordinate efforts of pre-construction survey with the Construction Manager and shall comply with Section 01060-1.12 **BIOLOGICAL**.
- F. Tribal monitoring may be required. Contractor shall coordinate efforts of tribal monitoring with the Construction Manager and tribal representative and shall comply with Section 01060-1.07 **CULTURAL RESOURCES**.

1.03 ACCESS FOR OPERATING PERSONNEL

During the course of the Work, access to District facilities shall be maintained at all times for operation and maintenance purposes 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 the existing facilities except in direct pursuit of the Work and as favorably reviewed by

the District's representative. The Contractor shall provide safe access at all times to the existing facility for operating personnel and equipment.

1.04 DISTRICT FURNISHED MATERIALS

There are no District furnished materials for this project.

1.05 TRENCH EXCAVATION

No trench in public or private areas shall be left open during periods when the Contractor is not at the site of the work. Trenches in these areas shall either be backfilled and temporarily paved, where applicable, or covered with steel trench plates that comply with the requirements of local jurisdictional agencies for work in that jurisdiction. The maximum length of trench excavation in advance of the pipe laying operation and the maximum amount of trench remaining open without backfill during the course of the daily pipe installations shall be in accordance with local jurisdictional agencies encroachment and excavation permit requirements or a maximum of 150 feet, whichever is more restrictive.

1.06 WORK UNDER OTHER CONTRACTS

There is no work to be performed under other contracts for this project.

1.07 WORK PERCENTAGES

The Contractor shall perform at least fifty percent (50%) of the Contract bid amount. This portion of work shall encompass the performance of work by the Contractor's forces and equipment and the procurement of materials and equipment by the Contractor. Subcontractors shall not be responsible for the performance of any work or procurement of materials and equipment within the above Contractor's work percentage allotment.

1.08 UNDERGROUND FACILITIES

Contractor shall be responsible for being familiar with any existing underground facilities, per related sections of these Contract Documents.

1.09 SITE CONDITIONS

The Contractor acknowledges that it is satisfied as to the nature and location of the Work, the general and local conditions, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, and similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities need preliminary to and during the prosecution of the Work and all other matters which can in any way affect the Work and the cost thereof under this Contract.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

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SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 GENERAL

- A. Measurements of the completed work shall be in accordance with, and by instruments and devices calibrated to United States Standard Measures and the units of measurement for payment, and the limits thereof, shall be made as shown on the Plans, Specifications, General Requirements, and Supplementary Conditions.
- B. Units of Measurement
 - 1. Measurements shall be in accordance with U.S. Standard Measures.
 - 2. A pound is an avoirdupois pound.
 - 3. A ton is 2,000 pounds avoirdupois.
 - 4. The unit of liquid measure is the U.S. gallon.
- C. Certified Weights
 - 1. When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales, or when approved by the Ross Valley Sanitary District (District), on a completely automated weighing and recording system.
 - 2. The Contractor shall furnish the District with duplicate licensed weighmaster's certificates showing the actual net weights.
 - 3. The District will accept the certificates as evidence of the weights delivered.
- D. Methods of Measurement
 - 1. Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the method stipulated in the particular sections involved.
 - 2. In determining quantities, all measurements shall be made in a horizontal plane unless otherwise specified.
 - 3. Material not used from a transporting vehicle shall be determined by the District and deducted from the certified tag.
 - 4. When material is to be measured and paid for on a volume basis and it would be impractical to determine the volume, or when requested by the Contractor in writing and approved by the District in writing, the material

will be weighed and converted to volume measurement for payment purposes.

5. Factors for conversion from weight measurement to volume measurement will be determined by the District and shall be agreed to by the Contractor before such method of measurement of pay quantities will be adopted.
6. Full compensation for all expense involved in conforming to the above requirements for measuring and weighing materials shall be considered as included in the unit prices paid for the materials being measured or weighed and no additional allowances will be made therefore.
7. Quantities of material wasted or disposed of in a manner not called for under the Contract; or rejected loads of material, including material rejected after it has been placed by reason of failure of the Contractor to conform to the provisions of the Contract; or material not unloaded from the transporting vehicle; or material placed outside the lines indicated on the plans or given by the District; or material remaining on hand after completion of the Contract, will not be paid for and such quantities will be deducted from the final total quantities.
8. No compensation will be allowed for hauling rejected material.

1.02 BID ITEMS

The Bid amounts for each Bid Item will be used for comparative bid analysis. The Bid amounts will also form the basis of monthly progress payments. Each Lump Sum bid amount will undergo further breakdown as described later in this Section. Unit prices for any unit price bid items, will be the basis for monthly progress payment determinations and for any changes related to that Work item. Bid Item will also demonstrate the Contractor's compliance with the California Labor Code relating to the price for sheeting, shoring, and bracing of excavations. Bid items are not intended to be exclusive descriptions of work categories and the Contractor shall determine and include in its pricing all materials, labor, and equipment necessary to complete each Bid Item (work phase) as shown and specified. Measurement and payment for each Bid Item is defined in each section of the Special Provisions.

BID ITEMS:

A. Bid Item 1 – Mobilization and Demobilization

1. This bid items shall be lump sum. Payment shall be made at seventy five (75%) percent of the bid item amount on the first progress payment following completion of mobilization and the remaining amount on the final progress payment, with retention withheld as allowed by the Contract Documents. The Contractor may apply for the remaining twenty-five (25%) percent of the bid item amount upon completion of the project final punch list items provided by the Construction Manager.
2. *These bid items shall include payment for obtaining all bonds, all Contractor acquired permits, licenses, agreements, certifications, notices*

of intent, and temporary easements; moving onto the site of all equipment, materials, and staff including obtaining and set up of Contractor's staging area/yard; preparing Storm Water Pollution Prevention Plan; utilities coordination; furnishing and erecting all needed construction facilities; fencing; submittals; preparing traffic control plans; project signage; project security; demobilization; preconstruction photographs; video recording of surface features; progress schedules and reports; partnering; contract meetings; and record drawings.

3. Final payment for mobilization and demobilization, or any part thereof, will be approved for payment under the Contract when all applicable mobilization and demobilization items listed above have been completed.
4. This amount shall not exceed five percent (5%) of the total bid price for the Work.

B. Bid Item 2 – Traffic Control

1. This bid items shall be lump sum. Payment for this item will be prorated over the course of the Project based on percentage complete of all items.
2. These bid items includes all labor, equipment, materials and incidentals necessary to provide traffic control and operate detours for pedestrians, bicyclists, and vehicles in compliance with local agency having jurisdiction and these bid documents during construction including flagmen, hiring police, and placement of signs and changeable message boards.

C. Bid Item 3 – Overexcavation and Special Pipe Foundation

1. This bid item shall be measured by the cubic yard of overexcavation and special pipe foundation as determined by the Construction Manager.
2. This bid item includes all labor, equipment, and materials necessary to excavate, remove and properly dispose of unsuitable trench foundation material encountered during excavation of the pipe trench as determined in the field by the Construction Manager.
3. This item shall include all additional: excavation, spoils handling and disposal, geofabric, drain rock, compaction and testing not included in other payment items.
4. The Construction Manager has sole discretion in determining when unsuitable trench foundation is encountered. Payment quantity shall be for the trench width dimensions as indicated on the Drawings, times the depth and length directed in the field by the Construction Manager.
5. No adjustment in unit price will be made for increase or decrease of quantities for this bid item as set for in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, "Increase or Decreased Quantities" shall not apply.

This bid item is revocable if no overexcavation and special pipe foundation is required.

D. Bid Item 4 – Rock Excavation

1. This bid items shall be measured by the cubic yard of rock removed as determined by the Construction Manager. Payment for unit price work will be based on the actual number of cubic yards of rock removed as determined by the Construction Manager.
2. These bid items include all labor, equipment, and materials necessary to excavate, remove and properly dispose of rock encountered during excavation of the pipe trench as indicated in the Contract Drawings.
3. Rock excavation is defined when a 350 Caterpillar Excavator with a general-purpose boom, medium stick, and an extreme-service trenching bucket with a single shank rock ripper mounted to the back of the bucket, or equivalent equipment, can excavate at a production rate of less than 30 bank cubic yards per hour using normal excavation effort.
4. The Construction Manager has sole discretion in determining when rock excavation is encountered. Payment quantity shall be for the trench dimensions as indicated on the Drawings.
5. No adjustment in unit price will be made for increase or decrease of quantities for this bid item as set for in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, “Increase or Decreased Quantities” shall not apply.
6. This bid item is revocable if no rock excavation is required.

E. Bid Item 5 – Trench Sheet piling, Shoring, and Bracing

1. This bid items shall be measured in lump sum. Payment for this item will be prorated over the course of the Project based on percentage complete of all items.
2. These bid items include excavation support measures required including but not limited to: submittals; installation and removal of shoring and bracing required to stabilize and prevent movement of existing ground and to protect and provide for the safety of the Contractor’s workers due to collapse or movement of the existing ground during excavation and trenching operations, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Specifications, requirements of OSHA and California Labor Code 6700-6708.

F. Bid Item 6 – AC Surface Upheaval Repair

1. This bid item shall be measured by the square foot for AC surface upheaval repair irrespective of AC thickness as measured in the field by the Construction Manager. Payment for unit price work will be based on the actual number of square feet replaced complete and in place as

determined by the Construction Manager. The District or Construction Manager during construction operations will make the determination if/where AC surface upheaval repair will be required.

2. This bid item includes all labor, equipment, and materials necessary to replace AC surface due to upheaval, which includes saw cutting, grinding and surface demolition; removal and proper disposal of asphalt, and asphalt containing reinforcing fabric, preparation of base course, CLSM, prime coat and final asphalt concrete placing, compaction and joining, pavement markings reference development and other submittals, placement of temporary markings, removal of temporary markings, cleaning prior to final markings, restoration of final traffic stripes and markings, resetting survey monuments, vehicle detectors, restoration of speed humps and markings, and miscellaneous work for a complete system.
3. No adjustment in unit price will be made for increase or decrease of quantities for this bid item as set for in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, "Increase or Decreased Quantities" shall not apply.
4. This bid item is revocable if no AC Surface Upheaval Repair is required.

G. Bid Item 7 - PCC Pavement/Slab Excavation

1. This bid item shall be measured at the area, in square feet, of PCC pavement/slab removed and replaced as measured in the field. This bid items include all costs for sawcutting, removal and disposal of existing concrete, constructing concrete complete-in-place including formwork, reinforcement, subgrade preparation, dowels, concrete coloring, concrete texture, concrete placement, and concrete finishing and curing, including all equipment, materials and personnel associated therewith, and in accordance with the Contract Documents.
2. Payment for removal and replacing PCC slab and pavement will be made per square foot removed and installed. This unit price shall constitute full payment furnishing all labor, materials, tools, equipment, and incidentals required for doing all the work involved in the PCC pavement removal and replacement, as shown on the Plans and specified in the these Specifications, complete in place and no additional compensation will be allowed therefore.
3. No adjustment in unit price will be made for increase or decrease of quantities for this bid item as set forth in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, "Increased or Decreased Quantities" shall not apply.
4. This bid item is revocable if no PCC pavement/slab excavation is required.

H. Bid Item 8 – Sag Repair for HDPE SS

1. This bid item shall be measured by the linear foot for repair of sags found after pipe bursting operations where directed by the Construction Manager per District Standard Plans. Payment for unit price work will be based on the actual number of linear feet repaired complete and in place as determined by the Construction Manager.
2. This bid item includes all labor, equipment, and materials necessary to repair sags in pipe after pipe bursting including but not limited to all site clearing/preparation, protecting existing utilities, surveying, sawcutting, sewer flow control, removal and disposal of existing pavement, sidewalk, driveway, curb and gutter; excavation, bedding foundation support materials, backfill, compaction, dewatering, geotextile fabrics, disposal of waste materials, approved support of existing utilities, aggregate base and hot mix asphalt (not including top 2-inches of HMA) and other items such as survey monuments, signs, trails, topsoil, landscaping to match pre-construction conditions, drainage, striping, etc, pre- and post-Cleaning/CCTV inspection, temporary trench paving with hot mix asphalt, and all incidentals required for the work.
3. No adjustment in unit price will be made for increase or decrease of quantities for this bid item as set forth in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, "Increased or Decreased Quantities" shall not apply.
4. This bid item is revocable if no sag repair is required.

I. Bid Item 9 - HMA Surface Restoration Including 2” Mill per Detail 2 on Sheet D-01

1. This bid items shall be measured by the ton of HMA placed as part of top 2 inches of surface restoration where directed by the Construction Manager per Detail 2/D-01 of the plans. Payment for unit price work will be based on the actual tonnage installed complete and in place as determined by the Construction Manager.
2. These bid items include all labor, equipment, and materials necessary to restore top 2 inches of HMA surface after trenching per encroachment permits including but not limited to all site clearing/preparation, protecting existing utilities, lowering and raising existing utilities for milling, surveying, sawcutting, 2” mill of existing AC, removal and disposal of existing pavement, dressing sides of existing asphalt with asphalt emulsion, disposal of waste materials, placement and compaction of hot mix asphalt, striping, placement of pavement markers, monument restoration and all incidentals required for the work.
3. No adjustment in unit price will be made for increase or decrease of quantities for this bid item as set forth in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, "Increased or Decreased Quantities" shall not apply.

4. This bid item shall be for the top 2-inches of milling and HMA placed only. Payment for HMA placed below the top 2-inches shall be included in various bid items for pipeline work.

J. Bid Item 10 - Bid Allowance for District's Use

1. This bid item shall be a lump sum of \$200,000. Payment for this item shall be for work performed which is not included in the Contract Documents as specified in Section 00700-Article 7 CHANGES IN THE WORK, only when written direction is provided by the District or the Construction Manager. Prior to performing the work the Contractor shall submit documentation to the District in accordance with the provisions of Section 01035 MODIFICATION PROCEDURES
2. This bid item includes cost for products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead, and profit for work performed
3. At the completion of the Contract, a balancing change order will be issued and funds not used will be revoked.

See the Bid Schedule for the bid item numbers of the following bid items

K. Bid Item – Remove and Replace Existing/ Construct New Sewer by Open Trench (Various Pipe Sizes)

1. These bid items shall be measured by the linear foot of replacement of existing sewer main or construction of new sewer main by open trench per District Standard Plans. Payment for unit price work will be based on the actual number of linear feet complete and in place as determined by the Construction Manager.
2. These bid items include furnishing all labor, equipment, and materials necessary to replace existing sewer or construct new sewer by open trench including installation of new pipe materials, fittings, and appurtenances, all site clearing/preparation, excavation (including hand digging), verification of active laterals by dye testing, disconnecting and reconnecting of laterals, locating/potholing and protecting existing utilities, surveying, sawcutting, sewer flow control and bypass pumping, removal and disposal of existing AC/PCC pavement, removal and replacement of existing PCC sidewalk, removal and replacement of existing PCC curb and gutter, removal and replacement of existing PCC driveway, removal and replacement of existing PCC curb ramp (including detectable warning surface), removal and replacement of existing concrete slurry backfill, excavation, bedding foundation support materials, CLSM or LDCC, backfill, compaction, dewatering, warning/tracer tapes, tracer wire, geotextile fabrics, removal of trees as necessary, disposal of waste materials, removal and disposal of existing pipe including asbestos pipe, removal of concrete overpour at manholes, manhole wall and base repair,

couplings, tie-in to existing pipe, plugging existing manholes where a pipe has been removed, assembly, connection with existing manhole drop connections, pipe couplings, installation of trench dams, cleanup, testing of new pipe, dust control, manhole base modifications, sealing pipe ends in structures, pre- and post- Cleaning/CCTV inspection, check boards, trench plates, temporary trench paving with hot mix asphalt, T-Grind for permanent paving, permanent paving per encroachment permit conditions, surface restoration in the trench repair area as part of final restoration such as survey monuments, removal and replacement of wood wall, signs, trails, topsoil, landscaping to match pre-construction conditions, drainage, striping, etc, and all incidentals required for the work.

L. Bid Item – Pipe Burst Existing SS with New SS Pipe (Various Pipe Sizes)

1. This bid item shall be measured by the linear foot for pipe bursting existing sewer per District Standards. Payment for unit price work will be based on the actual number of linear feet complete and in place as determined by the Construction Manager.
2. This bid items includes furnishing all labor, equipment, and materials necessary to pipe burst the existing pipe including pre- and post-Cleaning/CCTV inspection, locating/potholing, protecting existing utilities, verification of active laterals by dye testing, excavating access pits/trenches and air gaps, removal of concrete overpour at manholes, verification and removal of field drains, removal and replacement of existing concrete slurry backfill, dewatering, demolition and removal of pavement surfaces, repair of laterals if damaged by pipe bursting operations, bursting existing pipe (including existing cast/ductile iron pipe and PVC pipe), installing new pipe materials, electrofusion couplings, sewer flow control and bypass pumping, concrete manhole base and wall reconstruction, connecting and grouting pipe ends in manhole, backfilling and compacting access pits/trenches and air gaps, temporary steel plates, aggregate base and hot mix asphalt (not including top 2-inches of HMA) and other items such as survey monuments, signs, trails, topsoil, landscaping to match pre-construction conditions, drainage, striping, etc, temporary pavement or sidewalk patch, pipe cleaning, pipe testing, and mandrel test, and all incidentals required for the work.

M. Bid Item – Disconnect/Reconnect Sewer Lateral To Main for Pipe Bursting

1. This bid item shall be measured per each sewer lateral disconnected and reconnected for pipe bursting operations. Payment for unit price work will be based on the actual number of laterals disconnected and reconnected complete and in place as determined by the Construction Manager.
2. This bid items includes furnishing all labor, equipment, and materials necessary to disconnect/reconnect sewer laterals to the pipe bursted sewer main and shall include excavating, dewatering as needed, demolition and removal of PCC/AC pavement surfaces, disconnection of service lateral, temporary lateral connections, extension of the service lateral,

reconnecting the service lateral with electrofusion saddles, reconnecting manhole drops with electrofusion saddles, piping, fittings, couplings required for the lateral connection, providing and placement of crushed rock, backfilling and compacting, geotextile fabric, compaction testing, temporary steel plates, temporary pavement patch, locating/potholing and protecting existing utilities, aggregate base and hot mix asphalt (not including top 2-inches of HMA) and other items, and all incidentals required to complete the work.

Bid Item – Construct New SSMH, Remove and Replace/Relocate Existing SSMH, Remove and Replace Existing SSCO/SSLH with New SSMH

1. These bid items shall be measured per each sewer manhole including frame and cover, installed regardless of depth per District Standards. Payment for unit price work will be based on the actual number of manholes installed and in place as determined by the Construction Manager.
2. These bid items include furnishing all labor, equipment, and materials necessary to install new sewer manholes including removal and disposal of existing structure(s) and installation of new manhole base, manhole barrel sections, manhole cone sections, grade rings, concrete collars, frame and cover, sealing gaskets, grout, waterproofing, waterstops, connection of tracer wire, installation of drop connections, establishing connections to the sewer main and laterals, all site clearing/preparation, bypass pumping, sawcutting, remove and replacement of existing PCC sidewalk, removal and replacement of existing PCC driveway, removal and replacement of existing PCC curb ramp (including detectable warning surface); dewatering, excavation, bedding foundation support materials, backfill, compaction, disposal of waste materials, assembly, approved support of existing utilities, potholing and protection of existing utilities, temporary trench paving with hot mix asphalt, T-Grind for permanent paving, permanent paving per encroachment permit conditions, surface restoration in the trench repair area as part of final restoration such as survey monuments, signs, trails, topsoil, landscaping to match pre-construction conditions, drainage, striping, etc, and all incidentals required for the work.

N. Bid Item – Install New Sewer by Horizontal Directional Drilling

1. This bid item will be measured for the actual horizontal length, in linear feet, of pipe installed measured from centerline of manhole, or structure, to centerline of manhole, or structure. No measurement will be made or included for surplus pipe (wastage) remaining because of Contractor's need to cut standard lengths to fit field conditions. Measurement for payment does not signify that the new pipe is accepted. These bid items include but are not limited to traffic control, locating/potholing and

protecting existing utilities, excavating access pits/trenches, dewatering for any access pits/trenches as needed, demolition and removal of pavement surfaces, installing new pipe materials, fittings and couplings, sewer flow control and bypassing, concrete manhole base and wall reconstruction, connecting and grouting pipe ends in manhole, backfilling and compacting access pits/trenches, temporary steel plates, temporary pavement or sidewalk patch, final asphalt concrete, concrete and pavement repair, striping, pipe connections, pavement markers, monument restoration, pipe cleaning, final cleaning and TV video inspection, pipe testing, including furnishing all equipment, materials and personnel associated therewith, and all incidentals required by these Specifications and Drawings.

2. Payment for installation of sanitary sewer mainlines by horizontal directional drilling will be made per linear foot installed and at the unit price named in the Bid Schedule. This unit price shall constitute full payment furnishing all labor, materials, tools, equipment, and incidentals required for doing all the work involved in the horizontal directional drilling installation, as shown on the Plans and specified in the these Specifications, complete in place and no additional compensation will be allowed therefore.

O. Bid Item– Abandon Existing SS by Filling Pipe (Various Pipe Diameters)

1. This bid items shall be measured by the linear feet of existing pipe abandoned by filling. Payment will be based on the actual linear feet of pipe filled and abandoned complete in place as determined by the Construction Manager.
2. These bid items include furnishing all labor, equipment, and materials necessary to abandon existing sewer pipe including draining and proper disposal of wastewater, filling with CLSM or LDCC, temporary bulkheads, plugging pipes and manholes with concrete, any additional sawcutting and excavation as needed, testing, additional surface restoration as part of final restoration, place and compact trench backfill and all incidentals required for the work.

P. Bid Item – Abandoned Existing SSMH

1. This bid item shall be measured per each existing structure abandoned. Payment will be based on the actual number of existing structures abandoned as determined by the Construction Manager.
2. This bid item includes furnishing all labor, equipment, and materials necessary to remove existing structures including removal and disposal of the existing structure, remove of top portion of structure to be abandoned, site clearing/preparation, sawcutting, removal and replacement of existing PCC sidewalk, removal and replacement of existing PCC curb and gutter, removal and replacement of existing PCC driveway, removal and replacement of existing PCC curb ramp (including detectable warning

surface); dewatering, excavation, sheeting and shoring, backfill, compaction, disposal of waste materials, filling of the structure to remain in place with CLSM, approved support of existing utilities, protection of existing utilities, surface restoration as part of final restoration, temporary trench paving with hot mix asphalt, T-Grind for permanent paving, permanent paving per encroachment permit conditions, and all incidentals required for the work.

Q. Bid Item – Remove Existing SSMH

1. This bid item shall be measured per each existing structure removed or abandoned. Payment will be based on the actual number of existing structures removed or abandoned as determined by the Construction Manager.
2. This bid item includes furnishing all labor, equipment, and materials necessary to remove existing structures including removal and disposal of the existing structure, remove of top portion of structure to be abandoned, site clearing/preparation, sawcutting, removal and replacement of existing PCC sidewalk, removal and replacement of existing PCC curb and gutter, removal and replacement of existing PCC driveway, removal and replacement of existing PCC curb ramp (including detectable warning surface); dewatering, excavation, sheeting and shoring, backfill, compaction, disposal of waste materials, filling of the structure to remain in place with CLSM, approved support of existing utilities, protection of existing utilities, surface restoration as part of final restoration, temporary trench paving with hot mix asphalt, T-Grind for permanent paving, permanent paving per encroachment permit conditions, and all incidentals required for the work.

R. Bid Item – Pipe Burst, Remove and Replace, or Construct New Sewer Lateral with New 4” SS (Various Lengths).

1. This bid items shall be measured per linear foot of replacement of existing sewer lateral or construction of new sewer lateral by open trench or pipe bursting per District Standard Plans. Payment shall be per linear foot of sewer lateral installed by open trench or pipe bursting complete in place as determined by the Construction Manager. Pipe bursting is the preferred method for replacement of laterals. Open cut shall be used where approved by the District or the bursting option is not feasible.
2. These bid items includes furnishing all labor, equipment, and materials necessary to replace existing sewer lateral or construct new sewer lateral by open trench including installation of new pipe materials, fittings, and appurtenances, all site clearing/preparation, locating and verifying laterals, locating/potholing and protecting existing utilities, surveying, sawcutting, sewer flow control and bypass pumping, removal and disposal of existing AC/PCC pavement, removal and replacement of existing PCC sidewalk, removal and replacement of existing PCC curb and gutter, removal and replacement of existing PCC driveway, removal and replacement of

existing PCC curb ramp (including detectable warning surface), removal and replacement of existing concrete slurry backfill, excavation, bedding foundation support materials, backfill, compaction, dewatering, warning/tracer tapes, tracer wire, geotextile fabrics, disposal of waste materials, removal and disposal of existing pipe including asbestos pipe, couplings, tie-in to existing pipe, plugging existing manholes where a pipe has been removed, assembly, connection with existing manhole drop connections, pipe couplings, installation of trench dams, cleanup, testing of new pipe, dust control, manhole base modifications, sealing pipe ends in structures, pre- and post- Cleaning/CCTV inspection, check boards, trench plates, temporary trench paving with hot mix asphalt, T-Grind for permanent paving, permanent paving per encroachment permit conditions, surface restoration as part of final restoration such as survey monuments, signs, trails, topsoil, landscaping to match pre-construction conditions, drainage, striping, etc, final concrete and pavement repair and all incidentals required for the work.

3. No adjustment in unit price will be made for increase or decrease of quantities for these bid items as set for in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, "Increase or Decreased Quantities" shall not apply.

S. Bid Item – Remove and Replace or Construct New SSCO at Property Line

1. This bid items shall be measured per each cleanout installed as directed in the field by the Construction Manager per District Standards. Payment will be based on the actual number of property line cleanouts installed complete in place as determined by the Construction Manager.
2. These bid items include furnishing all labor, equipment, and materials necessary to install new property line cleanouts including removal of existing piping and structure(s), piping, couplings, fittings, backwater prevention devices (sewer popper), utility boxes, sewage flow control, excavation, protection of existing utilities, new pipe materials, fittings, and appurtenances, dewatering, cutting and disposal of existing pipe, backfill, geotextile fabrics, compaction, surface restoration as part of final restoration such as survey monuments, signs, trails, topsoil, landscaping to match pre-construction conditions, drainage, striping, etc, temporary pavement or sidewalk patch, final concrete and pavement repair and all incidentals required for the work.
3. No adjustment in unit price will be made for increase or decrease of quantities for these bid items as set for in Section 00310 BID SCHEDULE, herein, and Section 01035 MODIFICATION PROCEDURES 1.06, "Increase or Decreased Quantities" shall not apply.

T. LUMP SUM PAYMENT ITEMS

- U. Payment items for the Project for which Contract lump sum payments will be made are as listed in the Bid Schedule.

- V. Payment for each lump sum item provides full compensation for furnishing the labor, materials, tools, and equipment and doing all the work involved to complete the work covered by each item and included in the Contract Documents. Costs for items of Work, not specifically mentioned to be included in a particular lump sum or unit price payment item, but deemed incidental to the Work to be considered complete, shall be included in the listed lump sum item most closely associated with the Work involved.
- W. The lump sum price and payment made for each item listed shall be for performing all work required to complete the item and for which separate payment is not otherwise provided.
- X. Contractor shall submit a Schedule of Values for lump sum items. Provide itemized costs of lump sum items to facilitate progress payments of lump sum items that will take longer than one month to complete and are not tied to overall project completion.

1.03 UNIT PRICE PAYMENT ITEMS

- A. Payment items for the Project on which the Contract unit price payments will be made are as listed in the approved Bid Schedule.
- B. Each unit price item provides full compensation for furnishing the labor, materials, tools, and equipment and doing all the work involved to complete the work covered by each item and included in the Contract Documents. Measurement and payment stipulations are as detailed in the Specifications.

1.04 BID SCHEDULE QUANTITIES

- A. Contract quantities are those quantities that have been calculated from the neat lines shown on the Plans and Specifications with no allowance for so-called shrinkage, swelling or settlement.
- B. When the Plans and Specifications have been altered or when disagreement exists between the Contractor and the Construction Manager as to the accuracy of the Plan and Specification quantities, either party shall, before any work is started that would affect the measurement, have the right to request in writing a change to the noted quantity.

1.05 SCHEDULE OF VALUES

- A. In addition to the requirements stated in Contract Documents, the Schedule of Values shall be in the form of an Excel hardcopy spreadsheet along with the electronic file on a disk. A Schedule of Values shall be submitted for each bid item as directed by the Construction Manager. Each component of work shall be consistent with the Contractor's Construction Schedule as defined in Section 01310 PROGRESS SCHEDULES. Construction Manager will use the approved Schedule

of Values to assist in determining monthly progress payments for associated bid items, but will pay for work in terms of percentages actually completed.

- B. Lump Sum bid items as listed in the Bid Schedule submitted by the Contractor with the accepted bid shall be included in a separate detailed Schedule of Values addendum. Each lump sum item shall be as included on the Bid Schedule and shall indicate the portion of the lump sum expected to be requested for each month for the period of the Project. Construction Manager will use this information for reviewing and approving partial payments for these items.
- C. Construction Manager will review the Schedule of Values to assure that item breakdowns are reasonable and balanced. Before any work associated with Schedule of Value items can commence, Construction Manager must approve the Schedule of Values. When approved, they will be used in reviewing and approving the associated bid items to be included in the monthly partial payment requests.
- D. Updates and proposed changes to cash flow and Schedule of Values shall be submitted with the monthly partial payment request. Construction Manager will review the updates and proposed changes and advise the Contractor as to their acceptance, modification, or rejection.

1.06 CHANGES AND EXTRA WORK

- A. Measurement and payment of changes and extra work shall be as detailed in the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01035

MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 CHANGES IN CONTRACT PRICE

This section provides supplementary procedures for the administration of changes to the Contract as specified in Section 00700-Article 7, **CHANGES IN THE WORK**. Whenever corrections, alterations, or modifications of the Work under this Contract are ordered by the District and increase the amount of work to be done, such added work shall be known as extra work; and when such corrections, alterations, or modifications decrease the amount of work to be done, such subtracted work shall be known as omitted work.

The difference in cost of the work affected by such change will be added to or deducted from the amount of said Contract price, as the case may be, by a fair and reasonable valuation, which shall be determined in one or more of the following ways as directed by the District:

- A. Where applicable, by unit prices accepted by the District and stated in the Contract Documents;
- B. By unit prices subsequently fixed by agreement between the parties;
- C. By an acceptable lump sum proposal from the Contractor; or
- D. By Force Account (as described in Section 01035-1.03, **FORCE ACCOUNT PAYMENT**), when directed in writing and administered by the District through its agents or representatives.

The prices agreed upon and any agreed upon adjustment in Contract Time shall be incorporated in the written order issued by the District, which shall be written so as to indicate an acceptance on the part of the Contractor as evidenced by its signature. By signature of the Change Order, the Contractor acknowledges that the adjustments to cost and time contained in the Change Order are in full satisfaction and accord, payment in full, and so waives any right to claim any further cost and time impacts (including loss of productivity and/or efficiency) at any time during and after completion of the Contract for the changes encompassed by the Change Order.

1.02 NEGOTIATED CHANGE ORDERS

Under the methods described in Sections 01035-1.01B and 01035-1.01C, the Contractor shall submit substantiating documentation with an itemized breakdown of Contractor and subcontractor direct costs, including labor, material, equipment rentals, and approved services, pertaining to such ordered work in the form and detail acceptable to the District.

The direct costs shall include only costs as described in Section 01035-1.04, **DIRECT COST CATEGORIES**.

The District will review the Contractor's proposal for the change and negotiate an equitable adjustment with the Contractor. After there is an agreement the District will prepare and process the Change Order. All Change Orders must be approved by the District in writing before the work can be authorized and the Change Order executed.

1.03 FORCE ACCOUNT PAYMENT

If either the amount of work or payment for a Change Order cannot be determined or agreed upon beforehand, the District may direct by written Change Order or Field Order that the work be done on a force account basis. The term "force account" shall be understood to mean that payment for the work will be done on a time and expense basis, that is, on an accounting of the Contractor's forces, materials, equipment, and other items of cost as required and used to do the work. For the work performed, payment will be made for the documented actual cost of the work as described in Section 01035-1.04, **DIRECT COST CATEGORIES**.

Prior to the commencement of force account work, the Contractor shall notify the District of its intent to begin work. Labor, equipment and materials furnished on force account work shall be recorded daily by the Contractor upon report sheets acceptable to the District. The reports, if found to be correct, shall be signed by both the Contractor and District, and/or its inspector, and a copy of which shall be furnished to the District no later than the working day following the performance of said work. The daily report sheet shall thereafter be considered the true record of force account work provided. If the District and/or its inspector, do not agree with the labor, equipment and/or materials listed on the Contractor's daily force account report, the Contractor and District and/or its inspector, shall sign-off on the items on which they are in agreement. The District shall then review the items of disagreement and will advise the Contractor, in writing, of its determination. If the Contractor disagrees with this determination, it shall have the right to file a claim notice as provided in Section 00700-7.03.

The Contractor shall maintain its records in such a manner as to provide a clear distinction between the direct costs of work paid for on a force account basis and the costs of other operations.

To receive partial payments and final payment for force account work, the Contractor shall submit, in a manner approved by the District, detailed and complete documented verification of the Contractor's and any of its subcontractor's actual costs involved in the force account pursuant to the pertinent Change Order or Field Order. Such costs shall be submitted within thirty (30) days after said work has been performed. No payments will be made for work billed and submitted to the District after the thirty (30) day period has expired.

The force account invoice shall itemize the materials used and shall cover the direct costs of labor and the charges for equipment rental, whether furnished by the Contractor,

subcontractor, or other forces. The invoice shall be in a form acceptable to the District and shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, and also the size, type, and identification number of equipment and hours operated. Material charges shall be substantiated by valid copies of vendor's invoices.

1.04 DIRECT COST CATEGORIES

The categories described below are defined to be direct costs. No other type of costs will be allowable as direct costs. Direct costs shall not include any labor costs pertaining to the Contractor's and subcontractors' managers or superintendents, their office and engineering staffs, the cost of their offices, facilities, vehicles, or anyone not directly employed on such work, nor small tools and supplies (those having a replacement value of five hundred dollars (\$500.00) or less). All such items are considered indirect costs which form a part of the Contractor's and subcontractors' overhead expenses.

The District reserves the right to furnish such labor, materials and equipment as it deems expedient, and the Contractor shall have no claim for profit or added fees on the cost of such items.

A. Direct Labor

The Contractor will be paid the cost of direct craft labor for the workers and foremen (when authorized by the District) used in the actual and direct performance of the work.

The direct labor cost will be the actual payroll cost, including wages, subsistence and travel payments, fringe benefits as established by negotiated labor agreements or state prevailing wages. To these actual wages, will be added a labor surcharge set forth in the State of California Department of Transportation publication entitled Labor Surcharge & Equipment Rental Rates. An additional allowance of eight (8) percent will be added to this labor rate surcharge. No other fixed labor burdens will be considered, unless approved in writing by the District.

Except as otherwise provided, the Contractor shall receive no additional compensation for wage premiums resulting from overtime work performed under change conditions without the prior written authorization of the District.

B. Materials

The Contractor will be paid the cost of the materials to the purchaser, including tax and delivery if paid. If the Contractor does not furnish satisfactory evidence of the cost of such materials, it shall be deemed to be the lowest current price for the materials delivered to the jobsite for the applicable quantities of the materials.

Small tools and supplies will be paid for based on seven and a half (7.5) percent of the direct labor costs for the change prior to inclusion of the markup allowances provided for in Section 01035-1.05, **MARK-UP ALLOWANCES**.

The allowance for small tools and supplies shall be deemed as full compensation for all tools and materials which are incidental to performing work including safety equipment provided by the Contractor to its employees.

C. Construction Equipment

The cost of construction machinery and equipment for changes shall be based on fair rental cost or equivalent rental cost of owned equipment. Such costs will be allowed for only those days or hours during which the equipment is in actual use. Payment for non-owner operated equipment shall be based on actual rental and transportation invoices but shall not exceed the rental rates listed for such equipment in the State of California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" which is in effect on the date upon which the work is performed. Owner-operated equipment rates shall not exceed the rates in the aforesaid Rental Rate publication plus the labor costs as provided in Section 01035-1.04A, **Direct Labor**. The rental cost allowed for equipment will, in all cases, be understood to cover all fuel, supplies, repairs, ownership, and incidental costs and no further allowances will be made for those items, unless specific written agreement to that effect is made. Compensation for idle time of equipment through delays caused by the District will be made consistent with Section 8-1.09, Right of Way Delays, of the Caltrans Standard Specifications.

Individual items of construction equipment or small tools which have a replacement value of five hundred dollars (\$500) or less shall not be charged to the Change Order work unless it can be demonstrated that the particular item is needed solely for the completion of the Change Order work.

1.05 MARK-UP ALLOWANCES

The Contractor and subcontractors shall be entitled to compensation for indirect and overhead costs, bond and insurance costs, and profit for Change Order work. This compensation shall be in the form of markup percentages applied to the direct cost of the Change Order work, as further described below. The maximum markup which will be allowed for the Contractor's combined overhead and profit will be:

- A. For work by its own organization, the Contractor may add up to the following percentages:
1. Direct Labor
 - a. Negotiated Change Orders (Section 01035-1.02): 25 percent
 - b. Force Account (Section 010350-1.03): 15 percent
 2. Materials: 10 percent
 3. Equipment (owned or rented): 15 percent

- B. For all such work performed by subcontractors, such subcontractor may add the same percentages as the Contractor as listed in Section 01035-1.05A above to its actual net increase in costs for combined overhead and profit. The Contractor may add up to five (5) percent of the subcontractor's total for its combined overhead and profit. No further compensation will be allowed for the Contractor's administration of the work performed by the subcontractor.
- C. For all such work done by sub-tier subcontractors, such sub-subcontractors may add the same percentages as the Contractor as listed in Section 01035-1.05A above to its actual net increase in costs for combined overhead and profit. The subcontractor may add up to five (5) percent of the sub-subcontractor's total for its combined overhead and profit. The Contractor may add up to five (5) percent of the subcontractor's total for its combined overhead and profit. No further compensation will be allowed for the Contractor's administration of the work performed by the subcontractor.
- D. For all such work performed by consultants, engineers, surveyors, etc. the combined total allowable markup for the Contractor and all subcontractors shall be five (5) percent of the fee total.
- E. To the total of the direct costs and markups allowed herein under, not more than two (2) percent shall be added for any and all additional contractor bond and insurance, other than labor insurance. The compensable percentage for additional bonds and insurance shall be based on actual costs for the contractor's bonds and insurance, as substantiated through documentation submitted to the District.

When both additional and deleted work are involved in any one change, the markup allowances of this section shall be applied to the net extra cost of the work, if any, after subtraction of the costs for the omitted work from the extra work. For Change Order work which results in a net decrease in cost a minimum of five (5) percent markup shall be added to the sum of the direct labor, materials and equipment as a deduction for profit, indirect and overhead costs, and reduction in bond and insurance. The Contractor shall not be entitled to nor claim for anticipated profits on work that may be omitted.

The added fixed fees shall be considered to be full compensation, covering the cost of general supervision, overhead, profit, small tools, incidentals, loss of productivity and/or efficiency, and any other general expenses. The above fixed fees represent the maximum limits which will be allowed, and they include the Contractor's and all subcontractors' indirect field and home office expenses and all other costs for cost proposal preparation, schedule analysis and preparation, operation and maintenance manual documentation, and record documents and change order administration.

1.06 INCREASED OR DECREASED QUANTITIES

Increases or decreases in the quantity of a Contract unit price bid item of work will be determined by comparing the total pay quantity of such item of work with the Bid Schedule quantity.

If the total pay quantity of any item of work required under the Contract varies from the Bid Schedule quantity by twenty-five (25) percent or less, payment will be made for the quantity of work of said item actually performed, at the Contract unit prices therefore, unless eligible for adjustment pursuant to Section 01035-1.06D, **Changes in Character of Work**.

If the total pay quantity of any item of work actually performed under the Contract varies from the Bid Schedule quantity by more than twenty-five (25) percent, in the absence of an executed Contract change order specifying the compensation to be paid, the compensation payable to the Contractor will be determined in accordance with Sections 01035-1.06A, 1.06B or 1.06C, as the case may be.

A. Increases of More than Twenty-Five (25) Percent

Should the total pay quantity of any item of work required under the Contract exceed the Bid Schedule quantity by more than twenty-five (25) percent, the work in excess of one hundred twenty-five (125) percent of the Bid Schedule quantity will be paid for by adjusting the Contract unit price, as hereinafter provided. The work up to one hundred twenty-five (125) percent of the Bid Schedule quantity will be paid for at the Contract unit prices. At the option of the District, payment for the work involved in such excess will be made on the basis of force account as provided by Section 01035-1.03, **FORCE ACCOUNT PAYMENT**.

Such adjustment of the Contract unit price will be the difference between the Contract unit prices and the actual unit costs, which will be determined as hereinafter provided, of the total pay quantity of the item. If the costs applicable to such item of work include fixed costs, such fixed costs will be deemed to have been recovered by the Contractor by the payments made for one hundred twenty-five (125) percent of the Bid Schedule quantity for such item, and in computing the actual unit cost, such fixed costs will be excluded. Subject to the above provisions, such actual unit cost will be determined by the District in the same manner as if the work were to be paid for on a force account basis as provided in Section 01035-1.03, **FORCE ACCOUNT PAYMENT** or such adjustment will be as agreed to by the Contractor and the District.

When the compensation payable for the number of units of an item of work performed in excess of one hundred twenty-five (125) percent of the Bid Schedule quantity is less than \$5,000 at the applicable Contract unit price, the District shall not be obligated to make any adjustment in said price.

B. Decreases of More Than Twenty-Five (25) Percent

Should the total pay quantity of any item of work required under the Contract be less than seventy-five (75) percent of the Bid Schedule quantity, an adjustment in compensation pursuant to this Section will not be made unless the Contractor so requests in writing. If the Contractor so requests, the revised quantity will be paid for by adjusting the Contract unit price as hereinafter provided. The work up to

seventy-five (75) percent of the Bid Schedule quantity will be paid for at the Contract unit prices. At the option of the District, payment for the quantity of the work of such item performed will be made on the basis of force account as provided in Section 01035-1.03, **FORCE ACCOUNT PAYMENT**. However, in no case shall the payment for such work be less than that which would be made at the Contract unit price.

Such adjustment of the Contract unit price will be the difference between the Contract unit price and the actual unit cost of the total pay quantity of the item, including fixed costs. Such actual unit cost will be determined by the District in the same manner as if the work were to be paid for on a force account basis as provided in Section 01035-1.03, **FORCE ACCOUNT PAYMENT**; or such adjustment will be as agreed to by the Contractor and the District.

The payment for the total pay quantity of such item of work will in no case exceed the payment which would have been made for the performance of seventy-five percent (75%) of the Bid Schedule of the quantity for such item at the original Contract unit price.

C. Eliminated Items

In the event that a part of the Work is to be eliminated in its entirety and such Work is covered by unit price(s) contained in the Bid and/or Contract Documents, the price of the eliminated Work item shall be based on the applicable unit price(s). The Contractor shall be paid five (5) percent of the total extended amount (bid price times quantity) for the eliminated Work item in consideration of the applicable Contractor's overhead costs.

Should any Contract item of the Work be eliminated in its entirety, in the absence of an executed Contract Change Order covering such elimination, payment will be made to the Contractor for actual costs incurred in connection with such eliminated Contract item if incurred prior to the date of notification in writing by the District of such elimination.

If acceptable material is ordered by the Contractor for the eliminated item prior to the date of notification of such elimination by the District, and if orders for such material cannot be canceled, it will be paid for at the actual cost, including a five (5) percent mark-up, to the Contractor. In such case, the material paid for shall become the property of the District and the actual cost of any further handling will be paid for. If the material is returnable to the vendor and if the District so directs, the material shall be returned and the Contractor will be paid for the actual costs of charges made by the vendor for returning the material. The actual cost of handling returned material will be paid for by the District.

D. Changes in Character of Work

If an ordered change in the Plans and Specifications materially changes the character of work of a Contract unit price bid item from that on which the

Contractor based its Bid price, and if the change increases or decreases the actual unit cost of such changed item as compared to the actual or estimated actual unit cost of performing the work of said item in accordance with the Plans and Specifications originally applicable thereto, in the absence of an executed Contract Change Order specifying the compensation payable, an adjustment in compensation (increase/decrease) therefore will be made in accordance with the following:

The basis of such adjustment in compensation will be the difference between the actual unit cost to perform the work of said item or portion thereof involved in the change as originally planned and the actual unit cost of performing the work of said item or portion thereof involved in the change, as changed. Actual unit costs will be determined by the District in the same manner as if the work were to be paid for on a force account basis as provided in Section 01035-1.03, **FORCE ACCOUNT PAYMENT**; or such adjustment will be agreed to by the Contractor and the District. Any such adjustment will apply only to the portion of the work of said item actually changed in character. At the option of the District, the work of said item or portion of item which is changed in character will be paid for by force account as provided in Section 01035-1.03, **FORCE ACCOUNT PAYMENT**.

If the compensation for an item of work is adjusted under this Section, the costs recognized in determining such adjustment shall be excluded from consideration in making an adjustment for such item of work under the provisions in Sections 01035-1.06A, **Increases of More Than Twenty-Five (25) Percent** and 1.06B, **Decreases of More Than Twenty-Five (25) Percent**.

1.07 COST PRICING DATA AND ACCESS TO RECORDS

All cost and pricing data submitted by the Contractor with respect to any change, prospective or executed, or any claim for extra compensation shall be a true, complete, accurate and current representation of actual cost and pricing of the work. The District may require a formal certification as to cost and pricing data submitted by the Contractor.

The District shall have access, upon reasonable notice during normal business hours, to any books, documents, accounting records, papers, project correspondence, project files, scheduling information and other relevant records of the Contractor and all subcontractors directly or indirectly pertinent to the work, original as well as changes and claimed extra work, and the Contract for the purpose of making audit, examination, excerpts and transcriptions and in order to verify or evaluate any change, prospective or executed, or any claim for which compensation has been requested or notice of potential claim has been tendered.

Such books, documents, and other records mentioned above shall include, but are not limited to all those reasonably necessary to determine the accurate amount of direct and indirect costs, job site, and delay and impact costs, however characterized, and shall

include the original Bid and all documents related to the Bid and its preparation, as well as, the as-planned construction schedule and all related documents.

Such access shall include the right to examine and audit such records and make excerpts, transcriptions, and photocopies at the District's cost.

1.08 TIME EXTENSIONS FOR CHANGE ORDERS

If the Contractor requests a time extension for the extra work necessitated by a proposed Change Order, the request must comply with the applicable requirements of Section 01310-1.06, **TIME IMPACT ANALYSES**.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

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SECTION 01050
FIELD ENGINEERING

PART 1 - GENERAL

1.01 DATUM

Vertical and horizontal datum is based on the coordinates and elevations shown on the Drawings. The Contractor shall establish other control and reference points from these District furnished reference points as required to properly layout the Work. The Contractor shall confirm all relative elevations between manholes identified on the plan prior to start of construction. All connections shall be installed based on actual elevations of existing structures to which connections are made.

Contractor shall protect control points and preserve permanent reference points during construction. Any control points or monuments lost, disturbed or destroyed by the Work shall be replaced by the Contractor's surveyor.

1.02 QUALITY ASSURANCE

The Contractor's surveyor or engineer responsible for surveying specified herein shall be a registered land surveyor in the state of California.

1.03 LINES AND GRADES

The Contractor shall lay out all work, including structures and pipelines, and shall be responsible for any errors resulting therefrom. In all questions arising as to proper location of lines and grades, the District's decision will be final.

As part of the bid price for the construction of the improvements, the Contractor shall provide and be responsible for the layout of all work. The Contractor shall provide all necessary surveys, field staking, and positioning for the construction of all components at the proper alignment, elevations, grades, and positions, as indicated on the Drawings and as required for the proper operation and function. The Contractor shall stake its work limits.

The Contractor's layout shall be based on existing structures, survey control and bench marks established by the District.

The Contractor shall supply such labor as required, at no extra charge, to aid and assist the District in checking location and grades of the work as set by the Contractor if the District desires to perform this checking. This shall include moving materials and equipment located between monuments and the construction work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01060

REGULATORY REQUIREMENTS AND PERMITS

PART 1 - GENERAL

1.01 APPLICABLE CODES

Contractor shall comply with all laws, codes, and ordinances applicable to the Project; see Technical Specifications for applicable codes. The omission of a code shall not excuse nor relieve the Contractor's obligation to comply with any such code applicable to the Work.

1.02 FEES AND PERMITS

The Contractor shall obtain necessary encroachment permits from the **Town of San Anselmo, Marin Municipal Water District (MMWD)**, Pacific Gas and Electric (PG&E), or other agency having jurisdiction over the construction area, and shall be responsible for satisfying all requirements, calling for inspections, and obtaining final approvals. The Contractor shall notify the Construction Manager of the need and the readiness of all required inspections. All inspections are to be coordinated with the Construction Manager. The Contractor shall comply with all construction conditions stipulated in the permits. The Contractor shall pay for all permits, fees and inspections required for local agency and code requirements.

The Contractor shall be responsible for and the District shall not provide reimbursement for any costs required for the re-inspection of defective work or additional costs due to the Contractor's failure to properly schedule the inspections.

The pipe repairs may go through multiple agency jurisdictions where the Contractor shall meet special constraints and permit conditions. The Contractor shall comply with the conditions of the permits. Summary information related to the permits is provided in this section only as an aid to the Contractor in the review of the permit requirements and shall not supersede any of the specific requirements of the various permits. The Contractor shall also include in its overall bid all costs of implementing and meeting environmental requirements.

The intent of this Section is to provide Bidders with an abstract of the requirements of permits required for the Work under this Contract.

A. CITY OR COUNTY

Contractor shall obtain necessary Encroachment Permits from the local city or county Department of Public Works, or agency having jurisdiction over the construction area. An Encroachment Permit shall be obtained by the Contractor for any work in the public right-of-way and submitted in approved form prior to any work taking place within that jurisdiction. Contractor shall be responsible for

satisfying all requirements and conditions of the permits. Contractor shall pay for fees/costs associated with the Encroachment Permit for the Project as part of their bid.

B. CAL-OSHA

Contractor shall comply with conditions and regulations of CAL-OSHA for this project. Contractor shall obtain necessary permits if required.

C. BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD)

BAAQMD rules and regulations may apply to Contractor's work. Contractor shall obtain necessary permits if required. Contractor shall utilize only construction vehicles which meet federal and state air emission standards. The Contractor shall take adequate dust control measures such as periodic water applications to the exposed soils at the construction site.

1.03 STORM WATER QUALITY CONTROLS

A. On Sept. 2, 2009, the State Water Resources Control Board (State Water Board) adopted a revised General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ) for all categories of construction storm water discharges. This permit is a statewide general construction storm water permit for construction activity that results in a land disturbance of one (1) acre or more. Contractor shall be responsible for compliance with the State of California Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009, as well as compliance for construction of this Project with the District's Permit Coverage as a Small MS4s under Phase II NPDES General Permit, and existing District storm water regulations.

B. Since the District is responsible to the State for the preparation of and compliance with the various management plans called for in the permit, the District requires the Contractor to provide the detail planning and compliance activities required insofar as they would potentially affect Contractor's methods and means of performing the Work. The conditions of the permit applicable to the Contractor are as follows:

1. Discharge prohibitions
2. Receiving water limitations
3. Special Provisions for Construction Activity
 - a. Standard Provisions 2, 3, 5, and 6
4. Section A: Storm Water Pollution Prevention Plan

- a. Contractor shall prepare a storm water pollution prevention submittal and obtain approval from District prior to the start of any construction activity with the potential for adverse impacts to storm water quality. It is recommended that Contractor's storm water pollution prevention submittal be developed by a Qualified Storm Water Pollution Prevention Plan ("SWPPP") Developer ("QSD") and implemented by a Qualified SWPPP Practitioner ("QSP") unless a SWPPP is not required under the Construction General Permit. In the event that a SWPPP is not required, Contractor shall remain obligated to acquire District approval of a storm water pollution prevention submittal.

5. Section B: Monitoring and Reporting Requirements

- a. The Contractor shall comply with all applicable paragraphs of this section of the SWPPP. The Contractor shall conduct inspections of the construction site prior to anticipated storm events and after storm events to assess effectiveness of the SWPPP.
- b. A record of the inspections must include the date of the inspection, the individual(s) who performed the inspection and the observations.
- c. The inspection reports shall be submitted within twenty-four (24) hours of the event.

6. Storm Water Pollution Prevention Best Management Practices

- a. In preparing and complying with its storm water pollution prevention submittal, Contractor shall consider best management practices ("BMPs") for erosion control, sediment control, run-on and runoff control and make all necessary provisions for inspection, maintenance and repair of all BMPs employed during the course of construction and until the Project is accepted and the Contractor has fully demobilized from the site. All BMPs must be periodically inspected, maintained, and repaired to ensure that receiving water quality is protected.
- b. Contractor shall properly handle, store and dispose of any potential pollutants, and actively prevent the contamination of waterways or subsoil.
- c. Contractor shall eliminate sediment discharge into storm drains, the Bay or any other receiving waters due to

rainwater run-off, and shall eliminate all construction debris, soil or contaminants prior to discharge of storm water.

- d. Contractor shall ensure that construction materials are properly handled and managed to minimize threats to water quality. These procedures shall include good housekeeping measures for: construction materials, waste management, vehicle storage and maintenance, landscape materials, and other potential pollutant sources.
- e. Contractor shall control all non-storm water discharges directly connected to receiving waters or the storm drain system must during construction, including any dewatering activities associated with construction.

1.04 EXISTING UTILITIES AND IMPROVEMENTS

A. General

- 1. Access shall be provided at all times to all fire hydrants.
- 2. Contractor shall contact Underground Services Alert (USA) at (800) 227-2600 or (800) 642-2444 one week in advance of starting excavation to provide for marking of utilities. Shutdown of utilities shall be performed only by the utility owner.
- 3. The Contractor shall protect all existing utilities, pavement, sidewalks, curbs, fences, landscaping, and other improvements that are not designated for removal, from damage by his operations. Any such features that are damaged or temporarily relocated by the Contractor during construction shall be repaired or restored by the Contractor to a condition equal to or better than they were prior to such damage or temporary relocation all in accordance with requirements of the contract documents and at no expense to the District.
- 4. The location of known existing utilities and pipelines are shown on the drawings in their approximate locations. Some of the locations include multiple conduits. The Contractor shall exercise care in avoiding damage to those facilities which are to remain in service subsequent to the work, and shall be held responsible for their repair if damaged. The Contractor shall also exercise care in maintaining those facilities which will be removed or abandoned by the work until such time as they can be removed or abandoned.
- 5. It shall be the Contractor's responsibility to ascertain the actual location of all existing utilities and other improvements that will be encountered in his construction operations, and to see that such utilities or other

improvements are adequately protected from damage due to such operations. There is no guaranty that all utilities or obstructions are shown or that the locations indicated are accurate. The Contractor shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary. The cost of repair of any damages to existing utilities shown on the Plans, marked in the field, or attributable to negligence on the part of the Contractor shall be at the Contractor's expense.

6. Nothing herein shall be deemed to require the public agency to indicate the presence of existing overhead power, telephone and TV cable or underground service laterals and appurtenances when the presence of such utilities on the site of the construction can be inferred from the presence of visible facilities, such as poles, buildings, or meter and junction boxes, on or adjacent to the site of construction; provided, however, nothing herein shall relieve the public agency from identifying buried main or trunk lines in the Plans and Specifications.

B. Owner's Right of Access

1. The right is reserved to the District and to the owners of public utilities and franchises to enter at any time upon any public street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the Work of this Contract.

C. Exploratory Excavation

1. The Contractor shall verify the exact locations and depths of all utilities shown on the Plans or by Underground Services Alert (USA). Prior to trenching or excavating for any pipe or structure, the Contractor shall make exploratory excavations to completely expose all utilities shown on the drawings, directed by the District, or located by USA that may interfere with the work. Excavations around underground electrical ducts and conduits shall be performed using extreme caution to prevent injury to workers or damage to the electrical ducts or conduits.
2. The Contractor shall contact the owner of each utility to determine if they permit potholing of their utility or if they pothole with their own personnel. All such exploratory excavations shall be performed as soon as practicable after award of the contract and, in any event, a sufficient time in advance of construction to avoid possible delays to the Contractor's work.
3. The cost for performing said excavations shall be included in the contract unit price for various items of work. If the Contractor does not expose all required utilities, it shall not be entitled to additional compensation for work necessary to avoid interferences or for repair to damaged utilities.

4. When such exploratory excavations show the utility location as shown to be in conflict with the work, the Contractor shall so notify the District and a method for correcting the conflict will be supplied by the District. The Contractor will be reimbursed for the cost of correcting the conflict in accordance with Section 00700-Article 7, **CHANGES IN THE WORK**.

D. Utilities to be Moved

1. Where the proper completion of the work requires the temporary removal and/or relocation of an existing utility or other improvement the Contractor shall remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the District and the owner of the facility. In all cases of such temporary removal or relocation, restoration to former location shall be accomplished by the Contractor in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.
2. In case it shall be necessary to permanently move any existing utility or improvement, the Contractor shall notify the District a sufficient time in advance for the necessary measures to be taken to prevent interruption of service or delay of the work.

E. Underground Utilities Shown or Indicated

1. Existing utility mains and improvements that are shown on the Plans or the locations of which are indicated to the Contractor prior to excavation and that are to be retained, and all utility lines that are constructed during the work shall be protected from damage during excavation and backfilling, and if damaged, shall be immediately repaired by the Contractor at no expense to the District. This provision shall also apply to existing utility services whose locations can be inferred from meters, vaults, valves, and other markings, or that are indicated by the owner of the utility.
2. All buried utilities shall be considered to be correctly shown or indicated if their true locations are within ten (10) horizontal feet of the locations shown either on the Plans or marked on the ground by the utility's owner regardless of depth.
3. The Contractor shall receive no additional compensation for extra work or delay for locating such correctly shown or indicated utilities.

F. Underground Utilities Not Shown or Indicated

1. If the Contractor encounters any existing utility mains that are not shown or correctly shown on the Plans, and the locations of which are not correctly indicated to the Contractor prior to excavation, he shall

immediately make a written report to the District. If directed by the District, repairs shall be made by the Contractor under the provisions for changes and extra work. This provision shall also apply to existing utility services whose locations cannot be inferred from meters, vaults, valves, or other markings, and are not indicated to the Contractor prior to excavation by the owner of the utility.

2. The Contractor shall be reimbursed for repair, removal, and/or relocation of these utilities, provided that he exercised reasonable care to avoid causing the damage. Reimbursement will be limited to extra materials, extra labor, and idled equipment that was actually working on the portion of the work that was stopped due to the damage and could not reasonably be reassigned to another task of the work.
3. The Contractor shall not be assessed liquidated damages for delay in completion of the Project when such delay was due to utilities that were not shown or located, or could not be inferred from visual evidence.

G. Approval of Repairs

1. The utility or improvement owner 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.
2. All repairs to a damaged improvement are subject to inspection and approval by an authorized representative of the improvement owner before being concealed by backfill or other work.

H. Maintaining in Service

1. All oil and gasoline pipelines; railroad facilities; power, telephone or communication cable ducts; gas and water mains; irrigation, sewer, and storm drain lines; and overhead power and communication poles, wires and cables, encountered along the line of the work shall remain continuously in service during all the operations under the contract, unless other arrangements satisfactory to the District are made with the owner of said facilities.
2. Planned facility shutdowns shall be accomplished as required by the owner of the facility. In some cases, this may require night or weekend work which shall be at no additional cost to the District. 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 utility systems to a minimum. No utility interruption will be permitted without the prior approval of the District and the specific utility. The Contractor shall immediately contact PG&E by calling (800) 743-5000 should any damage occur to the pipelines, cables, appurtenances, or overhead power lines.

3. The Contractor shall be responsible for all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.

1.05 RIGHTS-OF-WAY

- A. The Contractor shall not do any work that would affect any existing oil, gas, sewer, or water pipeline; any existing telephone, telegraph, or electric transmission line; any fence; any railroad facility; or any other structure, nor shall the Contractor enter upon the rights-of-way involved until notified by the District that the Owner has secured authority therefore from the proper party. After authority has been obtained, the Contractor shall give said party due notice of its intention to begin work, comply with any preconstruction easement conditions, and shall give said party convenient access for removing, shoring, supporting, or otherwise protecting such pipeline, transmission line, ditch, fence, or structure, and for replacing same.
- B. When two or more contracts are being executed at one time on the same or adjacent land in such manner that work on one contract may interfere with that on another, the Owner shall determine the sequence and order of the work. When the territory of one contract is the necessary or convenient means of access for the execution of another contract, such privilege of access or any other reasonable privilege may be granted by the Owner to the Contractor so desiring, to the extent, amount, in the manner, and at the times permitted. No such decision as to the method or time of conducting the work or the use of territory shall be made the basis of any claim for delay or damage, except as provided in the General Conditions for temporary suspension of the work, Section 00700-6.06, **SUSPENSION OF WORK**.

1.06 PRIVATE PROPERTIES

- A. Access shall be provided to all private property owners impacted by the Project whether along the pipe alignment or one of the truck haul routes. Written notification shall be provided to each property owner along the alignment, three times before the work commences in the vicinity of said property. All notifications shall be submitted for approval by the Construction Manager prior to sending to property. Contractor shall document that each property owner received notification. First notification shall be 7 days prior to planned construction. Second notification shall be the day before planned construction.
- B. Contractor shall contact property owner on the day of construction to finalize coordination of vehicle access needs and shall provide vehicle access with a maximum of a ten-minute delay to or from the affected property at any time so requested by the person(s) needing access to the property.

- C. The Contractor shall exercise proper construction procedures, and controls and surface restoration shall be considered of the utmost importance during prosecution of the work and as a condition of final acceptance.
- D. In accordance with Section 01050, **FIELD ENGINEERING**, the Contractor shall prepare a preconstruction survey of private properties adjacent to where the work will occur (including hauls routes) in order to provide a basis for determining proper restoration. The Contractor shall preserve and restore existing improvements within the work area as required.
- E. All restoration work performed shall be subject to the same 1 year warranty period as the other contract work. The Contractor, however, shall not be responsible for damage or loss of restored facilities should it be determined that said loss or damage was due to property owner negligence in maintenance of said facilities. Facilities will be maintained by the property owner from date of completed restoration of same by the Contractor.

1.07 CULTURAL RESOURCES

- A. The Contractor's attention is directed to the National Historic Preservation Act of 1966 (16 U.S.C. 470) and PRM 75-27 which provides for the preservation of potential historical architectural, archeological, or cultural resources (hereinafter called "cultural resources").
- B. The Contractor shall conform to the applicable requirements of the National Historic Preservation Act of 1966 as it relates to the preservation of cultural resources. Fair compensation to the Contractor for delays resulting from such cultural resources investigations shall be made.
- C. In the event of accidental discovery of cultural resources, all ground-disturbing activity in the area of impact shall cease (Stop Work Order) until RVSD retains the services of a qualified archaeological consultant, who shall notify FIGR, examine the findings, assess their significance and offer recommendations for any procedures deemed appropriate to further investigate and/or mitigate adverse impacts to those cultural resources which have been encountered.
- D. Such Stop Work Order shall be effective until such time as a qualified archaeologist can be called to assess the value of these potential cultural resources and make recommendations to the District. Any Stop Work Order shall contain the following:
 - 1. A clear description of the work to be suspended
 - 2. Any instruction regarding issuance of further orders by the Contractor for material services
 - 3. Guidance as to action to be taken on subcontracts

4. Any suggestions to the Contractor as to minimization of his costs
 5. Estimated duration of the temporary suspension
- E. If an archaeological deposit is found, it shall be assessed for potential significance by a qualified archaeological consultant retained by RVSD. Areas in proximity to shellmounds often have re-deposited pockets or sparse shell midden resulting from removal/transport of shell materials. If such shell is found in the absence of any other cultural materials or human remains, or other cultural materials are present but deemed not historically significant, such materials shall be photographed and recorded. If the archaeologist identifies an intact and potentially significant archaeological resource, he or she shall develop a treatment plan in consultation with the RVSD, the SWRCB, the Federated Indians of Graton Rancheria (FIGR) (in the event of a prehistoric site) and the State Historic Preservation Officer (SHPO). This plan would likely entail a program of systematic data recovery in which cultural materials are documented and removed.
- F. If the archaeologist determines that the potential find is a bona fide cultural resource, at the direction of the District, the Construction Manager shall extend the duration of the Stop Work Order in writing, and the Contractor shall suspend work at the location of the find.
- G. Equitable adjustment of the construction contract time shall be made in the following manner: If the work temporarily suspended is on the “critical path,” the total number of days for which the suspension is in effect shall be added to the number of allowable contract days.
- H. If human remains are encountered, the follow procedures will be implemented:
1. Per the stipulations of the California Health and Safety Code Section 7050.5(b), the Marin County Coroner's Office will be contacted immediately; this will occur whether or not a Most Likely Descendant has already been appointed.
 2. The Coroner's Office has two working days in which to examine the identified remains. If the Coroner determines that the remains are Native American, then—if a Most Likely Descendant has not yet been appointed—the Office will notify the Native American Heritage Commission within 24 hours.
 3. Following receipt of the Coroner's Office notice, the NAHC will contact a Most Likely Descendant. The Most Likely Descendant then has 48 hours in which they can make recommendations to the project sponsor and consulting archaeologist regarding the treatment and/or re-interment of the human remains and any associated grave goods.

4. Appropriate treatment and disposition of Native American human remains and associated grave goods will be collaboratively determined in consultation between the appointed Most Likely Descendant, the consulting archaeologist, and the landowner or authorized representative. The treatment of human remains may potentially include the preservation, excavation, analysis, and/or reburial of those remains and any associated artifacts.
5. If the remains are determined not to be Native American, the Coroner, archaeological research team, and RVSD will collaboratively develop a procedure for the appropriate study, documentation, and ultimate disposition of the historic human remains.

1.08 SPECIAL WORK HOURS FOR SPECIFIC ITEMS OF WORK

- A. The following items of work are required to be completed during the specified time period:
 1. Working hours and school year restrictions are defined in Section 01560-1.07, **WORKING HOURS**.

1.09 NIGHT WORK (NOT USED)

1.10 PROTECTION OF STREET OR ROADWAY MARKERS

- A. It is the responsibility of the Contractor to protect all survey monuments, survey markers, and street markers in the area of his work.
- B. Prior to breaking pavement or starting excavation, the Contractor shall reference all survey monuments and markers that will be affected by his work, and reset such monuments and markers after construction, in accordance with the requirements of Marin County.
- C. Referencing and resetting of survey monuments and markers shall be done by a land surveyor registered in the State of California who is hired by the Contractor.

1.11 WORK WITHIN PRIVATE PROPERTY

- A. The Contractor shall restrict operations to cause the least amount of damage to the surrounding property and to save as many trees and plants as possible. If damage to the surrounding property has occurred, the Contractor shall restore the property to a condition equal to or better than that which existed prior to the Contractor's entry, or as required as part of these Contract Documents.

1.12 BIOLOGICAL

- A. If initial construction is proposed during the nesting season (February 1 to August 31), a focused survey for nesting raptors and other migratory birds shall be

conducted by a qualified biologist within 7 days prior to the onset of construction in order to determine whether any active nests are present in the area within 100 feet of proposed construction.

- B. If no active nests are identified during the construction survey period, or development is initiated during the non-breeding season (September 1 to January 31), construction may proceed with no restrictions.
- C. If bird nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the CDFW, and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated elsewhere in the APEs.
- D. A report of findings shall be prepared by the qualified biologist and submitted to the RVSD for review and approval prior to initiation of construction during the nesting season (February 1 to August 31). The report shall either confirm absence of any active nests or should confirm that any young are located within a designated no-disturbance zone and construction can proceed. No report of findings is required if construction is initiated during the non-nesting season (September 1 to January 31) and continues uninterrupted according to the above criteria.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01090

REFERENCES

PART 1 - GENERAL

1.01 CODES AND STANDARDS

Whenever reference is made to a code or standard, it means the latest edition in effect the date that the Contract Documents are dated. Where codes, standards and reference documents are referred to in the Contract Documents, the Contractor may submit a written request to the District for assistance in locating such documents. Within three days of receipt of such request, the District will notify the Contractor as to where the document(s) can be reviewed.

No provision of any such standard, specifications, manual, code or instruction shall be effective to change the duties and responsibilities of the District, District's representative, or any of their consultants, agents, or employees from those set forth in the Contract Documents. Nor shall any of the aforementioned be effective to assign to the District or the District's representative, or any of their consultants, agents, or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

1.02 DEFINITIONS OF WORDS AND TERMS

Where used in the Contract Documents, the following words and terms shall have the meanings indicated. The meanings shall be applicable to the singular, plural, masculine and feminine of the words and terms.

- A. Acceptance - Formal action of the District in determining that the Contractor's work has been completed in accordance with the Contract and in notifying the contractor in writing of the acceptability of the work.
- B. Acts of God - "Acts of God" shall include only the following occurrences or conditions and effects: earthquakes in excess of a magnitude of 3.5 on the Richter Scale and tidal waves.
- C. Addenda - Supplemental written specifications or drawings issued prior to bid submittal which modify or interpret these Contract Documents by addition, deletion, clarification, or corrections.
- D. Agreement - The written document covering the performance of the Work as more fully described in Section 00500, **CONSTRUCTION AGREEMENT**.
- E. Bid - Offer of a bidder submitted on the prescribed form setting forth prices of the Work to be performed.

- F. Bidder - Individual, partnership, corporation, or a combination thereof, including joint ventures offering a bid to perform the Work.
- G. Clarification Letter - A Clarification Letter is issued by the District to address the clarification of Contract issues raised by the Design Consultant or District.
- H. Completion - The word completion shall indicate Substantial Completion.
- I. Contract - The word "Contract" means this Contract, as set forth in the Agreement and the Contract Documents.
- J. Contract Change Order - A written order to the Contractor, covering changes in the plans or quantities, or both, and establishing the basis of payment and time adjustments for the work affected by the changes. Also referred to as a Change Order.
- K. Contract Documents - The words "Contract Documents" shall mean any or all of the following items, as applicable:
1. Notice Inviting Bids
 2. Instructions to Bidders
 3. Information Available to Bidders
 4. Bid Form
 5. Bid Schedule
 6. Bid Guaranty Bond
 7. Certification of Bidder's Experience and Qualifications
 8. Designation of Subcontractors
 9. Site Visit Affidavit
 10. Non-Collusion Affidavit
 11. Affidavit of Safety Compliance
 12. Construction Agreement
 13. Bond of Faithful Performance
 14. Payment Bond
 15. Escrow Agreement
 16. General Liability Endorsement
 17. Auto Liability Endorsement
 18. General Conditions
 19. Supplementary General Conditions
 20. General Requirements

21. Specifications
22. Drawings
23. Addenda, if any
24. Executed Change Orders, if any
25. Field Orders
26. Notice to Proceed
27. Permits

Each of these items is to be considered by reference as part of the Contract Documents, also referred to as Contract.

- L. Contract Price (also referred to as Contract Amount) - The amount payable to the Contractor under the terms and conditions of the Contract based on the price given on the bidding schedule, with adjustments made in accordance with the Contract. The Total Base Amount given in the Bid Schedule (Section 00310) shall be either a lump sum bid or the summation of the unit price bids multiplied by the estimated quantities set forth in the bid form.
- M. Contract Time - Number of calendar days stated in the Contract for the completion of the Work.
- N. Contractor - The individual partnership, corporation, or combination thereof including joint ventures who enter into the Contract with the District for the performance of the Work. The term appropriately extends to subcontractors, subtier subcontractors, consultants, equipment and material suppliers and their employees which are utilized by the Contractor.
- O. Contractor's Plant and Equipment - Equipment, material, supplies, and all other items, except labor, brought onto the site by the Contractor to carry out the work, but not to be incorporated in the work.
- P. Corrective Work Item List - List of incomplete items of work, incomplete administrative requirements and items of work which are not in conformance with the Contract, prepared by the District and issued to the Contractor as an attachment to the response to the Contractor's notification of Substantial Completion.
- Q. Days - The word "Days" shall mean calendar days, including legal holidays, Saturdays and Sundays, unless specifically noted otherwise.
- R. Design Consultant - The engineer or architect designated by the District to have design control over the Work or a specified portion of the Work, acting either directly or through duly authorized representatives. Such representatives shall act within the scope of the particular duties delegated to them. The Design Consultant may also furnish inspection services as provided by the Contract.

- S. Direct - Action of the District by which the Contractor is ordered to perform or refrain from performing work under the Contract.
- T. District - The word "District" refers to the Sanitary District No. 1 of Marin County, the governing body of which is termed the Board.
- U. District Representative - The person designated in writing by the District to act as its agent on specified matters relating to this Contract. The District's Representative is an employee of the District who has been designated to represent the District.
- V. Drawings - Also referred to as "Plans". That part of the Contract Documents consisting of the graphical and technical requirements of the Contract as included on the plan sheets.
- W. Engineer - Engineer may also be referred to as Design Consultant based on his/her/their roles as defined in Section 00700, **GENERAL CONDITIONS**, and their separate contracts with the District.
- X. Favorable Review - "Favorable Review" means that the person or entity acting on behalf of the District has reviewed a proposal or submittal and found it acceptable as to the aspects for which review was sought. "Favorable Review" does not imply any approval of deviations from the Contract Documents which can only be made by formal Field Directive, Field Order or Contract Change Order.
- Y. Field Directive - Written documentation of the actions of the District in directing the Contractor. Also referred to as a Directive.
- Z. Field Order - A written instruction given to the Contractor authorizing work that is a change to the scope of work carried out on a time and material basis.
- AA. Final Inspection List - List of materials, equipment, workmanship, or administrative requirements, which are not in conformance with the Contract. The list shall be prepared by the District and submitted to the Contractor following the Contractor's notice of completion of the Work, including all items on the Punch List.
- BB. Float - Float or "total float" shall be defined as provided in the Associated General Contractors of America "CPM in Construction, A Manual for General Contractors".
- CC. Furnish - To deliver to the job site or other specified location any item, equipment or material.
- DD. General Conditions - Sections 00700, **GENERAL CONDITIONS**, and 00800, **SUPPLEMENTARY GENERAL CONDITIONS**, which form the part of the Contract Documents representing the general clauses that establish how the project is to be administered.

- EE. General Requirements - Division 1, **GENERAL REQUIREMENTS**, which forms the part of the Contract Documents establishing special conditions or requirements peculiar to the work and supplementary to the General Conditions.
- FF. Herein - Refers to information presented in these Contract Documents.
- GG. Holidays - Legal holidays shall include the following holidays designated by the District: New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksgiving, and Christmas Day.
- HH. Install - Placing, erecting, or constructing complete in place any item, equipment, or material.
- II. Notice to Proceed - Notice to Proceed shall mean the written notice issued by District to Contractor authorizing him to proceed with the work and establishing the date of commencement of the Contract Time. Notice to Proceed may or may not include separate dates establishing the date of commencement of the submittal process.
- JJ. Owner - The word "Owner" shall have the same meaning as the term "District."
- KK. Paragraph - For reference or citation purposes, a paragraph shall refer to the paragraph, or paragraphs, called out by paragraph number and alphanumeric designator.
- LL. Person - The term, person, includes firms, companies, corporations, partnerships, and joint ventures.
- MM. Plans - See "Drawings."
- NN. Project - The undertaking to be performed under the provisions of the Contract.
- OO. Provide - Furnish and install, complete in place.
- PP. Punch List - List of incomplete items of work, incomplete administrative requirements and items of work which are not in conformance with the Contract, prepared by the District and issued to the Contractor as an attachment to the Certificate of Substantial Completion.
- QQ. Request for Information - Also referred to as "Request for Clarification." A Request for Information (RFI) is issued by the Contractor to the District to request resolution of a question on a Contract issue. A RFI is not to be used for request for material/equipment substitutions or value engineering/cost reduction incentive proposals.
- RR. Request for Quotation - A request for a proposed cost made of the Contractor by the Owner to add, delete or change the Work. A Contract Change Order is issued upon Agreement of Price and nature of the change of the Work.

- SS. Shall - The use of "shall" or "will" means that the Contractor or District, as appropriate, is contractually or legally obligated to take the required action, unless another meaning is clearly indicated.
- TT. Shown - Refers to information presented on the drawings, with or without reference to the drawings.
- UU. Specifications - That part of the Contract Documents consisting of written descriptions of the technical features of materials, equipment, constructions systems, standards, and workmanship.
- VV. Specify - Refers to information described, shown, noted or presented in any manner in any part of the Contract.
- WW. State of California Specifications - The State of California Department of Transportation Standard Specifications in effect at the time of advertising the Work. Also referred to as State Standard Specifications and Caltrans Standard Specifications.
- XX. Subcontractor - A subcontractor is a person or entity who has a direct contract with the Contractor or a subtier subcontractor who has a direct contract with a subcontractor to perform any of the Work associated with the Project. The term subcontractor, does not include any separate contractor or any separate contractor's subcontractors.
- YY. Submittals - The information which is specified for submission to the District in accordance with these Contract Documents.
- ZZ. Substantial Completion - "Substantial Completion" means that there is sufficient completion of the Project or an agreed to portion thereof that the District can effectively utilize. Determination of substantial completion is solely at the discretion of the District. Substantial Completion does not mean Complete in accordance with the Contract nor shall Substantial Completion of all or any part of the Project entitle the Contractor to Acceptance under the Contract.
- AAA. Substantial Completion Date - Date when the District puts into service, the Project, or that portion of the Project, which the District has been determined to be Substantially Complete.
- BBB. Sub-subcontractor - A sub-subcontractor is a person or entity who has a direct or indirect contract with a subcontractor to perform any of the Work at the Site. The term subsubcontractor means a sub-subcontractor or an authorized representative thereof, also referred to as subtier-subcontractor.
- CCC. Supplier - Any person, firm, corporation, or organization who supplies materials or equipment for the Work, including that fabricated to a special design, and may also be a Subcontractor or a Sub-contractor.

- DDD. Surety - The person, firm, corporation, or organization that joins with the Contractor in assuming the liability for the faithful performance of the Work and for the payment of all obligations pertaining to the Work in accordance with the Contract Documents by issuing the Bonds required by the Contract Documents or by law.
- EEE. Total Base Bid - The original Contract Price as established from Section 00310, **BID SCHEDULE** as completed by the Contractor as a part of his Bid for the work.
- FFF. Warranty Period - Period where the Contractor is responsible for repairs to equipment or the Work at no cost to the District after Substantial Completion. Length of period is as established in Section 01740, **WARRANTIES AND BONDS**, and/or elsewhere in the Contract Documents.
- GGG. Will - See definition of shall.
- HHH. Work - The term "Work" means all labor, materials, equipment, supplies, services, and other items necessary for the execution, completion and fulfillment of the Contract.
- III. Work Day - Any day except Saturday, Sunday, and legal holidays. For time extension purposes a work day is equivalent to 1.45 calendar days.

1.03 ABBREVIATIONS

Whenever the following terms are used, the intent and meaning shall be as follows:

Abbreviation Stands For

AASHTO	American Association of State and Highway and Transportation Officials
AAMA	Architectural Aluminum Manufacturers Association
ABMA	American Boiler Manufacturers Association
ACI	American Concrete Institute
ADC	Air Diffusion Council
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AMCA	Air Moving and Conditioning Association
ANSI	American National Standard Institute (formerly United States of America Standards Institute)
APA	American Plywood Association
API	American Petroleum Institute
AREA	American Railway Engineers Association
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Construction Managers
ASME	American Society of Mechanical Engineers

<u>Abbreviation</u>	<u>Stands For</u>
ASTM	American Society of Testing and Materials
AWPA	American Wood-Preserver's Association
AWS	American Welding Society
AWWA	American Water Works Association
CAGI	Compressed Air and Gas Institute CAL/OSHA State of California Department of Industrial Relations, Division of Industrial Safety
CBM	Certified Ballast Manufacturers
CBR	California Bearing Ratio
CI	Chlorine Institute
CISPI	Cast Iron Soil Pipe Institute
CMAA	Crane Manufacturers Association of America
CPSC	Consumer Products Safety Commission
CRA	California Redwood Association
CRSI	Concrete Reinforcing Steel Institute
CTI	Cooling Tower Institute
DFPA	Douglas Fir Plywood Association
EIA	Electronic Industries Association
EPA	U.S. Environmental Protection Agency
ETL	Electronic Testing Laboratory
FM	Factory Mutual Insurance Company
FPS	Fluid Power Society
FS	Federal Specifications
GO 95	General Order No. 95, California Public Utilities Commission Rules for Overhead Electric Line Construction
HI	Hydraulic Institute
HMI	Hoist Manufacturers Institute
IAPMO	International Association of Plumbing and Mechanical Officials
IBR	Institute of Boiler and Radiator Manufacturers
ICBO	International Conference of Building Officials
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
IPCE	International Power Cable Engineers Association
ISA	Instrument Society of America
MIL	Military Specifications
MSS	Manufacturer's Standardization Society
NAAMM	National Association of Architectural Metal Manufacturers
NBS	National Bureau of Standards
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NSF	National Sanitation Foundation
NWMA	National Woodwork Manufacturers Association
OSHA	Occupational Safety and Health Act
PCMAC	Prestressed Concrete Manufacturers Association of California
SMACNA	Sheet Metal and Air Conditioning Contractors National Association

Abbreviation Stands For

SSPC	Structural Steel Painting Council	TCA	Tile Council of America
UBC	Uniform Building Code		
UFC	Uniform Fire Code		
UPC	Uniform Plumbing Code		
UL	Underwriters Laboratories		
WCLIB	West Coast Lumber Inspection Bureau		
WIC	Woodwork Institute of California		

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SECTION 01150

PARTNERING

PART 1 - GENERAL

1.01 DESCRIPTION

The District will promote the formation of a “Partnering” relationship with the Contractor in order to effectively complete the contract to the benefit of both parties. The purpose of this relationship is to maintain a cooperative communication and to mutually resolve conflicts at the lowest responsible management level.

The Contractor shall attend a one-day partnering conference. The Partnering conference will be conducted locally for the Contractor’s and District’s project representatives. The Contractor shall be represented by a minimum of 2 representatives, one being the Contractor’s authorized representative. Scheduling of the Partnering Conference and selection of the trainer and training site shall be determined cooperatively by the Contractor and the Engineer. The purpose of the Partnering Conference will be to achieve the following goals:

- Develop a project charter to include a mission statement and key objectives
- Explain and discuss important partnering principles and concepts.
- Identify and resolve stakeholder concerns, questions, and suggestions.
- Develop a protocol/procedure for a timely, respectful resolution of conflicts
- Develop a performance evaluation form for periodic assessment and tracking of team performance.

The costs involved in providing the Partnering Conference trainer and training site will be borne entirely by the District. Costs associated with attendance by Contractor staff shall be borne by the Contractor.

The establishment of a “Partnering” relationship will not change or modify the terms and conditions of the contract and will not relieve either party of the legal requirements of the contract.

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SECTION 01200
PROJECT MEETINGS

PART 1 - GENERAL

1.01 PRE-CONSTRUCTION CONFERENCE

Prior to the start of construction the District will conduct a pre-construction conference that shall be attended by the Contractor's Project Manager/Project Engineers and major subcontractors and major equipment and material suppliers, affected utilities and others as determined by the Contractor and District. At the conference, the District will review the Contractor's proposed schedule of operations and the construction procedure and sequence requirements. Also discussed will be the Contractor's field organization, submittals, progress payments, change order procedures, safety requirements, permits and inspections, and other matters.

1.02 PROGRESS MEETINGS

The District shall schedule, arrange and conduct progress meetings. These meetings shall be conducted not more than once per week and shall be attended by the Contractor's superintendent and representatives of all subcontractors, utilities, and others, who are active in the execution of the Work. The purpose of these meetings shall be to review the Contractor's three (3) week schedule provided in accordance with Section 01310-1.07, **WEEKLY ACTIVITIES PLAN**, resolve conflicts, and in general, coordinate and expedite the execution of the Work.

The agenda of progress meetings shall include, as a minimum, review of progress and schedule, clarifications, changes, quality of work, progress payment request, and record documents. The District shall prepare and distribute minutes to the meetings.

1.03 PARTNERING MEETINGS (NOT USED)

1.04 OTHER PROJECT MEETINGS

The Contractor shall attend and require the participation of other subcontractors or suppliers for other project related meetings when requested by the District.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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SECTION 01300

SUBMITTALS

PART 1 - GENERAL

1.01 SUMMARY

- A. Where the Contractor is required by these Specifications to make submittals, they shall be made to the District with a letter of transmittal and in accordance with the requirements of this Section.
- B. The Contractor shall submit the following items to the District. One electronic copy is to be submitted unless other provisions of the Contract Document stipulate a different quantity.
 - 1. Safety Program
 - 2. Substitutions
 - 3. Shop Drawings
 - 4. Material Safety Data Sheets
 - 5. Operation and Maintenance Manuals
 - 6. Working Drawings
 - 7. Warranty Data
 - 8. Others as Specified in the Technical Specifications
- C. Three (3) copies of submittals, which require review, will be returned to the Contractor with review comments, if any, noted.
- D. Reviewed copies of the Construction Schedule and the Final Operation and Maintenance Manuals will not be returned to the Contractor. It shall be the Contractor's responsibility to copy and/or conform reviewed submittals in sufficient numbers for its files, subcontractors, and vendors.

1.02 CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall submit, at its own expense, samples, submittals and details of structural and reinforcing steel, equipment, material, electrical controls, architectural fabrications, pipe, pipe joints, special pipe sections, and any other appurtenances as required in Technical Specifications.
- B. All samples, submittals and supporting data, catalogs, schedules, etc., shall be submitted as the instruments of the Contractor, who shall be responsible for their accuracy and completeness and coordination. Such responsibility shall not be delegated in whole or part to subcontractors or suppliers. These submittals may be

prepared by the Contractor, subcontractors, or suppliers, but the Contractor shall ascertain that submittals meet all of the requirements of the Contract Documents, while conforming to structural, space, and access conditions at the point of installation. Designation of work "by others," if shown in submittals, shall mean that the work will be the responsibility of the Contractor rather than the subcontractor or supplier who prepared the submittals.

- C. The Contractor shall insure that there is no conflict with other submittals and notify the District in each case where its submittal may affect the work of another contractor or the District. The Contractor shall insure coordination of submittals among the related crafts and subcontractors. The Contractor accepts the responsibility and expense for additional costs and delays which may result from Work performed without Favorably Reviewed as defined in Section 1.06 herein, submittals.
- D. Submittals shall be prepared in such form that data can be identified with the applicable Specification paragraph. The data shall clearly demonstrate compliance with the Contract Plans and Specifications and shall relate to the specific equipment to be furnished. Where manufacturer's standard drawings are employed, they shall be marked clearly to show what portion of the data is applicable to this project.
- E. The Contractor shall review and check all submittals before submitting them to the Construction Manager. The Contractor shall stamp and certify on the transmittal letter and on each shop drawing that they have been checked, are in compliance with the Plans and Specifications, and all deviations from the Contract requirements are noted.
- F. If the Contractor submits an incomplete submittal, the submittal will be returned to the Contractor without review. A complete submittal shall contain sufficient data to demonstrate that the items comply with the Specifications, shall meet the minimum requirements for submissions cited in the technical specifications, shall include materials and equipment data and seismic anchorage certifications where required, and shall include any necessary revisions required for equipment other than first named.
- G. It is considered reasonable that the Contractor shall make a complete and acceptable submittal to the Construction Manager at least by the second submission of data. The Owner reserves the right to deduct monies from payments due the Contractor to cover additional costs of review beyond the second submission.

1.03 MATERIAL AND EQUIPMENT SUBSTITUTIONS

A. General

- 1. In preparing these Contract Documents, the Design Consultant has named those products which to its knowledge meet the Technical Specifications and are equivalent in construction, functional efficiency, and durability.

2. Wherever catalog numbers and specific brands or trade names preceded by "similar and equal" or followed by the designation "or equal" are used in conjunction with a designated material, product, thing, installation, or service mentioned in these Specifications, they are used to establish the standards of quality and utility required.
3. The first-named manufacturer is the basis for the project design and the use of alternative named or unnamed manufacturer's products proposed by the Contractor may require modifications in the project design and construction.
4. Where only one product has been named by brand, it is the only brand, trade name, or manufactured product known to the Design Consultant that meets the requirements of the Technical Specifications. Bidders will have until ten (10) days prior to the date set for the opening of bids to submit data substantiating a request for a substitution of "an equal" item.
5. The District has made a determination that no substitution will be considered and that the following listed materials and/or equipment must be furnished as designated below in order to match others in use by the District or because it is a unique or novel product application required to be used by the District:

No Sole Source Materials or Equipment Identified

B. Substitutions

1. Substitutions, which are equal in quality and utility to those specified, will be permitted, subject to the following provisions. For this purpose, the contractor shall submit to the District within fifteen (15) days of the Notice of Award, a typewritten list containing a description of each proposed substitute item or material. Sufficient data, drawings, samples, literature, calculations, or other detailed information as will demonstrate to the Design Consultant that the proposed substitute is equal in quality and utility to the material specified shall be appended to this list. The Design Consultant will Favorably Review in writing such proposed substitutions as are, in its opinion, equal in quality to the items or materials specified. In the event that a substitute is Favorably Reviewed, fifty (50) percent of all savings shall be credited to the District.
2. Failure of the Contractor to submit proposed substitutions for review in the manner described above and within the time prescribed shall be sufficient cause for rejection by the District of any substitutions otherwise proposed.

C. Modifications and Costs

1. If alternative named or substitutions are proposed by the Contractor and Favorably Reviewed by the Design Consultant, the Contractor is responsible for providing, at no additional cost to the District, any electrical, mechanical, structural, or other related changes or testing that may be required to accommodate or provide the particular material or equipment the Contractor desires to use. Any deviation from the Specifications or the Drawings resulting from the type of material or equipment to be used shall not be the basis for any "extra charges" above and in excess of the original bid price of the work.
2. In addition the Contractor is responsible for all additional costs to the District, and its agents and representatives, for evaluation of data submitted by the Contractor for alternative named or substitutions and any redesign necessary. The District shall deduct said costs from the Contract monies due the Contractor.

1.04 SUBMITTAL AND MATERIAL LIST

- A. Within five (5) days after the Award of Contract and prior to the submission of the initial shop drawings, the Contractor shall submit a complete list of all required submittals to the District for favorable review.
- B. The Submittal and Material List shall include a description of each item, Specification reference and the anticipated submittal date. The List shall include all items of equipment and materials for mechanical, piping, electrical, heating and ventilating, equipment piping, and plumbing work; and the names of manufacturers with whom purchase orders have been placed.
- C. Items on the List shall be arranged in the same order as in these Specifications, and shall contain sufficient data to identify precisely the items of material and equipment the Contractor proposes to furnish. The List shall reference the applicable Specification section or Drawing.
- D. After the submission is Favorably Reviewed and returned to the Contractor by the District, it shall become the basis for the submission of detailed manufacturer's drawings, catalog cuts, curves, diagrams, schematics, data, and information on each separate item for review.
- E. An incomplete submittal list shall not be the basis for avoiding a submittal required by the Contract Documents. No work shall proceed on any item until it has been submitted and favorably reviewed. An incomplete submittal list is not a basis for avoiding a submittal required by the Specifications.

1.05 TRANSMITTAL PROCEDURES

- A. Transmittal Form

1. A separate transmittal form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required.
2. Submittal documents common to more than one piece of equipment shall be identified with all the appropriate equipment numbers. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.
3. The specification section and subsection or paragraph to which the submittal is related shall be indicated on the transmittal form.
4. A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted, Section 01322, **WEB BASED DOCUMENT CONTROL**.

B. Deviations from the Contract

1. If the submittals show any deviations from the Contract requirements, the Contractor shall submit with the submittal submission a separate written description of such deviations and the reasons therefore.
2. If the District accepts such deviation, the District shall issue an appropriate Contract Change Order, except that, if the deviation is minor, or does not involve a change in price or in time of performance, a Change Order need not be issued.
3. If any deviations from the Contract requirements are not noted on the submittal, the review of the shop drawing shall not constitute acceptance of such deviations.

C. Submittal Completeness

1. The Contractor shall review and check all submittals before submitting them to the District.
2. The Contractor shall stamp and certify on the transmittal letter and on each shop drawing that they have been checked, are in compliance with the Plans and Specifications, and all deviations from the Contract requirements are noted.
3. If the Contractor submits an incomplete submittal, the submittal will be returned to the Contractor without review.
4. A complete submittal shall contain sufficient data to demonstrate that the items comply with the Specifications, shall meet the minimum requirements for submissions cited in the technical specifications, shall include materials and equipment data and seismic anchorage certifications where required, and shall include any necessary revisions required for equipment other than first named.

5. It is considered reasonable that the Contractor shall make a complete and acceptable submittal to the District at least by the second submission of data.
6. The District reserves the right to deduct monies from payments due the Contractor to cover additional costs of review beyond the second submission.

D. Submittal Period

1. All submittals shall be completed within fifteen (15) days after the Notice to Proceed unless the District accepts an alternate schedule for submission of submittals proposed by the Contractor.
2. Submittals shall be submitted in time to allow appropriate time for review and response to submittals as provided for herein prior to the incorporation of materials and equipment in the Work.

E. Certificates of Compliance

1. For materials furnished and installed in accordance with Division 2 of these Specifications and for standard “off-the-shelf” materials where the Contractor is furnishing the materials listed in the Contract Documents, the Contractor may furnish a Certificate of Compliance in lieu of a full shop drawing for such materials.
2. The Certificate of Compliance shall be submitted as otherwise stipulated in Section 01300-1.05, **TRANSMITTAL PROCEDURES**. The certificate shall be signed by the manufacturer or supplier of the material and shall state that the materials involved comply in all respects with the requirements of the Contract Documents.
3. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Contract Documents.

F. Alternate Submittals

1. If a submittal is approved and the Contractor elects to submit an alternate item for review for the same application, the Contractor shall be responsible for the review costs for the alternate submittal.

1.06 REVIEW PROCEDURE

- A. Submittals shall be submitted to the District for review and returned to the Contractor within thirty (30) days after receipt.
- B. Review of submittals by the Design Consultant has as its primary objective the completion for the District of a project in full conformance with the Contract Plans and Specifications, unmarred by field corrections, and within the time provided.

- C. In addition to this primary objective, submittal review as a secondary objective will assist the Contractor in its procurement of equipment that will meet all requirements of the project Plans and Specifications, will fit the structures detailed on the Plans, will be completed with respect to piping, electrical, and control connections, will have the proper functional characteristics, and will become an integral part of a complete operating facility.
- D. After review by the Design Consultant of each of the Contractor's submissions, the material will be returned to the Contractor with actions defined as follows:
 - 1. **NO EXCEPTIONS NOTED (RESUBMITTAL NOT REQUIRED)** - Accepted subject to its compatibility with future submissions and additional partial submissions for portions of the work not covered in this submission. Does not constitute approval or deletion of specified or required items not shown in the partial submission.
 - 2. **MAKE CORRECTIONS NOTED (RESUBMITTAL NOT REQUIRED)** - Same as A, except that minor corrections as noted shall be made by the Contractor.
 - 3. **MAKE CORRECTIONS NOTED (RESUBMIT)** - Rejected because of major inconsistencies or errors which shall be resolved or corrected by the Contractor prior to subsequent review by the Design Consultant.
 - 4. **NOT ACCEPTABLE (RESUBMIT)** - Submitted material does not conform to Plans and Specifications in major respect, i.e.: wrong size, model, capacity, or material.
- E. Items 1 and 2 above (no resubmittal required) are considered "Favorable Review." Items 3 and 4 above (correction and resubmittal required) are considered "unfavorable review."

1.07 EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTALS

- A. The Design Consultant's Favorable Review of submittals shall be obtained prior to the fabrication, delivery and construction of items requiring submittal review.
- B. Favorable Review of submittals does not constitute a Change Order to the Contract requirements.
- C. The Favorable Review of all submittals by the Design Consultant shall apply in general design only and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein.
- D. Favorable Review by the Design Consultant shall not relieve the Contractor of its obligation to meet safety requirements and all other requirements of laws, nor constitute a Contract Change Order.

- E. Favorable Review will not constitute acceptance of any responsibility for the accuracy, coordination, and completeness of the submittals or the items of equipment represented on the submittals.

1.08 RETURN OF REVIEWED SUBMITTALS

- A. When the shop drawings have been reviewed by the Design Consultant, the appropriate number of submittals will be returned to the Contractor appropriately stamped.
- B. If major changes or corrections are necessary, the shop drawing will be rejected and returned to the Contractor with the need for such changes or corrections indicated.
- C. The Contractor shall correct and resubmit rejected shop drawings in the same manner and quantity as specified for the original submittal.
- D. If changes are made by the Contractor (in addition to those requested by the Design Consultant) on the resubmitted shop drawings, such changes shall be clearly explained in a transmittal letter accompanying the resubmitted shop drawings.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01310
PROGRESS SCHEDULES

PART 1 - GENERAL

1.01 GENERAL

The Contractor shall provide a construction schedule which shall be subject to the favorable review of the District.

1.02 CONSTRUCTION SCHEDULE

A. General

1. *The Construction Schedule for this Project shall be a resource based schedule and will be referred to as the Base Schedule.*
2. The Contractor shall designate, in writing, an authorized representative in its firm who will be responsible for the preparation, revising, and updating of the Base Schedule. The Contractor's representative shall have direct project control and complete authority to act on behalf of the Contractor in fulfilling the construction scheduling requirements set forth herein, and such authority will not be interrupted throughout the duration of the Project. The requirements for the Base Schedule are included to assure adequate planning and execution of the Work and to assist the District in appraising the reasonableness of the proposed schedule and evaluating progress of the Work.

B. Preliminary and Base Progress Schedule

1. Within five (5) days after award of Contract, the Contractor shall submit a Preliminary Progress Schedule covering the following project phases and activities:
 - a. Procurement and Submittals, including shop drawings and fabrication and delivery of key and long lead time procurement activities.
 - b. *All activities with required resources planned in the execution of the Work.*
 - c. The total duration of the summary activities shall equal the Contract Time.
 - d. Approximate duration for each summary activity representing the Contractor's best estimate for the work the summary activity represents.

2. The Preliminary Progress Schedule shall describe the activities to be accomplished and their dependency subject to all requirements under these Construction Schedule provisions, as appropriate. The Preliminary Progress Schedule will be used temporarily to record and monitor the progress of the Work until a Base Schedule has been completely developed and Favorably Reviewed. Recorded data on the Preliminary Progress Schedule shall be incorporated into the Base Schedule during the first schedule update.
3. The Base Schedule shall be used in implementation of the work and progress of the work will be compared to the Base Schedule at each weekly progress meeting.
4. The District will review the schedule and provide any comments, its Favorable Review of the schedule, or request a meeting to review the schedule with the Contractor within ten (10) days of receipt of the schedule. If requested, the Contractor shall participate in a review and evaluation of the schedule with the District. Any revisions necessary as a result of this review shall be resubmitted for review by the District within five (5) days. When completed, the favorably reviewed schedule shall then be the schedule to be used by the Contractor for planning, organizing, and directing the Work, and for reporting progress. If the Contractor thereafter desires to make significant changes in its scheduling or sequencing, the Contractor shall notify the District in writing stating the reasons for the change.
5. Only one progress payment will be made prior to submission and acceptance of the Base Schedule.
6. To the extent that the favorably reviewed initial Construction Schedule, or revisions thereto, indicate anything not jointly agreed upon, it shall be deemed to be not favorably reviewed by the District. Omission of any portion of the Work from the detailed Base Schedule will no excuse the Contractor from completing such work within the Contract time or by any applicable milestone.
7. Schedule Type – The Schedule submitted under this section shall utilize a critical path method (CPM) format. The schedule shall show completion of the project at the Contract completion date incorporating the entire project duration.
8. The schedule shall be computer generated utilizing “Microsoft Project” or a compatible scheduling program. The Contractor shall provide the District with electronic files compatible with the “Microsoft Project” system. The program shall be capable of accepting revised completion dates as modified by approved time adjustments of all tabulation dates and float accordingly.

C. Float

1. “Total Float” or “Float” shall be defined as the difference between the early finish and late finish dates for an activity.
2. On the schedule delineate the specified Contract duration and identify the planned completion of the Work as the final finish milestone. The time period between these two dates, if any, shall be considered the total amount of Float in the schedule.
3. Float in any activity, milestone completion date or Contract completion date shall be considered a resource available to both the District and the Contractor. Neither the District nor the Contractor have ownership of the Float. Float is a shared resource, to be used for the benefit of the project. Acceptance of the Contractor’s Base Schedule, monthly updates or revised schedule, when based on less than the maximum time allowed for milestone(s) or Contract completion does not serve to change any contract duration, nor served a waiver of the Contractor’s nor the District’s right to utilize the full Contract Time, unless so modified in a Contract Change Order.

1.03 WEATHER CONDITIONS

Seasonal weather conditions shall be considered in the planning and scheduling of work influenced by high or low ambient temperatures or precipitation to ensure the completion of the Work within the Contract Time. No time extensions will be granted for the Contractor's failure to take into account such weather conditions for the location of the Work and for the period of time in which the Work is to be accomplished.

The expected loss of working days specified in the Supplementary General Conditions, Section 00800-1.03, **WEATHER DAYS** shall be included in a separate identifiable critical activity labeled “Weather Days Allowance” to be included at the end of the project schedule. When weather days are experienced, and are approved as such by the Construction Manager, the Contractor shall either:

- a. Increase the duration of the current critical activity(ies) by the number of weather day(s) experienced, or
- b. Add a critical activity to the schedule to reflect the occurrence of weather day(s).

The duration of the weather day allowance activity shall be reduced as weather days are experienced and included in the schedule. Any remaining weather days in the weather day allowance activity at the completion of the project shall be considered as float and shall not be for the exclusive use or benefit of either the District or Contractor.

1.04 UPDATES

A. Submittal Period

1. The Contractor shall submit at weekly intervals a report of the actual construction progress. Each weekly report shall cover the previous week's progress. If, in the opinion of the District, the project is behind schedule, the report shall include a revised tabular reports showing the Contractor's proposed revised schedule to complete the project by the designated Contract Time.

1.05 TIME IMPACT ANALYSES

A. When Change Orders are initiated or delays are experienced, the Contractor shall submit to the District a written Time Impact Analysis illustrating the influence of each change, delay, or Contractor request on the current Progress Schedule completion date.

1. Construction Schedule – Analysis

- a. The analysis shall demonstrate the time impact based on the beginning and ending date of the occurrence, change, delay or revision; the status of construction at that point in time immediately preceding the occurrence, change, delay or revision; and the event time computation of all affected activities.
- b. The event times used in the analysis shall be those included in the latest updated copy of the Construction Schedule or as adjusted by mutual agreement between the District and Contractor.

B. Activity time delays will not automatically mean that an extension of Contract Time is warranted or due the Contractor.

1. It is possible that an excusable delay or contract modification will not affect existing critical activities or cause noncritical activities to become critical, i.e., a delay or modification may result in only absorbing a part of the available total float that may exist within an activity chain of the network, thereby not causing any effect on the Contract completion date or Contract Time.
2. The Contractor acknowledges and agrees that mitigation for delays due to changes, differing site conditions, and other causes will require revision of preferential sequences of the Work. Accordingly, to mitigate delays, the activities shall be resequenced prior to the Contractor proposing an updated schedule which supports a delay to the Project as a whole. When a delay to the Project as a whole can be avoided by revising preferential sequencing, and the Contractor chooses not to implement the revisions, the Contractor will be entitled to a time extension but is not entitled to compensation for indirect overhead for this extended duration.

3. Actual delays in activities which do not affect the critical path work or which do not move the Contractors planned completion date beyond a milestone or the Contract completion date will not be the basis for an adjustment to the Contract Time.
 4. Extensions of time can be granted for a delayed or impacted activity only for the duration of the time adjustment which exceeds the total float for the schedule path wherein the activity is located. The adjustment is only applicable during the time the delay occurred or when the change is ordered.
- C. Time Impact Analyses shall be submitted within fifteen (15) days after a delay occurs or with the Contractor's cost proposal in response to a notice of change from the District. In cases where the Contractor does not submit a Time Impact Analysis for a specific Change Order, delay, or other Contractor requested time extension within the specified period of time, then it is mutually agreed that the particular Change Order, delay, or Contractor request has no time impact on the Contract completion date and no time extension is required.
1. Approval or rejection of Time Impact Analyses by the District will be made within fifteen (15) days after receipt of the Time Impact Analysis unless subsequent meetings and negotiations are necessary.
 2. Upon approval, a copy of the Time Impact Analysis signed by the District will be returned to the Contractor.
 3. Upon mutual agreement by both parties, schedule revisions illustrating the influence of Change Orders, delays, and/or Contractor requests will be incorporated into the next schedule update.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

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SECTION 01322

WEB BASED DOCUMENT CONTROL

PART 1 - GENERAL

1.01 SUMMARY

- A. The project team will use and maintain a web-based database as the primary means of communication related to the Project's correspondence, submittals, requests for information (RFIs), advisory notices, and non-compliance issues. Correspondence from the Contractor shall be sent to the Construction Manager via the web based document control system such as PROCORE. The use of PROCORE software is used in this section as an example. It is expected that other similar web based document control system programs would have similar capabilities.
- B. The Construction Manager and Contractor shall utilize PROCORE's system for electronic submittal of all data and documents (unless specified otherwise by the Construction Manager) throughout the duration of the Contract. PROCORE is a web-based electronic media site that is hosted by PROCORE LLC utilizing their PROCORE web solution. PROCORE will be made available to all Contractor's project personnel. The joint use of this system is to facilitate; electronic exchange of information, automation of key processes, and overall management of the Contract. PROCORE shall be the primary means of project information submission and management. When required by the Construction Manager, paper documents will also be required. In the event of discrepancy between the electronic version and paper documents, the paper documents will govern. PROCORE is a registered trademarks of PROCORE LLC.

1.02 USER ACCESS LIMITATIONS

- A. The Construction Manager will control the Contractor's access to PROCORE by allowing access and assigning user profiles to accepted Contractor personnel. User profiles will define levels of access into the system; determine assigned function-based authorizations (determines what can be seen) and user privileges (determines what they can do).

1.03 AUTOMATED SYSTEM NOTIFICATION AND AUDIT LOG TRACKING

- A. Review comments made (or lack thereof) by the Construction Manager and Design Consultant on Contractor submitted documentation shall not relieve the Contractor from compliance with requirements of the Contract Documents. The Contractor is responsible for managing, tracking, and documenting the Work to comply with the requirements of the Contract Documents. The Construction Manager's acceptance via automated system notifications or audit logs extends only to the face value of the submitted documentation and does not constitute validation of the Contractor's submitted information.

1.04 CONTRACTOR RESPONSIBILITY

- A. The Contractor shall be responsible for the validity of their information placed in PROCORE and for the abilities of their personnel. Accepted users shall be knowledgeable in the use of computers, including Internet Browsers, email programs, CAD drawing applications, and Adobe Portable Document Format (PDF) document distribution program. Adobe PDF documents will be created through electronic conversion rather than optically scanned whenever possible. The Contractor is responsible for the training of their personnel in the use of PROCORE (outside what is provided by the Construction Manager) and the other programs indicated above as needed.

1.05 USER ACCESS ADMINISTRATION

- A. Provide a list of Contractor's key PROCORE personnel for the Construction Manager's acceptance. The Construction Manager is responsible for adding and removing users from the system. The Construction Manager reserves the right to perform a security check on all potential users.

1.06 CONNECTIVITY PROBLEMS

- A. PROCORE is a web-based environment and therefore subject to the inherent speed and connectivity problems of the Internet. The Contractor is responsible for its own connectivity to the Internet. PROCORE response time is dependent on the Contractor's equipment, including processor speed, Internet access speed, etc. and current traffic on the Internet. The District and Construction Manager will not be liable for any delays associated from the usage of PROCORE including, but not limited to: slow response time, down time periods, connectivity problems, or loss of information. The Contractor will ensure that its connectivity to the PROCORE system (whether at the home office or job site) is accomplished through some form of high-speed communications with 128 kb/s as the minimum bandwidth requirements for using the system. It is recommended a faster connection be used when uploading pictures and files into the system. Under no circumstances shall the usage of PROCORE be grounds for a time extension or cost adjustment to the Contract. If there are problems that persist with the PROCORE site for more than 24 consecutive hours that prevent the electronic submission of data by the Contractor, the Contractor may submit documents in paper form to the Construction Manager until such time that the Construction Manager notifies the Contractor that the PROCORE site is operable and available for use. Construction Manager shall likewise send documents to Contractor in paper form during such disruption of the Procure system.

1.07 TRAINING

- A. The Construction Manager has arranged for the following training to be provided to the Contractor. The Construction Manager will provide a one-hour training class to the Contractor within ten (10) days of NTP at a time mutually agreeable to Contractor and Construction Manager. Thereafter the Construction Manager will provide up to one hour of additional training via telephone during the project per month of the project life.

PART 2 - PRODUCTS

2.01 GENERAL

- A. In order to process correspondence, submittals, and RFIs, the Contractor must provide and have in place for its own use the required basic components outlined below.
 - 1. Hardware
 - a. A computer with internet access and sufficient capabilities to perform all project duties; a scanner at least large enough to scan 11" x 17" sheets with sufficient resolution to maintain clarity and legibility of the document at its native size; and a color printer of sufficient size and capacity to accept incoming correspondence as described in this section.
 - 2. Software
 - a. Adobe Acrobat 9 or higher; Microsoft's Internet Explorer v7 or higher; Microsoft Office 2010 or higher, including but not limited to Microsoft Word and Microsoft Excel.
 - b. PROCORE currently supports Mozilla's Firefox v3.5 and newer, Apple's Safari v4 and newer, Google Chrome, and Microsoft's Internet Explorer v7 and v8 web browsers for accessing the application. Certain functions may not be available when using any program other than the newest version of Microsoft's Internet Explorer.
 - 3. Facilities
 - a. The Contractor shall make its own arrangements to provide high-speed (minimum speed: download 1Mbps/upload 256Kbps) internet connection for its own use as soon as practicable.

PART 3 - EXECUTION

3.01 SUMMARY

- A. Items to be uploaded to PROCORE by the Construction Manager include but are not limited to: RFI responses, Submittal comments, Clarification letters, Design Clarifications, Field Orders, et al. These items will be emailed as attachments in PDF file format. These attachments may include files that need to be viewed and/or printed in color. Formal letters, stop notices, Field Orders, Progress Payment Requests, and Contract Change Orders will always include a wet-signed hard copy.

3.02 PROCURE UTILIZATION

- A. All project related correspondence (RFIs, submittals, etc.) originated by the Contractor or Subcontractor, Supplier, et al. shall be directed to the Construction Manager, unless otherwise indicated in the Specifications.

3.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01300. The provisions of Section 01300 shall apply both to electronic copies and hard copies of submittals.
- B. In addition to above, PROCORE shall be utilized in connection with submittal preparation and information management required by but not limited to Sections:
 - 1. Section 01310, **PROGRESS SCHEDULES**.
 - 2. Section 01300, **SUBMITTALS**.
- C. PROCORE will be utilized by all other Sections not listed above and as required by the Construction Manager.
- D. If a submittal package has multiple items that are not directly related, each item shall be considered a separate submittal and shall be sent separately. For example, “Concrete Mix Design,” and “Concrete Curing Compound” shall be submitted as separate items to the Construction Manager.

3.04 TERMINATION IN USE

- A. The District may request a termination of the use of PROCORE for the electronic submission of data, and alternatively the use of paper documents submitted in accordance with the Contract Documents by providing notification in writing with ten (10) days notice that it intends to discontinue use of PROCORE.

3.05 ADOBE PDF

- A. All information, comments, questions, and statements shall be scanned and/or converted to the PDF file format and attached to the email. Items to be sent via email include but are not limited to large-format plan sheets (22” x 34” or larger), small-format plan sheets, pages within tabbed binders, RFIs, transmittal sheets, et al. The PDF attachments supplied to the Construction Manager shall be in a sufficient resolution to be fully legible at its native size.

- B. All separate files within a given piece of correspondence shall be combined into a single PDF document (i.e. An RFI that contains a text file and two photo files shall be combined into a single PDF document prior to delivery to the Construction Manager.)

3.06 LABELING FORMAT

- A. The subject line of each email, and the file name of any attached files shall begin with the file labeling scheme:
 - 1. RFI_XXX.Y_(Contractor Name)_(Subject).
 - 2. Letter_XXX_(Contractor Name)_(Subject).
 - 3. Transmittal_XXX_(Contractor Name)_(Subject).
 - 4. PCO_XXX.Y_(Contractor Name)_(Subject).
 - 5. Submittal_XXXXX-YY-Z_(Contractor Name)_(Subject).
- B. The first section of the label indicates the type of correspondence (i.e RFI). “XXX” indicates a unique number, sequentially assigned for the given piece of correspondence. “Y” is a sequential letter assigned for revised or resubmitted documents, i.e. A, B, or C being the 1st, 2nd, and 3rd revision or resubmittal, respectively. “(Contractor Name)” indicates to the database that the correspondence is from the Contractor. The Contractor will indicate the subject at the end of the numbering scheme. For submittals, XXXXX denotes the Specification Number, YY denotes the sequential number of submittals in that Specification Section, and “ZZ” indicates whether the submittal is an original or a resubmittal, as described in Section 01300, **SUBMITTALS**. Each piece of correspondence shall be sent in a separate email.

3.07 ORIGINAL DOCUMENTS

- A. Where possible, the Contractor will obtain the electronic document from its original source to maintain the integrity, legibility, and searchability of the document.

3.08 ORGANIZATION

- A. The information included in the attachments shall be organized in a logical and thoughtful manner. Where the information originated in a tabbed format (a binder, for example), the scanned and/or converted PDF file shall be electronically bookmarked accordingly using the “bookmark” function of Adobe Acrobat 9 Std.

3.09 PRINTING

- A. Except where otherwise indicated, the Contractor will receive no hard copies of the above outlined correspondence. The Contractor will be required to print for its use, in color if necessary, any record copies, field copies, sub-Contractor copies, etc., if such copies are desired.

3.10 PROJECT FORMS

- A. The Contractor may use its own correspondence forms to be attached to correspondence emails as long as the Contractor's forms comply with this and all submittal sections.

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

SECTION 01345

REQUESTS FOR INFORMATION AND CLARIFICATIONS

PART 1 - GENERAL

1.01 DEFINITIONS

- A. RFI = Request for Information

1.02 SCOPE

- A. Should the Contractor discover conflicts, omissions, or errors in the Contract Documents, or have any questions concerning interpretation or clarification of the Contract Documents, or if it appears to the Contractor that work to be done or any matter relative thereto are not sufficiently detailed or explained in the Contract Documents, then, before proceeding with the work effected, the Contractor shall immediately notify the Construction Manager in writing and request interpretation, clarification, or additional detailed instructions concerning the work. The Contractor shall ask for any clarification or request for information immediately upon discovery and prior to the start of the effected work. Contractor shall be responsible for its costs to implement and administer RFI's throughout the Contract duration. Regardless of the number of RFI's submitted, Contractor will not be entitled to additional compensation.
- B. A RFI is not to be used for request for materials/equipment substitutions or value engineering/cost reduction incentive proposals.

1.03 RFI PROCEDURES

- A. Contractor Review and Submittal
 - 1. Contractor's Review:
 - a. Before submitting each RFI, the Contractor shall carefully review the following for relevant information:
 - i. All field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto.
 - ii. All materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work.
 - iii. All information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto.
 - iv. The coordination of each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

- v. The Contract Documents.
 - vi. The Project correspondence and documentation.
- 2. Submittal requests:
 - a. The Contractor shall submit all requests for clarification and/or additional information in writing through the Construction Manager using a form acceptable to the Construction Manager. Contractor shall provide a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested.
 - b. Each RFI shall be dated and bear a signed certification that Contractor has performed the review defined above. No consideration for review by Construction Manager of an RFI will be made for any item which has not been certified by the Contractor. All non-certified RFI's will be returned to the Contractor without action taken by the Construction Manager, and any delays caused thereby shall be the total responsibility of Contractor.
 - c. Each RFI shall be limited to one subject.

B. RFI Numbering System

- 1. The Contractor shall consecutively number each RFI with the date of issue, except for re-issuance of a respective RFI in which the subscript A, B, C, etc., will be added until the RFI is resolved. If Contractor believes the RFI reviewer's response is incomplete, Contractor shall issue another RFI (with the same RFI number with the letter "A" indicating if it is a follow-up RFI) to Construction Manager clarifying original RFI. Additionally, Construction Manager may return RFI requesting additional information should original RFI be inadequate in describing condition.

C. District's RFI Review and Response Time

- 1. Except as may otherwise be provided herein, the Construction Manager will return one copy of each RFI form to Contractor, with its comments noted thereon or on a separate comment sheet, within a reasonable amount of time, but no more than fifteen (15) calendar days following their receipt from Contractor, or if it is necessary to extend this period, the Construction Manager shall notify the Contractor in writing or at the Weekly Progress Meeting as to when a decision will be provided.
- 2. The District's review will be only to provide clarification and interpretation of the Contract Documents. The District's review shall not relieve the Contractor of the responsibility for compliance with the Contract Documents.
- 3. The District's review will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is

specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto.

4. The Construction Manager may furnish additional detailed written instructions to further explain the Work, and such instructions shall be a part of the Contract Documents. Clarifications will be issued using the above RFI system or as a Clarification Letter. Should additional detailed instructions in the opinion of the Contractor constitute work in excess of the scope of the Contract, the Contractor shall submit notification immediately and written notification thereof to the Construction Manager no more than ten (10) days following receipt of such instruction, and in any event prior to the commencement of work thereon. If the Construction Manager considers the Contractor's notice justified, the instructions and/or interpretation will be revised or a proposed change order will be issued in accordance with Section 01035, **MODIFICATION PROCEDURES**. The Contractor shall have no claim for additional compensation or extension of the schedule because of any such additional instructions unless the Contractor provides the Construction Manager written notice thereof within the time frame specified above.
5. Should the Contractor proceed with the work affected before receipt of a response from the Construction Manager, any portion of the work which is not done in accordance with the District's interpretation, clarifications, instructions, or decisions are subject to removal or replacement and the Contractor shall be responsible for all losses.
6. RFI's will not be recognized or accepted, if in the opinion of the Construction Manager, one of the following conditions exists:
 - a. The Contractor submits an RFI as a submittal.
 - b. The Contractor submits the RFI under the pretense of a Contract Documents discrepancy or omission without thoroughly reviewing the documents. In this case, the Contractor shall be responsible for both the Construction Manager's and Design Consultant's administrative costs to process the RFI. Such costs may be deducted from the Contractor's progress payments.
 - c. The Contractor submits the RFI in a manner that suggests that specific portions of the Contract Documents are assumed to be excluded, or be taken as an isolated portion of the Contract Documents in part rather than whole.
 - d. The Contractor submits an RFI in an untimely manner without proper coordination and scheduling of work or related trades.
7. The District's review shall not relieve the Contractor from the responsibility for a variation from the requirements of the Contract Documents unless the Contractor has in writing called attention to each such variation at the time of each RFI submittal and Construction Manager has given written approval of each such variation by specific written notation thereof incorporated in the RFI review; nor will any review by

District relieve Contractor from responsibility for compliance with the requirements for careful review above.

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

SECTION 01400
QUALITY CONTROL

PART 1 - GENERAL

1.01 INSPECTION AND TESTING

Additional requirements for tests are described in the District's Standard Specifications and the Contract Documents.

A. General

Where the Contract Documents require work to be tested or approved, it shall be tested in the presence of an authorized representative of the District. Such authorized representative shall have the right to witness all on-site tests performed by the Contractor and any shop tests. The results of any tests performed by the Contractor shall be made available for the information of the District.

Inspections, tests or Favorable Reviews by the District or others shall not relieve the Contractor from its obligation to perform the work in accordance with the requirements of the Contract Documents or for its sole responsibility for the quality of workmanship and materials.

Except as specifically required under the Technical Specifications for testing and inspection, all tests for materials furnished by the Contractor will be done in accordance with commonly recognized standards of national organizations. Where tests are to be performed by the District or by an independent laboratory or agency, the Contractor shall furnish such samples of all materials as required by the District without charge. The sample or samples of materials to be tested shall be selected by such laboratory or agency, or the District, and not by the Contractor. No material for which the Contract Documents require the submittal and approval of tests, certificates of compliance or other documentation shall be incorporated in the Work until such submittal has been made and approved.

The Contractor shall provide safe access for the authorized representatives of the District and inspectors to adequately inspect the quality of work and the conformance with the Contract Documents. The Contractor shall furnish the District the necessary labor and facilities for such things as excavation in the compacted fill to the depths required to take samples. The Contractor shall provide adequate lighting, ventilation, ladders and other protective facilities as may be necessary for the safe performance of inspections.

Records shall be available at all reasonable hours for inspection by other local or State agencies to ascertain compliance with laws and regulations.

Upon completion of the Work the District will conduct a final inspection as provided for in Section 00700-8.07, **FINAL INSPECTION AND PAYMENT**.

B. Notice

The Contractor shall notify the District at least twenty-four (24) hours before any field testing or special inspections are required to be performed by any authorized member of the District or independent laboratory furnished by the District. The Contractor shall notify the District at least two (2) hours before any inspection is required to be performed or to witness the Contractor's on-site field testing.

Whenever the Contractor varies the period during which work is carried on each day, the Contractor shall give due notice to the District so that proper inspection may be provided. Any work done in the absence of the District shall be subject to rejection.

The Contractor shall give the District written notification at least thirty (30) days prior to the shipment of materials and equipment to be tested and/or inspected at the point of origin. Satisfactory tests and inspections at the point of origin shall not be construed as a final acceptance of the materials and equipment nor shall such tests and inspections preclude retesting or reinspection at the site of the Work.

C. Costs of Testing

1. The Contractor shall be responsible for, and shall pay for, all quality control and off-site tests of materials required including all source and mix design tests for the approval of soil and concrete materials. The District will perform the soils and concrete confirmation tests detailed in the Technical Specifications during the performance of the Work. District will retain and pay a qualified testing agency to perform soil compaction testing and work identified as requiring special inspections and testing as defined by UBC section 1701. All other testing required by the Technical Specifications shall be the responsibility of the Contractor.
2. The Contractor shall be responsible for, and shall pay for, all source quality control and all on-site tests of materials required, except those tests specifically noted to be performed and paid for by the District.
3. The District shall have the authority to require additional tests or inspections due to the manner in which the Contractor executes its work. Examples of such additional tests and inspections include: tests of materials substituted for previously accepted materials, or substituted for specified materials, or retests made necessary by failure of material to comply with the requirements of the Specifications. Where such tests and inspections are required by Contract to be performed by the District, the

District will pay for the additional tests and inspections but will issue a unilateral Change Order to deduct these costs from the Contract price.

4. In the event the Contractor prematurely notifies of testing, inspection, special inspection, or on site inspection in accordance with Section 01400-1.01B, and the Contractor is not prepared or the project has not progressed to the point requiring testing, inspection, special inspection, or on site inspection, the Contractor shall pay for all costs associated with the premature notification of testing and inspection personnel and equipment.

D. Work Covered Prior to Inspection and/or Testing

Work requiring inspection and/or testing shall not be concealed or buried prior to the acceptance of such inspection or testing. Work covered without the favorable review or consent of the District shall, if required by the District, be uncovered for inspection and/or testing at the Contractor's expense.

E. Work Covered With Prior Inspection and/or Testing

If the District considers it necessary or advisable that covered work which was favorably inspected and tested be uncovered for reinspection and/or retesting, the Contractor, at the District's request, will uncover, expose or otherwise make available for observation, inspection or testing as the District may require, that portion of the work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such work is defective, the Contractor will bear all expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such work is not found to be defective the Contractor will be allowed an increase in the Contract price or an extension of the Contract time, or both, directly attributable to such uncovering, exposure, observation, testing and reconstruction, and a Change Order shall be issued for such additional work.

F. Coordination of Other Inspections

The Contractor is completely responsible for scheduling all agency inspections in accordance with the agency requirements. The Contractor shall notify the District of all building and other work component inspection notices and schedules. Failure of the Contractor to properly coordinate and schedule these inspections shall not be cause for time extensions.

1.02 TEST WATER

The Contractor shall furnish and dispose of the water which is required for testing of piping and structures. The Contractor shall dispose of all testing water without damage to property, and in accordance with applicable regulations.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01510

TEMPORARY UTILITIES

PART 1 - GENERAL

1.01 ELECTRICAL SERVICE

The Contractor shall arrange, at its own cost, with the local utility to provide adequate temporary electrical service at a mutually agreeable location. The Contractor shall then provide adequate jobsite distribution facilities conforming to applicable codes and safety regulations. The Contractor shall provide, at its own cost, all electric power required for construction, testing, bypass pumping, general and security lighting, and all other purposes whether supplied through temporary or permanent facilities.

1.02 WATER

The Contractor shall pay for and shall construct all facilities necessary to furnish water for its use during construction. Water used for human consumption shall be kept free from contamination and shall conform to the requirements of the State and local authorities for potable water. The Contractor shall pay for all water used for the Contractor's operations prior to final Acceptance.

1.03 TEMPORARY LIGHTING

The Contractor shall provide temporary lighting in all work areas sufficient to maintain a lighting level during working hours not less than the lighting level required by California OSHA standards. As permanent lighting facilities are completed they may be used in lieu of temporary facilities, provided however, that bulbs, lamps, or tubes of such facilities used by the Contractor shall be replaced prior to final Acceptance of the Work.

1.04 HEATING AND VENTILATION

The Contractor shall provide means for heating and ventilating all work areas as may be required to protect the Work from damage by freezing, high temperatures, weather, or to provide a safe environment for workers. Un-vented direct fired heaters shall not be used in areas where freshly placed concrete will be exposed to the combustion gases until at least two (2) hours after the concrete has attained its initial set.

1.05 SANITARY CONVENIENCES

The Contractor shall provide suitable and adequate sanitary conveniences for the use of all persons at the site of the Work. Such conveniences shall include chemical toilets or water closets and shall be located at appropriate locations at the site of the Work. All sanitary conveniences shall conform to the regulations of the public authority having jurisdiction over such matters. At the completion of the Work, all such sanitary conveniences shall be removed and the site left in a sanitary condition.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01560

TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 TEMPORARY FACILITIES

Construction hoists, elevators, scaffolds, stages, shoring, and similar temporary facilities shall be of ample size and capacity to adequately support and move the loads to which they will be subjected. Railings, enclosures, safety devices, and controls required by law or for adequate protection of life and property shall be provided.

1.02 STAGING AND FALSEWORK

Temporary supports shall be designed by a registered professional engineer with an adequate safety factor to assure adequate seismic and load bearing capability. The Contractor shall submit design calculations for staging and shoring prior to commencement of work and as required by Section 00700, **GENERAL CONDITIONS**.

Excavation support shall be in accordance with Section 00700, **GENERAL CONDITIONS**.

1.03 PROTECTION OF WORK, PROPERTY AND PERSONS

The Contractor shall be responsible for the care of all work until its completion and final Acceptance; and the Contractor shall, at its own expense, replace damaged or lost material and repair damaged parts of the Work, or the same may be done by the District, and the Contractor and its sureties shall be liable therefore. The Contractor shall make its own provisions for properly storing and protecting all material and equipment against theft, injury, or damage from any and all causes. Damaged material and equipment shall not be used in the Work. The Contractor shall take all risks from floods and casualties, or for delays from such causes. The Contractor may, however, be allowed a reasonable extension of time on account of such delays, subject to the conditions herein before specified. The Contractor shall remove from the vicinity of the completed work all plant, buildings, rubbish, unused material, concrete forms, sheeting or equipment belonging to the Contractor or used under its discretion during construction; and in the event of the Contractor's failure to do so, the same may be removed by the District at the expense of the Contractor, and the Contractor and its sureties shall be liable therefor.

The Contractor shall adopt all practical means to minimize interference to traffic and inconvenience, discomfort, or damage. The Contractor shall protect against damage, any piling, duct or structures crossing trenching or encountered in the Work and shall be responsible for any damage done to such structures, or damage therefrom. The Contractor shall support or replace, any such structures without delay and without any additional compensation, to the satisfaction of the District. All obstructions to traffic shall be

guarded by flagmen as required and by barriers and illuminated at night. The Contractor shall be responsible for all damage to persons and property directly or indirectly caused by its operations, and under all circumstances the Contractor shall comply with the regulations of the City or County, and the laws and regulations of the State of California, relative to safety of persons and property and the interruption of traffic and the convenience of the public within the respective jurisdiction, and the Contractor shall be solely responsible for any damages caused by failure to provide proper safety.

The Contractor will be held responsible for and be required to make restitution, at its own expense, for all damage to persons or property caused by the Contractor or subcontractor, or the agents, or employees of either during the progress of the Work and until its final Acceptance.

1.04 FENCES (NOT USED)

1.05 TEMPORARY ENCLOSURES

When sandblasting, spray painting, spraying of insulation, or other activities inconveniencing or dangerous to property or the health of employees or the public are in progress, the area of activity shall be enclosed adequately to contain the dust, over-spray, or other hazard. In the event there are no permanent enclosures of the area, or such enclosures are incomplete or inadequate, the Contractor shall provide suitable temporary enclosures.

1.06 ABOVE GRADE PROTECTION

On multi-level structures the Contractor shall provide safety protection that, as a minimum, shall meet the requirements of Title 8, California Code of Regulations.

1.07 WORKING HOURS

The table below shows the working hours by street location and season. Contractor to verify school schedules prior to construction.

Street	Season	Allowable Work Hours
All	Summer	8:00 AM to 5:00 PM
All	Year Round	8:00 AM to 5:00 PM

The more restrictive hours and working days identified in the limits imposed in accordance with those typically issued by the encroachment permits and those listed in these specifications shall prevail for this Project.

The Contractor shall be responsible for any inspection and additional administration costs incurred by the District, the Construction Manager, or its agents and representatives, for work by the Contractor outside the hours defined above on weekdays, or any work on

weekends or holidays recognized by the District. If an inspection is required at any time other than during regular hours of business, contractor shall notify the Construction Manager or shall make such request for overtime inspection at the District's office at least four (4) hours prior to closing time. A fee shall be charged for overtime inspection and shall be determined as follows: the Inspector's hourly rate of pay in effect at that time shall be doubled; such double-time rate shall then be multiplied by a minimum chargeable time of two (2) hours. If the Inspector is required to stay on the job more than two (2) hours, the double-time rate shall be paid for each hour thereafter; portions of hours shall be charged as a full hour. Such costs shall be withheld from the succeeding monthly progress payment. Any work in Section 01010, **SUMMARY OF WORK**, specifically required to be performed outside the normal working hours is excluded from the provisions of this paragraph. The District may also exclude other work performed outside the normal working hours from the provisions of this paragraph.

The Contractor shall notify the District at least forty-eight (48) hours prior to any work outside the normal working hours defined above, on weekends or holidays.

Such costs shall be withheld from the succeeding monthly progress payment. Any work in Section 01010, **SUMMARY OF WORK**, specifically required to be performed outside the normal working hours is excluded from the provisions of this paragraph.

1.08 DUST CONTROL

During the performance of all Work under this Contract, the Contractor shall assume all responsibility for dust control and shall furnish all labor, equipment, and means required to carry out proper and efficient measures wherever and whenever dust control is necessary to prevent the Contractor's operations from producing dust damage and nuisance to persons and property.

Unless the construction dictates otherwise, and unless otherwise approved by the Construction Manager, the Contractor shall furnish and operate a mechanical broom with vacuum-assist filtration street sweeper at least once each working day to keep paved areas acceptably clean whenever construction, including restoration, is incomplete.

If the contractor does not provide and/or conduct dust control as required above or otherwise approved in writing by the District, the District has the right to contract such services separately and withhold those costs from the contractor.

Any claims resulting from dust damage or nuisance shall be borne solely by the Contractor.

1.09 FIRE EXTINGUISHER

Sufficient number of fire extinguishers of the type and capacity required to protect the Work and ancillary facilities, shall be provided and maintained by the Contractor in readily accessible locations.

1.10 USE OF EXPLOSIVES

The use of explosives is prohibited.

1.11 REMOVED MATERIALS

All concrete, paving, reinforcing steel, fencing materials, rock, soil, strips, and other waste material and construction debris shall be removed from the site by the Contractor and disposed of in accordance with applicable regulations and laws.

1.12 CONSTRUCTION CLEANING

Throughout the period of construction the Contractor shall keep the Work site; including work, storage, parking, and employee areas; free and clean of all rubbish and debris, and shall promptly remove from the site, or from property adjacent to the site of the Work, all unused and rejected materials, surplus earth, concrete, plaster, and debris. In particular the Contractor shall keep the site clean to maintain safe access and to avoid fire hazard.

1.13 NOISE ABATEMENT

Operations at the Worksite shall be performed so as to minimize unnecessary noise. Special measures shall be taken to suppress noise during night hours. Noise levels due to construction activity shall not exceed the levels specified by local ordinance.

Internal combustion engines used on the Work shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated without said muffler.

1.14 DRAINAGE CONTROL

In excavation, fill, and grading operations care shall be taken to disturb the pre-existing drainage pattern as little as possible. Particular care shall be taken not to direct drainage water onto private property or into streets or drainage ways inadequate for the increase flow. Drainage means shall be provided to protect the Work.

1.15 EROSION CONTROL

- A. All excavated areas shall be provided with temporary erosion control measures.
- B. Temporary erosion control shall be required for all areas where natural ground cover is disturbed, all temporary excavation stockpiles, including structures and trench excavations.
- C. Erosion control shall be by means of filter fabric fences or hay bales placed to completely circumvent the down-slope side of any excavated stockpile.

- D. Protected areas shall be regularly inspected and maintained by the Contractor during the course of the work.
- E. All excavations, spills, and waste materials shall not be placed in areas subject to washout, flooding or natural drainage.
- F. See Section 01060-1.03, **STORM WATER QUALITY CONTROLS**, for additional requirements

1.16 WARNING DEVICES AND BARRICADES

The Contractor shall adequately identify and guard all hazardous areas and conditions by visual warning devices and, where necessary, physical barriers. Such devices shall, as a minimum, conform to the requirements of Cal/OSHA.

The Contractor is responsible for providing and maintaining barricades necessary to prevent accidental falls through any unattended open hatches or trenches, or entrances into potentially hazardous work areas in the Contractor's work area.

1.17 TRAFFIC CONTROL

“Signs and Traffic Control” shall conform to Sections 7-1.03 “Public Convenience,” 7-1.04 “Public Safety” and Section 12 “Temporary Traffic Control” of the current State of California Department of Transportation Standard Specifications (Standard Specifications), and the "California Manual on Uniform Traffic Control Devices, Temporary Traffic Control,” 2012 edition, insofar as they may apply, and the following Special Provisions. **The Contractor shall be held solely responsible for complying with the listed reference documents and these Special Provisions for the complete duration of project.**

The provisions of the Standard Specifications Sections 7-1.03, 7-1.04 and Section 12 regarding signs and other traffic control devices are hereby revised to provide that all signs and other warning devices (including construction and warning signs placed beyond the limits of work) shall be provided by the Contractor, and shall remain his property after the completion of the contract. The applicable sections of Section 7-1.03 “Public Convenience” and Section 12-1 are further revised to provide that all flaggers shall be provided by the Contractor at his expense. Flaggers shall be properly equipped and trained in accordance with “Instructions to Flaggers,” published by the Department of Transportation.

The traffic control plans included in the bid documents are a graphical representation of some of the traffic control requirements and do not relieve the contractor from preparing its own traffic control plans. A Traffic Control Plan shall be submitted by the Contractor to the Construction Manager for review at least 5 working days prior to start of work covered by the traffic control plan. The Traffic Control Plan shall address movements for vehicles, pedestrians and bicycle traffic through the work zone for the various phases of work. A Traffic Control Plan and detour plan shall be

submitted by the Contractor to the Construction Manager and the Town of San Anselmo for review when applying for an encroachment permit at that time. San Anselmo shall review and approve the Traffic Control Plan prior to issuing the encroachment permit. All fees relating to obtaining the permit shall be paid by the Contractor and no additional payment shall be made to the Contractor for costs to comply with the encroachment permit requirements.

Where work requires the closure of a pedestrian route and a temporary access route is not shown, the Contractor shall submit a temporary work plan for a temporary pedestrian access route. The work plan must:

- Describe the activities, processes, equipment and materials that will be used to provide the temporary access route.
- Show the locations of the routes and the placement of traffic control devices for each stage of the work.
- Include a time-scaled logic diagram displaying the sequence and duration of the planned activities for each stage of work.
- Be sealed and signed by an engineer who is registered as a civil engineer in the State of California.

Contractor shall provide a continuous, accessible and safe path of travel around or through construction work zones and to each building, business and property for pedestrians. The Contractor shall use temporary asphalt, aggregate base, or wood/metal ramps, signs, cones, barricades, flashers, and flaggers to direct and channel pedestrians during construction. Where applicable, advance signage and pedestrian access shall comply with MUTCD Advance warning shall be provided to pedestrians of the presence of sidewalk closures. Means for temporary access for pedestrians with disabilities, such as temporary ramps, boardwalks, barriers, etc., shall be in compliance with applicable Americans with Disabilities Act Accessibility Guidelines (ADAAG) and American with Disabilities Act (ADA) regulations.

All public traffic shall be permitted to pass through the work site with as little inconvenience as possible. No road closures will be authorized without prior approval from the Construction Manager and City/Town/County with jurisdiction.

Stopped public traffic shall not exceed a period of five (5) minutes when traffic is being handled by one-lane/alternating two-way control.

When a travel lane is used for interchangeable direction to traffic, the Contractor shall provide flaggers at each street intersection to expedite the safe passage of public traffic through the work under one-way controls. Where flaggers are not visible to each other, they shall be equipped with two-way radios for communication, or the Contractor shall furnish a properly equipped and signed pilot car and driver to pilot traffic through those project areas where two flaggers are not visible to each other and no additional compensation shall be provided therefore.

Contractor shall maintain signs and barricades at all times including overnight and on weekends for the complete duration of the project. It shall be the responsibility of the Contractor to make sure that the signs remain posted until no longer required and are protected from vandalism or removal.

During non-working hours a minimum of two 12-foot wide lanes shall be provided, where possible. At the end of any working day when work operations have obscured existing traffic striping, the striping shall be restored via permanent reflective painting or other compliant interim materials.

All open excavations shall be adequately barricaded and delineated against entry by pedestrians, bicyclists, animals or motorized vehicles at all times.

1.18 NOTIFICATIONS

A minimum of two weeks prior to the commencement of work, the Contractor shall hand deliver notifications to each residence or business along the affected portion of the road, intersecting streets that do not have an alternate route, and on detour routes. The notifications are subject to approval by the Construction Manager, and shall indicate at a minimum a description of the work to be done, the date the work is scheduled and the hours the street the Contractor will be working. In addition, the Contractor shall provide written notification to the local postmaster, garbage collector, Golden Gate Transit, Marin Transit, police/sheriff, and other emergency service providers.

Work shall be accomplished in such a manner as to provide access to all intersecting streets, driveways and adjacent parking areas whenever possible. If during the course of the work, it is necessary to restrict access to certain driveways for an extended period of time, the Contractor shall notify the Construction Manager and Town/City/County with jurisdiction in writing, at least forty-eight (48) hours in advance.

At least one week prior to the commencement of work, the Contractor shall fabricate four traffic advisory signs to be installed at ends of each project work site as designated by the Construction Manager and Town/City/County with jurisdiction. This sign shall be 3'x 5' (sign panel may be larger to fit intended messages) and shall read as follows:



ROSS VALLEY SANITARY DISTRICT
Woodland Capacity and Creek Crossing Project

Project Duration "Mo/Year - Mo/Year"

Construction Hours: Monday - Friday
8 AM - 5 PM

Construction Mgr:
"Contractor's Name"
Ross Valley Sanitary District

XXX.XXX.XXXX
XXX.XXX.XXXX
415.259.2949

Visit RVSD.org for more information

On an as-needed basis the Contractor shall post "NO PARKING" and "TOW AWAY" signs as necessary to accomplish his work. Posting of "NO PARKING" signs with dates and time restrictions described in work areas shall be at least seventy-two (72) hours prior to commencement of work. However, if the intended work does not commence within 24 hours of the scheduled work, all "NO PARKING" signs shall be removed from the site or as directed by the CM and Town/City/County jurisdiction. The local police phone number shall be printed on all "NO PARKING" and "TOW AWAY" signs.

In addition, starting a minimum of one month prior to commencement of work on Sir Francis Drake Boulevard, the contractor shall provide at least three (3) electronic changeable message signs (CMS); two on Sir Francis Drake Boulevard. CMS locations to be approved by the Town of San Anselmo, Department of Public Works. The Contractor shall place CMSs one month prior to the start of construction and one month prior to any lane closures or lane shifts on Sir Francis Drake.

The CMS message boards shall remain active until the final paving is completed. These signs shall comply with Section 12-3.11 of the Standard Specifications.

It shall be the responsibility of the Contractor to arrange with local authorities for the towing and removal of any vehicles that have not been removed by the owner and which interfere with any operations. Full compensation for the removal of the vehicles shall be considered as included in the price paid for the various items of work and no additional compensation will be allowed thereof

In addition, the Contractor shall provide written notifications to the local postmaster, garbage collector, police/sheriff, affected transit lines, and emergency service providers.

Convenient access to driveways and buildings in the vicinity of work shall be maintained as much as possible. Temporary approaches to, and crossing of, intersecting traffic lanes shall be provided and kept in good condition.

Contractor shall submit a written schedule of planned closures for the next five (5) day period. The Closure Schedule shall allow the locations and times when the proposed closures are to be in effect. No lane closures will be allowed unless the Contractor has obtained a confirmation of their written lane closure schedule from the Construction Manager and Town/City/County with jurisdiction.

Confirmed closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Construction Manager and Town/City/County with jurisdiction for the next working day.

1.19 ROADS AND FENCES

Roads subject to interference by the prosecution of the work covered by this Contract shall be kept open, and fences subject to interference shall be maintained by the Contractor during the work and shall be replaced to their original condition unless specifically shown otherwise on the Drawings. Such signs and barricades as are required by local laws and as necessary for the safe prosecution of the Work shall be provided.

Excavated dirt shall not be stored on roads, paths, or planted areas. Care shall be taken to protect improvements.

1.20 PARKING AND STAGING AREAS (NOT USED)

1.21 TREES AND SHRUBS

Except as noted on the plans, the Contractor shall not remove trees or shrubs without authorization of the District. Injuries to tree roots and limbs shall be avoided. No roots shall be cut or limbs pruned, without prior notification to and review of Contractor's proposed methods by the District.

1.22 OFFICE OF CONTRACTOR AT SITE

During the performance of this Contract, the Contractor may maintain a suitable office at the site of the Work which shall be the headquarters of a representative authorized to receive drawings, instructions, or other communications or articles from the District or the District; and any such thing tendered to the said representative or delivered at the Contractor's office at the site of the Work in the representative's absence shall be deemed to have been received by the Contractor.

1.23 CONTRACTOR'S WORK AND STORAGE AREA

The Contractor shall make its own arrangements for staging, storage and shop areas necessary for the proper execution of the work.

The Contractor's construction equipment, vehicles, and materials shall not remain in public streets during non-working hours. It shall be the responsibility of the Contractor to transport and store such items at the Contractor's own facility or within construction easements on nonpublic areas at the end of each workday.

1.24 DISTRICT'S FIELD OFFICE (NOT USED)

1.25 PHOTOGRAPH AND VIDEO RECORDING OF SITE CONDITIONS

Existing conditions throughout the project site shall be photographed and videotaped by Contractor before starting construction. Recording shall include and show every detail of existing location, including the current condition of the curb, gutter, sidewalk, landscaping, streetlights, and structures near the project including backyards, face of buildings, canopies, shades, decking, fences, concrete, irrigation systems, driveways, canals, access roads, plants and landscaping, and any other features within the limits of work, including Contractor staging areas. Photos and videotape shall be performed in the presence of a representative of the District.

The Contractor shall provide additional photos and video recording as deemed necessary by the District at no additional cost to the District.

The Contractor shall not start any work on site until the photos and video images are submitted and approved by District.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01580

MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.01 SALVAGING AND STORAGE OF EQUIPMENT AND MATERIALS

Salvage of materials is anticipated in this project, as listed in Section 02050, **DEMOLITION** and noted on the Drawings.

All other material and items to be demolished, including all junk or scrap material, removed by the Contractor shall be removed and properly disposed by the Contractor from the site.

1.02 CONTRACTOR STORAGE AREAS

The Contractor shall take all responsibility for storage of materials. No equipment for incorporation in the Project may be stored in any area subject to natural or man-made flooding.

The Contractor's construction equipment, vehicles, and materials shall not remain in public streets during non-working hours unless approved by the District in writing. It shall be the responsibility of the Contractor to transport and store such items at the Contractor's own facility or within construction easements on nonpublic areas at the end of each workday.

Should the Contractor elect to use private property or other property not owned by the District for construction purposes or storage of materials for the Project, the Contractor shall defend, indemnify and hold harmless the District from any claims arising from such storage or use, to the fullest extent permitted by law.

1.03 HAZARDOUS MATERIALS

All hazardous materials shall be stored and handled in strict accordance with the Material Safety Data Sheets for the products. Material Safety Data Sheets shall be submitted to the District prior to the delivery of materials to the project. The storage and handling of potential pollution causing and hazardous materials, including but not necessarily limited to, gasoline, oil and paint shall be in accordance with all local, state and federal requirements.

1.04 DISPOSAL OF EXCAVATED MATERIAL

The Contractor shall be responsible for making its own arrangements for disposal of all excavated material or other materials at a legal disposal site.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01710
FINAL CLEAN-UP

PART 1 - GENERAL

1.01 FINAL SITE CLEAN-UP

Cleanup shall conform to the provisions of Section 4-1.13, "Final Cleanup," of the Standard Specifications, details on the Plans, and the Special Provisions

The project area shall be left in a neat and clean condition, as approved by the Engineer, at the end of each workday. The project site shall be clear of clutter at the end of each workday.

The project area shall be left in a neat and clean condition upon completion of the project prior to final inspection by the Construction Manager.

- A. Perform final cleaning prior to inspections for Final Acceptance.
- B. Employ skilled workers who are experienced in cleaning operations.
- C. Use cleaning materials which are recommended by manufacturers of surfaces to be cleaned.
- D. Prevent scratching, discoloring, and otherwise damaging surfaces being cleaned.
- E. Clean roofs, gutters, downspouts, and drainage systems.
- F. Broom clean exterior paved surfaces and rake clean other surfaces of site work:
- G. Remove dust, cobwebs, and traces of insects and dirt.
- H. Clean grease, mastic, adhesives, dust, dirt, stains, fingerprints, paint, blemishes, sealants, plaster, concrete, and other foreign materials from sight-exposed surfaces, and fixtures and equipment.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

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SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section contains instructions for creating and maintaining Project Records.

1.02 RECORD DOCUMENTS

- A. Maintain at the Project site, available to the District and Construction Manager, one (1) copy of the Contract Documents, shop drawings and other submittals, in good order.
 - 1. Mark and record field changes and detailed information contained in submittals and Change Orders.
 - 2. Record actual depths, horizontal and vertical location of underground pipes, duct banks and other buried utilities. Reference dimensions to permanent surface features.
 - 3. Identify specific details of pipe connections, location of existing buried features located during excavation, and the final locations of piping, equipment, electrical conduits, manholes, and pull boxes.
 - 4. Identify location of spare conduits including beginning, ending and routing through pull boxes, and manholes. Record spare conductors, including number and size, within spare conduits, and filled conduits.
 - 5. Provide schedules, lists, layout drawings, and wiring diagrams.
 - 6. Make annotations with erasable colored pencil conforming to the following color code:
 - a. Additions: Red
 - b. Deletions: Green
 - c. Comments Blue
 - d. Dimensions: Graphite
- B. The Contractor shall solely dedicate and maintain one set of full size prints and mark thereon the actual work, including any deviations from plan dimensions, elevations, or orientations. Maintain documents separate from those used for construction. Label documents "RECORD DOCUMENTS". Alternatively, these may be labeled, "AS-BUILT DOCUMENTS".

- C. Record Documents shall be updated at least once each week and shall be available to the District and Construction Manager for review. Keep documents current. Record required information at the time the material and equipment is installed and before permanently concealing.
- D. Deliver Record Documents with transmittal letter containing date, Project title, Contractor's name and address, list of documents, and signature of Contractor prior to request for Final Payment.
- E. Record documents shall be available for the District to review to ascertain that changes have been recorded.
- F. Failure of the Contractor to keep current with the updating of the Record Documents shall be grounds for withholding monies from partial payment estimates as specified in Section 00700-8.03B, **OTHER WITHHOLDS**.
- G. Marked prints and the Project Manual shall be updated at least once a week and shall be available to the District and Construction Manager for review at any time.
- H. The Contractor shall solely dedicate and maintain one copy of the Technical Specifications as "RECORD SPECIFICATIONS" therein indicating actual products used, including manufacturer, model number and options. The Record Drawings and Record Specifications shall be submitted in excellent condition to the District upon completion of the job as a condition of Acceptance of the Project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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

SECTION 01740

WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 GUARANTEE OF WORK

- A. The Contractor warrants to the District that materials and equipment furnished under the Contract Documents will be of good quality and new unless otherwise required or permitted by the Contract Documents, and that the Work will be free of defects, not inherent in the quality required or promised, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized and inspected, shall be considered defective.
- B. The Contractor hereby agrees to make, at its own expense, all repairs or replacements necessitated by defects in materials or workmanship, supplied under terms of this Contract, and pay for any damage to other works resulting from such defects, which becomes evident within one (1) year after the date of the Substantial Completion date of the Project, or Acceptance date of the Project for items of work listed on the Punch List(s), or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. The Contractor's guarantee applies to all work and materials provided by subcontractors or manufacturers of packaged equipment components. To the fullest extent permitted by law, the Contractor shall indemnify, defend and hold harmless the District, the Construction Manager, and their officers, directors, agents and employees against and from all liabilities, claims, costs, expenses, losses and damages, including without limitation actual attorneys' fees and legal costs, arising in connection with any defects or Contractor's failure to repair or replace defects as required by this Paragraph 01740-1.01. The Contractor also agrees to indemnify, defend, and hold the District harmless from liability of any kind arising from damage due to said defects.
- C. Specific items of equipment or work may be placed in continuous service by the District prior to the Substantial Completion of the Project. At the District's discretion, the specific items may be accepted as Substantially Complete, commencing the warranty period for those specific items.
- D. The Contractor shall execute and submit a completed Warranty Form in the format as appended to this section for the Work, and any portion of the Work possessed in accordance with Section 00700-3.04, **DISTRICT'S RIGHT TO USE OR OCCUPY**. The Warranty Form shall be submitted prior to the Substantial Completion date or the final acceptance of the project or within five (5) days of the occupancy or use of a portion of the Work, whichever is applicable.

- E. The Contractor shall, upon the receipt of notice in writing from the District, promptly make all repairs arising out of defective materials, workmanship, or equipment. The District is hereby authorized to make such repairs, and the Contractor and its Surety shall be liable for the cost thereof, if ten (10) days after giving of such notice to the Contractor, the Contractor has failed to make or undertake the repairs with due diligence. In case of emergency, where in the opinion of the District delay could cause serious loss or damage, repairs may be made without notice being sent to the Contractor, and the expense in connection therewith shall be charged to the Contractor, and its Surety shall be liable for the cost thereof.
- F. Prior to the expiration of the Warranty period, the District reserves the right to hold a meeting and require the attendance of the Contractor. The purpose of the meeting is to review warranties, bonds and maintenance requirements and determine required repair or replacement of defective items.
- G. For the purpose of this paragraph, Acceptance of the Work or a portion of the Work by the District, shall not extinguish any covenant or agreement on the part of the Contractor to be performed or fulfilled under this Contract which has not, in fact, been performed or fulfilled at the time of such Acceptance. All covenants and agreements shall continue to be binding on the Contractor until they have been fulfilled.
- H. The District and the Contractor agree that warranty on the parts of the work possessed and used by the District in accordance with Section 00700-3.04, **DISTRICT'S RIGHT TO USE OR OCCUPY**, shall commence on the date that the District takes possession of such Work and so notifies the Contractor in writing. The District and the Contractor further agree that such possession, and use of the Work shall not be deemed as Substantial Completion or Acceptance of any other part of the Work.
- I. If, after installation, the operation or use of the materials or equipment furnished under this Contract proves to be unsatisfactory to the District, the District shall have the right to operate and use such materials or equipment until it can, without damage to the District, be taken out of service for correction or replacement. Such period of use of the defective materials or equipment pending correction or replacement shall in no way decrease the Warranty Period. Warranty Period for equipment shall be extended by the number days from the date the equipment is found by the District to be non-functional or defective to the date the contractor repairs and makes fully operational the same equipment.
- J. Nothing in this Section shall be construed to limit, relieve or release the Contractor's, subcontractor's and equipment supplier's liability to the District for damages sustained as the result of latent defects in the equipment furnished, or work performed, nor shall it be deemed to be a waiver by the District of any rights or remedies, or time limits in which to enforce such rights or remedies, it may

have against the Contractor, subcontractors, or suppliers of the equipment to be furnished under these Specifications.

- K. This Warranty is in addition to, and not in lieu of, all other rights and remedies available under California law or otherwise imposed by the Contract Documents. Nothing contained in this Paragraph 01740-1.01 shall be construed to establish a period of limitations with respect to any obligations which the Contractor might have under the Contract Documents or applicable laws including without limitation its obligations under Paragraph 01740-1.01. Establishment of the time period of one (1) year, as described in this Paragraph 01740-1.01, relates only to these specific obligations of the Contractor to correct the Work if a defect becomes apparent during the warranty period, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations under the Contract Documents.

WARRANTY FORM

Warranty For

We hereby guarantee the _____ that we have constructed for a period of one (1) year from _____ the date of Acceptance of the work/Substantial Completion by the Sanitary District No. 1 of Marin County.

The following are excluded from the provisions of this warranty:

We agree that if any of the equipment should fail due to any reason other than improper maintenance or improper operation, if any pipe or appurtenances should develop leakage, or if any settlement of fill or backfill occurs (e.g. poor compaction), or should any portion of the work fail to fulfill any of the requirements of the Specifications, we will, within ten days after written notice of such defects, commence to repair or replace the same together with any other work which may be damaged or displaced in so doing.

In the event of our failure to comply with the above with the above mentioned conditions within a reasonable time after being notified, or should the exigencies of the case require repairs or replacements to be made before we can be notified or respond to notification, we do hereby authorize the Sanitary District No. 1 of Marin County to proceed to have the defect repaired and made good at our expense, and we will pay the cost therefore upon demand.

The warranty provided herein shall not be in lieu of, but shall be in addition to any warranties or other obligations otherwise imposed by the Contract Documents and by law.

Contractor: _____

Signed: _____

Titled: _____

Date: _____

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

ROSS VALLEY SANITARY DISTRICT
Woodland Capacity and Creek Crossing Project

APPENDIX A

Project Plans

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INDEX OF DRAWINGS

SHT #	DWG #	DESCRIPTION
1	T-01	TITLE SHEET
2	N-01	NOTES, LEGENDS AND ABBREVIATIONS
3	K-01	KEY MAP
PLAN AND PROFILE PLANS		
4	PP-01	WOODLAND RD STA. 10+00 – STA. 14+00
5	PP-02	WOODLAND RD STA. 14+00 – STA. 17+03.26
6	PP-03	WOODLAND RD STA. 30+00 – STA. 34+00
7	PP-04	WOODLAND RD STA. 34+00 – STA. 38+00
8	PP-05	WOODLAND RD STA. 38+00 – STA. 42+50
9	PP-06	WOODLAND RD STA. 42+50 – STA. 46+50
10	PP-07	WOODLAND RD STA. 46+50 – STA. 50+90.69
11	PP-08	WOODLAND RD/ACORN WAY EASEMENT STA. 10+00 – STA. 11+75.69
12	PP-09	WOODLAND RD/ACORN WAY EASEMENT STA. 20+00 – STA. 22+96.34
13	PP-10	WOODLAND RD EASEMENT STA. 10+00 + STA. 13+75.26
CONSTRUCTION DETAILS		
14	D-01	CONSTRUCTION DETAILS

ROSS VALLEY SANITARY DISTRICT
MARIN COUNTY, CALIFORNIA

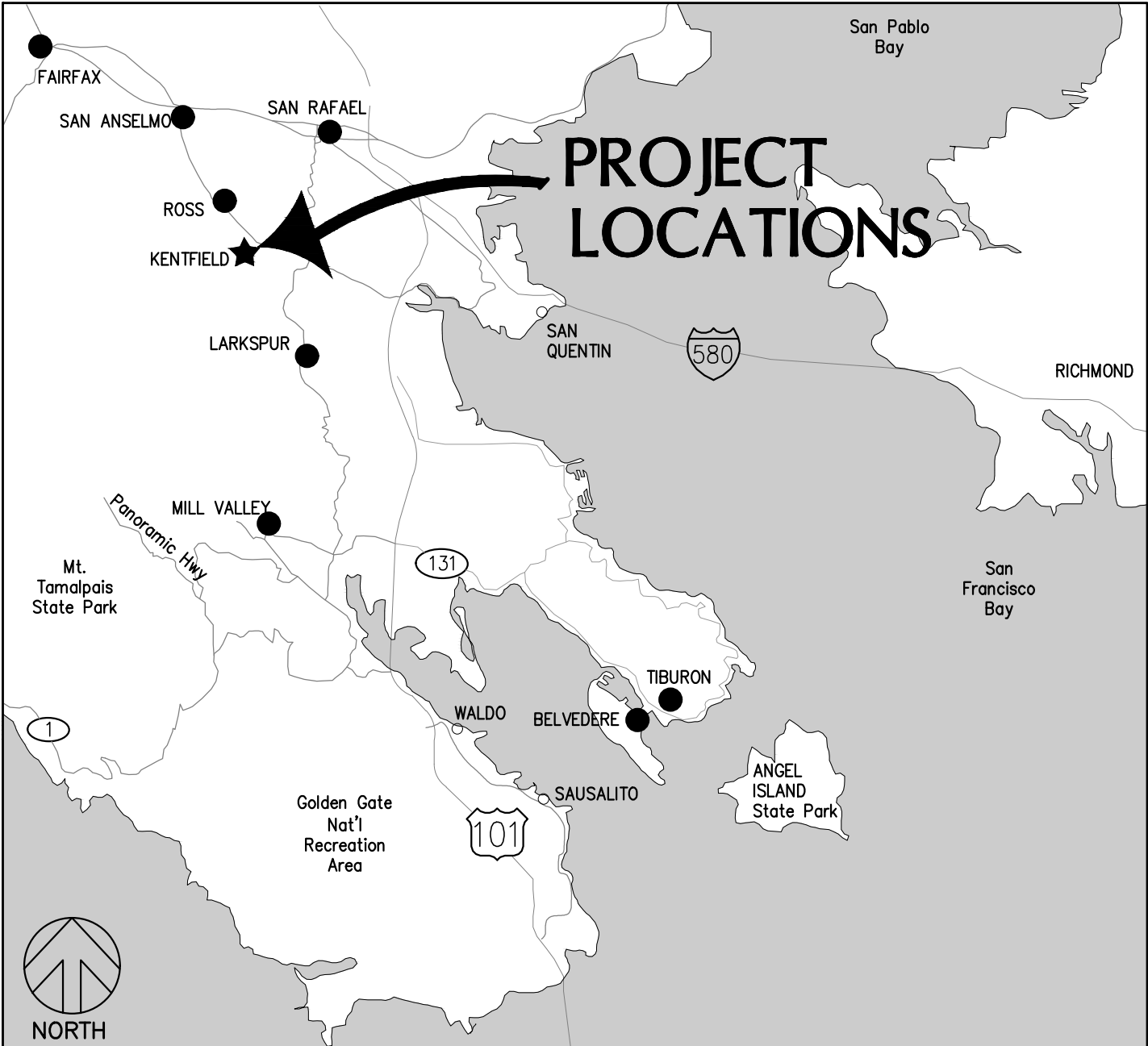
PLANS

FOR THE CONSTRUCTION OF
WOODLAND CAPACITY AND CREEK
CROSSINGS PROJECT (#956)

BOARD OF DIRECTORS
MARY SYLLA
MICHAEL BOORSTEIN
THOMAS GAFFNEY
PAMELA MEIGS
DOUG KELLY

DATUM

HORIZONTAL DATUM IS NAD 83, CALIFORNIA COORDINATE SYSTEM ZONE 3, ITRF 2011
VERTICAL DATUM IS NAVD 88



GENERAL MANAGER
STEVE MOORE, P.E.

DESIGN ENGINEER
KOUROSH IRANPOUR, P.E.

DATE

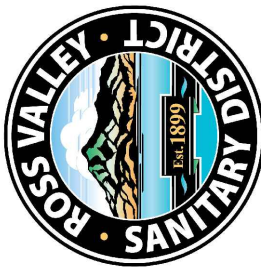
Prepared By:
Harris & Associates
1401 Willow Pass Rd, Suite 500 Concord, CA 94520
weareharris.com (925) 827-4900

100% SUBMITTAL
NOT FOR CONSTRUCTION

NO.	BY	DATE	REVISION

TITLE SHEET

ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT



Harris & Associates
1401 Willow Pass Rd, Suite 500 Concord, CA 94520
weareharris.com (925) 827-4900

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DESIGNED BY	KLC/JR
DRAWN BY	KLC/JR
CHECKED BY	KI
DATE ISSUED	02/14/2023
JOB NO.	120-0743.005
DWG NO.	T-1

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GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR PREPARING & SUBMITTING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO THE ENGINEER FOR APPROVAL FOR ALL CONSTRUCTION ACTIVITIES PRIOR TO THE BEGINNING OF WORK. THE SWPPP SHALL BE REVISED TO REMAIN CURRENT THROUGHOUT THE PROJECT.
2. CONTRACTOR TO PROVIDE 7 DAY NOTICE AND 24 HOUR NOTICE TO PROPERTY OWNERS AND RESIDENTS PRIOR TO COMMENCING CONSTRUCTION WORK. NOTIFICATION TO BE BY LETTER AND SHALL BE APPROVED BY THE ENGINEER.
3. IF SAW CUTTING AND/OR TRENCH EXCAVATION ACTIVITIES RESULT IN A WIDTH OF LESS THAN 4 FEET OF EXISTING PAVEMENT REMAINING BETWEEN THE PROPOSED EDGE OF TRENCH AND EXISTING EDGE OF PAVEMENT OR GUTTER, THE CONTRACTOR SHALL REMOVE THIS REMNANT "SLIVER" OF PAVEMENT ENTIRELY AND RESTORE IT TO ITS ORIGINAL FULL WIDTH DURING SURFACE RESTORATION. THIS PAVING WORK SHALL BE CONSIDERED INCIDENTAL AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
4. CONTRACTOR SHALL PROTECT ALL UTILITY POLES DURING CONSTRUCTION. ANY SPECIAL BRACING AND/OR SHORING REQUIRED BY THE WORK AND/OR BY THE UTILITY OWNER(S) SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
5. CONTRACTOR SHALL PROTECT EXISTING WATER UTILITIES AND EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH DISTRICT AND MMWD REQUIREMENTS.
6. CONTRACTOR SHALL RESTORE ALL FACILITIES OUTSIDE LIMITS OF WORK DAMAGED BY CONSTRUCTION OPERATIONS TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST. NO MATERIAL MAY BE STORED IN PUBLIC RIGHT OF WAY.
7. EXISTING UTILITIES IN THE PROJECT AREA MAY BE IN FRAGILE CONDITION. THE CONTRACTOR SHALL EXERCISE NECESSARY CAUTION WHEN WORKING NEAR EXISTING UTILITIES. WORK IN THE VICINITY OF ALL UTILITIES SHALL BE PER CALIFORNIA GOVERNMENT CODE SECTION 4216.
8. THE PLANS DO NOT SHOW ALL OF THE UTILITIES. THE CONTRACTOR SHALL VERIFY ALIGNMENT AND ELEVATION OF EXISTING UTILITIES AFFECTING THE WORK PRIOR TO CONSTRUCTION BY POTHOLING. PRIOR TO ANY DIGGING, CALL U.S.A. AT 811 A MINIMUM OF 48 HOURS IN ADVANCE OF EXCAVATION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY ADDITIONAL UTILITY COMPANIES TO DETERMINE THE LOCATION OF EXISTING UTILITIES. CONTACT AND THE COORDINATION WITH U.S.A. AND U.S.A. MARKINGS SHALL NOT RELIEVE THE CONTRACTOR FROM THEIR RESPONSIBILITY FOR UTILITY VERIFICATION AND PROTECTION.
9. TYPICAL DETAILS REFERENCED ON THESE DRAWINGS ARE FROM THE RVSD STANDARD SPECIFICATIONS AND DRAWINGS, "UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN", OR STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS DATED 2018.
10. UNLESS OTHERWISE NOTED, EXISTING SANITARY SEWER LINES ARE TO BE REHABILITATED IN THE SAME LOCATION. EXISTING PIPES ARE ASSUMED TO HAVE UNIFORM GRADE BETWEEN MANHOLES. CONTRACTOR SHALL LOCATE LINES PRIOR TO BEGINNING WORK.
11. ALL STREET MARKINGS AFFECTED BY CONSTRUCTION SHALL BE REPLACED AT THEIR EXISTING LOCATIONS AT NO ADDITIONAL COST, THIS INCLUDES DAMAGE OF STREET MARKINGS ON ANY STREET WITHIN COUNTY, CITY AND TOWN LIMITS.
12. ALL PAVEMENT SHALL BE SAWCUT FULL DEPTH FOR PIPE TRENCH AND FOR PAVEMENT REMOVAL, PER RVSD STD DWG SD-14.
13. RECONNECT ALL ACTIVE SANITARY SEWER SERVICE LATERALS TO REHABILITATED SANITARY SEWER MAINS. DRAWINGS DO NOT SHOW ALL LATERALS AND WHERE SHOWN ARE APPROXIMATELY LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL SERVICE CONNECTIONS AND DYE TESTING TO DETERMINING IF SERVICES ARE ACTIVE AS PART OF THE WORK.
14. EXISTING UTILITY CROSSINGS AS SHOWN ON THE PROFILES ARE APPROXIMATE. VERIFICATION OF HORIZONTAL AND VERTICAL EXISTING UTILITY ALIGNMENTS SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
15. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE CONTRACTORS RESPONSIBILITY AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE REQUIREMENT OF THE COUNTY AND THE CITY/TOWN WITH JURISDICTION AND ENCROACHMENT PERMITS. THE CONTRACTOR SHALL SUBMIT A WRITTEN TRAFFIC CONTROL & SIGNING PLAN (INCLUDING STREET CLOSURE DETAILS) TO THE ENGINEER WITHIN TEN (10) WORKING DAYS AFTER AWARD OF CONTRACT.
16. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS BARRICADES, FLAGMEN AND OTHER DEVICES TO PROVIDE VEHICULAR AND PEDESTRIAN SAFETY.
17. CONTRACTOR SHALL PROTECT ALL UTILITY STRUCTURES, AND SURVEY MONUMENTS WITHIN THE WORK AREAS. THE CONTRACTOR SHALL REVIEW THE WORK SITES PRIOR TO SUBMISSION OF BIDS.
18. THE FOLLOWING UTILITY COMPANIES AND AGENCIES, BUT NOT LIMITED TO, ARE KNOWN TO HAVE SUBSTRUCTURES OR OTHER FACILITIES WITHIN THE AREA OF PROPOSED WORK:

MARIN MUNICIPAL WATER DISTRICT

(415) 945-1481

PG&E (NORTH BAY DIVISION)

(415) 257-3405

COMCAST

(707) 207-1376

AT&T

(707) 575-2077

ALL UTILITIES, CONTACT U.S.A

811 / (800) 227-2600
19. THE CONTRACTOR SHALL BYPASS PUMP ALL MAIN-LINE SANITARY SEWER FLOW DURING REHABILITATION OR CCTV ACTIVITIES IF NECESSARY TO ASSESS PIPE CONDITION. ADDITIONAL LATERAL PUMPING (OR OTHER METHOD APPROVED BY THE ENGINEER) NECESSARY TO PREVENT SEWER SPILLAGE INTO SURROUNDING PROPERTIES FROM LATERAL SERVICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK REQUIREMENTS.
20. DIMENSIONS SHOWN ON PLANS ARE HORIZONTAL MEASUREMENTS.
21. HORIZONTAL AND VERTICAL DIMENSIONS PROVIDED ON THE DRAWINGS ARE BASED ON DESIGN SURVEY METHODS. FIELD MEASUREMENTS MAY VARY FROM THOSE ON THE DRAWINGS. ADJUSTMENTS TO LINE AND GRADE MAY BE MADE BY THE ENGINEER DURING CONSTRUCTION. PAYMENT WILL BE BASED ON QUANTITIES INSTALLED.
22. RIGHT OF WAY LINES ARE SHOWN AT APPROXIMATE LOCATIONS.
23. FOR OPEN TRENCH INSTALLATIONS, IF A NEW SEWER MAIN CROSSES UNDER AN EXISTING WATER LINE WITH LESS THAN 1 FOOT OF CLEARANCE, THE CONTRACTOR SHALL INSTALL A CONTINUOUS SLEEVE AROUND THE SEWER MAIN FOR A DISTANCE OF 4 FEET CLEAR TO EACH SIDE OF THE EXISTING WATER LINE PER RVSD STD DWG SD-22. IF A NEW SEWER MAIN CROSSES ABOVE AN EXISTING WATER MAIN WITH LESS THAN 1 FOOT OF CLEARANCE, THE CONTRACTOR SHALL INSTALL A CONTINUOUS HDPE SLEEVE AROUND THE SEWER MAIN FOR A DISTANCE OF 10 FEET CLEAR TO EACH SIDE OF THE EXISTING WATER LINE, PER RVSD STD DWG SD-25.
24. NEW SEWER MAINS CROSSING UNDER OR ABOVE EXISTING WATER LINES WITH LESS THAN 4 INCHES OF CLEARANCE ARE PROHIBITED.
25. THE CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES ALONG THE STREETS TO BE REPAIRED THROUGHOUT THE LIFE OF THE CONTRACT.
26. CONTRACTOR TO COORDINATE WITH ALL PROPERTY OWNERS FOR EASEMENT WORK A MINIMUM OF TWO WEEKS PRIOR TO START OF SAID WORK.
27. PEDESTRIAN, PUBLIC, AND WHEELCHAIR ACCESSSES SHALL BE MAINTAINED DURING THE CONSTRUCTION TO THE SATISFACTION OF THE DISTRICT AND AGENCY HAVING JURISDICTION IN THE RIGHT-OF-WAY IN ACCORDANCE WITH THE ENCROACHMENT PERMITS.
28. CONTRACTOR SHALL RESTORE SITES TO EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
29. ANY DAMAGE TO THE EXISTING FACILITIES INCLUDING, BUT NOT LIMITED TO, TREES, LANDSCAPING, IRRIGATION, FENCES, WALLS, SIDEWALK, AND OTHER PAVEMENT SURFACES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE. CONTRACTOR SHALL RESTORE ANY AND ALL PAVEMENT AND OTHER FACILITIES OUTSIDE LIMITS OF WORK AFFECTED BY THE CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST.

ABBREVIATIONS

AB, ASB	AGGREGATE BASE, SUBBASE	G	GAS	PROP	PROPOSED
ABD	ABANDONED	GA	GAUGE	PVC	POLYVINYL CHLORIDE
AC	ASPHALT CONCRETE	GB	GRADE BREAK	R	RADIUS
ADJ	ADJUSTABLE	GM	GAS METER	RD	ROAD
APPROX	APPROXIMATE	GRND	GROUND	R+C	REBAR & CAP
AVE	AVENUE	GTP	GALVANIZED THREADED PIPE	RCE#	REGISTERED CIVIL ENGINEER #
BC	BEGIN CURVE	GTR	GUTTER	REQ'D	REQUIRED
BM	BLUE MARKER	GV	GAS VALVE	RET	RETAINING
BOC	BACK OF CURB	>	GREATER THAN	R/R	REMOVE & REPLACE
BP	BOTTOM OF PIPE	H, HORIZ	HORIZONTAL	RS	ROADWAY STABILIZATION
BSW	BACK OF SIDEWALK	HDD	HORIZONTAL DIRECTIONAL DRILLING	R/W	RIGHT-OF-WAY
C&G	CURB & GUTTER	HDPE	HIGH DENSITY POLYETHYLENE	RVSD	ROSS VALLEY SANITARY DISTRICT
CATV	CABLE TV	HH	HANDHOLE	S	SLOPE
CB	CATCH BASIN	HMA	HOT MIX ASPHALT	SD	STORM DRAIN, STANDARD DRAWING
CCTV	CLOSED CIRCUIT TELEVISION	HV	HIGH VOLTAGE	SDCB	STORM DRAIN CATCH BASIN
CIP	CAST IRON PIPE	ID	INNER DIAMETER	SDMH	STORM DRAIN MANHOLE
CIPP	CURED-IN-PLACE PIPE	IN	INCH	SDR	STANDARD DIMENSION RATIO
CL, ☉	CENTERLINE	INV	INVERT	SDWK	SIDEWALK
CLR	CLEARANCE	IPB	IRRIGATION PULL BOX	SF	SQUARE FEET
CLSM	CONTROLLED LOW STRENGTH MATERIAL	JP	JOINT UTILITY POLE	SHT	SHEET
CMP	CORRUGATED METAL PIPE	LAT	LATERAL	SL	STREET LIGHT
CO	CLEANOUT	LDCC	LOW DENSITY CELLULAR CONCRETE	SS	SANITARY SEWER
CON'T	CONTINUED	LF	LINEAR FOOT	SSCO	SANITARY SEWER CLEANOUT
CP	CONTROL POINT	LH	LAMPHOLE	SSLH	SANITARY SEWER LAMPHOLE
D, DIA	DIAMETER	LIP	LIP OF GUTTER	SSMH	SANITARY SEWER MANHOLE
DI	DRAIN INLET	MAGN	"MAG" NAIL	STA	STATION
DL	DETECTOR LOOP	MAX	MAXIMUM	STD	STANDARD
DR	DIMENSION RATIO	MAGNW	"MAG" NAIL & WASHER	STL	STEEL
DWY	DRIVEWAY	MAGNS	"MAG" NAIL & SHINER	T	TELEPHONE, TOTAL
DWG	DRAWING	MB	MAILBOX	TC	TOP OF CURB
E	EASTING, ELECTRIC	MBGR	METAL BEAM GUARD RAIL	TEL	TELEPHONE
E (OH)	ELECTRIC OVERHEAD	MH	MANHOLE	TMH	TELEPHONE MANHOLE
EC	EDGE OF CONCRETE	MIN	MINIMUM	TOE	TOE OF SLOPE, TOE OF CURB, TOE OF WALL
EC	END OF CURVE	MMWD	MARIN MUNICIPAL WATER DISTRICT	TOP	TOP OF PIPE
EG	EXISTING GRADE	MNFR	MANUFACTURER	TYP	TYPICAL
EL OR ELEV	ELEVATION	MON	MONUMENT	TV	TELEVISION
ELEC	ELECTRIC	N	NORTHING	UNK	UNKNOWN
EP, EOP	EDGE OF PAVEMENT	N.I.C.	NOT IN CONTRACT	UT	UNKNOWN UTILITY
EOS	EDGE OF SHOULDER	NO	NUMBER	VCP	VITRIFIED CLAY PIPE
ETW	EDGE OF TRAVELED WAY	O.C.	OFF CENTER	VG	VALLEY GUTTER
EXIST, EX	EXISTING	OD	OUTSIDE DIAMETER	W, WAT	WATER
FC, FOC	FACE OF CURB	OH	OVERHEAD	W/	WITH
FD	FOUND	OG	ORIGINAL GRADE	WM	WATER METER
FG	FINISHED GRADE	PCC	PORTLAND CEMENT CONCRETE	WSP	WELDED STEEL PIPE
FI	FIRE HYDRANT	PCC	POINT OF COMPOUND CURVE	WV	WATER VALVE
FL, ☉	FLOWLINE	PK	"PK" NAIL	W.W.M.	WELDED WIRE MESH
FOB	FACE OF BERM	PL	PLASTIC	100D	100 PENNY
FY	FISCAL YEAR	PLS#	PROFESSIONAL LAND SURVEYOR #	2:1	2 HORIZONTAL TO 1 VERTICAL SLOPE
		PP	POWER POLE, PLAN AND PROFILE		

LEGEND

EXISTING	REHABILITATE OR NEW	DESCRIPTION	EXISTING	DESCRIPTION
		SANITARY SEWER OPEN TRENCH REPLACEMENT WITH SIZE, FLOW DIRECTION, CO, MH		MONUMENT
		PIPE BURST SEWER MAIN OR LATERAL REPLACEMENT WITH SIZE, FLOW DIRECTION		ELECTRIC
				HIGH VOLTAGE ELECTRIC
		STORM DRAIN WITH SIZE, FLOW DIRECTION, MH, DI		GUY WIRE
		ABANDON/REMOVE EX PIPE, SSMH		FIRE HYDRANT
				JOINT/POWER POLE
				EDGE OF PAVEMENT
				CURB AND GUTTER
				AC DIKE
				APPROX BORING LOCATIONS (SEE APPENDIX B FOR BORING LOGS)
				CONTROL POINT
				FENCE
				TREE
				SIGN
				PULL BOX
				WALL

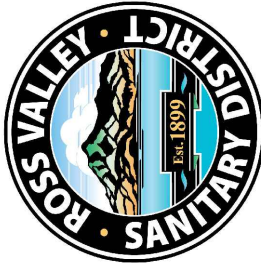
GENERAL NOTES CON'T

30. BIDDERS SHOULD NOTE PRESENCE OF OVERHEAD UTILITIES IN THE WORK AREA. ALL OVERHEAD UTILITIES MAY NOT BE SHOWN AND IF SHOWN, MAY BE IN THEIR APPROXIMATE ALIGNMENT. AS PART OF THEIR PRE-BID INSPECTION, BIDDERS SHALL NOTE THE TYPE AND LOCATION OF OVERHEAD UTILITIES IN THE PROPOSED WORK AREA. BIDDER'S PRICE SHALL INCLUDE PROVISIONS FOR WORKING IN AREAS WHERE OVERHEAD UTILITIES EXIST AT THE TIME OF BIDDING, WHETHER SHOWN ON THE PLANS OR NOT, AND NO ADDITIONAL COMPENSATION IS ALLOWED.
31. REFER TO SPECIFICATIONS FOR WORK HOUR AND WORK SEQUENCE RESTRICTIONS.
32. WHEN AN ABANDONED GAS LINE IS EXPOSED, CONTRACTOR TO COORDINATE WITH PG&E TO VERIFY THAT IT IS DEACTIVATED.
33. UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS, ALL EXPOSED CONCRETE WORK (I.E. SIDEWALKS, CURB AND GUTTER, VALLEY GUTTERS, ETC) SHALL CONFORM TO THE LATEST EDITION OF THE MARIN COUNTY STANDARD DRAWINGS.
34. DURING NON WORKING HOURS, A TEMPORARY CONNECTION SHALL BE MADE FROM THE EXISTING SEWER TO THE NEW SEWER. LATERALS AND SEWERS CROSSING THE TRENCH SHALL BE TEMPORARILY RECONNECTED UNTIL THEY CAN BE PERMANENTLY CONNECTED TO THE NEW SEWER.
35. CDF BACKFILL IS NOT ALLOWED FOR SITES WITHIN COUNTY OF MARIN JURISDICTION.
36. CONTRACTOR TO NOTE THAT SOME SITES ARE WITHIN EASEMENTS WITH LIMITED OR NO ACCESS FOR VEHICLES AND EQUIPMENT. THESE SITES MAY REQUIRE PORTABLE EQUIPMENT AND/OR HAND EXCAVATION.
37. CONTRACTOR SHALL USE RECYCLED WATER FOR ANY CONSTRUCTION ACTIVITY. MMWD WILL NOT PROVIDE A WATER METER FOR CONTRACTOR'S USE DUE TO SEVERE DROUGHT CONDITIONS.

100% SUBMITTAL
NOT FOR CONSTRUCTION

NOTES, LEGENDS
AND ABBREVIATIONS

ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT

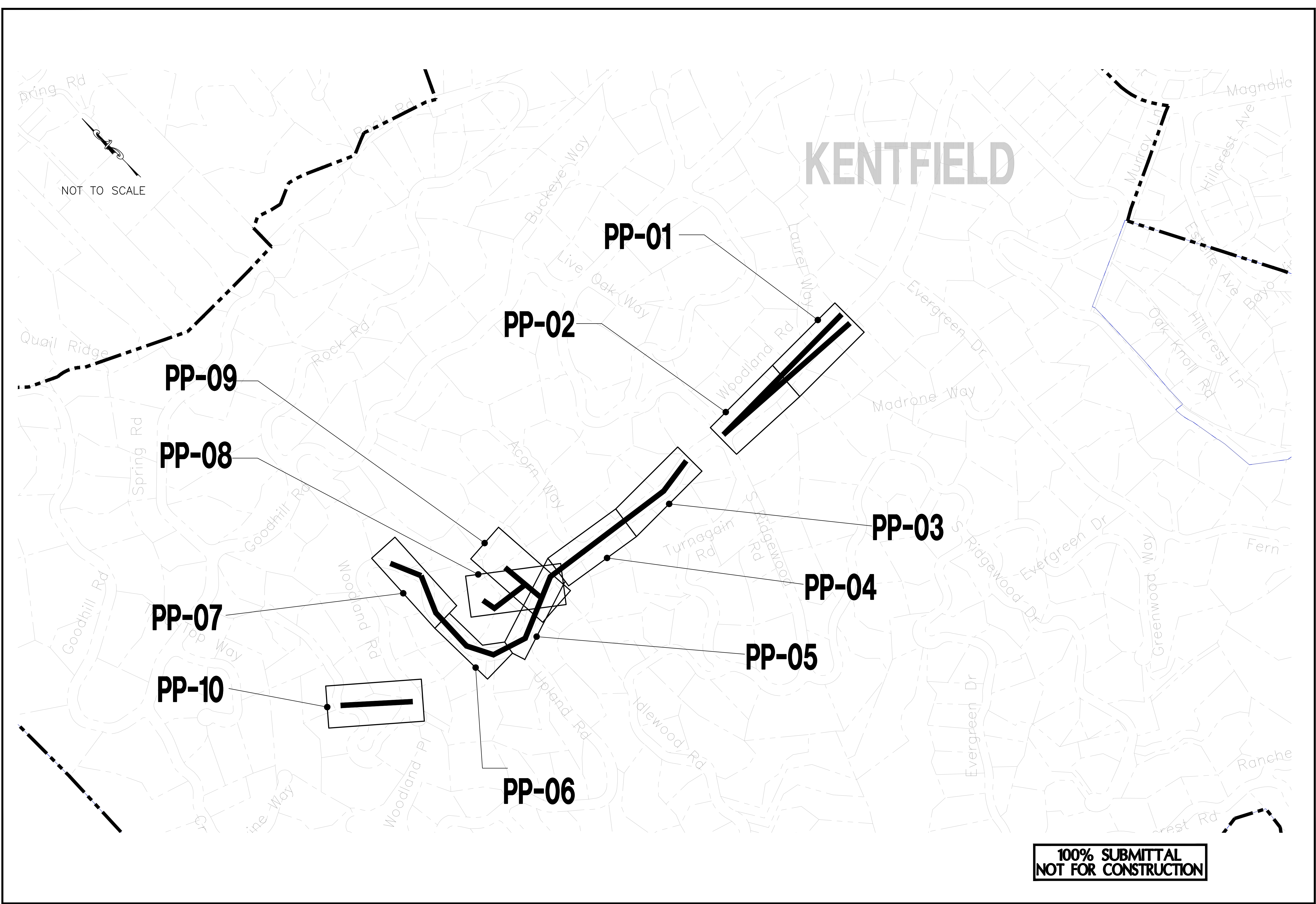


Harris & Associates
1401 Willow Pass Rd, Suite 500 Concord, CA 94520
weareharris.com (925) 827-4900

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DESIGNED BY	KLC/JR
DRAWN BY	KLC/JR
CHECKED BY	KI
DATE ISSUED	02/14/2023
JOB NO.	120-0743.005
DWG NO.	N-01
SHEET	2 OF 14

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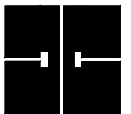


NO.	BY	DATE	REVISION

KEY MAPS



ROSS VALLEY
SANTARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT



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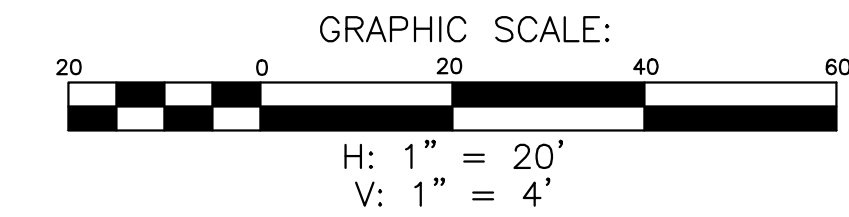
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MATCHLINE - STA 14+00
SEE DWG PP-01

MATCHLINE - STA 14+00
SEE DWG PP-01

SURVEY CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
109	2174744.80	5968212.95	50.50	MAG SHNR
111	2174602.23	5968164.22	51.60	MAG NL



A REMOVE AND REPLACE 303 LF OF 8" SS
WITH 12" SS (11.16" I.D. HDPE DR 17)
S = 2.83%±

100% SUBMITTAL
NOT FOR CONSTRUCTION

LEGEND OF REHABILITATION METHODS

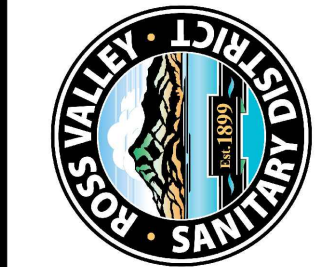
- A** REMOVE AND REPLACE OR CONSTRUCT NEW PIPE BY OPEN TRENCH PER RVSD STD DWG SD-16. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. FINAL PAVING SHALL BE PER DETAIL 2/D-01. INSTALL TRENCH DAM PER RVSD STD DWG SD-17.
- B** REPLACE EXISTING PIPE USING THE PIPE BURSTING METHOD. CONNECT TO EX SSMH PER RVSD STD DWG SD-14. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. NO BURSTING FROM INSIDE EXISTING SSMH WILL BE ALLOWED UNLESS APPROVED BY THE DISTRICT. FINAL PAVING SHALL BE PER DETAIL 2/D-01 FOR ALL OPEN TRENCHES.
- REPAIR SURFACE UPHEAVAL AND SAG REPAIR PER RVSD STD DWG SD-22 AND SD-20 AFTER PIPE BURSTING IF DIRECTED BY THE DISTRICT.
- DISCONNECT AND RECONNECT SEWER LATERALS PER RVSD STD DWG SD-29 AND SD-30.
- C** REMOVE AND REPLACE EX SSMH, SSLH, SSC0 WITH NEW SSMH OR CONSTRUCT NEW SSMH PER RVSD STD DWG SD-01, SD-02, SD-03, SD-04, SD-05 AND SD-06. FINAL PAVING SHALL BE PER DETAIL 2/D-01.
- D** REHABILITATE MANHOLE BY LINING WITH CALCIUM ALUMINATE MORTAR SYSTEM AFTER MANHOLE MODIFICATIONS ARE PERFORMED AND IN ACCORDANCE WITH THE SPECIFICATIONS. REMOVE EXISTING MANHOLE STEPS PRIOR TO REHABILITATION.
- E** PIPE BURST, REMOVE AND REPLACE, OR CONSTRUCT NEW SEWER LATERAL AND SSC0 NEAR PROPERTY LINE PER RVSD STD DWG SD-29 AND SD-30. PIPE BURSTING IS THE PREFERRED METHOD FOR REPLACEMENT OF LATERALS. OPEN CUT SHALL BE USED WHERE APPROVED BY THE DISTRICT OR AS SHOWN ON THE PLANS. FINAL PAVING SHALL BE PER DETAIL 2/D-01.

CONTRACTOR SHALL VERIFY LATERAL ALIGNMENTS IN THE FIELD. CONTRACTOR SHALL EXTEND/SHORTEN EXISTING LATERALS AS REQUIRED TO BRING NEW CLEANOUT TO EDGE OF R/W. CLEANOUTS SHALL BE TWO-WAY WITH SEWER POPPER TYPE 2 BACKWATER PREVENTION DEVICE. CLEANOUTS SHALL MATCH EXISTING LOWER LATERAL MATERIAL. REFER TO SD-29: C-900 IS TWO-WAY AND HDPE IS WYE FACING MAIN. CLEANOUT MATERIALS AND UTILITY BOX SHALL BE PER RVSD APPROVED MATERIALS LIST. CHRISTY 809 BOXES SHALL BE USED FOR NON-TRAFFIC LOCATIONS. CHRISTY B1017 BOXES SHALL BE USED FOR ALL LOCATIONS SUBJECT TO TRAFFIC LOADS. LOCATION AND BOX TYPE SHALL BE CONFIRMED IN THE FIELD BY THE DISTRICT. CONNECTION OF SEWER LATERAL TO SEWER MAIN, INCLUDING DROP OFF ANGLE (TYPE A OR TYPE B CONNECTION) OF SERVICE LATERAL, SHALL BE AS SHOWN ON RVSD DWG SD-29. NO VERTICAL DROP OFF IS ALLOWED.

- NOTES:**
- CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING LIVE SANITARY SEWER LATERALS ALONG SEWER MAINS BY DYE TESTING AND SONDE AND REINSTATE LIVE LATERALS TO NEW SEWER MAIN.
 - FOR PIPE BURSTING SITES, PROVIDE AIR GAP FOR (1) LOCATIONS WHERE EXISTING UTILITY CROSSES NEW PIPE WITH LESS THAN TWO FEET CLEARANCE PER RVSD STD DWG SD-21 AND (2) WHERE PIPE MATERIAL CHANGES AND REQUIRES REMOVAL PRIOR TO PIPE BURSTING, IF NEEDED. NOT ALL PIPE MATERIAL CHANGES ARE SHOWN ON THE PROFILE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. AIR GAP LOCATIONS ARE NOT IDENTIFIED ON THE PLANS.
 - WHERE PIPING IS REMOVED AND REPLACED BY OPEN TRENCH, NEW PIPE INVERT ELEVATIONS SHALL MATCH EX PIPE INVERT ELEVATIONS (UPSIZED 8" SS INVERTS SHALL MATCH EXISTING 6" SS INVERTS), UNLESS OTHERWISE NOTED.
 - FOR WATER MAIN CROSSINGS AT OPEN TRENCH INSTALLATIONS, SEE GENERAL NOTE 23 AND 24 ON DWG N-01 FOR HDPE SLEEVE REQUIREMENTS.
 - BENDING OF NEW PIPING AND/OR JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH AWWA AND PIPE MANUFACTURER'S RECOMMENDATIONS.
 - EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. SEE GENERAL NOTE 8 ON DWG N-01. USE CLSM BACKFILL WHERE 6" CLEARANCE CANNOT BE OBTAINED BETWEEN NEW AND EXISTING UTILITIES. IF CONFLICTS REQUIRE THE RELOCATION OF EXISTING UTILITIES, THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING UTILITY OWNER(S) FOR RELOCATION(S).

SANITARY SEWER IMPROVEMENTS
PLAN AND PROFILE
WOODLAND RD

ROSS VALLEY
SANTARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT



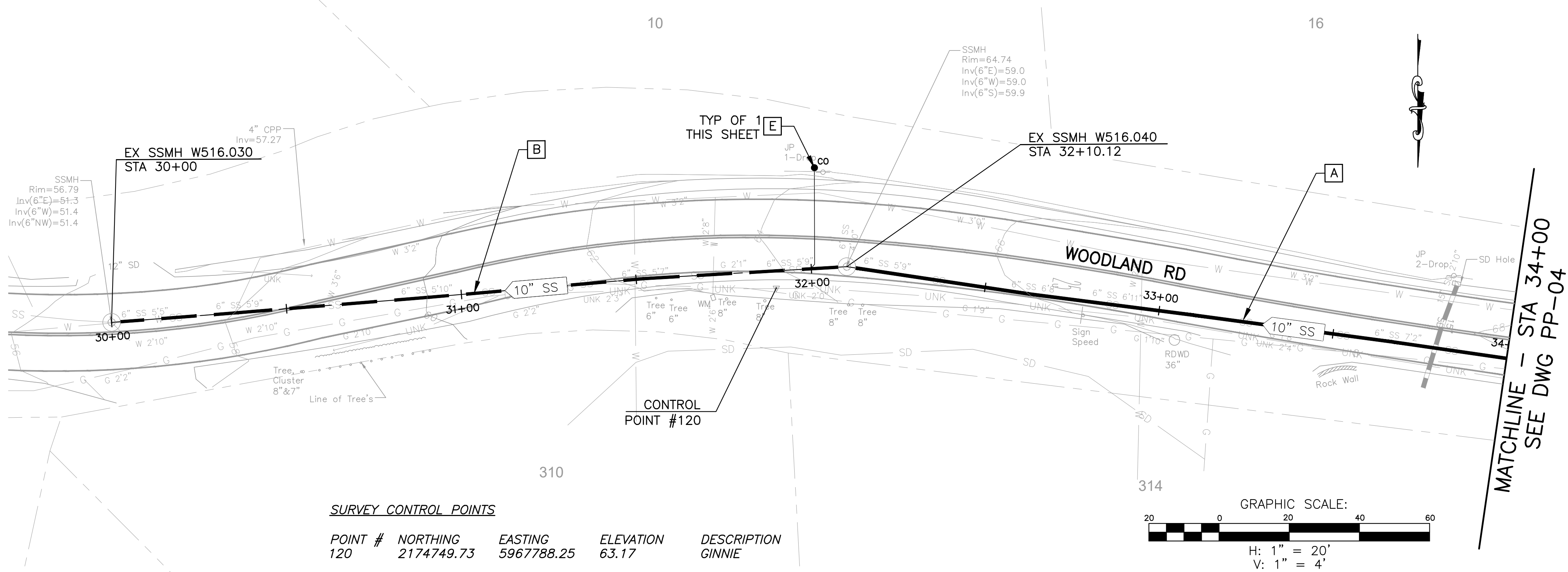
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1401 Willow Pass Rd, Suite 500 Concord, CA 94520
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DATE ISSUED 02/14/2023
JOB NO. 120-0743.005
DWG NO.

PP-02
SHEET 5 OF 14

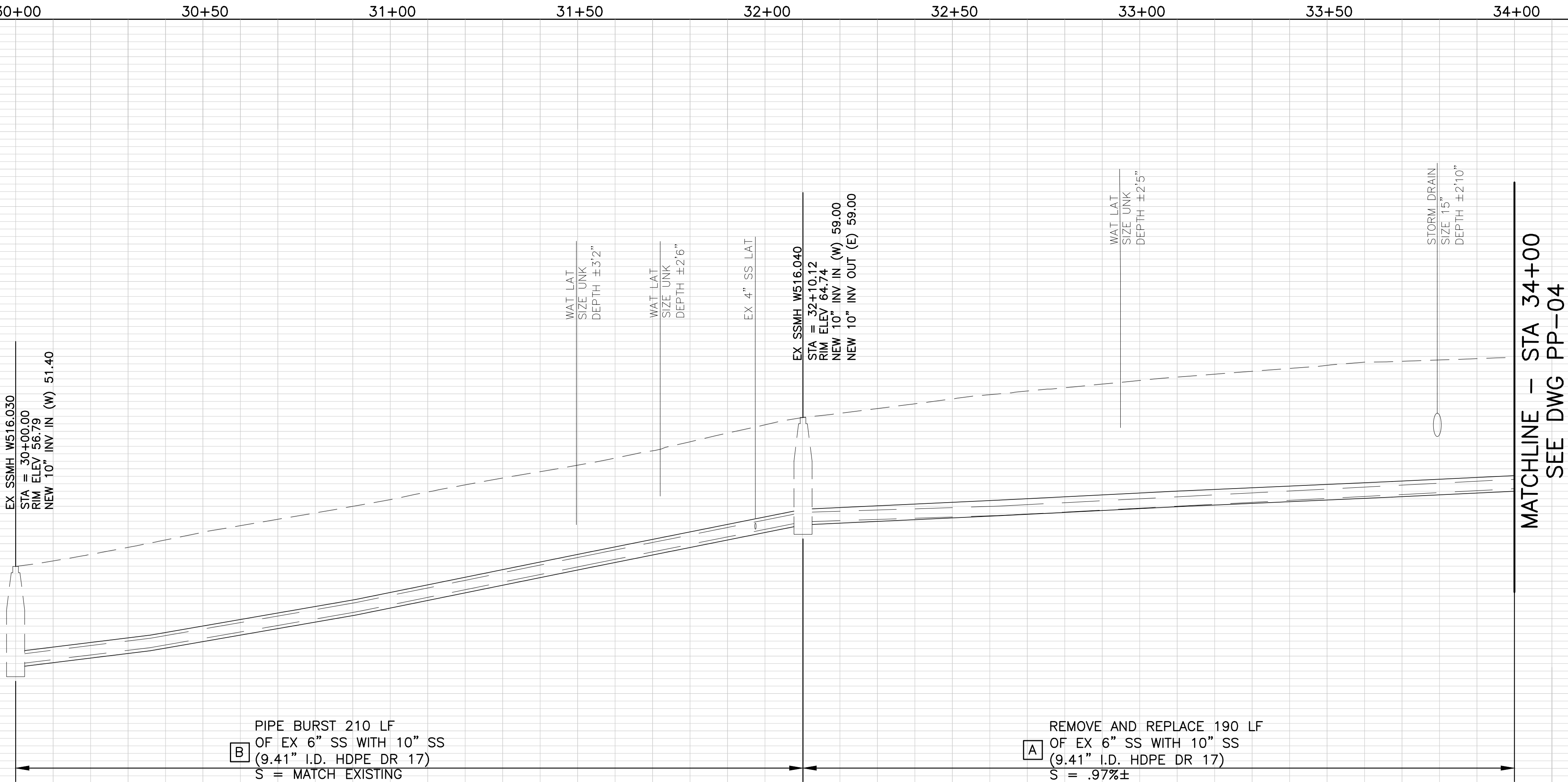
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LEGEND OF REHABILITATION METHODS

- A** REMOVE AND REPLACE OR CONSTRUCT NEW PIPE BY OPEN TRENCH PER RVSD STD DWG SD-16. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. FINAL PAVING SHALL BE PER DETAIL 2/D-01. INSTALL TRENCH DAM PER RVSD STD DWG SD-17.
- B** REPLACE EXISTING PIPE USING THE PIPE BURSTING METHOD. CONNECT TO EX SSMH PER RVSD STD DWG SD-14. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. NO BURSTING FROM INSIDE EXISTING SSMH WILL BE ALLOWED UNLESS APPROVED BY THE DISTRICT. FINAL PAVING SHALL BE PER DETAIL 2/D-01 FOR ALL OPEN TRENCHES.
- REPAIR SURFACE UPHEAVAL AND SAG REPAIR PER RVSD STD DWG SD-22 AND SD-20 AFTER PIPE BURSTING IF DIRECTED BY THE DISTRICT.
- DISCONNECT AND RECONNECT SEWER LATERALS PER RVSD STD DWG SD-29 AND SD-30.
- C** REMOVE AND REPLACE EX SSMH, SSLH, SSCO WITH NEW SSMH OR CONSTRUCT NEW SSMH PER RVSD STD DWG SD-01, SD-02, SD-03, SD-04, SD-05 AND SD-06. FINAL PAVING SHALL BE PER DETAIL 2/D-01.
- D** REHABILITATE MANHOLE BY LINING WITH CALCIUM ALUMINATE MORTAR SYSTEM AFTER MANHOLE MODIFICATIONS ARE PERFORMED AND IN ACCORDANCE WITH THE SPECIFICATIONS. REMOVE EXISTING MANHOLE STEPS PRIOR TO REHABILITATION.
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SANITARY SEWER IMPROVEMENTS
PLAN AND PROFILE
WOODLAND RD

ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT

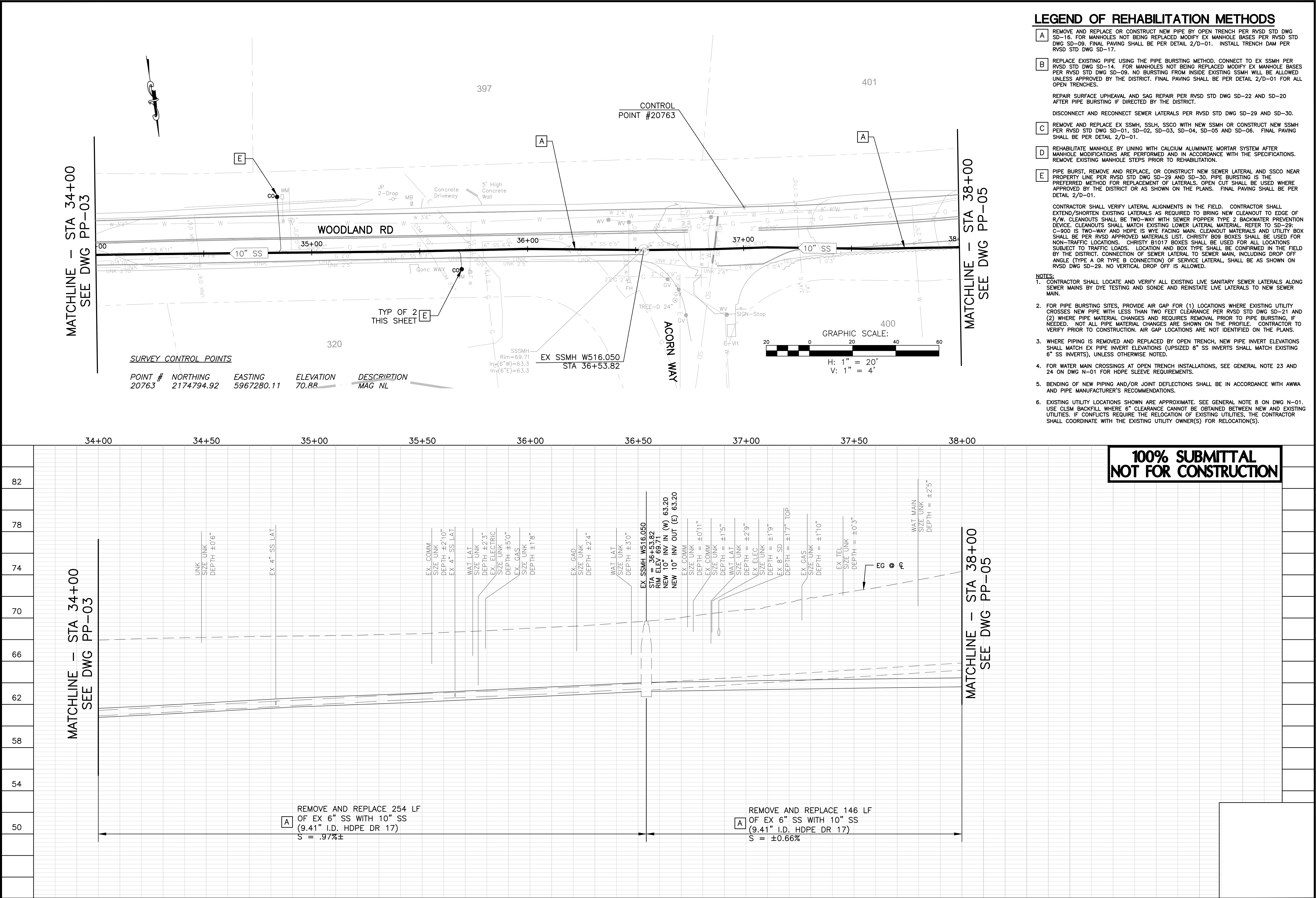


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JOB NO. 120-0743.005
DWG NO.

PP-03
SHEET 06 OF 14



ROSS VALLEY
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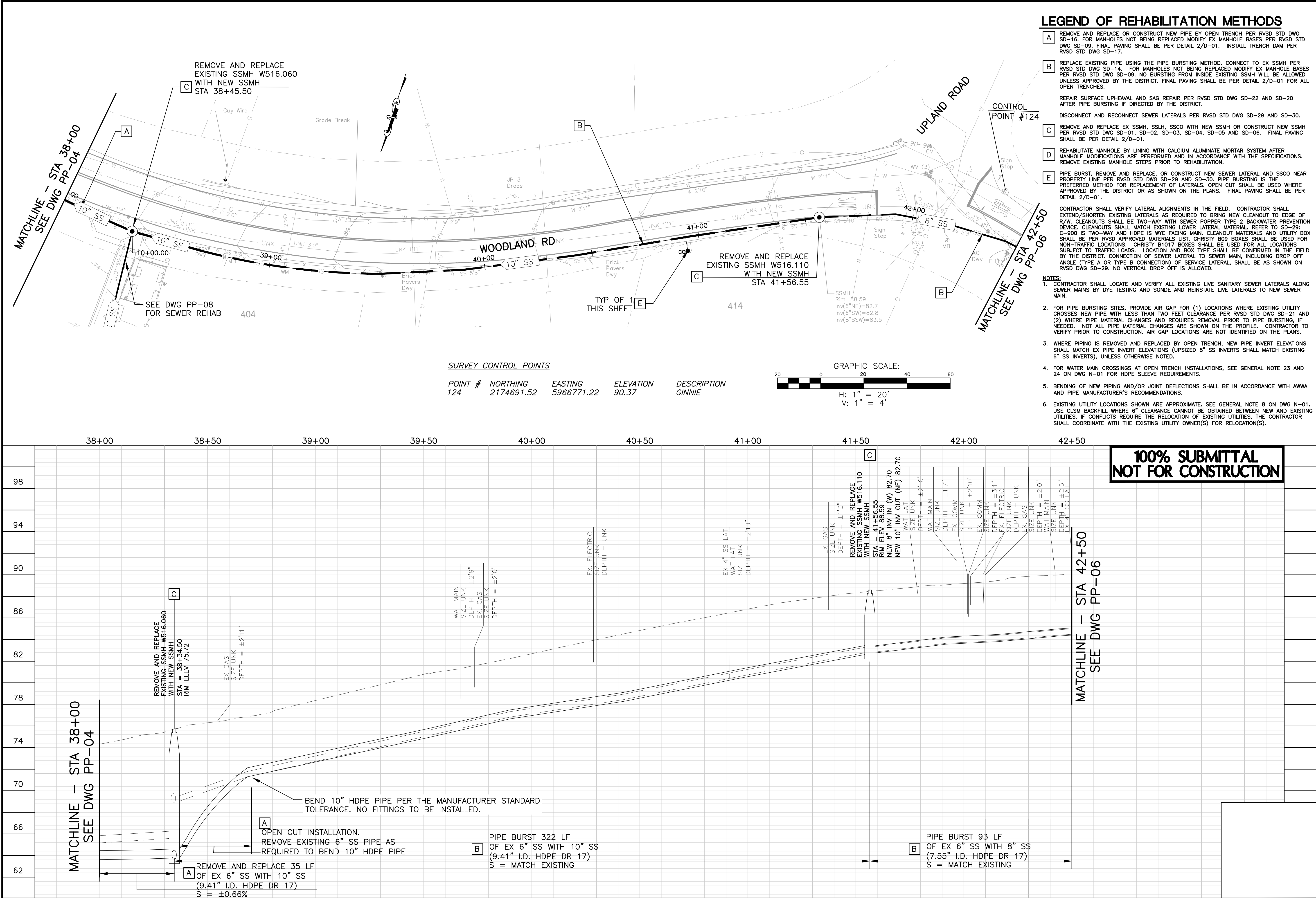
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SHEET **07** OF **14**

SANITARY SEWER IMPROVEMENTS
PLAN AND PROFILE
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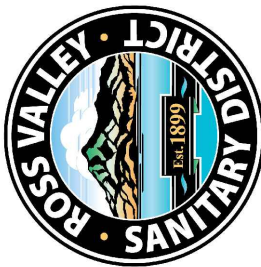
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SANITARY SEWER IMPROVEMENTS PLAN AND PROFILE WOODLAND RD

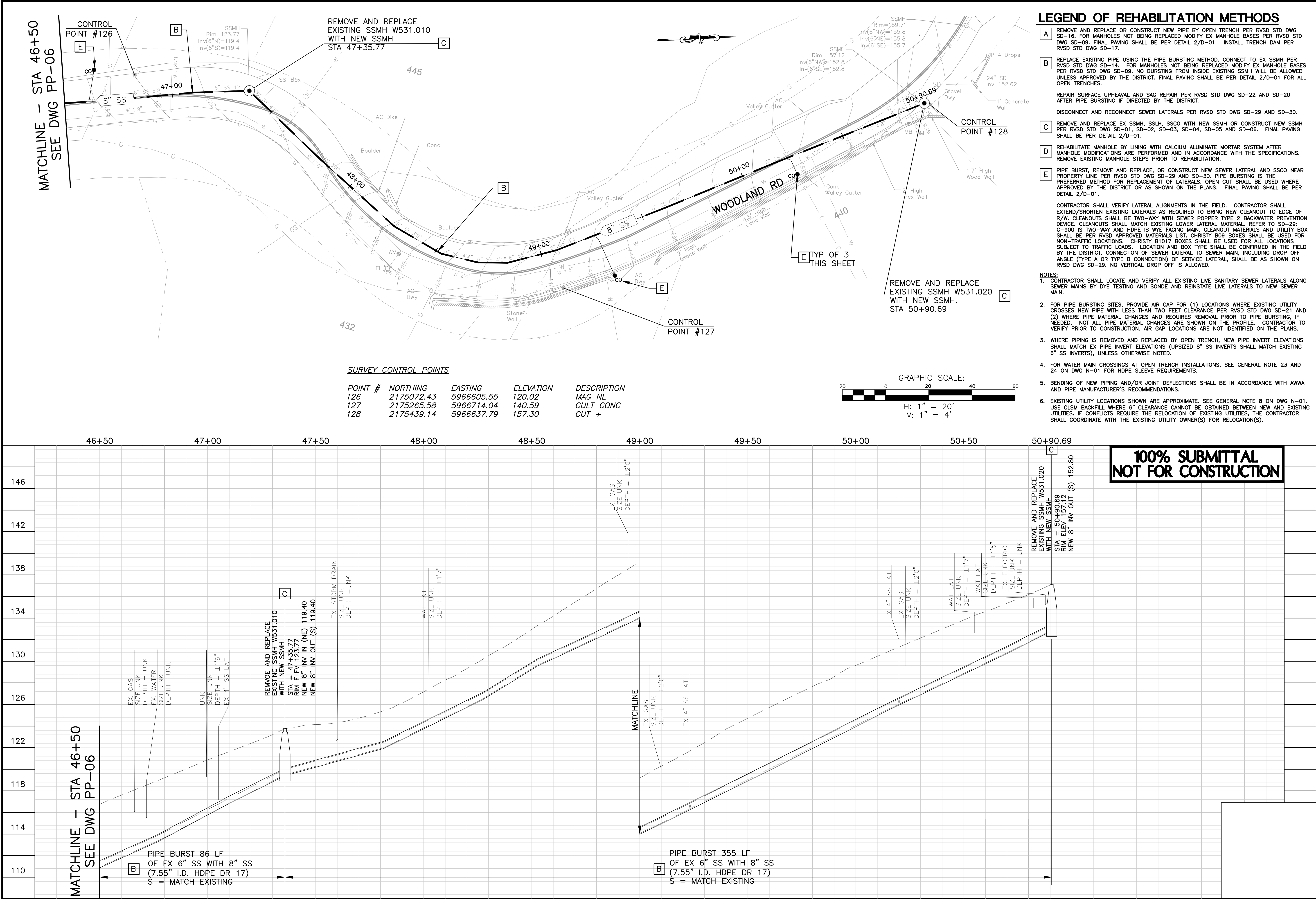
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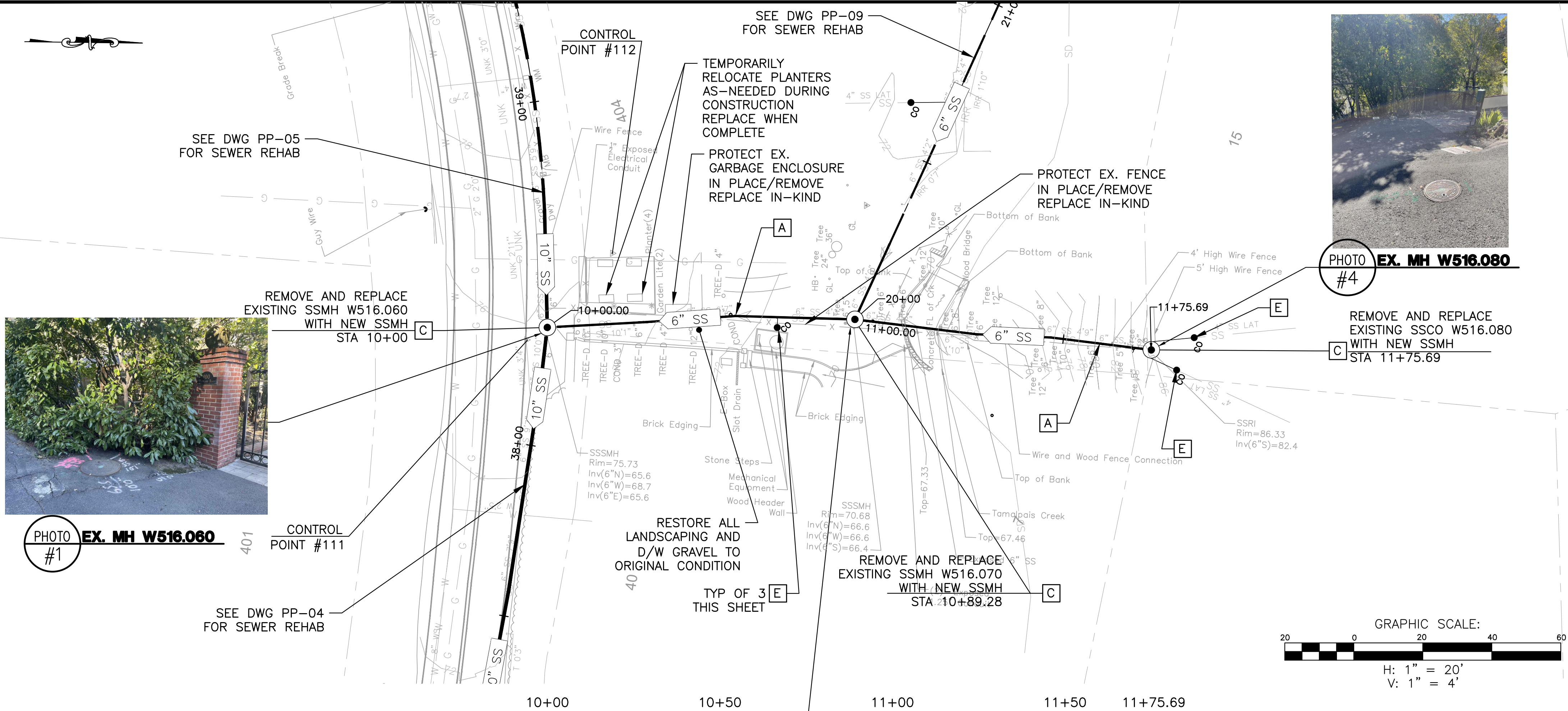
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SHEET 08 OF 14



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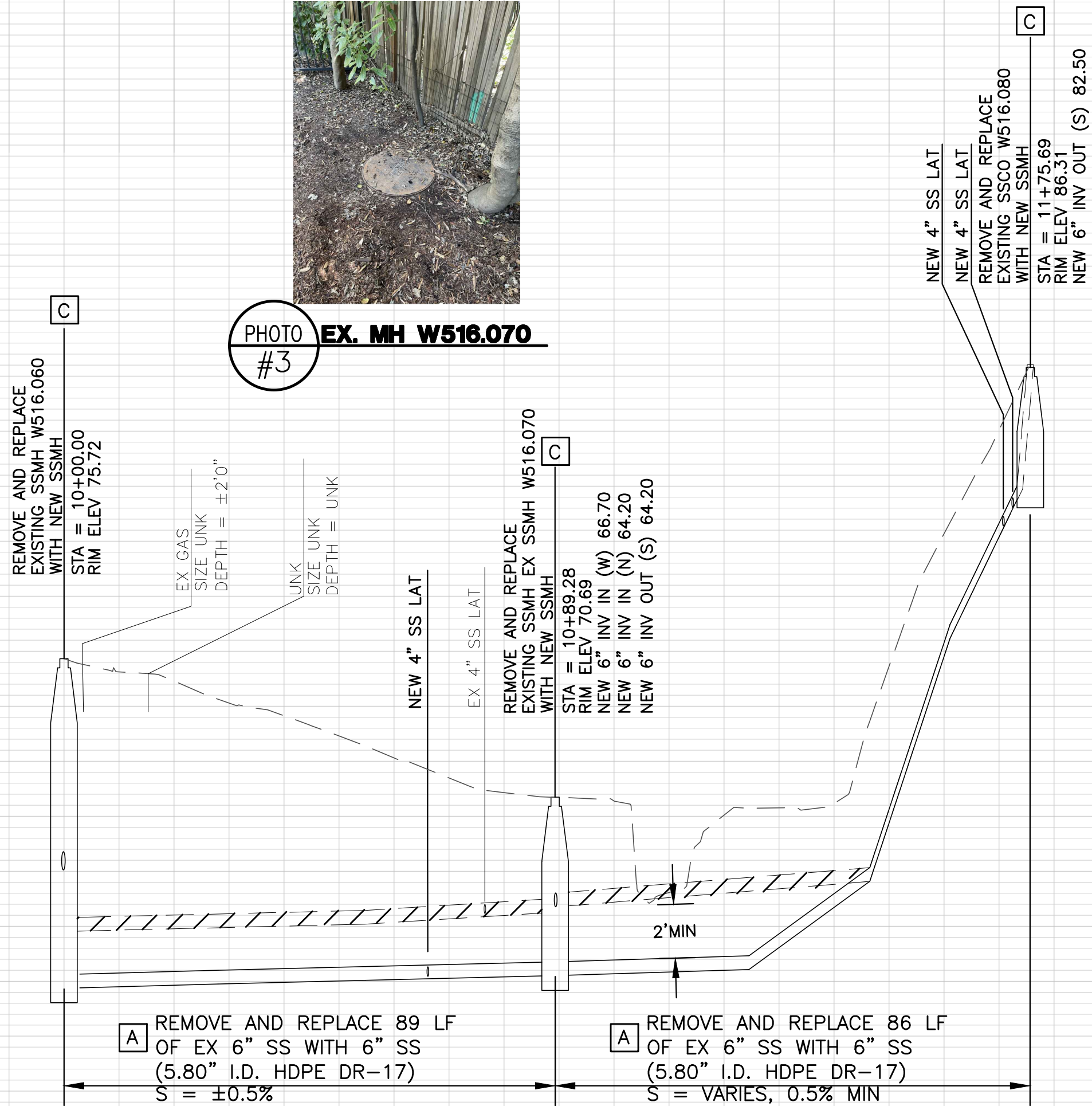


PHOTO #2 EX. PLANTERS AND GARBAGE ENCLOSURE



PHOTO #3 EX. MH W516.070



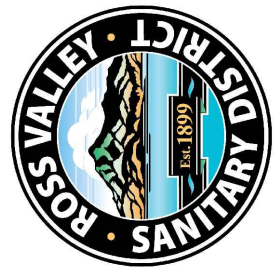
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PHOTO #1 EX. MH W516.060

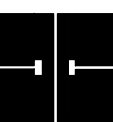
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SANITARY SEWER IMPROVEMENTS PLAN AND PROFILE WOODLAND RD

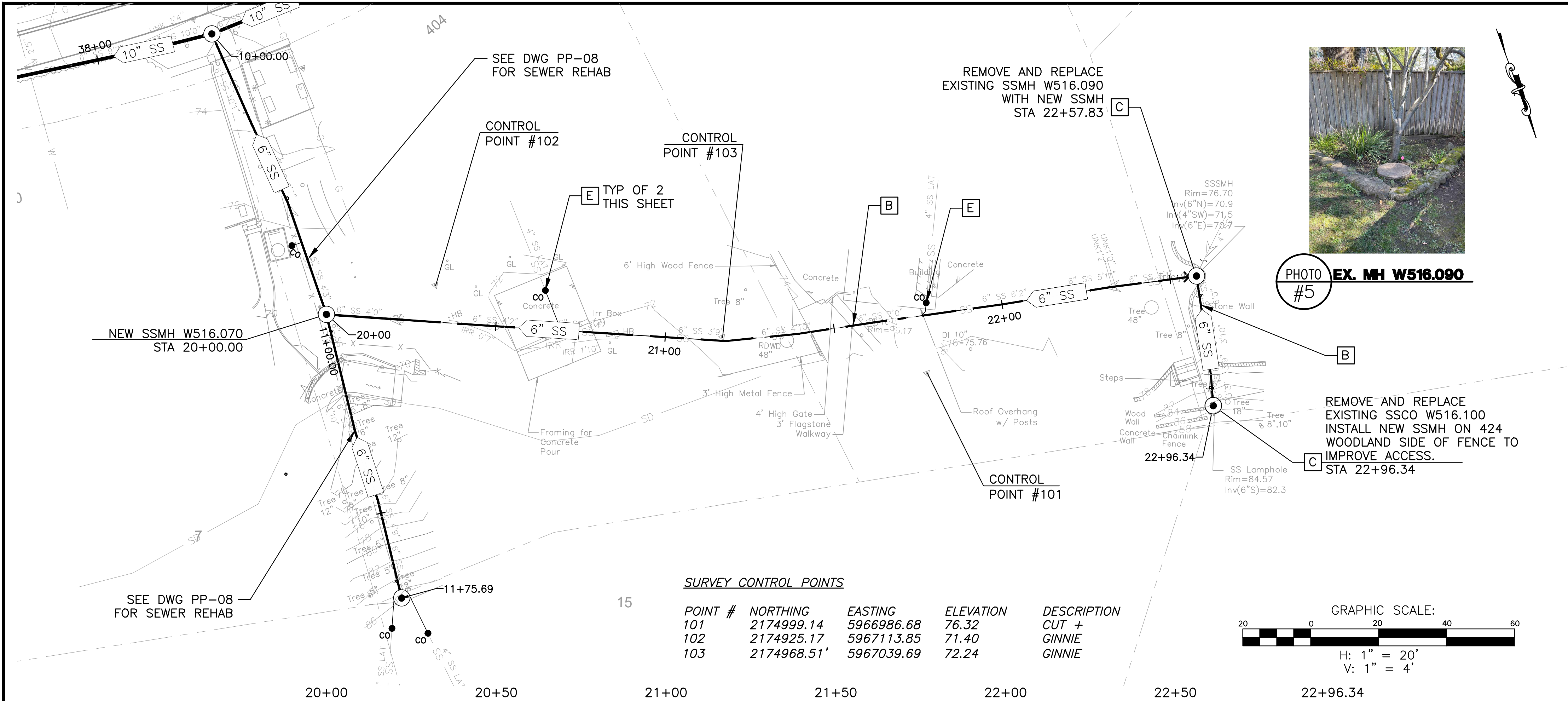
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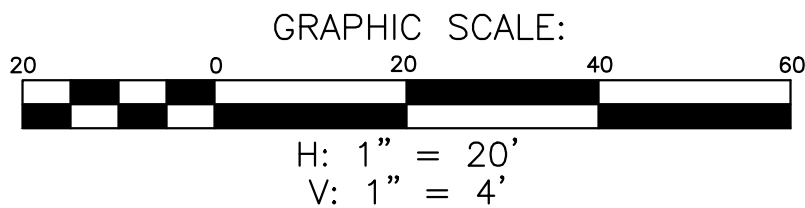


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SHEET	11 OF 14



SURVEY CONTROL POINTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
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102	2174925.17	5967113.85	71.40	GINNIE
103	2174968.51	5967039.69	72.24	GINNIE

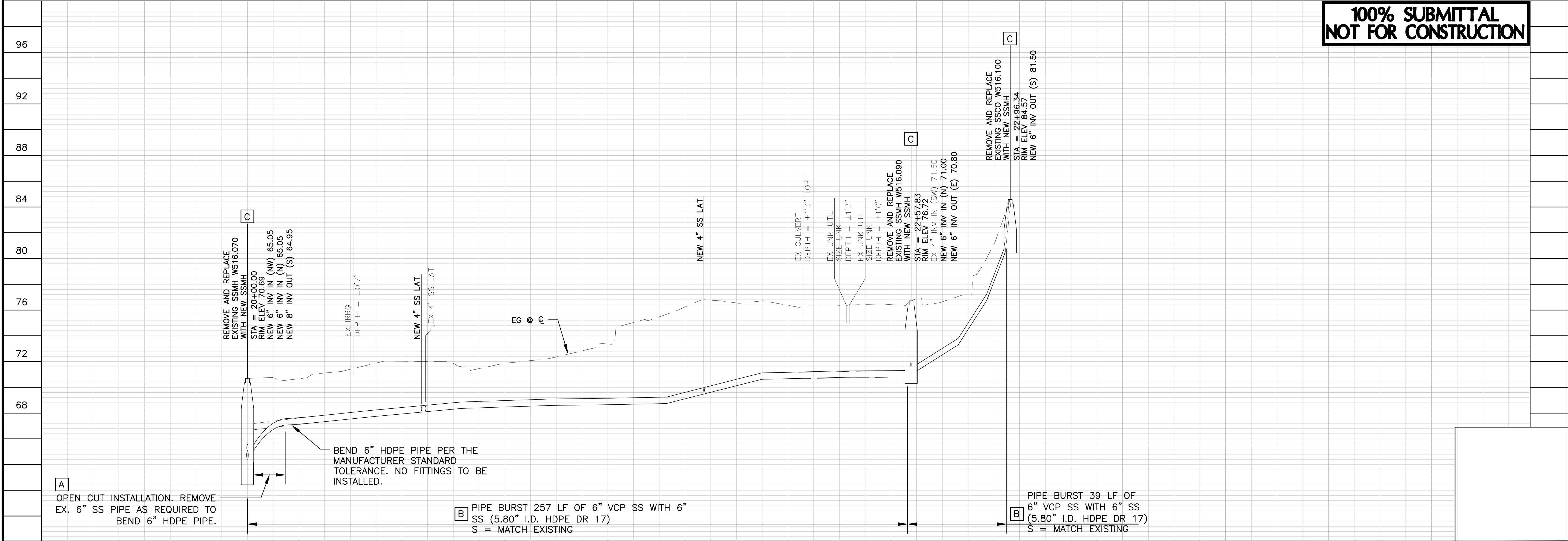


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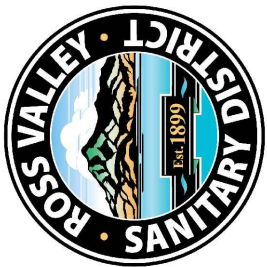
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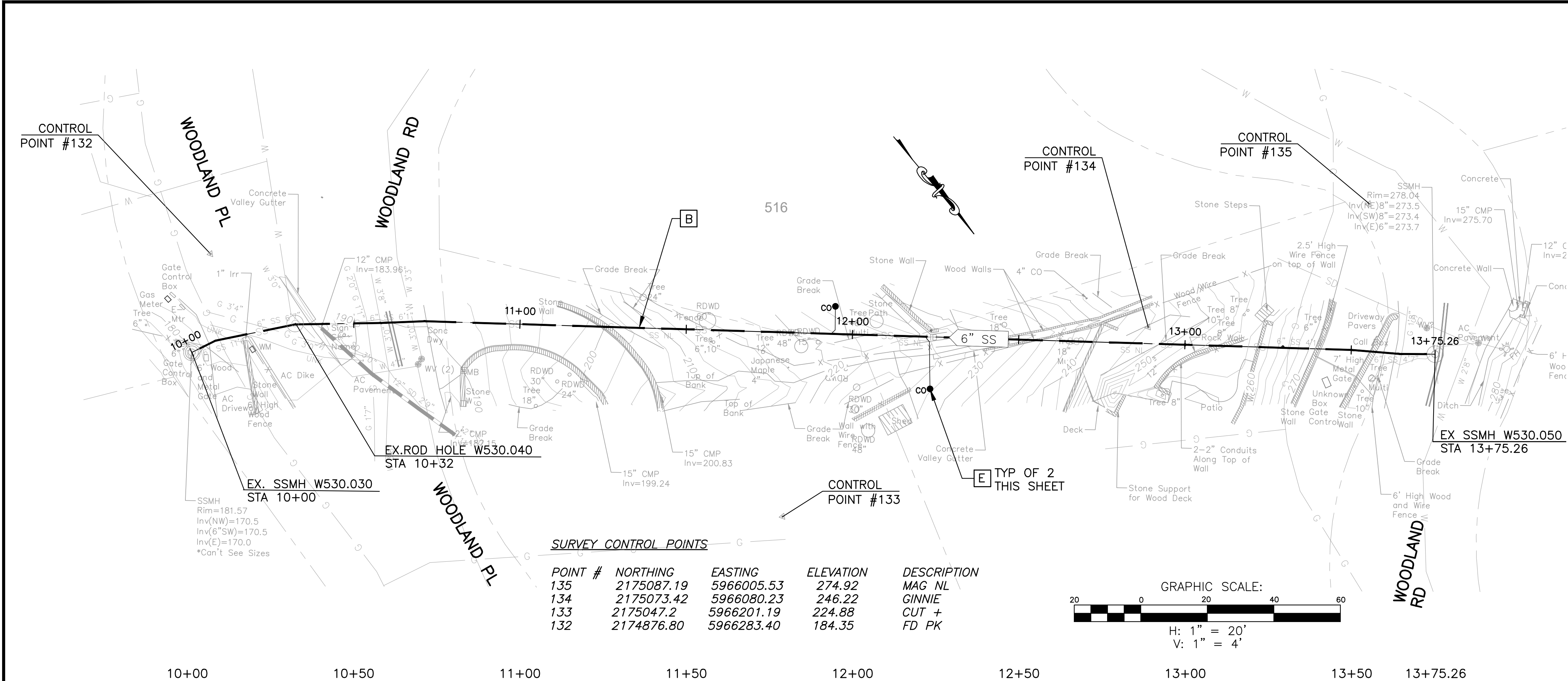


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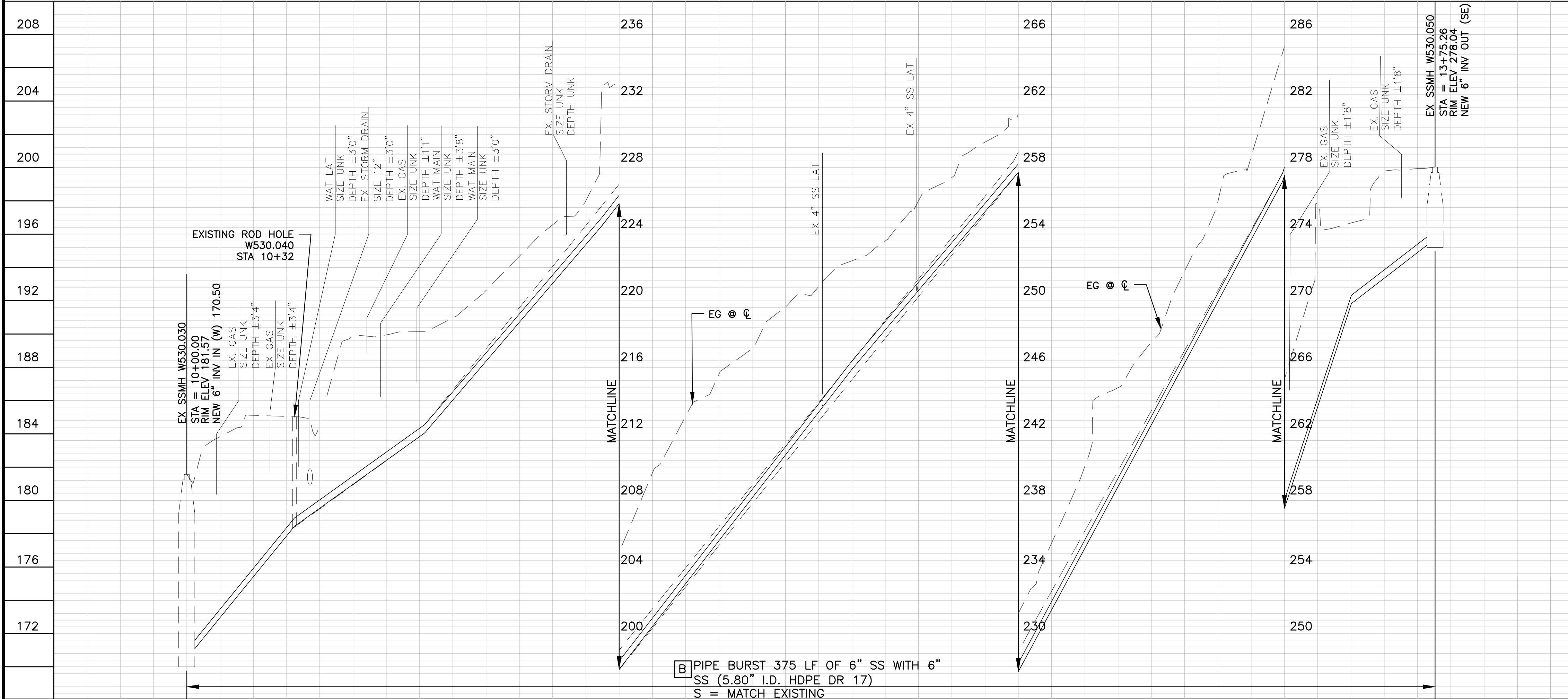
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CONTRACTOR SHALL VERIFY LATERAL ALIGNMENTS IN THE FIELD. CONTRACTOR SHALL EXTEND/SHORTEN EXISTING LATERALS AS REQUIRED TO BRING NEW CLEANOUT TO EDGE OF R/W. CLEANOUTS SHALL BE TWO-WAY WITH SEWER POPPER TYPE 2 BACKWATER PREVENTION DEVICE. CLEANOUTS SHALL MATCH EXISTING LOWER LATERAL MATERIAL. REFER TO SD-29: C-900 IS TWO-WAY AND HDPE IS WYE FACING MAIN. CLEANOUT MATERIALS AND UTILITY BOX SHALL BE PER RVSD APPROVED MATERIALS LIST. CHRISTY B09 BOXES SHALL BE USED FOR NON-TRAFFIC LOCATIONS. CHRISTY B1017 BOXES SHALL BE USED FOR ALL LOCATIONS SUBJECT TO TRAFFIC LOADS. LOCATION AND BOX TYPE SHALL BE CONFIRMED IN THE FIELD BY THE DISTRICT. CONNECTION OF SEWER LATERAL TO SEWER MAIN, INCLUDING DROP OFF ANGLE (TYPE A OR TYPE B CONNECTION) OF SERVICE LATERAL, SHALL BE AS SHOWN ON RVSD DWG SD-29. NO VERTICAL DROP OFF IS ALLOWED.

- NOTES:**
- CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING LIVE SANITARY SEWER LATERALS ALONG SEWER MAINS BY DYE TESTING AND SONDE AND REINSTATE LIVE LATERALS TO NEW SEWER MAIN.
 - FOR PIPE BURSTING SITES, PROVIDE AIR GAP FOR (1) LOCATIONS WHERE EXISTING UTILITY CROSSES NEW PIPE WITH LESS THAN TWO FEET CLEARANCE PER RVSD STD DWG SD-21 AND (2) WHERE PIPE MATERIAL CHANGES AND REQUIRES REMOVAL PRIOR TO PIPE BURSTING, IF NEEDED. NOT ALL PIPE MATERIAL CHANGES ARE SHOWN ON THE PROFILE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. AIR GAP LOCATIONS ARE NOT IDENTIFIED ON THE PLANS.
 - WHERE PIPING IS REMOVED AND REPLACED BY OPEN TRENCH, NEW PIPE INVERT ELEVATIONS SHALL MATCH EX PIPE INVERT ELEVATIONS (UPSIZED 8" SS INVERTS SHALL MATCH EXISTING 6" SS INVERTS), UNLESS OTHERWISE NOTED.
 - FOR WATER MAIN CROSSINGS AT OPEN TRENCH INSTALLATIONS, SEE GENERAL NOTE 23 AND 24 ON DWG N-01 FOR HDPE SLEEVE REQUIREMENTS.
 - BENDING OF NEW PIPING AND/OR JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH AWWA AND PIPE MANUFACTURER'S RECOMMENDATIONS.
 - EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. SEE GENERAL NOTE 8 ON DWG N-01. USE CLSM BACKFILL WHERE 6" CLEARANCE CANNOT BE OBTAINED BETWEEN NEW AND EXISTING UTILITIES. IF CONFLICTS REQUIRE THE RELOCATION OF EXISTING UTILITIES, THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING UTILITY OWNER(S) FOR RELOCATION(S).

**100% SUBMITTAL
NOT FOR CONSTRUCTION**



B PIPE BURST 375 LF OF 6" SS WITH 6" SS (5.80" I.D. HDPE DR 17) S = MATCH EXISTING

NO.	BY	DATE	REVISION

**SANITARY SEWER IMPROVEMENTS
PLAN AND PROFILE
WOODLAND RD**

ROSS VALLEY SANTARY DISTRICT WOODLAND AREA GRAVITY SEWER IMPROVEMENTS PROJECT
--



Harris & Associates
1401 Willow Pass Rd, Suite 500 Concord, CA 94520
weareharris.com (925) 827-4900

DESIGNED BY **KLC/JR**

DRAWN BY **KLC/JR**

CHECKED BY **KI**

DATE ISSUED **02/14/2023**

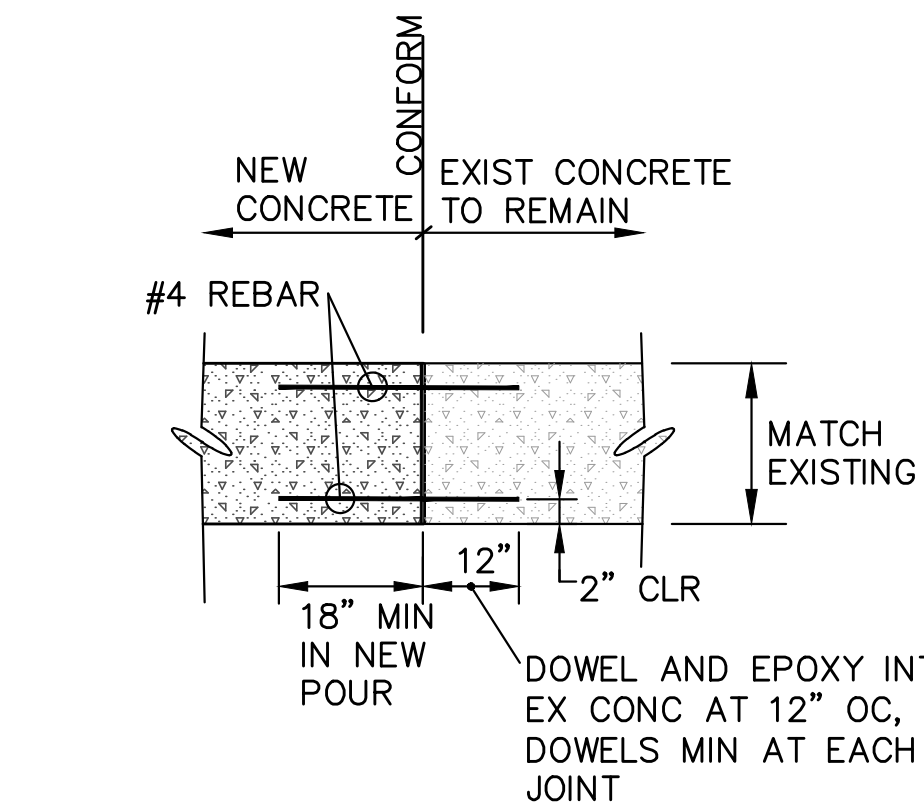
JOB NO. **120-0743.005**

DWG NO. **PP-10**

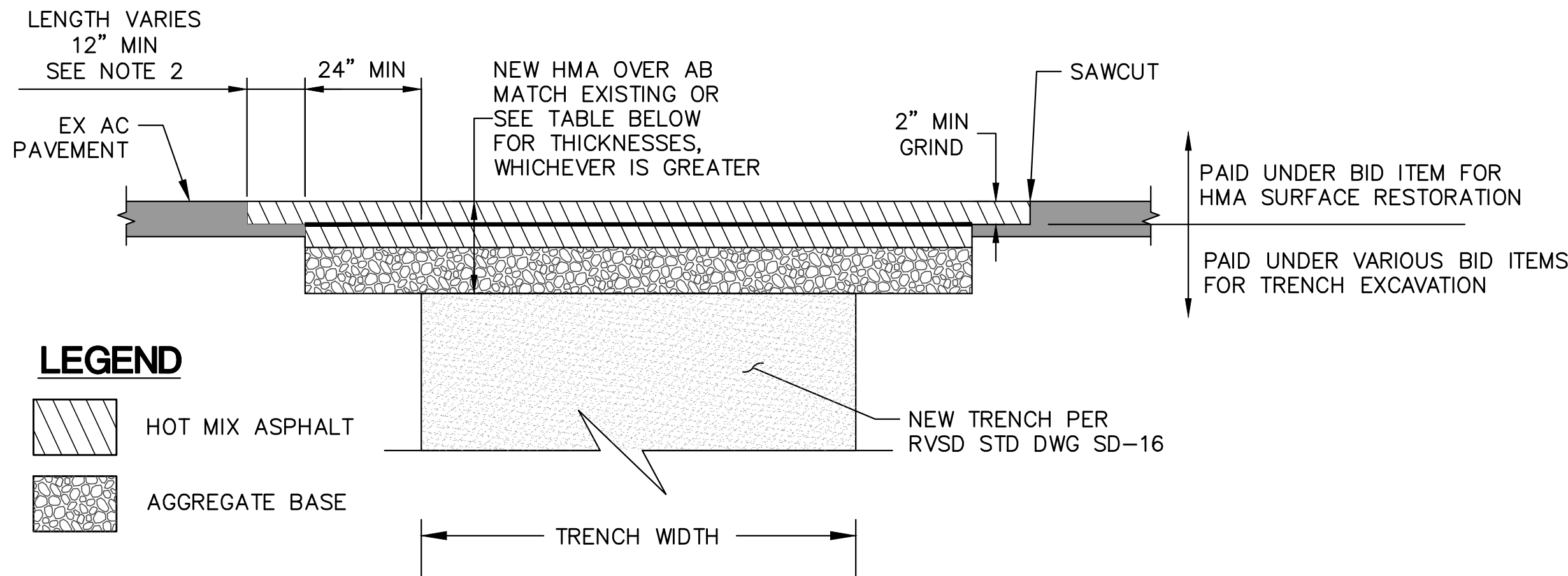
SHEET **13** OF **14**

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H:\Ross Valley Sanitary District (RVS)\1200743005 Woodland Area Sewer\16- D-01 CONSTRUCTION DETAILS.dwg Save Date: 2/14/2023 3:52 PM Plot Date: 2/14/2023 3:52 PM Julie.Rodriguez



1 PCC CONFORM SECTION
— NOT TO SCALE

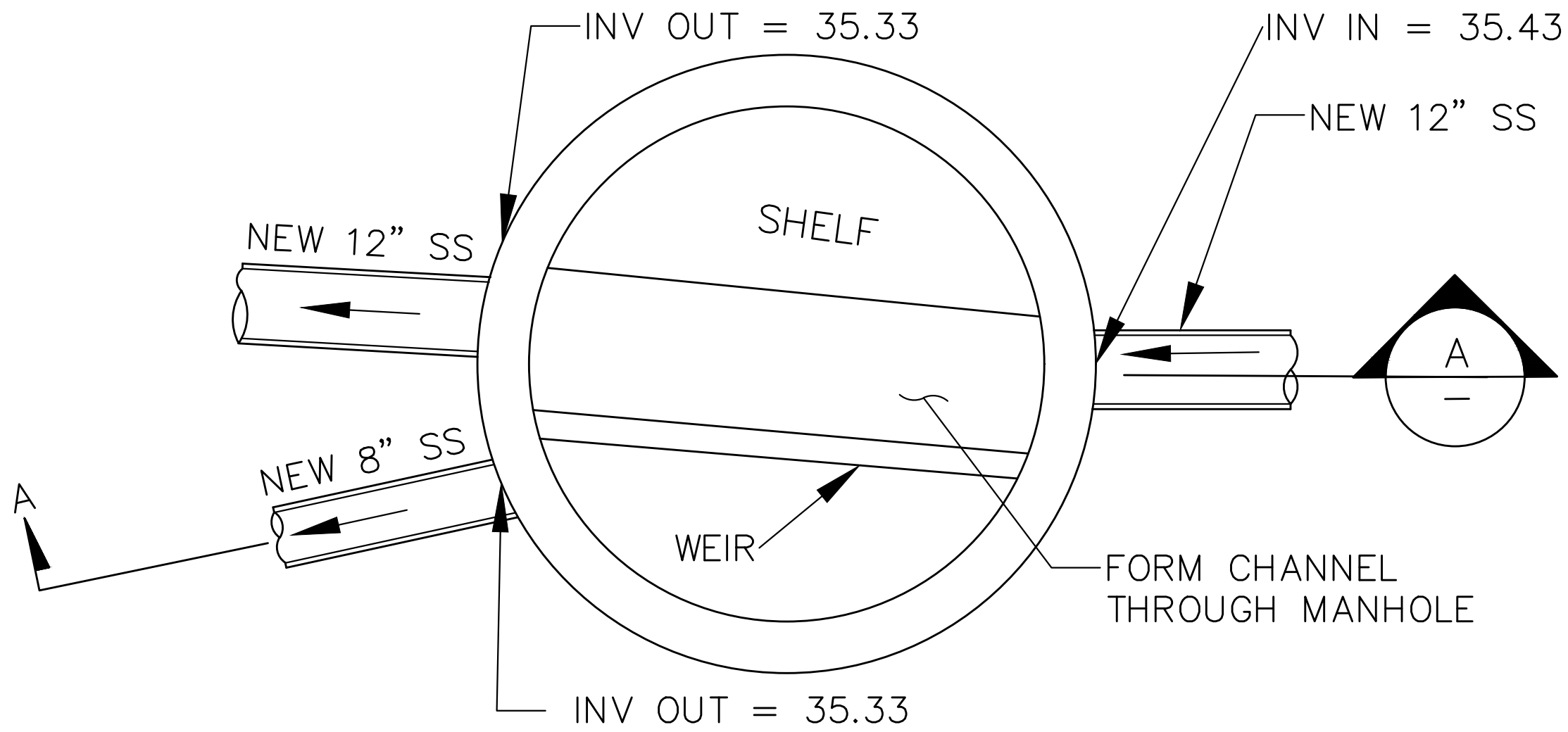


FINAL PAVING		
ROAD CLASSIFICATION (SEE NOTE 1)	PAVING REQUIREMENTS	ALTERNATE FULL DEPTH AC
LOCAL	MIN HMA: 4" MIN AB: 7"	7"
COLLECTOR	MIN HMA: 5" MIN AB: 11"	11"
ARTERIAL	MIN HMA: 6" MIN AB: 14"	14"

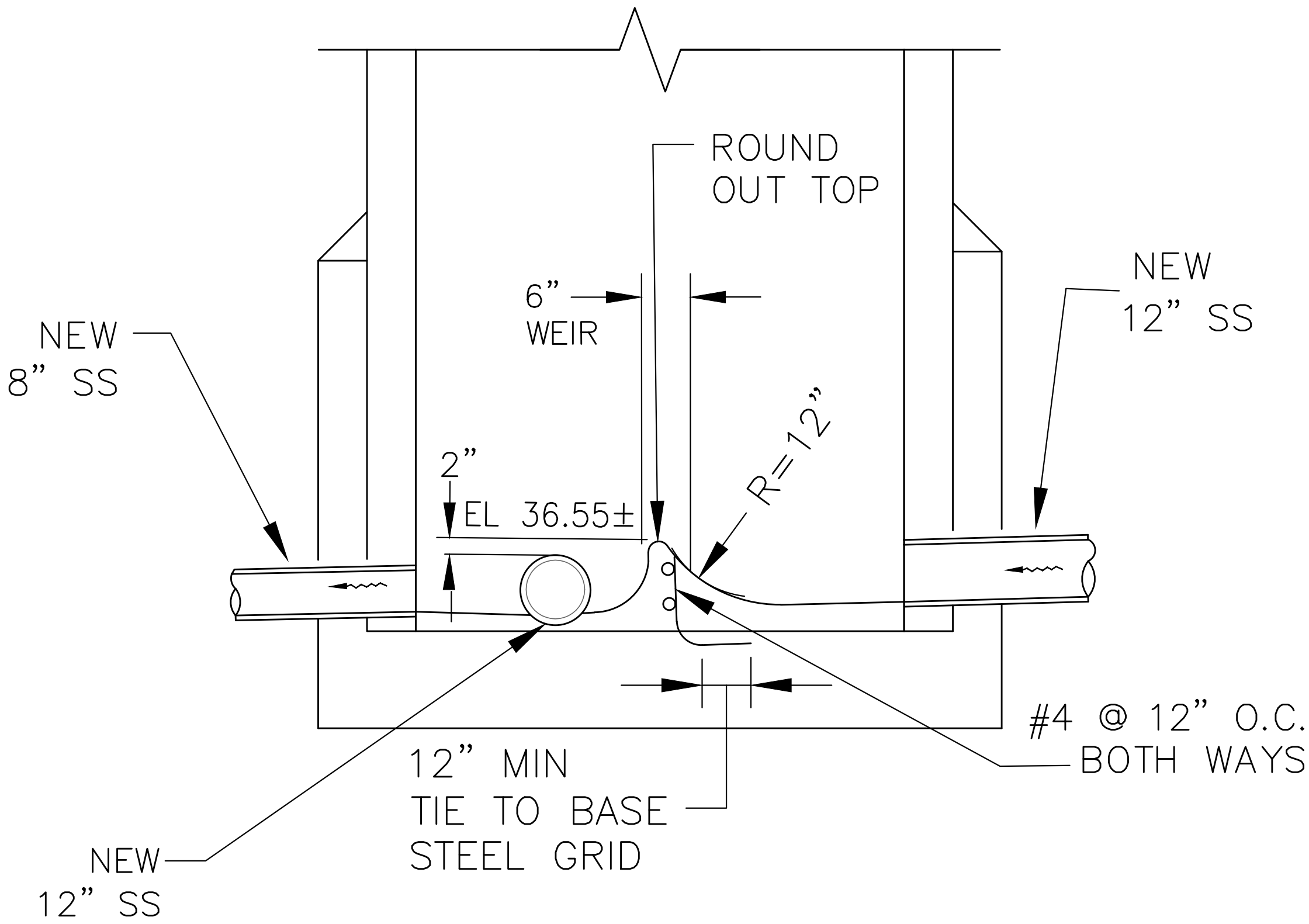
NOTES

- ROAD CLASSIFICATIONS ARE AS DETERMINED BY THE LOCAL JURISDICTION.
- SEE APPENDIX D FOR MARIN COUNTY STANDARDS 330 TO 380 FOR ADDITIONAL PAVING REQUIREMENTS. NOTE THAT EACH JURISDICTION MAY HAVE THEIR OWN ADDITIONAL PAVING REQUIREMENTS ASIDE FROM THOSE SHOWN IN APPENDIX D.

2 FINAL PAVING
— NOT TO SCALE



PLAN



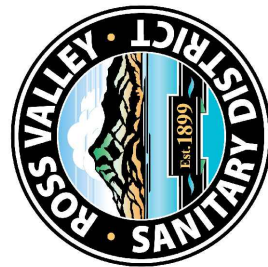
SECTION A-A

1 OVERFLOW MANHOLE
— NOT TO SCALE

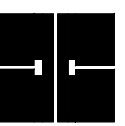
100% SUBMITTAL
NOT FOR CONSTRUCTION

CONSTRUCTION DETAILS

ROSS VALLEY
SANTARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT



Harris & Associates
1401 Willow Pass Rd, Suite 500 Concord, CA 94520
weareharris.com (925) 827-4900



DESIGNED BY KLC/JR

DRAWN BY KLC/JR

CHECKED BY KI

DATE ISSUED 02/14/2023

JOB NO. 120-0743.005

DWG NO.

D-01

SHEET 14 OF 14

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ROSS VALLEY SANITARY DISTRICT
Woodland Capacity and Creek Crossing Project

APPENDIX B

Sample Encroachment Permits

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- ☐ Town of Ross
- ☐ Town of Fairfax
- ☐ Town of Corte Madera
- ☐ Town of San Anselmo
- ☐ Town of Tiburon
- ☐ County of Marin

EP No: A
 A / B

UNIFIED APPLICATION FOR ENCROACHMENT PERMIT

APPLICATION DATE: _____ APN: _____ - _____

LOCATION OF WORK OR ENCROACHMENT: _____

No.	Street	City/Township
-----	--------	---------------

CROSS STREET: _____ ESTIMATED COST: \$ _____

STARTING DATE: _____ COMPLETION DATE: _____

PROPERTY OWNER'S NAME AND ADDRESS (If Different from Applicant):

THE UNDERSIGNED HEREBY APPLIES FOR PERMISSION TO PERFORM THE FOLLOWING DESCRIBED WORK AND/OR OTHERWISE ENCROACH ON A LOCAL AGENCY RIGHT-OF-WAY (ROW):

DESCRIPTION OF WORK OR ENCROACHMENT (Include plans or sketch):

Check all that apply to the project and provide a written description:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Driveway Approach | <input type="checkbox"/> Sidewalk | <input type="checkbox"/> Accessible Ramp | <input type="checkbox"/> Debris Box |
| <input type="checkbox"/> Curb & Gutter | <input type="checkbox"/> Water Service | <input type="checkbox"/> New Utilities | <input type="checkbox"/> Special Event |
| <input type="checkbox"/> Sewer Improvement | <input type="checkbox"/> Excavation | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Other (Describe) |

Describe:

Road Surface Type: ☐ Asphalt ☐ Concrete ☐ Other:

Trenching Work: ☐ Yes ☐ No Linear Feet: Surface Thickness:

Traffic Control Plan: ☐ Yes ☐ No

Applicant agrees that all work will be performed in accordance with the rules, regulations and standards of the Local Agency Department of Public Works and any Local Municipal Code. All work shall be subject to inspection and approval by the Department of Public Works. Applicant shall indemnify, defend and hold the Local Agency, its officers, agents and employees harmless from any and all claims, suits or liability, including, but not limited to, litigation costs and attorney's fees which the Local Agency may incur as the result of any and all claims and suits for personal injury, property damage or inverse condemnation by reason of applicants placement of/ or maintenance of encroachments authorized by this permit. No work shall commence until permit is issued.

APPLICANT'S NAME / COMPANY (PLEASE PRINT):

CONTRACTOR'S NAME: _____ Contractor License No: _____

APPLICANT'S MAILING ADDRESS:

AGENCY:

CONTACT NUMBERS:

Daytime Phone	Fax	Email
---------------	-----	-------

APPLICANT'S SIGNATURE: _____

For Agency Use Only										Fees:	
Accepted By: _____								Application:		_____	
Insurance on file?		<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Final Insp. Cleared:		<input type="checkbox"/>	Plan Review & Inspection:		_____
Road Moratorium?		<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Receipt #:		_____		Total:	_____

Encroachment Permit Conditions

- ☐ Construction Standard(s): _____
- ☐ General Conditions: _____
- ☐ Comprehensive General Liability insurance in amounts not less than \$1,000,000 combined single limit applying to bodily injury, personal injury and property damage are required.
- ☐ Additional Insured Endorsement: The local agency must be named as an additionally insured on a separate endorsement sheet that modifies the general liability policy.
- ☐ Contact local Police Department, Fire Department, and Parking Services prior to start of work.
- ☐ The Contractor shall maintain local access and provide emergency vehicle access at all times.
- ☐ Compaction test is required and shall be submitted to local Public Works Department.
- ☐ Provide a traffic control plan per the Manual on Uniform Traffic Control Devices (MUTCD).
- ☐ Provide safe pedestrian and wheelchair access, per ADA and State requirements, during construction.
- ☐ All work shall be performed between the hours of _____ and _____.
- ☐ Please contact _____ prior to start of work and for final inspection.
- ☐ Planning review required: YES / NO
- ☐ Special Conditions: _____

Encroachment Permit Approval

Approved By: _____

Date: _____

Inspected By: _____

Date: _____

How do I apply for an Encroachment Permit?

Submit your application and construction plans directly to the Department of Public Works, directly to Room 304 at the Civic Center or mail to the address on the back of this pamphlet.



What should I submit with my application?

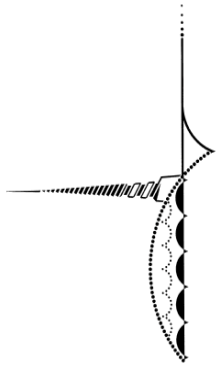
- A completed Encroachment Permit Application form.
- A site plan drawn to scale showing the property line, edge of pavement, proposed improvements, and site features including driveways, sidewalks, retaining walls, utilities, easements, trees, fences, and other structures.
- Construction details including dimensions, elevations, and length and depth of trench.
- Construction cost estimate.
- Traffic control plan if required.
- Copies of your building plan sheets may be used for the application if they clearly show the proposed improvements.

QUESTIONS?

Call (415) 499-6549

To aid in serving you, please provide the secretary with the community and address in which the project is located so your call can be directed to the appropriate staff.

**Marin County
Department of Public Works
3501 Civic Center Dr. Room 304
San Rafael, CA 94901
www.co.marin.ca.us**



**Marin County
Department of Public Works
Land and Development Division**

HOW TO APPLY FOR AN ENCROACHMENT PERMIT

HOW TO APPLY FOR AN ENCROACHMENT PERMIT



What is the purpose of an Encroachment Permit?

An encroachment permit allows you to make certain uses and construct certain improvements within a county-maintained public right-of-way, both above and underground. Examples include installation or repairs to underground utilities, trenching in the right-of-way, building or repairing driveway approaches/sidewalks, or work requiring traffic control on the street.

How do I know if my street is a County Public right-of-way?

All streets are listed on the County - Maintained Road System Road List.

Who issues encroachment permits?

The Department of Public Works issues the permits (Marin County Civic Center, 415-499-6549).

Is a public hearing held?

No.

How long will it take for my application to be reviewed?

Encroachment permit applications that are submitted with complete plans can be processed in 1 to 2 weeks, although in some cases it can take as long as 1 month or longer, and may include site inspection, plan checking and plan revisions.



What is the cost of an Encroachment Permit?

There is a non-refundable \$65.00 application fee. The plan review and inspection fees vary, depending upon the amount of work you are doing within the right-of-way. The Public Works Department will determine the permit fee after review of your application.



At what point should I call for an inspection of my project?

The permit will state when inspections are required, however, after you have completed the project, a final inspection is required. Please request inspections 2 business days before needed.

Issuance of the Encroachment Permit

The Public Works Department will review your proposed project and will prepare an Encroachment Permit with associated construction standards and use requirements. In certain situations a permit application may be denied. However, the Public Works staff will discuss with you how your plans might be revised to secure approval.

What is a Recorded Encroachment Permit?

Recording an encroachment permit is done when an improvement, usually a non-transportation improvement, e.g. retaining walls, is conditionally allowed in the right-of-way. The County reserves the right to have the improvement removed or modified in the future, at the property owners expense. The permit is recorded against the property title so that future property owners are aware of the condition. Contact Public Works if this applies to you because there are special conditions.

What should be submitted with an application for a Recorded Encroachment Permit?

Submit information as you would for a regular Encroachment Permit, however, the following also applies:

- The site plan and any construction information shall be on 8-1/2" by 11" paper with a 1/2" border. All lettering and notations shall be clearly marked; otherwise the County Recorders office will not accept the document.
- The right-of-way line, edge of pavement, centerline of road, street name and all improvements within the right-of-way shall be clearly shown on the site plan.
- The site plan shall be drawn to scale and dimensions provided showing the extent of the encroachment into the right-of-way.

What are the steps to record an Encroachment Permit?

- Submit a completed application, site plan, fees and a *copy of your Deed*.

- If the permit will be approved, the permit will be sent to you for your notarized signature. Return the permit to the County with your notarized signature. Do not start work yet.
- The Road Commissioner will sign the permit, then forward the permit to the Recorder's office for recording. A copy will be sent to you and you may start work.
- Should the recorders office reject the document you will be required to correct the deficiency and resign the permit. The Permit is not valid until recorded.

SAMPLE

No.
Area:

County of Marin
OFFICE OF ROAD COMMISSIONER
ENCROACHMENT PERMIT

TO:

Issue Date June 16, 2015

In compliance with your request of June 10, 2015, and subject to all the terms, conditions and restriction written or printed as General Provisions and Special Conditions on any part of this form and referenced attachments, **PERMISSION IS HEREBY GRANTED TO:**

Excavate to repair existing sanitary sewer mains per submitted plans entitled "FY 2014/15 Pipeline Rehabilitation Project" dated January 28, 2015. Note, several roads, included in scope of work, are currently under a road moratorium, please see attached special conditions for restoration.

At: McAllister Avenue, Sir Francis Drake Blvd., Lilac Avenue, & Acacia Avenue - Kentfield

All work shall be done in accordance with attached condition(s): (General Provisions, Special Conditions, 330, 340, 350, Stormwater Pollution Prevention for Asphalt Work)

and the following Special Condition(s):

1. Final pavement restoration per attached special conditions, backfill per U.C.S DWG #330 shall be performed. Required T-Cut shall be performed with a rotary grinder. The permanent trench paving shall be completed within five working days of backfilling. A compaction test (top 12" of class II AB at 95% relative compaction) shall be submitted to the referenced inspector prior to final pavement restoration.
2. Material shall not be placed within nine feet of the center of the pavement, or left in the right-of-way overnight. Leave no open trenches after working hours.
3. During working hours one traffic lane, under adequate flagger control, shall be maintained in all directions. At all other times all traffic lanes shall be kept open. All traffic control shall be per the Manual on Uniform Traffic Control Devices (MUTCD) standards.
4. Contractor shall call Underground Service Alert (800) 642-2444 at least 72 hours prior to any trenching work to have underground utilities marked. This permit is not valid unless applicant has been provided an initial inquiry identification number pursuant to GC Section 4216.2.
5. The use of "cut-back" asphalt will not be permitted as temporary trench paving. It is required to utilize trench plates or hot mix AC.
6. Contact Larry Lewis at (415) 473-4107 48 hours prior to starting work and for final inspection.

This permit shall be considered void unless the work herein contemplated shall have been completed before February 28, 2016.

A.P.# ROW

B.P. # _____

RAUL M. ROJAS
MARIN COUNTY ROAD COMMISSIONER


Deputy

ROSS VALLEY SANITARY PIPELINE PROJECT

PIPELINE/CONDUIT SPECIAL CONDITIONS

1. **Work Hours:** Shall be limited to 9:00 a.m. to 3:00 p.m. for work on Sir Francis Drake Blvd., and 8:00 a.m. to 5:00 p.m. for all other streets, weekdays only, excluding national holidays. Exceptions to this requirement shall be only upon written consent of the Marin County Public Works Department (DPW). Work hours shall be further restricted if work causes a traffic delay greater than 3 minutes. **Permittee to coordinate schedule with surrounding school districts. If conflicts arise with surrounding schools work shall cease until mitigations can be made as determined by DPW.**
2. **Traffic Control:** The Contractor shall refer to the current "Manual of Traffic Controls for Construction and Maintenance Work Zones" (1990), and the "Uniform Sign Chart," issued by the California Department of Transportation and shall furnish, erect, maintain and remove all necessary signs and devices during the length of this contract.

The Contractor shall be responsible for preparing a Traffic Control Plan. The Traffic Control Plan shall show the sequence of operations, work to be performed, and the traveled way to be used for all movements of traffic during each construction sequence. The Contractor shall schedule a traffic control review meeting with the Engineer to review said plan. Once the Engineer has approved the Contractor's Traffic Control Plan, the Contractor shall not deviate from the plan without the Inspectors/Engineer's written or verbal approval.

All traffic controls shall be in accordance with Caltrans standards. Traffic delays shall not exceed 3 minutes. Any delays must be under flagger control and must be limited to the work hours specified above. If construction operations create significant traffic congestion as determined by DPW, the hours of operation or traffic control requirements may be modified by DPW.

Note that road closures are only permissible with prior approval by the County Board of Supervisors. Allow 8 weeks for agenda placement, board hearing, approval, and neighborhood notification.

3. **Notification / Signs** The contractor shall post signs along either end of the effected streets not less than one week in advance informing the public of his schedule of activities and of any areas where delays or detours may be anticipated. The signs shall include a 24 hour emergency phone number. The emergency number shall also be provided to DPW prior to commencement of work.
4. **Trench Backfill & Pavement Restoration (including Potholes)** pavement restoration per U.C.S. DWG. #330, 340, 350 is required, and below mentioned requirements. Certified **compaction test** results for the base, at maximum spacing of 100 feet or each pothole, shall be submitted to the DPW Engineer prior to final paving. Compaction test results on the top 12 inches of class II aggregate base shall achieve 95% relative compaction.

Acacia Avenue, Lilac Avenue, and Laurel Grove Avenue are currently under a road moratorium. If trenching or construction damage occur on the above streets the

following restoration is required: After the trench is backfilled, the pavement on both sides of the trench or to the nearest construction damage, shall be over-cut with a rotary grinder to a depth of 2-inches, a minimum of 40' in each direction, and full width of the road.

After the trench is backfilled, the pavement on both sides of the trench shall be over-cut with a Rotary Grinder a minimum of 6 inches into good pavement as marked by DPW inspector, and the entire area shall be repaved as specified below. Pavement restoration limits shall not be located in a 'wheel path', as determined by DPW. The practice of over-cutting the trench prior to excavation will not be permitted.

Where the remaining existing pavement, between the edge of the paved area, another trench cut, linear cracking, or the edge of the trench after over-cutting (T-Cut per UCS #330) is less than 4 feet, the remaining section of existing pavement shall be removed and the entire area shall be repaved and rebuilt as specified.

Upon completion of the project if construction activity, equipment, vehicles and/or material delivery and storage cause damage to any existing facility (e.g., pavement, curb, gutter, sidewalk, landscaping) beyond normal wear and tear, as determined by the agency, then the permittee shall be responsible for the repair of same. No more than 300 linear feet of trench per day shall be excavated. Unless previously approved by DPW.

No more than 300 linear feet of trench per day shall be excavated. Unless previously approved by DPW.

Asphalt concrete shall conform to Caltrans Section 39 of the Standard Specifications and these special provisions. A tack coat shall be applied. Asphalt concrete shall be placed only when the atmospheric temperature is above 55°F. There shall be no free standing water in the trench or surface prior to placing tack coat or asphalt concrete.

No cut back, medium cure or cold mix shall be used as temporary trench paving. Only hot mix asphalt or trench plates meeting Caltrans Sections 39 and 92 shall be used. Temporary asphalt thickness shall be at least as thick as the existing section, but not less than 2 inches.

5. **Permanent paving** shall be completed no later than **five working days** after backfilling unless extensions are granted in conformance with a DPW approved pavement restoration.
6. **Shoulder Restoration:** Disturbed unpaved shoulder areas shall be capped as necessary with unclassified rock according to Marin County standards and to the satisfaction of the Marin County DPW Engineer. All disturbed landscaping and other associated improvements in the shoulder or median shall be replaced in kind.
7. **Safety Equipment & Procedures** shall be in accordance with current Caltrans Standards. Safety equipment shall be provided by the contractor and shall include any and all necessary barricades with flashers, cones delineators, and warning and informational signs required by the Caltrans Standards or the County.

8. **Maintenance of the Site:** The pavement along the entire length of the project, and all roads and streets used by the contractor for access to the site, shall be swept clean of all mud, dirt, gravel, dust and debris daily, or more frequently as otherwise necessary for safety and to maintain a neat and orderly appearance. At the end of each workday all materials, equipment tools and debris shall be removed from the roadways and said roadways shall be fully opened to traffic. Steel traffic plates shall be used in accordance with Caltrans standards to "Encroachment Permit Steel Plate Bridging Utility Provisions".

Trenches in paved shoulder areas shall be completely covered by steel traffic plates during non-working periods. Ramp material shall be replaced each time the plates are set in place, at the end of each workday, and other times as needed.

9. **Traffic Striping:** pavement legends and monuments damaged during construction shall be replaced as soon as possible, but not more than 5 days, after pavement has been restored. Traffic striping pavement legends materials and any center-line or fog-line shall be replaced to match existing or prior striping.
10. **Storm Drains:** Cutting into existing culverts is not permitted. Damaged storm drain culverts repairs require County inspection prior to backfill. All damaged County storm drains shall be camera inspected after completion of the utility line work to verify integrity. Videotape shall be provided to DPW prior to final inspection.
11. **Street Monumentation** potentially affected shall have reference points set prior to construction in case the monument(s) is disturbed or damaged.
12. **Failure to Comply** with the conditions of this permit or to maintain traffic control in a safe manner shall be cause for the immediate shutdown of work.
13. **Construction Site Staging:** Any equipment or construction site materials are not allowed to be staged in the County of Marin right of way, and shall be kept off-site, unless a staging plan is submitted and approved by DPW.
14. **Contractor to Obtain Permit:** The contractor shall furnish at his own expense insurance coverage naming the County as an additional insured (including endorsement). **The insurance coverage for General Liability shall be in an amount not less than \$2,000,000 per occurrence for bodily injury, personal injury and property damage.** If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit. Proof of this insurance coverage and payment shall be submitted to the County before commencement of the work. Contractor shall obtain other approvals and permits from appropriate jurisdictions and agencies. **The Permittee shall pay the encroachment fee of \$6,209.00, sign the encroachment permit application, and provide a full sized set of the approved drawings.**
15. **Inspections and Submittals:** The following must be completed. Inspections require a minimum 48-hour advance notice. Unless otherwise specified, Larry Lewis at DPW should be contacted for inspections at (415) 473-2830.

A. Pay encroachment permit fee, submit signed EP application and full sized set of

- plans.
- B. Contact Larry Lewis at least 48 hours prior to starting work for field meeting and inspection.
 - C. At the start of work, post notification regarding start of work, duration and 24-hour emergency contact telephone number; provide 24 hour emergency contact and contractor contact information to DPW.
 - D. Certified **compaction test** results for the base, shall be submitted to the DPW Engineer or Larry Lewis prior to final paving.
 - E. Provide 3 business days notice prior to final asphalt concrete restoration.
 - F. Immediately contact DPW (415) 473-2830 should there be any damage to storm drain facilities, street monuments or other county maintained improvements.
 - G. Contact DPW for final inspection of all paving and striping.

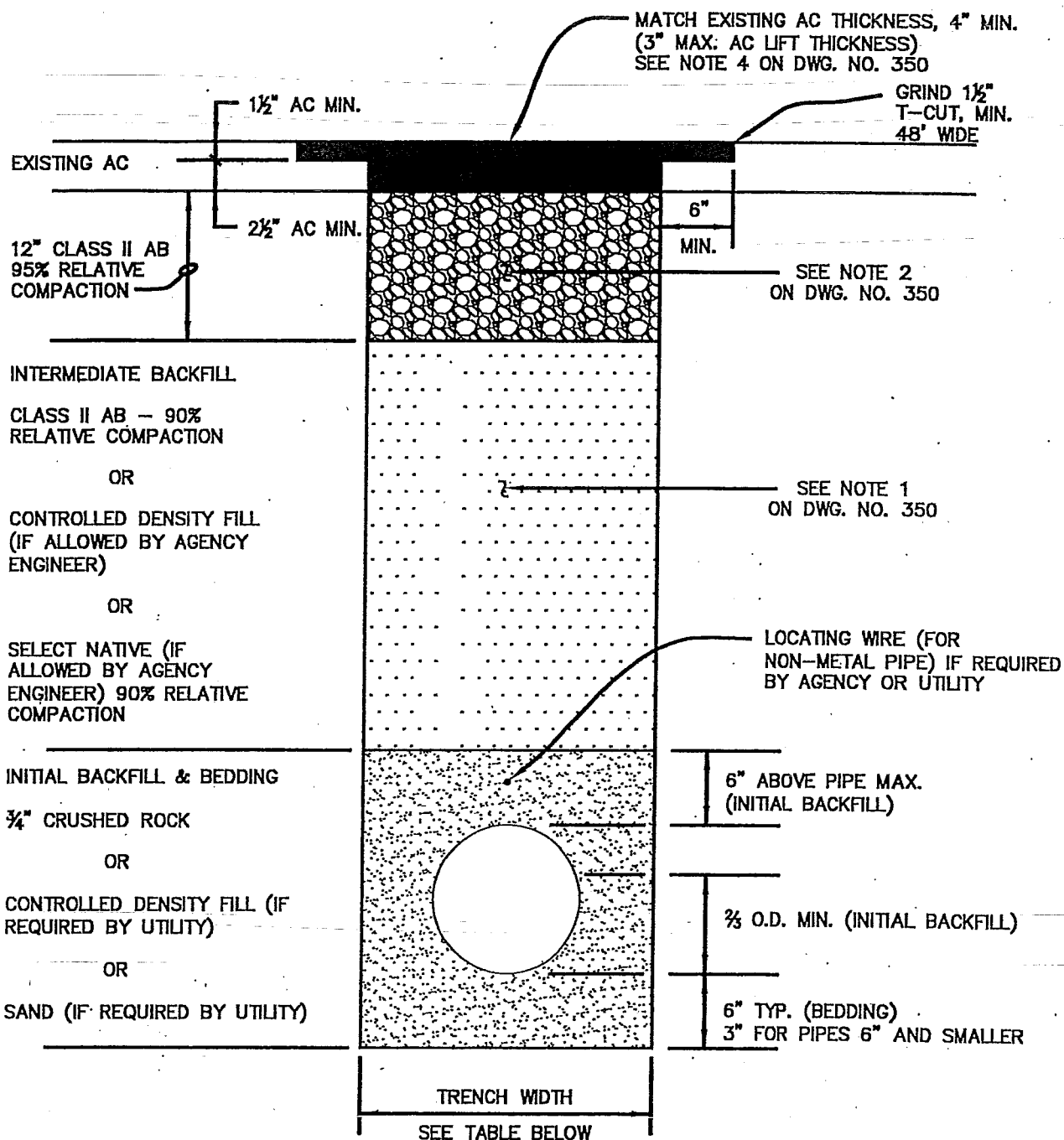
END

County of Marin
Department of Public Works
OFFICE OF THE ROAD COMMISSIONER
ENCROACHMENT PERMIT - GENERAL PROVISIONS

1. **PERMIT TO BE KEPT AT WORK SITE.** This permit shall be kept at the site of the work and must be shown to any representative of the Public Works Department (DPW) or any law enforcement officer on demand.
2. **NOTICE PRIOR TO STARTING WORK.** Before starting work, on which an inspector is required or whenever stated on the face of this permit, the permittee shall notify DPW. Such notice shall be given at least 24 hours in advance of the date work is to begin.
3. **PROTECTION OF TRAFFIC.** Adequate provision shall be made for the protection of the traveling public. Wherever necessary, barricades shall be placed with red lights or flares at night, flag persons employed, and any other necessary measures as may be required by the particular work in progress.

The accessible pedestrian path of travel and related accessibility features must be maintained at all times or an alternate accessible temporary pedestrian path of travel must be provided around work zones. Accessible features must also be maintained during road closures.
4. **MINIMUM INTERFERENCE WITH TRAFFIC.** All work shall be planned and carried out so that there will be the least possible inconvenience to the traveling public. All traffic controls shall be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) standards. Traffic delays shall not exceed 3 minutes. At a minimum, one traffic lane under adequate flagger control shall be maintained during working hours. If construction operations create significant traffic congestion as determined by DPW, the hours of operation or traffic control requirements may be modified by DPW.
5. **STORAGE OF MATERIAL.** No material shall be stored within eight (8) feet of the edge of pavement or traveled way or within the shoulder line where the shoulders are wider than eight (8) feet. Any storage of equipment or machinery within the public road right of way will require prior consent of DPW.
6. **CARE OF DRAINAGE.** If the work herein contemplated shall interfere with the established drainage, ample provision shall be made by the permittee to provide for it as may be directed by DPW.
7. **CLEAN UP OF RIGHT-OF-WAY.** Upon completion of work, all brush, timber, scraps and other leftover construction materials and refuse shall be entirely removed and the right-of-way restored to a condition at least as presentable as that existing prior to the start of work.
8. **DAMAGE TO RIGHT-OF-WAY IMPROVEMENTS.** Any damage to the existing roadway, structures or survey monuments due to construction operations under this permit shall be restored to original condition by the permittee. Shoulder areas shall be redressed, drainage ditches shall be restored to original grades, and all dirt and debris resulting from permittee's operations shall be removed from the construction area. Any trees damaged as a result of construction operations shall be removed or restorative measures taken at permittee's expense as directed by DPW.
9. **SURVEY MONUMENTS.** The permittee shall take all measures necessary to identify, mark and preserve survey monuments. In the event that a monument is disturbed, permittee shall immediately notify DPW and perform any necessary repairs.
10. **SUBMIT LOCATION PLAN.** Upon completion of underground or surface work of consequence, the permittee shall furnish an as-built plan if requested by DPW.
11. **STANDARDS OF CONSTRUCTION.** All work shall conform to recognized standards of construction. Permittee shall comply with all "Uniform Construction Standards" drawings adopted May 2008, and "Standard Specifications Cities & County of Marin adopted June 1992. Copies of referenced documents can be found at - <http://www.marincounty.org/depts/pw/divisions/land-use>
12. **SUPERVISION OF AGENCY.** All work shall be done subject to the supervision of and to the satisfaction of DPW.
13. **DEFINITION.** This permit is issued under Code Section 13.12 of the County of Marin. The term encroachment is used in this permit as defined in Section 660, Sub. B of the Streets & Highways Code of the State of California. This permit does not authorize, and it shall not be construed as authorizing, any infringement upon the highway referred to herein or as affecting property rights of others thereto.
14. **ACCEPTANCE OF PROVISIONS.** It is understood and agreed by the permittee that the performance of any work under this permit shall constitute an acceptance of the provisions.

15. **NO PRECEDENT ESTABLISHED.** This permit is granted with the understanding that this action is not to be considered as establishing any precedent on the question of the expediency of permitting any certain kind of encroachment to be erected within the right-of-way of County roads.
16. **FUTURE MOVING ON INSTALLATION.** It is understood by the permittee that whenever construction, reconstruction or maintenance work on the highway may require, the installation provided for herein shall, upon request of DPW, be removed within a reasonable period of time as approved by DPW and at the sole expense of the permittee.
17. **PERMITS FROM OTHER AGENCIES.** The party or parties to whom this permit is issued shall, whenever required by law, secure the written order or consent to any work hereunder from the State of California Public Utilities Commission or any other public board having jurisdiction. This permit shall be suspended in operation unless and until such order or consent is obtained.
18. **LIABILITIES FOR DAMAGES.** The permittee is responsible for all liability imposed by law for personal injury or property damage which may arise out of work herein permitted, or which may arise out of failure on the permittee's part to perform his obligations under this permit in respect to maintenance. In the event any such liability is made against the County of Marin or any department, officer or employee thereof, permittee shall defend, indemnify and hold them and each of them harmless from such claim. Nothing herein is intended to impose on permittee any different or higher standard of care than that required by law. This permit shall not be effective for any purpose unless and until the above named permittee files with DPW a safety bond in the form and amount required by said department if stated on the face hereof. The requirement that a bond be filed does not apply in the event the permittee is a governmental board, which derives its revenue by taxation, or any public agency or public utility having lawful authority to occupy the highway.
19. **MAKING REPAIRS.** If DPW shall so select, repairs to paving or other improvements or facilities, which have been disturbed, shall be made by employees of DPW and the expenses therefore shall be borne by the permittee. All payment to laborers, inspectors, etc., employed by DPW for or on account of the work herein contemplated shall be made by said permittee forthwith on receipt of written orders, payrolls or vouchers approved by DPW. Alternatively, DPW may elect to require a deposit before starting repairs in an amount sufficient to cover the estimated cost thereof.
- DPW will give reasonable notice of its election to make such repairs. If DPW does not so elect, the permittee shall make such repairs promptly. In every case the permittee shall be responsible for restoring any portion of the highway which has been excavated or otherwise disturbed to its former condition as nearly as may be possible except where DPW elects to make repairs to paving as above provided in this paragraph and except where provisions to the contrary are made elsewhere in the permit.
20. **MAINTENANCE.** The permittee or his assignee of interest agrees by the acceptance of this permit to exercise reasonable care to maintain properly any encroachment placed by it in the highway and to exercise reasonable care in inspecting for and immediately repairing and making good any injury to any portion of the highway, which occurs as a result of the maintenance of the encroachment in the highway or as a result of the work done under this permit, including any and all injuries to the highway which would not have occurred had such work not been done or such encroachment not placed therein.
21. **INTEGRATED PEST MANAGEMENT:** The contractor shall be required to strictly adhere to the guidelines established in the County of Marin's Integrated Pest Management (IPM) Ordinance 3521 and Policy, approved by the Board of Supervisors on July 21, 2009. Additional information regarding IPM policy, ordinance 3521, program, resources and requirements is available at the following website:
<http://www.co.marin.ca.us/depts/AG/Main/IPM/ipmprogramhome.cfm> and Marin County Code Section 23.19.
- The contractor and applicant shall note that all pesticide applications, regardless of material used, must be approved by the IPM Coordinator prior to use at any facility covered by the contract. Material for weed eradication and pest control shall be only those listed in the County of Marin's approved list and categories III and IV herbicides, non-corrosive, non-staining, and shall not leave a flammable residue. Pesticides shall be EPA and California Department of Agriculture approved and used in strict accordance with manufacturer's label, recommendations, Federal, State, and local laws. Chemical application must use least toxic methods and be used as the last resort and only with written approval. Failure to comply with the Marin County IPM Ordinance & Policy may result in penalties as described in the ordinance.
22. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g. relocation, alteration, removal, etc.)



NOTE: IF ROADWAY HAS EXISTING AC OVER CONCRETE, TRENCH RESTORATION SHALL BE DETERMINED BY THE AGENCY ENGINEER.

TYPE 1 ASPHALT CONCRETE PAVED STREETS

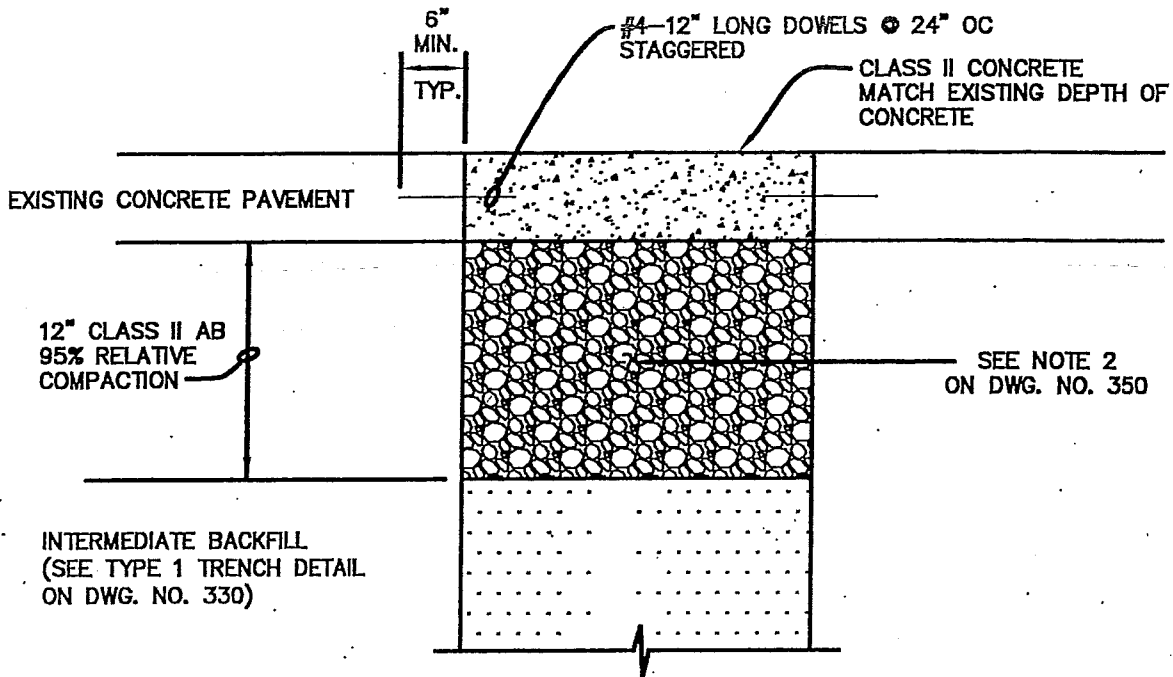
CONDUIT SIZE	LESS THAN 6"	6" TO 24"	OVER 24" TO 60"	OVER 60"
TRENCH WIDTH	O.D. + 12"	O.D. + 24"	O.D. + 24"	O.D. + 24"

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.

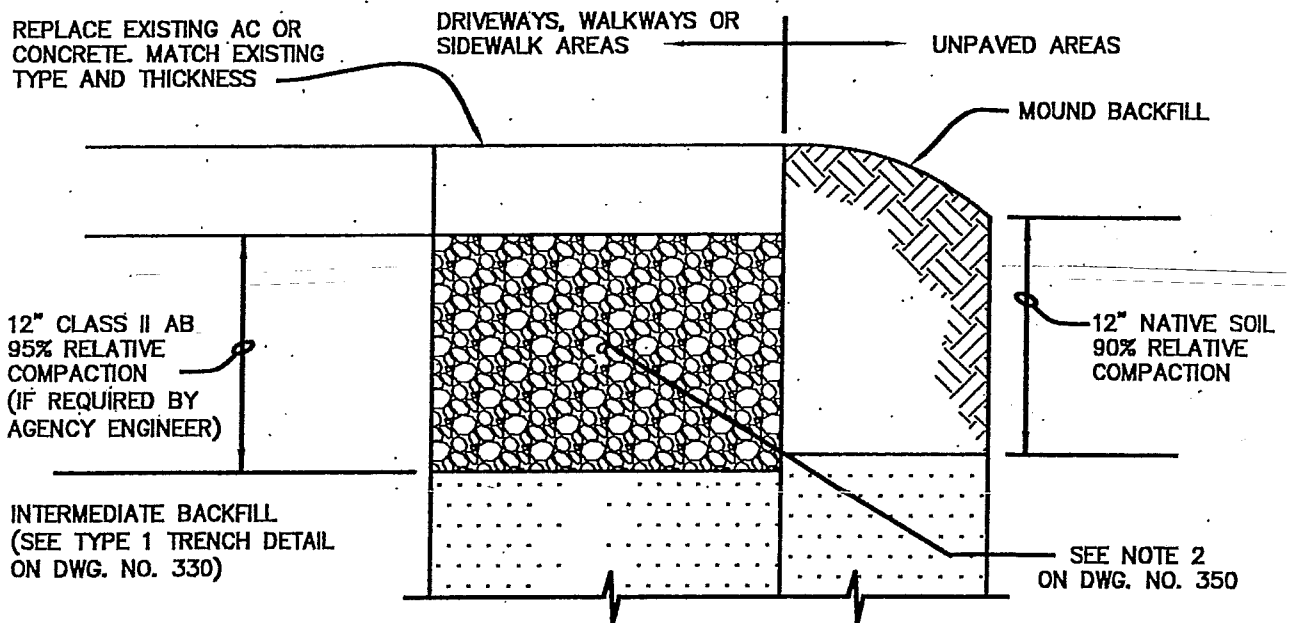
UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

TRENCH DETAILS
SHEET 1 OF 3

			MAY 2008
			DWG. NO.
			330
REV.	DATE	BY	



TYPE 2
CONCRETE PAVED STREETS



NOTE: FOR TRENCHES IN UNPAVED SHOULDERS, TOP 12" SHALL BE CLASS II AB
95% RELATIVE COMPACTION.

TYPE 3
AREAS OTHER THAN STREETS IN
THE PUBLIC RIGHT OF WAY

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

STANDARD
TRENCH BACKFILL
& RESURFACING
SHEET 2 OF 3

			MAY 2008
			DWG. NO.
			340
REV.	DATE	BY	

MATERIAL AND COMPACTION REQUIREMENT FOR TRENCH BACKFILL

1. 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 90%.
2. 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.
3. 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).
4. 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.
5. "JETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
6. THE USE OF PEA GRAVEL (OR SIMILAR ROUNDED AGGREGATE), IS NOT PERMITTED.
7. THE USE OF CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE AGENCY ENGINEER PRIOR TO PLACEMENT.
8. TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE AGENCY ENGINEER. TRIMMING SHALL BE BY SAWCUT OR ROTARY GRINDER.
9. 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.
10. CONTRACTOR MUST SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	TRENCH NOTES SHEET 3 OF 3				MAY 2008
					DWG. NO.
					350
		REV.	DATE	BY	

STORMWATER POLLUTION PREVENTION FOR ASPHALT WORK

Paving/Asphalt Work:

- ❖ Do not pave during wet weather or when rain is forecast.
- ❖ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ❖ Prevent paving materials from entering stormdrains, ditches, and creeks.
- ❖ Do not sweep or wash down excess materials into stormdrains, or creeks. Collect these materials and return them to stockpiles, or dispose of as trash.
- ❖ Do not use water to wash down fresh asphalt or concrete pavement.
- ❖ Sweep streets and other paved areas daily. Never wash down streets or work areas with water.
- ❖ Be sure to store any stockpiles of dirt, sand, asphalt, concrete, grout, or mortar under cover and away from drainage areas. These materials must never reach a storm drain, or other watercourse.

Vehicle & Equipment Maintenance:

- ❖ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ❖ Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ❖ Make every effort to clean vehicles or equipment off site. If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinse water to run into streets, stormdrains, ditches, or creeks. Do not clean equipment using soaps, solvents, degreasers, or steam cleaning equipment, etc.

Saw Cutting:

- ❖ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, or fine gravel bags to barricade storm drain inlets.
- ❖ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location and by the end of each work day.
- ❖ If any hazardous material enters a stormdrain, or any other violation is committed, clean it up immediately, and contact the Marin County Stormwater Pollution Prevention Program (MCSTOPPP) at (415) 499-6528. For more information on erosion control standards please visit the MCSTOPPP website at www.mcstoppp.org.

ROSS VALLEY SANITARY DISTRICT
Woodland Capacity and Creek Crossing Project

APPENDIX C

CCTV Logs

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CCTV Pipeline View Report

Network: RVSD_Collection

Selection

19 July 2022

Survey ID: W530.050_W530.040_1_D_5/22/2012_182ft
Surveyor's Name: Darrell Proschold
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 5/22/2012
Time: 14:39
Cleaned: 5/18/2012
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W530.050
Downstream MH: W530.040
Certificate Number: 04-7424
Drainage Area: I-16
Street Address: Woodland Rd 520
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: 4.40 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	O and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W530.050
	MWL	Miscellaneous Water Level	0	0	
6.90	JOM	Joint Offset Medium	0	1	
	RFJ	Roots Fine Joint	3 to 7	1	0
28.70	RFJ	Roots Fine Joint	10 to 2	1	0
72.60	CL	Crack Longitudinal	3	0	2
143.90	CC	Crack Circumferential	12 to 12	0	1
153.40	TB	Tap Break-in/Hammer	9	0	0
180.00	RFJ	Roots Fine Joint	10 to 2	0	0
181.70	TBI	Tap Break-in Intruding	3	2	0
182.20	MSA	Miscellaneous Abandoned Survey	0	0	Intruding lateral, camera can not pass.

Survey ID: W516.090_W516.070_1_U_7/10/2012_184ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: N
Date: 7/10/2012
Time: 11:45
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.070
Downstream MH: W516.090
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Rd 401
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	O and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.070
	MWL	Miscellaneous Water Level	0	0	
2.00	RFJ	Roots Fine Joint	8 to 4	1	
32.80	FC	Fracture Circumferential	9 to 3	0	2
49.70	FC	Fracture Circumferential	7 to 6	0	2
62.50	IS	Infiltration Stain	12 to 5	0	0
66.70	TB	Tap Break-in/Hammer	9	0	0
89.00	RTJ	Roots Tap Joint	9 to 1	2	0
95.70	RMJ	Roots Medium Joint	8 to 4	3	0
99.40	RMJ	Roots Medium Joint	9 to 4	3	0
123.20	RMJ	Roots Medium Joint	9 to 4	3	0
184.00	RFJ	Roots Fine Joint	12 to 12	0	0
184.10	MSA	Miscellaneous Abandoned Survey	0	0	Unable to push further up the hill

Survey ID: 3781_W516.040_20131011_1027
Surveyor's Name: Albert Coats
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 3781_W516.040_20131011_1027
Pre-Cleaning: J
Date: 10/11/2013
Time: 10:27
Cleaned: 10/11/2013
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.040
Downstream MH: W516.030
Certificate Number: U-412-14888
Drainage Area: I-17
Street Address: Woodland Rd 310
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.040
	MWL	Miscellaneous Water Level	0	0	
27.30	MWM	Miscellaneous Water Mark	0	0	
32.60	RFJ	Roots Fine Joint	8 to 4	1	0
41.90	RFJ	Roots Fine Joint	8 to 4	1	0
50.50	SSSM		5 to 7	0	2
60.10	RFJ	Roots Fine Joint	8 to 4	1	0
76.50	TB	Tap Break-in/Hammer	3	0	0
90.40	LL	Line Left		1	0
99.40	RFJ	Roots Fine Joint	8 to 4	1	0
165.40	RFJ	Roots Fine Joint	8 to 4	1	0
171.60	RFJ	Roots Fine Joint	8 to 4	1	0
177.50	RFJ	Roots Fine Joint	8 to 4	1	0
183.60	RFJ	Roots Fine Joint	8 to 4	1	0
189.50	RFJ	Roots Fine Joint	8 to 4	1	0
201.60	RFJ	Roots Fine Joint	8 to 4	1	0
209.10	AMH	Access Point Manhole	0	0	USMH W516.030

Survey ID: 1418909294
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 1418909294
Pre-Cleaning: N
Date: 12/18/2014
Time: 13:28
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.110
Downstream MH: W516.060
Certificate Number: U-412-14888
Drainage Area: -
Street Address: Woodland Ave 414
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 5
Measurements:
Rim to Invert: 5.90 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.110
	MWL	Miscellaneous Water Level	0	0	
4.90	RFJ	Roots Fine Joint	12 to 12	1	
6.60	RFJ	Roots Fine Joint	12 to 12	1	
10.60	IS	Infiltration Stain	8 to 5	0	
15.80	IS	Infiltration Stain	7 to 5	0	
62.70	TB	Tap Break-in/Hammer	9	0	0
97.10	CM	Crack Multiple	10 to 1	0	3
269.30	CM	Crack Multiple	8 to 3	0	3
319.20	RMJ	Roots Medium Joint	10 to 4	3	0
	RFJ	Roots Fine Joint	12 to 12	1	0
323.00	AMH	Access Point Manhole	0	0	DSMH W516.060 Waterfall drop, no inside o

Survey ID: W530.0101_36350
 Surveyor's Name: Albert Coats
 Pipe Segment Ref.: 3150
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: mpeg

Pre-Cleaning: J

Date: 11/3/2016

Time: 10:44

Cleaned: 10/21/2016

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 294.900
 Len. Surveyed: 294.900

Upstream MH: W530.010
 Downstream MH: W516.110
 Certificate Number: U-412-14888
 Drainage Area: -
 Street Address: Woodland Rd 423
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: C
 Weather: 1
 Measurements:
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W530.010
	MWL	Miscellaneous Water Level	0	0	
22.80	RFJ	Roots Fine Joint	12 to 12	1	0
36.70	LL	Line Left	1	0	
47.00	LL	Line Left	1	0	
76.10	TB	Tap Break-in/Hammer	3	0	0
81.00	MMC	Miscellaneous Material Change	0	0	CAS
94.80	RPL	Point Repair Liner	0	0	Point repair
99.30	MMC	Miscellaneous Material Change	0	0	CAS
137.90	MWLS	Miscellaneous Water Level Sag	0	2	
150.80	MWLS	Miscellaneous Water Level Sag	0	2	
	RPL	Point Repair Liner	0	0	Point repair
159.10	CC	Crack Circumferential	10 to 1	0	1
197.60	TB	Tap Break-in/Hammer	2	0	0
225.50	MWLS	Miscellaneous Water Level Sag	0	3	
229.40	MWLS	Miscellaneous Water Level Sag	0	3	
232.10	RPL	Point Repair Liner	0	0	Point repair
234.40	MWLS	Miscellaneous Water Level Sag	0	3	
238.50	RPL	Point Repair Liner	0	0	End
246.90	MWLS	Miscellaneous Water Level Sag	0	2	
	LL	Line Left	1	0	
254.30	MWLS	Miscellaneous Water Level Sag	0	2	
271.60	MWLS	Miscellaneous Water Level Sag	0	3	
288.50	RFJ	Roots Fine Joint	12 to 12	1	0
288.60	RPL	Point Repair Liner	0	0	Point repair
291.80	MWLS	Miscellaneous Water Level Sag	0	2	
293.50	RPL	Point Repair Liner	0	0	End
294.90	AMH	Access Point Manhole	0	0	DSMH W516.110

Survey ID: W531.0101_36350
 Surveyor's Name: Albert Coats
 Pipe Segment Ref.: 3117
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: mpeg

Pre-Cleaning: J

Date: 11/3/2016

Time: 10:26

Cleaned: 11/3/2016

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 288.200
 Len. Surveyed: 288.200

Upstream MH: W531.010
 Downstream MH: W530.010
 Certificate Number: U-412-14888
 Drainage Area: -
 Street Address: Woodland Rd 427
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: C
 Weather: 1
 Measurements:
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W531.010
	MWL	Miscellaneous Water Level	0	0	
74.40	TB	Tap Break-in/Hammer	3	0	0
121.80	RPL	Point Repair Liner		0	0
140.90	RFJ	Roots Fine Joint	12 to 12	1	0
158.70	RFJ	Roots Fine Joint	12 to 12	1	0
219.20	RFJ	Roots Fine Joint	12 to 12	1	0
252.10	TB	Tap Break-in/Hammer	2	0	0
284.80	CC	Crack Circumferential	12 to 12	0	1
288.20	AMH	Access Point Manhole		0	0

DSMH W530.010

Survey ID: W516.0101_38434
 Surveyor's Name: Brady Stewart
 Pipe Segment Ref.: 3181
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: mpeg

Pre-Cleaning: J

Date: 12/27/2016

Time: 10:36

Cleaned: 12/27/2016

Year Laid: -

Year Rehab.: -

Additional Information: -

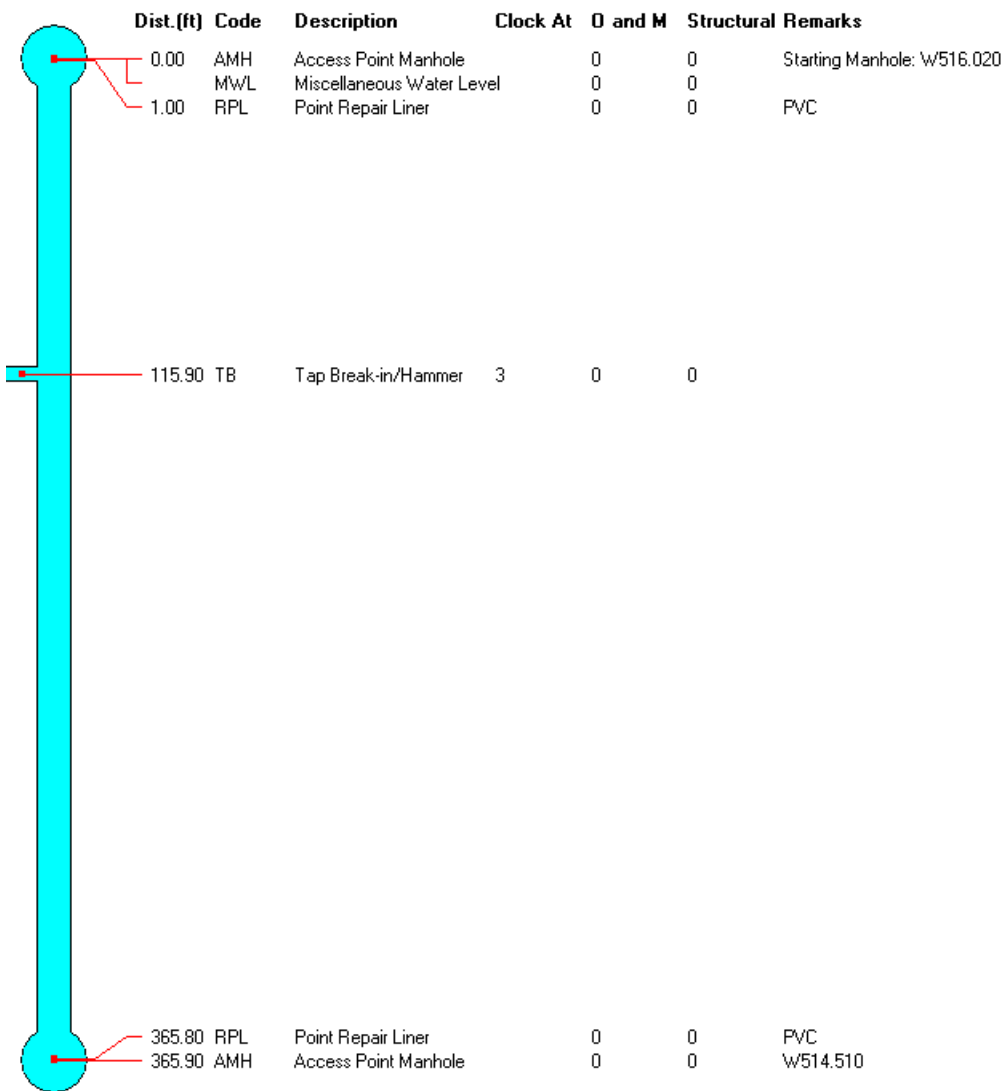
Height: 8.0
 Width: -
 Joint Length: 8.00
 Total Length: 305.900
 Len. Surveyed: 305.900

Upstream MH: W516.010
 Downstream MH: W515.010
 Certificate Number: U-1209-9830
 Drainage Area: -
 Street Address: Woodland Rd 223
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements:
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.010
	MWL	Miscellaneous Water Level	0	0	
2.80	RFJ	Roots Fine Joint	12 to 12	1	0
41.20	MWLS	Miscellaneous Water Level Sag	0	4	Adjusted after inspection. CA-JR
	MCU	Miscellaneous Camera Underwater	4	0	
46.70	MWLS	Miscellaneous Water Level Sag	0	0	
	MCU	Miscellaneous Camera Underwater	0	0	
71.70	MWLS	Miscellaneous Water Level Sag	0	4	Adjusted after inspection. CA-JR
	MCU	Miscellaneous Camera Underwater	4	0	
74.40	MCU	Miscellaneous Camera Underwater	4	0	
80.60	MWLS	Miscellaneous Water Level Sag	0	0	Adjusted after inspection. CA-JR
	MCU	Miscellaneous Camera Underwater	0	0	
84.30	MCU	Miscellaneous Camera Underwater	0	0	
109.50	RFJ	Roots Fine Joint	12 to 12	0	0
	RPR	Point Repair Replacement	0	0	CONCRETE
126.40	RPR	Point Repair Replacement	0	0	CONCRETE
305.90	AMH	Access Point Manhole	0	0	W515.010

Survey ID: W516.0201_38434
Surveyor's Name: Brady Stewart
Pipe Segment Ref.: 3182
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: N
Date: 12/23/2016
Time: 06:16
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.020
Downstream MH: W514.150
Certificate Number: U-1209-9830
Drainage Area: -
Street Address: Woodland Rd 233
Direction: D
Shape: C
Ln. Method: -
Purpose: H
Weather: 1
Measurements:
Rim to Invert: 4.00 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -



Survey ID: W516.0501_51361
 Surveyor's Name: Jason Roos
 Pipe Segment Ref.: 3119
 City: Kent Woodlands

Location Details: -
 Sewer Use: SS
 Flow Control: -
 Material: VCP
 Media Number: -
 Pre-Cleaning: J

Date: 1/7/2019
 Time: 07:24

Cleaned: 1/4/2019

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: -
 Total Length: 444.600
 Len. Surveyed: 444.600

Upstream MH: W516.050
 Downstream MH: W516.040
 Certificate Number: U-513-17964
 Drainage Area: -
 Street Address: Woodland Ave 320
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 6

Measurements: U / D
 Rim to Invert: 6.50 / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.050
	MWL	Miscellaneous Water Level	0	0	
16.70	MWLS	Miscellaneous Water Level Sag	0	4	
18.90	MCU	Miscellaneous Camera Underwater	4	0	
26.00	MWLS	Miscellaneous Water Level Sag	0	0	
35.90	RFJ	Roots Fine Joint 12 to 3	1	0	
39.10	MWLS	Miscellaneous Water Level Sag	0	4	
46.20	MWLS	Miscellaneous Water Level Sag	0	0	
51.80	IR	Infiltration Runner 1	4	0	
60.80	FC	Fracture Circumferential 3 to 4	0	2	
85.00	FL	Fracture Longitudinal 10	0	3	
86.20	TB	Tap Break-in/Hammer 10	0	0	
96.60	MWLS	Miscellaneous Water Level Sag	0	4	
101.10	MWLS	Miscellaneous Water Level Sag	0	0	
121.80	CL	Crack Longitudinal 9	0	2	
127.90	CC	Crack Circumferential 1 to 3	0	1	
138.80	MWLS	Miscellaneous Water Level Sag	0	4	
150.50	MWLS	Miscellaneous Water Level Sag	0	0	
169.20	TB	Tap Break-in/Hammer 3	0	0	
193.80	MWLS	Miscellaneous Water Level Sag	0	4	
204.80	MWLS	Miscellaneous Water Level Sag	0	0	
273.50	MWLS	Miscellaneous Water Level Sag	0	4	
285.90	MWLS	Miscellaneous Water Level Sag	0	0	
341.30	MWLS	Miscellaneous Water Level Sag	0	4	
347.60	MWLS	Miscellaneous Water Level Sag	0	0	
386.80	CC	Crack Circumferential 1 to 3	0	1	
391.60	MWLS	Miscellaneous Water Level Sag	0	4	
416.50	MWLS	Miscellaneous Water Level Sag	0	0	
425.70	RFJ	Roots Fine Joint 11 to 2	1	0	
444.60	AMH	Access Point Manhole	0	0	W516.040

Survey ID: W514.1501_52960
 Surveyor's Name: Austin Sanfilippo
 Pipe Segment Ref.: 3223
 City: Kent Woodlands

Location Details: -
 Sewer Use: SS
 Flow Control: N
 Material: VCP
 Media Number: -
 Pre-Cleaning: J

Date: 7/8/2019
 Time: 11:25
 Cleaned: 7/2/2019
 Year Laid: -
 Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: -
 Total Length: 52.400
 Len. Surveyed: 52.400

Upstream MH: W514.120
 Downstream MH: W514.150
 Certificate Number: U11180703003021
 Drainage Area: -
 Street Address: WOODLAND RD 223
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1

Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W514.120
	MWL	Miscellaneous Water Level	0	0	
9.50	FM	Fracture Multiple	12 to 12	0	4
9.60	B	Broken	5 to 8	0	5
12.20	TBD	Tap Break-in/Hammer Def10tive	3	0	TBD
	HSV	Hole Soil Visible	9	0	
26.10	CC	Crack Circumferential	12 to 12	0	1
28.10	CC	Crack Circumferential	12 to 12	0	1
30.10	CM	Crack Multiple	6 to 11	0	3
40.50	CC	Crack Circumferential	8 to 2	0	1
42.90	RFJ	Roots Fine Joint	12 to 12	1	0
50.40	TFC	Tap Factory Capped	12	0	0
52.40	AMH	Access Point Manhole	0	0	USMH W514.150

Survey ID: W514.1201_52960
 Surveyor's Name: Austin Sanfilippo
 Pipe Segment Ref.: 4295
 City: Kent Woodlands

Location Details: -

Sewer Use: SS
 Flow Control: N
 Material: VCP
 Media Number: -
 Pre-Cleaning: J

Date: 7/8/2019

Time: 10:56

Cleaned: 7/2/2019

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: -
 Total Length: 245.600
 Len. Surveyed: 245.600

Upstream MH: W514.110
 Downstream MH: W514.120
 Certificate Number: U11180703003021
 Drainage Area: -
 Street Address: WOODLAND RD 221
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W514.110
	MWL	Miscellaneous Water Level	0	0	
0.10	MWLS	Miscellaneous Water Level Sag	0	4	Adjusted after inspection. CAJR
0.10	TF	Tap Factory	3	0	
5.00	B	Broken	12	0	3
6.00	MCU	Miscellaneous Camera Underwater	4	0	Camera was under water, defect from previous
18.30	MWLS	Miscellaneous Water Level Sag	0	0	Adjusted after inspection. CAJR
20.50	TF	Tap Factory	9	0	
45.50	CL	Crack Longitudinal	2	0	2
116.50	CC	Crack Circumferential	9 to 3	0	1
133.00	MMC	Miscellaneous Material Change	0	0	CAST
156.80	MMC	Miscellaneous Material Change	0	0	VCP
158.20	TB	Tap Break-in/Hammer	12	0	0
160.80	FC	Fracture Circumferential	4 to 8	0	2
168.60	CM	Crack Multiple	12 to 12	0	3
170.50	CM	Crack Multiple	12 to 12	0	3
198.30	TB	Tap Break-in/Hammer	10	0	0
217.40	CL	Crack Longitudinal	3	0	2
245.60	AMH	Access Point Manhole	0	0	USMH W514.120

Survey ID: W530.0401_52960
 Surveyor's Name: Jason Roos
 Pipe Segment Ref.: 3104
 City: Kent Woodlands

Location Details: -
 Sewer Use: SS
 Flow Control: N
 Material: VCP
 Media Number: -
 Pre-Cleaning: J

Date: 8/12/2019
 Time: 12:35
 Cleaned: 8/12/2019
 Year Laid: -
 Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: -
 Total Length: 180.000
 Len. Surveyed: 5.100

Upstream MH: W530.040
 Downstream MH: W530.030
 Certificate Number: U-513-17964
 Drainage Area: -
 Street Address: Woodland Ave 523
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1

Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -



Survey ID: W516.1001_52977
 Surveyor's Name: Brady Stewart
 Pipe Segment Ref.: 3110
 City: Kent Woodlands

Location Details: -

Sewer Use: -

Flow Control: -

Material: VCP

Media Number: -

Pre-Cleaning: N

Date: 8/20/2019

Time: 11:17

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: -
 Total Length: 53.300
 Len. Surveyed: 53.300

Upstream MH: W516.090
 Downstream MH: W516.100
 Certificate Number: 000
 Drainage Area: -
 Street Address: WOODLAND RD 432
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.090
	MWL	Miscellaneous Water Level	0	0	
	IS	Infiltration Stain	9 to 3	0	
47.80	FC	Fracture Circumferential	4 to 8	0	2
50.00	IS	Infiltration Stain	9 to 3	0	0
51.80	RBJ	Roots Ball Joint	7	4	0
53.30	BSV	Broken Soil Visible	9 to 12	0	5
	ACOM	Access Point Cleanout Mainline	0	0	USMH W516.100

Survey ID: W530.0401_52960_1!
Surveyor's Name: Jason Roos
Pipe Segment Ref.: -

City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: -

Pre-Cleaning: J

Date: 8/12/2019

Time: 12:44

Cleaned: 8/12/2019

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
Width: -
Joint Length: -
Total Length: 180.000
Len. Surveyed: 209.500

Upstream MH: W530.030
Downstream MH: W530.040
Certificate Number: U-513-17964

Drainage Area: -

Street Address: Woodland Ave 523

Direction: U

Shape: C

Ln. Method: -

Purpose: H

Weather: 1

Measurements:

Rim to Invert:

Grade to Invert:

Rim to Grade:

Sewer Category: -

U / D

- / -

- / -

/

Dist.(ft)	Code	Description	Clock At	D	M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	0	Starting Manhole: W530.030
	MWL	Miscellaneous Water Level	0	0	0	
32.20	TFC	Tap Factory Capped	12	0	0	
126.10	TB	Tap Break-in/Hammer	3	0	0	
136.00	FC	Fracture Circumferential	4 to 7	0	2	
138.70	CC	Crack Circumferential	3 to 9	0	1	
142.30	B	Broken	2 to 3	0	3	
156.00	B	Broken	6 to 9	0	5	
158.80	B	Broken	7 to 11	0	5	
172.80	FC	Fracture Circumferential	11 to 3	0	2	
188.80	B	Broken	4	0	3	
209.40	TBI	Tap Break-in Intruding	10	2	0	
209.50	MSA	Miscellaneous Abandoned Survey	0	0	0	TBI

Survey ID: W516.0801_61258
 Surveyor's Name: AUSTIN SANFILIPPO
 Pipe Segment Ref.: W516.080_W516.070.1
 City: Kent Woodlands

Location Details: -

Sewer Use: SS
 Flow Control: N
 Material: CAS

Media Number: -

Pre-Cleaning: L

Date: 6/10/2021

Time: 19:41

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 10.00
 Total Length: 90.000
 Len. Surveyed: 55.200

Upstream MH: W516.070
 Downstream MH: W516.080
 Certificate Number: U-111-070300321
 Drainage Area: -
 Street Address: Woodland Rd 401 KW
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	W516.070
	MWL	Miscellaneous Water Level	0	0	
	MGO	Miscellaneous General Observation	0	0	CHIPPED CAST IRON
4.80	SZ	Surface Damage Other	5 to 7	0	CAST MISSING
22.80	SMW	Surface Damage Missing \5 to 8	0	5	
36.60	SMW	Surface Damage Missing \5 to 7	0	5	
54.00	SMW	Surface Damage Missing \5 to 7	0	5	
55.20	MSA	Miscellaneous Abandoned Survey	0	0	COULD NOT CRAWL THE INCLINE

Survey ID: W516.0701_62947
 Surveyor's Name: AUSTIN SANFILIPPO
 Pipe Segment Ref.: W516.070_W516.060.1
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: -

Pre-Cleaning: L

Date: 6/10/2021

Time: 19:14

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 87.300
 Len. Surveyed: 87.300

Upstream MH: W516.060
 Downstream MH: W516.070
 Certificate Number: U-111-070300321
 Drainage Area: -
 Street Address: Woodland Rd 401 KW
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	W516.060
	MWL	Miscellaneous Water Level	0	0	
5.40	IS	Infiltration Stain	7 to 5	1	0
13.20	MWLS	Miscellaneous Water Level Sag	0	3	
13.80	FC	Fracture Circumferential	7 to 11	0	2
26.40	B	Broken	8 to 10	0	4
61.50	TBD	Tap Break-in/Hammer Def3ctive	3	0	VOID AT CONNECTION
69.60	B	Broken	6 to 9	0	4
82.20	B	Broken	6 to 9	0	4
83.70	CC	Crack Circumferential	5 to 12	0	1
87.30	AMH	Access Point Manhole	0	0	W516.070

Survey ID: W516.0101_62947
 Surveyor's Name: AUSTIN SANFILIPPO
 Pipe Segment Ref.: W516.010_W515.010.1
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: -

Pre-Cleaning: L

Date: 6/10/2021

Time: 14:23

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 8.0
 Width: -
 Joint Length: 3.00
 Total Length: 305.000
 Len. Surveyed: 199.500

Upstream MH: W515.010
 Downstream MH: W516.010
 Certificate Number: U-111-070300321
 Drainage Area: -
 Street Address: Woodland Rd 222 KW
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	O and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	W515.010
	MWL	Miscellaneous Water Level	0	0	
	FC	Fracture Circumferential 1 to 9	0	2	
30.30	MWLS	Miscellaneous Water Level Sag	0	3	
164.70	MWLS	Miscellaneous Water Level Sag	0	3	
183.00	FC	Fracture Circumferential 4 to 8	0	2	
185.40	CL	Crack Longitudinal 9	0	2	
195.00	JOM	Joint Offset Medium	0	3	
195.30	MGO	Miscellaneous General Observation	0	0	CHANGED TO 6" WHEELS
199.50	MSA	Miscellaneous Abandoned Survey	0	0	6" TIRES DID NOT WPRK WITH FLOW, BL

Survey ID: W516.0201_62947
 Surveyor's Name: AUSTIN SANFILIPPO
 Pipe Segment Ref.: W516.020_W516.010.1
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: -

Pre-Cleaning: L

Date: 6/9/2021

Time: 00:20

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 8.0
 Width: -
 Joint Length: 3.00
 Total Length: 389.000
 Len. Surveyed: 378.600

Upstream MH: W516.020
 Downstream MH: W516.010
 Certificate Number: U-111-070300321
 Drainage Area: -
 Street Address: Woodland Rd 233 KW
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	W516.020
	MWL	Miscellaneous Water Level	0	0	
3.00	MWLS	Miscellaneous Water Level Sag	0	3	
71.10	RFJ	Roots Fine Joint	8 to 4	1	0
75.90	RFJ	Roots Fine Joint	9	1	0
81.30	RFJ	Roots Fine Joint	8 to 3	1	0
87.90	RFJ	Roots Fine Joint	10 to 2	1	0
102.00	RFJ	Roots Fine Joint	9 to 3	1	0
107.10	RFJ	Roots Fine Joint	9 to 3	1	0
111.60	RFJ	Roots Fine Joint	8 to 4	1	0
141.60	RFJ	Roots Fine Joint	9 to 11	1	0
151.80	RFJ	Roots Fine Joint	8 to 4	1	0
221.40	RFJ	Roots Fine Joint	8 to 2	1	0
237.00	RFJ	Roots Fine Joint	9 to 4	1	0
257.40	MWLS	Miscellaneous Water Level Sag	0	3	
316.50	RFJ	Roots Fine Joint	7 to 3	1	0
345.90	MWM	Miscellaneous Water Mark	0	0	
351.60	RBC	Roots Ball Connection	7 to 3	4	0
356.70	RFJ	Roots Fine Joint	9 to 3	1	0
362.10	RMJ	Roots Medium Joint	7 to 4	3	0
367.50	RFJ	Roots Fine Joint	9 to 3	1	0
377.10	RBJ	Roots Ball Joint	8 to 4	4	0
378.60	MSA	Miscellaneous Abandoned Survey	0	0	ROOT BALL

Survey ID: W516.0601_62947
 Surveyor's Name: AUSTIN SANFILIPPO
 Pipe Segment Ref.: W516.060_W516.050.1
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: -

Pre-Cleaning: H

Date: 6/10/2021

Time: 20:16

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 176.400
 Len. Surveyed: 176.400

Upstream MH: W516.060
 Downstream MH: W516.050
 Certificate Number: U-111-070300321
 Drainage Area: -
 Street Address: Woodland Ave 320 KW
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	W516.060
	MWL	Miscellaneous Water Level	0	0	
0.60	MWLS	Miscellaneous Water Level Sag	0	4	
4.50	MCU	Miscellaneous Camera Underwater	4	0	
14.40	MWLS	Miscellaneous Water Level Sag	0	3	
33.30	MWLS	Miscellaneous Water Level Sag	0	3	
38.10	MWLS	Miscellaneous Water Level Sag	0	4	
47.10	CL	Crack Longitudinal	12	0	2
52.50	MWM	Miscellaneous Water Mark	0	0	
66.00	CC	Crack Circumferential	7 to 9	0	1
84.30	RFJ	Roots Fine Joint	2	1	0
121.80	B	Broken	6 to 8	0	4
158.40	MWLS	Miscellaneous Water Level Sag	0	3	
176.40	AMH	Access Point Manhole	0	0	W516.050

Survey ID: 1623842093
 Surveyor's Name: AUSTIN SANFILIPPO
 Pipe Segment Ref.: W531.020 W531.010
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: -

Pre-Cleaning: L

Date: 6/16/2021

Time: 02:11

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 335.400
 Len. Surveyed: 335.400

Upstream MH: W531.020
 Downstream MH: W531.010
 Certificate Number: U-111-070300321
 Drainage Area: -
 Street Address: WOODLAND RD 440
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: C
 Weather: 1
 Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	W531.020
	MWL	Miscellaneous Water Level	0	0	
5.50	RFJ	Roots Fine Joint	9	1	0
9.60	RFJ	Roots Fine Joint	9 to 3	1	0
22.50	CC	Crack Circumferential	12 to 12	0	1
43.20	CC	Crack Circumferential	12 to 2	0	1
68.40	TB	Tap Break-in/Hammer	10	0	0
79.50	CC	Crack Circumferential	7 to 12	0	1
126.90	RPL	Point Repair Liner	0	0	FG
165.00	TB	Tap Break-in/Hammer	11	0	0
194.40	CL	Crack Longitudinal	3	0	2
258.60	MMC	Miscellaneous Material Change	0	0	CAST IRON
279.90	MMC	Miscellaneous Material Change	0	0	CAST IRON
324.00	RPL	Point Repair Liner	0	0	FG
332.70	MMC	Miscellaneous Material Change	0	0	CAST IRON
335.40	RFJ	Roots Fine Joint	9 to 3	1	0
	AMH	Access Point Manhole	0	0	W531.010

CCTV Pipeline View Report

Network: RVSD_Collection

Selection

19 July 2022

Survey ID: W516.020_W514.150_1_D_11/9/2011_43ft
Surveyor's Name: Fred Guerrero
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: -
Material: VCP
Media Number: mpeg
Pre-Cleaning: H
Date: 11/9/2011
Time: 13:03
Cleaned: 11/8/2011
Year Laid: -
Year Rehab.: -
Additional Information: 01/2012 Site 10

Upstream MH: W516.020
Downstream MH: W514.150
Certificate Number: N/A
Drainage Area: J-17
Street Address: Woodland Ave
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: -
Measurements:
Rim to Invert: 4.00 / 5.00
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

U / D
 4.00 / 5.00
 - / -
 /

Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	MWL	Miscellaneous Water Level	0	0	Starting Manhole: 3883
43.00	MSA	Miscellaneous Abandoned Survey	0	0	STOP AT 43 FEET BECAUSE COULD NOT I

Survey ID: W530.010_W516.110_1_D_1/25/2012_289ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 1/25/2012
Time: 11:09
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W530.010
Downstream MH: W516.110
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Rd
Direction: D
Shape: C
Ln. Method: -
Purpose: A
Weather: 1
Measurements:
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D	M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0		Starting Manhole: W530.010
	MWL	Miscellaneous Water Level	0	0		
5.70	RFJ	Roots Fine Joint	8 to 4	1	0	
36.30	RFJ	Roots Fine Joint	8 to 4	1	0	
41.90	RFJ	Roots Fine Joint	8 to 4	1	0	
45.10	RFJ	Roots Fine Joint	8 to 4	1	0	
76.20	MWLS	Miscellaneous Water Level Sag	0	0	2	
	TF	Tap Factory	3	0	0	
82.00	MMC	Miscellaneous Material Change	0	0	0	Cast Iron
	RFJ	Roots Fine Joint	7 to 9	1	0	
143.30	DAGS	Deposits Attached Grease	3 to 9	3	0	
152.50	DAGS	Deposits Attached Grease	4 to 8	3	0	
152.60	FC	Fracture Circumferential	10 to 4	0	2	
	FM	Fracture Multiple	1 to 9	0	4	
	MMC	Miscellaneous Material Change	0	0	0	VCP
164.40	RFJ	Roots Fine Joint	8 to 4	1	0	
173.60	DAGS	Deposits Attached Grease	3 to 9	2	0	

	Dist.(ft)	Code	Description	Clock At	O and M	Structural Remarks
	198.20	TB	Tap Break-in/Hammer	3	0	0
	201.10	RFJ	Roots Fine Joint	8 to 4	1	0
	209.60	MWLS	Miscellaneous Water Level Sag		0	2
	225.60	MWLS	Miscellaneous Water Level Sag		0	4
	237.90	FM	Fracture Multiple	10 to 2	0	4
	251.50	MWLS	Miscellaneous Water Level Sag		0	2
	273.70	MWLS	Miscellaneous Water Level Sag		0	2
		RFJ	Roots Fine Joint	8 to 4	1	0
	276.50	RFJ	Roots Fine Joint	8 to 4	1	0
	279.70	RMJ	Roots Medium Joint	7 to 12	3	0
	286.10	MWLS	Miscellaneous Water Level Sag		0	2
	288.90	RFJ	Roots Fine Joint	8 to 4	1	0
	289.00	MGO	Miscellaneous General Observation		0	0
	289.70	DAGS	Deposits Attached Grease	4 to 8	2	0
		MSA	Miscellaneous Abandoned Survey		0	0

PGE House 414

Heavy Rocks and Roots

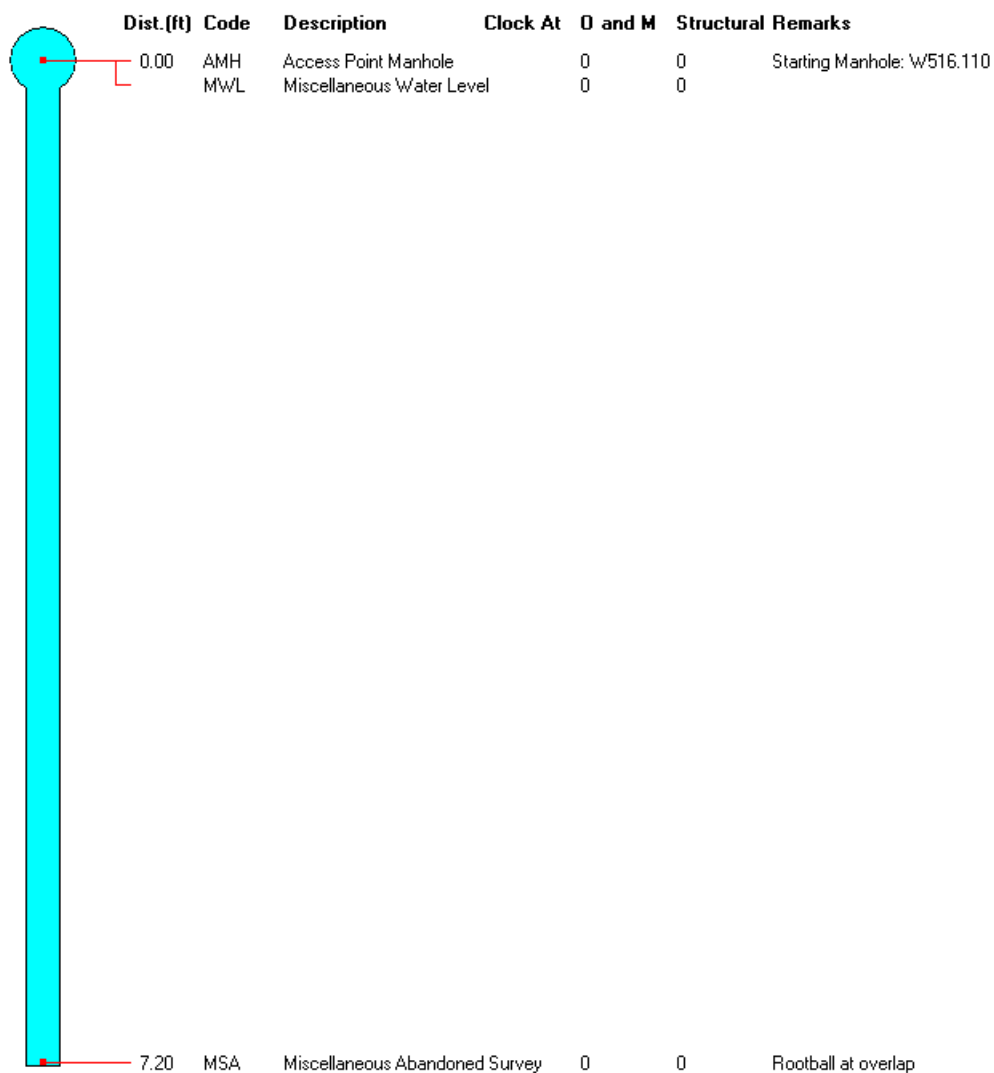
Survey ID: W516.020_W514.150_1_U_11/21/2011_384ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kentfield
Location Details: -
Sewer Use: SS
Flow Control: -
Material: VCP
Media Number: mpeg
Pre-Cleaning: Z
Date: 11/21/2011
Time: 09:38
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: 01/2012 Site 10

Upstream MH: W514.150
Downstream MH: W516.020
Certificate Number: U-811-13337
Drainage Area: J-17
Street Address: Woodland Ave
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: -
Measurements:
Rim to Invert: 4.00 / 5.00
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: 2672
	MWL	Miscellaneous Water Level	0	0	
8.10	FL	Fracture Longitudinal	3	0	3
8.80	B	Broken	4 to 10	0	5
11.30	TBD	Tap Break-in/Hammer Defective	3	0	Broken Bottom
26.20	FL	Fracture Longitudinal	4	0	3
28.30	FC	Fracture Circumferential	11 to 4	0	2
	RFJ	Roots Fine Joint	8 to 4	1	0
29.80	FL	Fracture Longitudinal	9	0	3
49.30	TFD	Tap Factory Defective	10	2	0
53.30	MGO	Miscellaneous General Observation	0	0	Roots MH 2672
60.10	RFJ	Roots Fine Joint	8 to 4	1	0
62.00	CC	Crack Circumferential	9 to 1	0	1
115.00	RFJ	Roots Fine Joint	8 to 4	1	0
124.80	CL	Crack Longitudinal	12	0	2
135.10	CL	Crack Longitudinal	12	0	2
164.10	FL	Fracture Longitudinal	8	0	3
173.70	CM	Crack Multiple	7 to 11	0	3
198.20	FM	Fracture Multiple	12 to 4	0	4
258.40	RFJ	Roots Fine Joint	10 to 3	1	0
282.90	CM	Crack Multiple	9 to 2	0	3
300.70	TB	Tap Break-in/Hammer	9	0	0
359.70	FM	Fracture Multiple	1 to 10	0	4
384.40	MSA XP	Miscellaneous Abandoned Survey	0	0	Full Collapse
			0	5	

Survey ID: W530.010_W516.110_1_U_1/25/2012_7ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 1/25/2012
Time: 11:53
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.110
Downstream MH: W530.010
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Rd
Direction: U
Shape: C
Ln. Method: -
Purpose: A
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -



Survey ID: W530.010_W516.110_1_D_5/30/2012_295ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 5/30/2012
Time: 13:32
Cleaned: 5/29/2012
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W530.010
Downstream MH: W516.110
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Rd 427
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W530.010
	MWL	Miscellaneous Water Level	0	0	
24.90	RFJ	Roots Fine Joint	8 to 4	1	0
48.70	RFJ	Roots Fine Joint	8 to 4	1	0
76.50	MWLS	Miscellaneous Water Level Sag	0	0	2
	TF	Tap Factory	3	0	0
81.90	MMC	Miscellaneous Material Change	0	0	0
	MWLS	Miscellaneous Water Level Sag	0	0	2
95.00	HSV	Hole Soil Visible	4 to 6		
143.10	MWLS	Miscellaneous Water Level Sag	0	0	2
151.60	B	Broken	2 to 9	0	5
	MMC	Miscellaneous Material Change	0	0	0
	MWLS	Miscellaneous Water Level Sag	0	0	2
160.60	FC	Fracture Circumferential	10 to 1	0	2
196.40	TB	Tap Break-in/Hammer	3	0	0
223.20	MWLS	Miscellaneous Water Level Sag	0	0	2
227.20	MWLS	Miscellaneous Water Level Sag	0	0	2
235.60	B	Broken	9 to 3	0	5
241.90	CC	Crack Circumferential	8 to 1	0	1
248.00	MWLS	Miscellaneous Water Level Sag	0	0	2
271.00	MWLS	Miscellaneous Water Level Sag	0	0	2
276.40	MWLS	Miscellaneous Water Level Sag	0	0	2
277.80	RTJ	Roots Tap Joint	9 to 1	2	0
286.40	RFJ	Roots Fine Joint	8 to 4	1	0
289.30	B	Broken	5 to 8	0	5
	MWLS	Miscellaneous Water Level Sag	0	0	2
292.90	FC	Fracture Circumferential	9 to 2	0	2
295.30	AMH	Access Point Manhole	0	0	0
	MWLS	Miscellaneous Water Level	0	0	2

Survey ID: W516.060_W516.050_1_D_6/21/2012_4ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 6/21/2012
Time: 09:45
Cleaned: 6/18/2012
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.060
Downstream MH: W516.050
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Ave 400
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist. (ft)	Code	Description	Clock At	O and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.060
	MWL	Miscellaneous Water Level	0	0	
3.00	HWV	Hole Void Visible	12 to 12	0	5
4.00	MSA	Miscellaneous Abandoned Survey	0	0	Unable to Pass

Survey ID: W531.010_W530.010_1_D_5/30/2012_285ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 5/30/2012
Time: 12:41
Cleaned: 5/29/2012
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W531.010
Downstream MH: W530.010
Certificate Number: U-811-13337
Drainage Area: I-16
Street Address: Woodland Rd 427
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W531.010
	MWL	Miscellaneous Water Level	0	0	
4.60	RFJ	Roots Fine Joint	8 to 4	1	
46.90	CL	Crack Longitudinal	10	0	2
73.80	TB	Tap Break-in/Hammer	3	0	0
122.20	B	Broken	4 to 10	0	5
140.80	RFJ	Roots Fine Joint	8 to 4	1	0
170.10	RFJ	Roots Fine Joint	8 to 4	1	0
251.00	TB	Tap Break-in/Hammer	3	0	0
276.00	MWLS	Miscellaneous Water Level Sag	0	0	3
285.50	AMH	Access Point Manhole	0	0	DSMH W530.010

Survey ID: W531.020_W531.010_1_D_5/30/2012_353ft
Surveyor's Name: Darrell Proschold
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 5/30/2012
Time: 10:42
Cleaned: 5/29/2012
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W531.020
Downstream MH: W531.010
Certificate Number: 04-7424
Drainage Area: I-16
Street Address: Woodland Rd
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W531.020
	MWL	Miscellaneous Water Level	0	0	
10.80	RFJ	Roots Fine Joint	12	1	
21.30	CC	Crack Circumferential	8 to 3	0	1
67.20	TB	Tap Break-in/Hammer	10	0	0
74.10	RFJ	Roots Fine Joint	10 to 3	1	0
78.30	CC	Crack Circumferential	7 to 12	0	1
98.10	RFJ	Roots Fine Joint	10 to 2	1	0
125.50	B	Broken	12 to 12	0	5
161.60	RFJ	Roots Fine Joint	10 to 12	1	0
162.80	TB	Tap Break-in/Hammer	11	0	0
179.00	RFJ	Roots Fine Joint	10 to 11	1	0
192.40	CC	Crack Circumferential	3 to 6	0	1
194.10	RFJ	Roots Fine Joint	9 to 3	1	0

	Dist.(ft)	Code	Description	Clock At	0 and M	Structural Remarks
	239.60	CC	Crack Circumferential	6 to 8	0	1
	258.90	B	Broken	12 to 12	0	5
	279.30	MMC	Miscellaneous Material Change		0	0
	279.80	B	Broken	12 to 12	0	5
	280.60	B	Broken	6 to 9	0	5
		HSV	Hole Soil Visible	6	0	5
	280.80	MGP	Miscellaneous General Photo		0	0
	299.70	CC	Crack Circumferential	12 to 12	0	1
	319.40	B	Broken	12 to 12	0	5
		MMC	Miscellaneous Material Change		0	0
	329.80	MWLS	Miscellaneous Water Level Sag		0	2
	332.90	MCU	Miscellaneous Camera Underwater		4	0
	335.70	MWLS	Miscellaneous Water Level Sag		0	2
	339.00	CC	Crack Circumferential	7 to 9	0	1
	347.20	CL	Crack Longitudinal	3	0	2
		H	Hole	6	0	3
	348.20	TB	Tap Break-in/Hammer	3	0	0
	349.20	B	Broken	1 to 7	0	5
	353.80	AMH	Access Point Manhole		0	0

Cast iron

VCP

End of sag

DSMH W531.010

Survey ID: W516.060_W516.050_1_U_6/21/2012_156ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: N
Date: 6/21/2012
Time: 10:20
Cleaned: 6/18/2012
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.050
Downstream MH: W516.060
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Ave 320
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.050
	MWL	Miscellaneous Water Level	0	0	
96.90	RFJ	Roots Fine Joint	8 to 4	1	0
156.20	MSA	Miscellaneous Abandoned Survey	0	0	Heavy Debris

Survey ID: W516.070_W516.060_1_U_6/21/2012_86ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 6/21/2012
Time: 09:18
Cleaned: 6/18/2012
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.060
Downstream MH: W516.070
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Ave 400
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D	M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0		Starting Manhole: W516.060
	MWL	Miscellaneous Water Level	0	0		
2.90	MGO	Miscellaneous General Observation	0	0		Switched to push camera
74.00	TB	Tap Break-in/Hammer	3	0	0	
86.60	DSZ	Deposits Settled Other	4 to 8	5	0	Broken Pipe
	MSA	Miscellaneous Abandoned Survey	0	0	0	Unable to pass

Survey ID: W516.060_W516.050_1_U/D__#ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: N
Date: 7/11/2012
Time: 08:20
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.060
Downstream MH: W516.050
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Ave 400
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Height: 6.0
Width: -
Joint Length: 3.00
Total Length: -
Len. Surveyed: 0.000



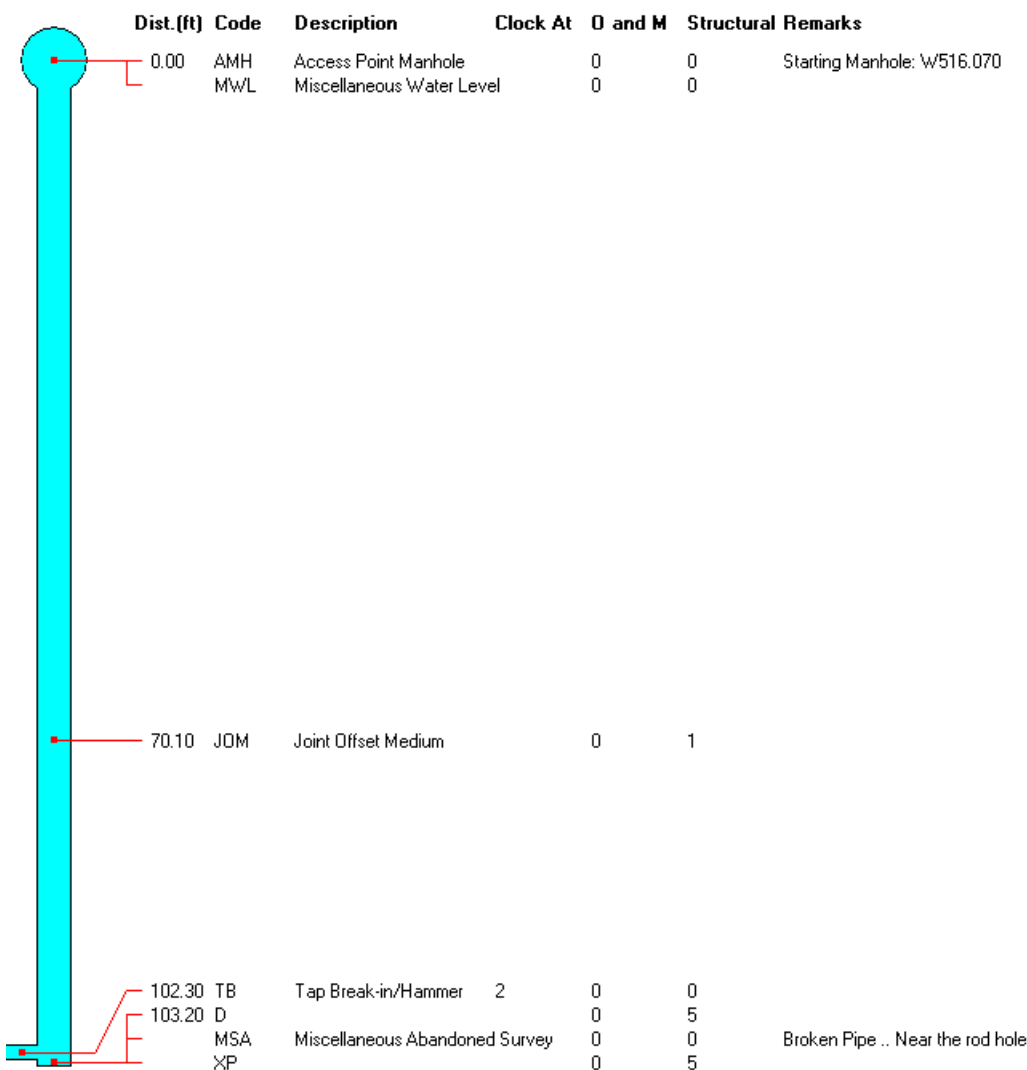
Survey ID: W516.070_W516.060_1_D_7/10/2012_105ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 7/10/2012
Time: 11:19
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.070
Downstream MH: W516.060
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Rd 401
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	O and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.070
2.80	MWL	Miscellaneous Water Level	0	0	
7.70	DAGS	Deposits Attached Grease 9 to 12	2	0	
19.60	DAGS	Deposits Attached Grease 2 to 6	2	0	
	RFJ	Roots Fine Joint 1 to 6	1	0	
28.50	TB	Tap Break-in/Hammer	10	0	
65.50	RMJ	Roots Medium Joint 7 to 12	3	0	
65.60	DAGS	Deposits Attached Grease 7 to 12	3	0	
71.00	MWLS	Miscellaneous Water Level Sag	0	4	
80.00	MCU	Miscellaneous Camera Underwater	4	0	Adjusted after inspection. CA-JR
105.00	MWLS	Miscellaneous Water Level Sag	0	0	DSMH W516.060
105.10	AMH	Access Point Manhole	0	0	

Survey ID: W516.080_W516.070_1_U_7/10/2012_103ft
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: CAS
Media Number: mpeg
Pre-Cleaning: N
Date: 7/10/2012
Time: 11:34
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -




















Upstream MH: W516.070
Downstream MH: W516.080
Certificate Number: U-811-13337
Drainage Area: I-17
Street Address: Woodland Rd 401
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -



Survey ID: 2951_W516.020_20130425_1349
Surveyor's Name: Albert Coats
Pipe Segment Ref.: -
City: Kentfield
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 2951_W516.020_20130425_1349
Pre-Cleaning: J
Date: 4/25/2013
Time: 13:49
Cleaned: 4/24/2013
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.020
Downstream MH: W514.150
Certificate Number: U-412-14888
Drainage Area: J-17
Street Address: Woodland Rd 233
Direction: D
Shape: C
Ln. Method: -
Purpose: C
Weather: 1
Measurements:
Rim to Invert: 3.80 / 4.90
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.020
	MWL	Miscellaneous Water Level	0	0	
10.40	CC	Crack Circumferential	12 to 12	0	1
13.50	CC	Crack Circumferential	3 to 8	0	1
19.70	CC	Crack Circumferential	3 to 9	0	1
26.10	RFJ	Roots Fine Joint	3	1	0
27.00	MMC	Miscellaneous Material Change	0	0	cas
32.70	MMC	Miscellaneous Material Change	0	0	vcp
35.70	CM	Crack Multiple	4 to 9	0	3
41.90	CM	Crack Multiple	9 to 2	0	3
53.70	FM	Fracture Multiple	9 to 3	0	4
55.90	FM	Fracture Multiple	12 to 12	0	4
61.80	CM	Crack Multiple	10 to 4	0	3
89.90	SSSM		12 to 12	0	2
108.00	CM	Crack Multiple	9 to 12	0	3
115.90	TB	Tap Break-in/Hammer	3	0	0
116.10	CM	Crack Multiple	10 to 6	0	3
130.40	RFJ	Roots Fine Joint	8 to 4	1	0
132.20	CM	Crack Multiple	9 to 3	0	3
	RFJ	Roots Fine Joint	8 to 4	1	0
140.20	RFJ	Roots Fine Joint	8 to 4	1	0

	Dist.(ft)	Code	Description	Clock At	O and M	Structural Remarks	
	191.30	RFJ	Roots Fine Joint	8 to 4	1	0	
	202.20	MMC	Miscellaneous Material Change		0	0	cas
	211.80	MMC	Miscellaneous Material Change		0	0	vcp
	213.80	CC	Crack Circumferential	12 to 12	0	1	
	217.40	CM	Crack Multiple	9 to 3	0	3	
	227.00	RFJ	Roots Fine Joint	8 to 4	1	0	
	237.40	RFJ	Roots Fine Joint	2	1	0	
	241.80	CC	Crack Circumferential	12 to 3	0	1	
	243.70	IS	Infiltration Stain	2 to 6	0	0	
	247.70	RFJ	Roots Fine Joint	8 to 4	1	0	
	249.70	RFJ	Roots Fine Joint	8 to 4	1	0	
	251.40	CM	Crack Multiple	3 to 11	0	3	
	276.10	RFJ	Roots Fine Joint	9 to 2	1	0	
	280.40	CC	Crack Circumferential	10 to 3	0	1	
	290.10	CM	Crack Multiple	9 to 5	0	3	
	306.30	SSSM		12 to 12	0	2	
	352.30	CM	Crack Multiple	9 to 4	0	3	
	361.00	RFJ	Roots Fine Joint	9 to 3	1	0	
	365.50	AMH	Access Point Manhole		0	0	DSMH W514.150

Survey ID: 3770_W514.120_20131011_1357
Surveyor's Name: Albert Coats
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 3770_W514.120_20131011_1357
Pre-Cleaning: J
Date: 10/11/2013
Time: 13:57
Cleaned: 10/11/2013
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W514.120
Downstream MH: W514.110
Certificate Number: U-412-14888
Drainage Area: J-17
Street Address: Woodland Rd 221
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: 5.80 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W514.120
	MWL	Miscellaneous Water Level	0	0	
48.70	TB	Tap Break-in/Hammer	3	0	0
49.80	CC	Crack Circumferential	1 to 4	0	1
74.70	CM	Crack Multiple	10 to 6	0	3
77.10	CM	Crack Multiple	8 to 11	0	3
84.80	CC	Crack Circumferential	4 to 8	0	1
89.10	MGO	Miscellaneous General Observation	0	0	0 may be capped
	TB	Tap Break-in/Hammer	1	0	0
89.80	MMC	Miscellaneous Material Change	0	0	0 CAS
113.00	CS	Crack Spiral	11 to 3	0	2
	MMC	Miscellaneous Material Change	0	0	0 VCP
129.20	CM	Crack Multiple	10 to 3	0	3
141.60	CL	Crack Longitudinal	12	0	2
151.30	CM	Crack Multiple	3 to 8	0	3
153.40	CM	Crack Multiple	3 to 8	0	3
155.70	CM	Crack Multiple	8 to 3	0	3
190.70	CL	Crack Longitudinal	12	0	2
194.20	CL	Crack Longitudinal	10	0	2
200.50	CM	Crack Multiple	6 to 10	0	3
226.70	TF	Tap Factory	3	0	0
228.80	MWLS	Miscellaneous Water Level Sag	0	0	3
233.40	CC	Crack Circumferential	10 to 4	0	1
239.50	FM	Fracture Multiple	9 to 3	0	4
245.80	MWLS	Miscellaneous Water Level Sag	0	0	3
	TF	Tap Factory	10	0	0
248.90	AMH	Access Point Manhole	0	0	0 DSMH W514.110

Survey ID: 3778_W516.010_20131011_1311
Surveyor's Name: Albert Coats
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 3778_W516.010_20131011_1311
Pre-Cleaning: J
Date: 10/11/2013
Time: 13:11
Cleaned: 10/11/2013
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.010
Downstream MH: W515.010
Certificate Number: U-412-14888
Drainage Area: J-17
Street Address: Woodland Rd 222
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.010
	MWL	Miscellaneous Water Level	0	0	
2.80	RFJ	Roots Fine Joint 8 to 4	1	0	
31.40	MWLS	Miscellaneous Water Level Sag	0	3	
47.50	MWLS	Miscellaneous Water Level Sag	0	3	
69.20	MWLS	Miscellaneous Water Level Sag	0	3	
77.40	MWLS	Miscellaneous Water Level Sag	0	3	
93.40	MWLS	Miscellaneous Water Level Sag	0	2	
103.50	MWLS	Miscellaneous Water Level Sag	0	2	
107.90	MMC	Miscellaneous Material Change	0	0	RCP
124.20	MMC	Miscellaneous Material Change	0	0	VCP
131.80	MWLS	Miscellaneous Water Level Sag	0	2	
139.10	MWLS	Miscellaneous Water Level Sag	0	2	
169.40	MWLS	Miscellaneous Water Level Sag	0	2	
213.90	MWLS	Miscellaneous Water Level Sag	0	2	
228.50	MWLS	Miscellaneous Water Level Sag	0	2	
242.50	MWLS	Miscellaneous Water Level Sag	0	2	
257.70	RFJ	Roots Fine Joint 8 to 4	1	0	
261.10	MWLS	Miscellaneous Water Level Sag	0	2	
271.50	MWLS	Miscellaneous Water Level Sag	0	2	
287.60	MWLS	Miscellaneous Water Level Sag	0	3	
297.70	RFJ	Roots Fine Joint 8 to 4	1	0	
301.10	MWLS	Miscellaneous Water Level Sag	0	3	
303.80	AMH	Access Point Manhole	0	0	DSMH W515.010

Survey ID: 3779_W516.020_20131011_1253
Surveyor's Name: Albert Coats
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 3779_W516.020_20131011_1253
Pre-Cleaning: J
Date: 10/11/2013
Time: 12:53
Cleaned: 10/11/2013
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.020
Downstream MH: W516.010
Certificate Number: U-412-14888
Drainage Area: J-17
Street Address: Woodland Rd 233
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: 4.00 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -






















Dist.(ft)	Code	Description	Clock At	D and M		Structural Remarks
0.00	AMH	Access Point Manhole	0	0	0	Starting Manhole: W516.020
	MWL	Miscellaneous Water Level	0	0	0	
4.60	JOM	Joint Offset Medium	0	1	1	
5.40	MWLS	Miscellaneous Water Level Sag	0	3	3	
63.70	RFJ	Roots Fine Joint	8 to 4	1	0	
67.60	RFJ	Roots Fine Joint	8 to 4	1	0	
243.10	RFJ	Roots Fine Joint	8 to 4	1	0	
287.60	RFJ	Roots Fine Joint	8 to 4	1	0	
297.50	RFJ	Roots Fine Joint	8 to 4	1	0	
357.50	RMJ	Roots Medium Joint	8 to 4	3	0	
367.40	RFJ	Roots Fine Joint	8 to 4	1	0	
398.00	AMH	Access Point Manhole	0	0	0	DSMH W516.010

Survey ID: 3782_W516.050_20131011_0922
Surveyor's Name: Albert Coats
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 3782_W516.050_20131011_0922
Pre-Cleaning: J
Date: 10/11/2013
Time: 09:22
Cleaned: 10/11/2013
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.050
Downstream MH: W516.040
Certificate Number: U-412-14888
Drainage Area: I-17
Street Address: Woodland Rd 397
Direction: D
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: 6.40 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.050
	MWL	Miscellaneous Water Level	0	0	
5.90	MWLS	Miscellaneous Water Level Sag	0	3	
9.70	MWLS	Miscellaneous Water Level Sag	0	0	
12.60	CC	Crack Circumferential 7 to 10	0	1	
16.80	MWLS	Miscellaneous Water Level Sag	0	3	
25.00	MWLS	Miscellaneous Water Level Sag	0	0	
39.80	MWLS	Miscellaneous Water Level Sag	0	4	
46.20	MWLS	Miscellaneous Water Level Sag	0	0	
48.80	CM	Crack Multiple 9 to 2	0	3	
61.80	FC	Fracture Circumferential 3 to 8	0	2	
67.30	MWLS	Miscellaneous Water Level Sag	0	2	
76.10	MWLS	Miscellaneous Water Level Sag	0	0	
79.60	MWLS	Miscellaneous Water Level Sag	0	3	
87.10	MWLS	Miscellaneous Water Level Sag	0	0	
	TB	Tap Break-in/Hammer 9	0	0	
96.10	MWLS	Miscellaneous Water Level Sag	0	3	
101.00	MWLS	Miscellaneous Water Level Sag	0	0	
109.20	MWLS	Miscellaneous Water Level Sag	0	3	
120.60	MWLS	Miscellaneous Water Level Sag	0	3	
122.90	CL	Crack Longitudinal 10	0	2	
125.70	MWLS	Miscellaneous Water Level Sag	0	0	
128.30	CC	Crack Circumferential 2 to 4	0	1	
134.20	MWLS	Miscellaneous Water Level Sag	0	3	

	Dist.(ft)	Code	Description	Clock At	O and M	Structural Remarks
	149.70	MWLS	Miscellaneous Water Level Sag	0	0	
	152.30	MWLS	Miscellaneous Water Level Sag	0	2	
		RFJ	Roots Fine Joint	8 to 4	1	0
	162.80	MWM	Miscellaneous Water Mark	0	0	
	169.90	TS	Tap Saddle	3	0	0
	176.10	MWLS	Miscellaneous Water Level Sag	0	3	
	190.90	MWLS	Miscellaneous Water Level Sag	0	3	
	201.70	MWLS	Miscellaneous Water Level Sag	0	0	
	204.40	CC	Crack Circumferential	8 to 4	0	1
	215.40	MWLS	Miscellaneous Water Level Sag	0	3	
	224.80	MWLS	Miscellaneous Water Level Sag	0	3	
	225.70	RFJ	Roots Fine Joint	8 to 4	1	0
	231.30	MWLS	Miscellaneous Water Level Sag	0	3	
	232.10	CC	Crack Circumferential	7 to 9	0	1
	249.10	MWLS	Miscellaneous Water Level Sag	0	3	
	255.00	SSSM		12 to 12	0	2
	259.80	MWLS	Miscellaneous Water Level Sag	0	2	
	261.80	RFJ	Roots Fine Joint	8 to 4	1	0
	264.80	MWLS	Miscellaneous Water Level Sag	0	0	
	271.40	MWLS	Miscellaneous Water Level Sag	0	3	
	282.30	MWLS	Miscellaneous Water Level Sag	0	0	
	291.70	MWLS	Miscellaneous Water Level Sag	0	3	
		RFJ	Roots Fine Joint	8 to 4	1	0
	298.20	RFJ	Roots Fine Joint	8 to 4	1	0

	Dist. (ft)	Code	Description	Clock At	0 and M	Structural Remarks
	315.50	MWLS	Miscellaneous Water Level Sag	0	3	
	328.60	MWLS	Miscellaneous Water Level Sag	0	2	
	334.20	SSSM		4 to 8	0	2
	337.90	MWLS	Miscellaneous Water Level Sag	0	3	
	340.40	RFJ	Roots Fine Joint	8 to 4	1	0
	349.90	MWLS	Miscellaneous Water Level Sag	0	0	
	364.80	RFJ	Roots Fine Joint	8 to 4	1	0
	368.00	RFJ	Roots Fine Joint	8 to 4	1	0
	376.50	SSSM		12 to 12	0	2
	383.40	CC	Crack Circumferential	8 to 9	0	1
	386.00	CC	Crack Circumferential	2 to 10	0	1
	390.70	MWLS	Miscellaneous Water Level Sag	0	3	
	395.30	RFJ	Roots Fine Joint	8 to 4	1	0
	398.30	RFJ	Roots Fine Joint	8 to 4	1	0
	402.50	MCU	Miscellaneous Camera Underwater	4	0	
	404.60	RFJ	Roots Fine Joint	8 to 4	1	0
	414.20	MWLS	Miscellaneous Water Level Sag	0	0	
	424.60	MWLS	Miscellaneous Water Level Sag	0	3	
	433.90	MWLS	Miscellaneous Water Level Sag	0	0	
	437.10	LL	Line Left	1	0	
	444.10	AMH	Access Point Manhole	0	0	DSMH W516.040

Survey ID: 3772_W514.150_20131014_0910
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: 3772_W514.150_20131014_0910
Pre-Cleaning: J
Date: 10/14/2013
Time: 09:10
Cleaned: 10/14/2013
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W514.120
Downstream MH: W514.150
Certificate Number: U-811-13337
Drainage Area: J-17
Street Address: Woodland Rd 221
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: 5.10 / 5.90
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W514.120 MACP
	MWL	Miscellaneous Water Level	0	0	
8.50	FM	Fracture Multiple	12 to 12	0	4
12.00	HVV	Hole Void Visible	6 to 9	0	5
	TBD	Tap Break-in/Hammer Defective	3	3	0
25.60	CC	Crack Circumferential	1 to 5	0	1
26.70	CL	Crack Longitudinal	4	0	2
27.90	CC	Crack Circumferential	11 to 5	0	1
	RTJ	Roots Tap Joint	11 to 2	2	0
29.70	FM	Fracture Multiple	6 to 10	0	4
50.00	TFC	Tap Factory Capped	12	0	0
52.70	AMH	Access Point Manhole	0	0	USMH W514.150

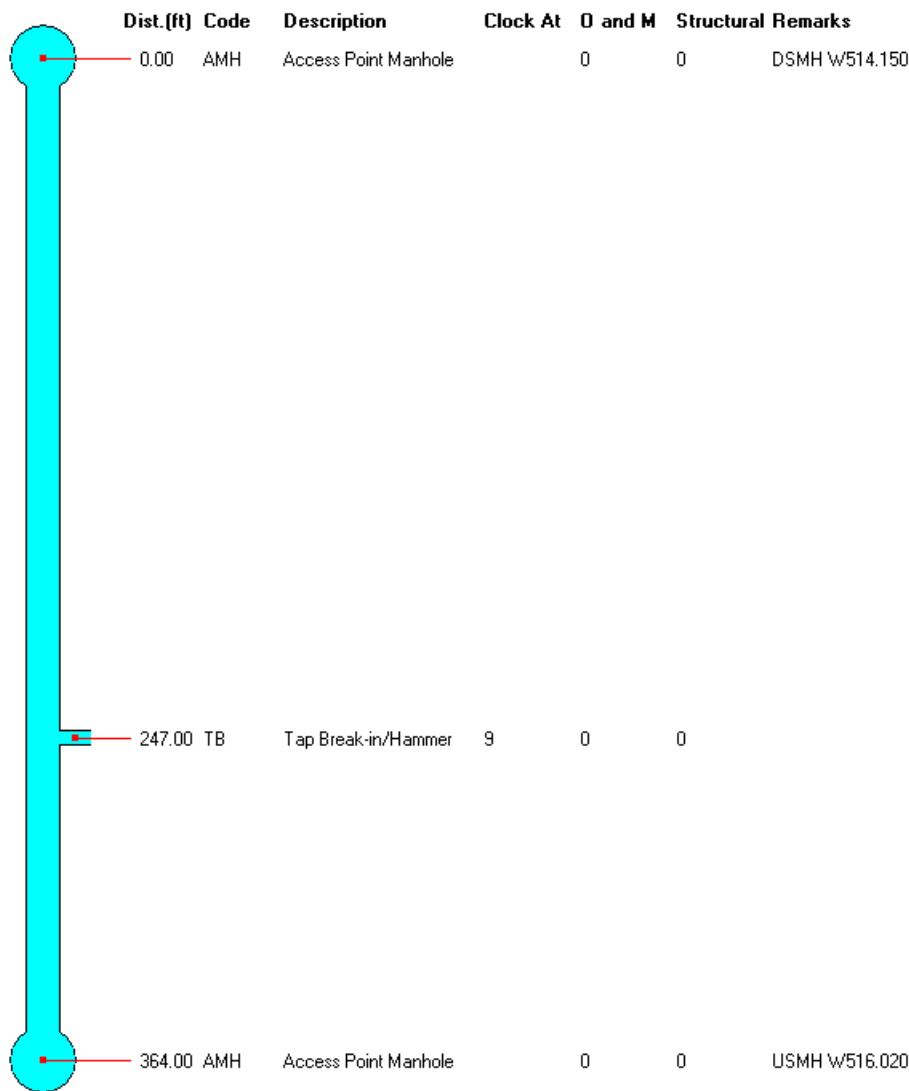
Survey ID: W530.040_W530.030_U_20141103_0935
Surveyor's Name: John Vogel
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: W530.040_W530.030_U_20141103_0935
Pre-Cleaning: J
Date: 11/3/2014
Time: 09:35
Cleaned: 11/3/2014
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W530.030
Downstream MH: W530.040
Certificate Number: U-811-13337
Drainage Area: -
Street Address: Woodland Rd 463
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements:
Rim to Invert: 0.00 / 12.50
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist. (ft)	Code	Description	Clock At	D	M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0		Starting Manhole: W530.030
	MWL	Miscellaneous Water Level	0	0		
31.30	TFC	Tap Factory Capped	12	0	0	
31.50	LR	Line Right		4	0	
38.30	LU	Line Up		2	0	
73.80	RFJ	Roots Fine Joint	12 to 12	1	0	
82.90	RFJ	Roots Fine Joint	12 to 12	1	0	
85.60	RFJ	Roots Fine Joint	12 to 12	1	0	
116.20	RFJ	Roots Fine Joint	12 to 12	1	0	
125.40	TB	Tap Break-in/Hammer	3	0	0	
129.10	IS	Infiltration Stain	2 to 6	0	0	
134.40	FC	Fracture Circumferential	5 to 7	0	2	
135.20	LU	Line Up		4	0	
137.70	FM	Fracture Multiple	4 to 8	0	4	
138.20	MSA	Miscellaneous Abandoned Survey	0	0	0	Unable to climb the grade

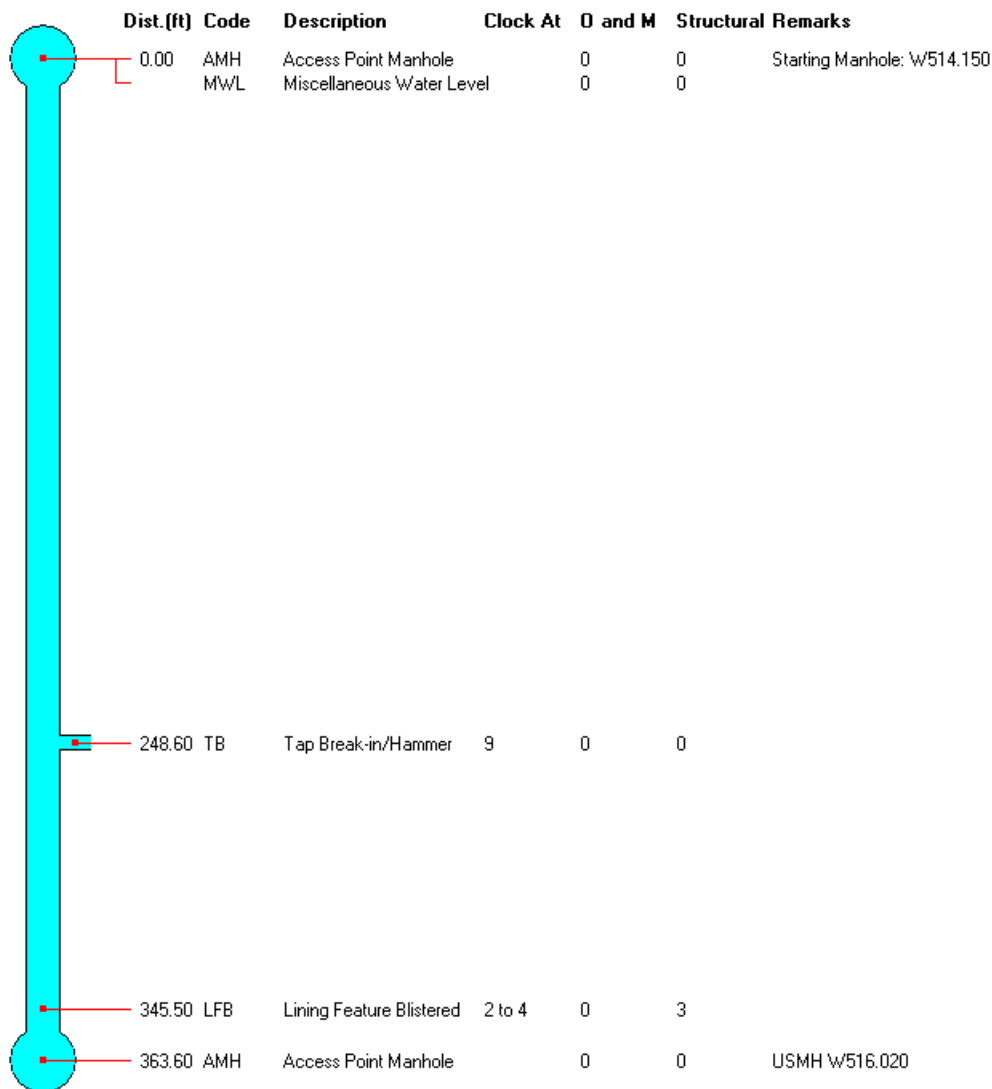
Survey ID: W516.0201_32413
Surveyor's Name: Branden Byrd
Pipe Segment Ref.: 3224
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: -
Material: VCP
Media Number: -
Pre-Cleaning: -
Date: 5/16/2014
Time: 10:17
Cleaned: -
Year Laid: -
Year Rehab.: 2014
Additional Information: -

Upstream MH: W514.150
Downstream MH: W516.020
Certificate Number: -
Drainage Area: -
Street Address: Woodland Rd 233
Direction: u
Shape: C
Ln. Method: -
Purpose: C
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -



Survey ID: W516.0201_32467
Surveyor's Name: John Vogel
Pipe Segment Ref.: 3224
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: W516.0201_32467
Pre-Cleaning: J
Date: 4/23/2015
Time: 13:18
Cleaned: 4/21/2015
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W514.150
Downstream MH: W516.020
Certificate Number: U-811-13337
Drainage Area: -
Street Address: Woodland Ave 233
Direction: U
Shape: C
Ln. Method: CP
Purpose: F
Weather: 1
Measurements:
Rim to Invert: - / 5.10
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -



Survey ID: W514.1501_34400
 Surveyor's Name: Brady Stewart
 Pipe Segment Ref.: 3223
 City: Kent Woodlands

Location Details: -

Sewer Use: SS
 Flow Control: N
 Material: VCP
 Media Number: 20.
 Pre-Cleaning: J

Date: 6/22/2016

Time: 14:56

Cleaned: 6/20/2016

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: -
 Total Length: 51.300
 Len. Surveyed: 51.300

Upstream MH: W514.120
 Downstream MH: W514.150
 Certificate Number: U-1209-9830
 Drainage Area: -
 Street Address: Woodland Rd 223
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1

Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D	M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0		Starting Manhole: W514.120
	MWL	Miscellaneous Water Level	0	0		
8.40	FM	Fracture Multiple	12 to 12	0	4	
11.30	TBD	Tap Break-in/Hammer Defective	3	0		
17.20	RFJ	Roots Fine Joint	12 to 12	1	0	
25.50	FM	Fracture Multiple	4 to 8	0	4	
27.30	CM	Crack Multiple	12 to 12	0	3	
28.80	CC	Crack Circumferential	6 to 10	0	1	
29.40	RFJ	Roots Fine Joint	12 to 12	1	0	
40.00	CC	Crack Circumferential	10 to 2	0	1	
49.10	TFC	Tap Factory Capped	12	0	0	
51.30	AMH	Access Point Manhole	0	0		W514.150

Survey ID: W516.1001_34760
Surveyor's Name: Henry Benavides
Pipe Segment Ref.: 3110
City: Kent Woodlands
Location Details: Bottom right hand corner of 432 Woodland Rd.
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: N
Date: 9/22/2016
Time: 09:34
Cleaned: -
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.090
Downstream MH: W516.100
Certificate Number: U-412-14888
Drainage Area: -
Street Address: Woodland RD 432
Direction: U
Shape: C
Ln. Method: -
Purpose: F
Weather: 1
Measurements: U / D
Rim to Invert: - / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.090
	MWL	Miscellaneous Water Level	0	0	
	FC	Fracture Circumferential	7 to 10	0	
3.30	RFJ	Roots Fine Joint	12 to 12	1	0
49.20	RBB	Roots Ball Barrel	4 to 8	5	0
50.00	RFJ	Roots Fine Joint	12 to 12	1	0
50.10	TFD	Tap Factory Defective	6	2	0
50.90	BSV	Broken Soil Visible	10 to 1	0	5
53.00	ACOM	Access Point Cleanout Mainline	0	0	0

Backside connection placed over rod hole co
 This is the access to the rod hole
 US Rodhole W516.100

Survey ID: W531.0201_36350
 Surveyor's Name: Brady Stewart
 Pipe Segment Ref.: 4717
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: mpeg

Pre-Cleaning: N

Date: 10/4/2016

Time: 09:19

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

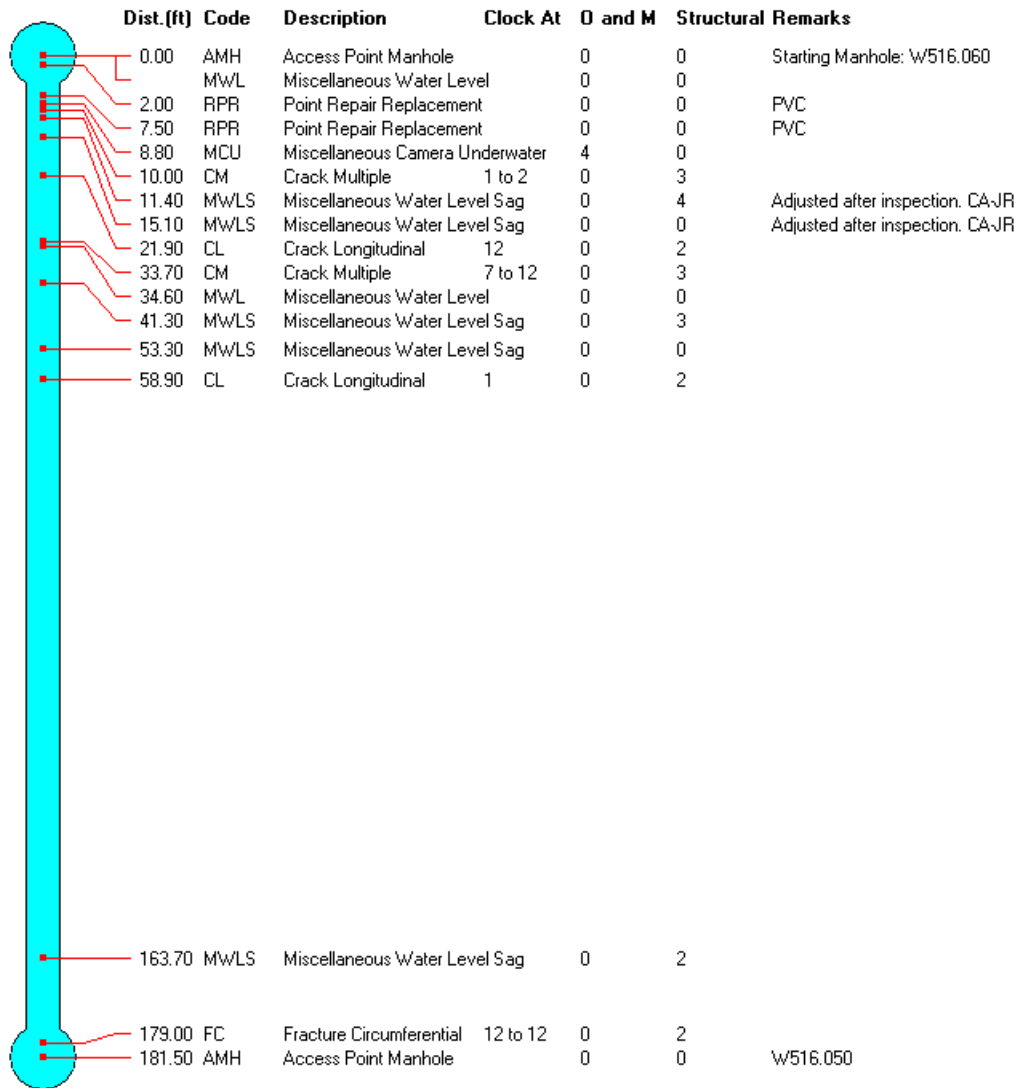
Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 356.100
 Len. Surveyed: 356.100

Upstream MH: W531.020
 Downstream MH: W531.010
 Certificate Number: U-1209-9830
 Drainage Area: -
 Street Address: Woodland Rd 440
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: C
 Weather: 1
 Measurements:
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D	M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0		Starting Manhole: W531.020
	MWL	Miscellaneous Water Level	0	0		
22.20	FC	Fracture Circumferential	12 to 12	0	2	
28.40	CS	Crack Spiral	1 to 4	0	2	
42.70	RFJ	Roots Fine Joint	12 to 12	1	0	
69.00	TB	Tap Break-in/Hammer	9	0	0	
94.20	RFJ	Roots Fine Joint	12 to 12	1	0	
103.40	RFJ	Roots Fine Joint	12 to 12	1	0	
126.60	RPL	Point Repair Liner	0	0	0	VCP
132.90	MWM	Miscellaneous Water Mark	4	0	0	
165.00	TB	Tap Break-in/Hammer	9	0	0	
256.90	RFJ	Roots Fine Joint	12 to 12	1	0	
	RPR	Point Repair Replacement	0	0	0	CAS
265.00	RPR	Point Repair Replacement	0	0	0	CAS
281.00	RPR	Point Repair Replacement	0	0	0	CAS
322.40	RPL	Point Repair Liner	0	0	0	CAS
325.70	RPR	Point Repair Replacement	0	0	0	CAS
	RPL	Point Repair Liner	0	0	0	CAS
	FM	Fracture Multiple	12 to 12	0	4	
331.60	RPR	Point Repair Replacement	0	0	0	CAS
338.90	RPR	Point Repair Replacement	0	0	0	CAS
351.20	FL	Fracture Longitudinal	3	0	3	
	TB	Tap Break-in/Hammer	3	0	0	
356.10	AMH	Access Point Manhole	0	0	0	W531.010

Survey ID: W516.0601_36350
Surveyor's Name: Brady Stewart
Pipe Segment Ref.: 3118
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 10/3/2016
Time: 14:33
Cleaned: 10/3/2016
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W516.060
Downstream MH: W516.050
Certificate Number: U-1209-9830
Drainage Area: -
Street Address: Woodland Rd 400
Direction: D
Shape: C
Ln. Method: -
Purpose: C
Weather: 6
Measurements:
Rim to Invert: 10.20 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -



Survey ID: W514.1501_38434
 Surveyor's Name: Brady Stewart
 Pipe Segment Ref.: 3223
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: mpeg

Pre-Cleaning: N

Date: 12/23/2016

Time: 08:10

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 6.00
 Total Length: 52.100
 Len. Surveyed: 52.100

Upstream MH: W514.150
 Downstream MH: W514.120
 Certificate Number: U-1209-9830
 Drainage Area: -
 Street Address: Woodland Rd 233
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1
 Measurements:
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W514.150
	MWL	Miscellaneous Water Level	0	0	
2.00	B	Broken	11 to 1	0	
9.10	RFJ	Roots Fine Joint	12 to 12	1	0
23.60	CC	Crack Circumferential	12 to 5	0	1
25.30	CC	Crack Circumferential	7 to 10	0	1
40.70	TBD	Tap Break-in/Hammer Def3ctive	3	0	0
42.00	H	Hole	4	0	4
	FM	Fracture Multiple	12 to 12	0	4
52.00	RFJ	Roots Fine Joint	12 to 12	1	0
52.10	AMH	Access Point Manhole	0	0	W514.120

Survey ID: W514.1201_38434
 Surveyor's Name: Brady Stewart
 Pipe Segment Ref.: 4295
 City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: mpeg

Pre-Cleaning: N

Date: 12/23/2016

Time: 08:43

Cleaned: -

Year Laid: -

Year Rehab.: -

Height: 6.0

Width: -

Joint Length: 6.00

Total Length: -

Len. Surveyed: 248.600

Upstream MH: W514.120
 Downstream MH: W514.110
 Certificate Number: U-1209-9830

Drainage Area: -

Street Address: Woodland Rd 221

Direction: D

Shape: C

Ln. Method: -

Purpose: H

Weather: 1

Measurements:

Rim to Invert:

Grade to Invert:

Rim to Grade:

Sewer Category: -

U / D

5.60 / -

- / -

/

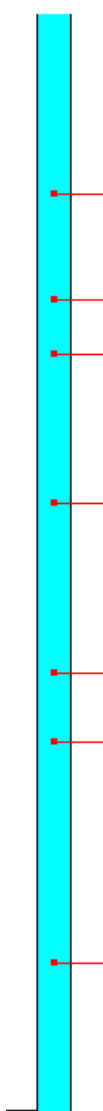
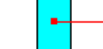
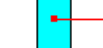
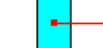

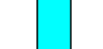
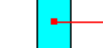

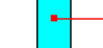
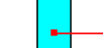
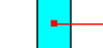
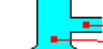


Additional Information: Completed OLD partials as part of a QAQC cleanup

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W514.120
	MWL	Miscellaneous Water Level	0	0	
48.00	CL	Crack Longitudinal	2	0	2
48.90	TB	Tap Break-in/Hammer	2	0	0
75.20	CM	Crack Multiple	11 to 5	0	3
89.40	TB	Tap Break-in/Hammer	12	0	0
89.50	MMC	Miscellaneous Material Change	0	0	Possible abandoned node CAS
113.70	MMC	Miscellaneous Material Change	0	0	VCP
	CC	Crack Circumferential	8 to 1	0	1
117.70	CC	Crack Circumferential	12 to 3	0	1
129.60	CC	Crack Circumferential	9 to 3	0	1
142.20	CL	Crack Longitudinal	12	0	2
153.00	CL	Crack Longitudinal	3	0	2
154.70	CL	Crack Longitudinal	7	0	2
156.30	CC	Crack Circumferential	8 to 3	0	1
200.90	CC	Crack Circumferential	7 to 9	0	1
227.10	TF	Tap Factory	3	0	0
228.90	MWLS	Miscellaneous Water Level Sag	0	0	4
240.00	FC	Fracture Circumferential	11 to 12	0	2
246.50	TF	Tap Factory	10	0	0
	MWLS	Miscellaneous Water Level Sag	0	0	0
248.60	AMH	Access Point Manhole	0	0	DSMH W514.110

Survey ID: 1482822488
Surveyor's Name: Brady Stewart
Pipe Segment Ref.: -
City: Kent Woodlands
Location Details: -
Sewer Use: SS
Flow Control: N
Material: VCP
Media Number: mpeg
Pre-Cleaning: J
Date: 12/27/2016
Time: 07:02
Cleaned: 12/27/2016
Year Laid: -
Year Rehab.: -
Additional Information: -

Upstream MH: W514.120
Downstream MH: W514.110
Certificate Number: U-1209-9830
Drainage Area: -
Street Address: Woodland Rd 221
Direction: D
Shape: C
Ln. Method: -
Purpose: H
Weather: 1
Measurements:
Rim to Invert: 5.60 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W514.120
	MWL	Miscellaneous Water Level	0	0	
39.90	CL	Crack Longitudinal	8	0	2
49.70	TB	Tap Break-in/Hammer	3	0	0
50.40	FC	Fracture Circumferential	11 to 2	0	2
76.00	FM	Fracture Multiple	12 to 12	0	4
78.20	FM	Fracture Multiple	12 to 12	0	4
86.80	CM	Crack Multiple	4 to 8	0	3
90.20	TB	Tap Break-in/Hammer	2	0	0
91.00	RPR	Point Repair Replacement	0	0	CAS
114.90	RPR	Point Repair Replacement	0	0	CAS
	FC	Fracture Circumferential	11 to 1	0	2
119.10	CC	Crack Circumferential	11 to 2	0	1
130.80	CM	Crack Multiple	11 to 5	0	3
143.40	CL	Crack Longitudinal	12	0	2
153.00	CL	Crack Longitudinal	4	0	2
155.00	FC	Fracture Circumferential	5 to 7	0	2
157.20	CM	Crack Multiple	7 to 2	0	3

	Dist.(ft)	Code	Description	Clock At	0 and M	Structural Remarks
	173.70	CM	Crack Multiple	10 to 2	0	3
	179.90	CM	Crack Multiple	10 to 2	0	3
	183.10	MWLS	Miscellaneous Water Level Sag		0	2
	191.90	CM	Crack Multiple	12 to 1	0	3
	201.80	CC	Crack Circumferential	7 to 10	0	1
	205.90	MWLS	Miscellaneous Water Level Sag		0	2
	218.90	MWLS	Miscellaneous Water Level Sag		0	2
	228.00	TF	Tap Factory	3	0	0
	230.60	MWLS	Miscellaneous Water Level Sag		0	2
	234.70	CM	Crack Multiple	12 to 12	0	3
	241.40	B	Broken	12 to 12	0	5
	247.40	TF	Tap Factory	9	0	0
	248.30	MWLS	Miscellaneous Water Level Sag		0	2
	250.20	AMH	Access Point Manhole		0	0

W514.110

Survey ID: W516.0201_38434_1!
Surveyor's Name: Brady Stewart
Pipe Segment Ref.: -

City: Kent Woodlands

Location Details: -

Sewer Use: SS

Flow Control: N

Material: VCP

Media Number: mpeg

Pre-Cleaning: J

Date: 12/27/2016

Time: 09:56

Cleaned: 12/27/2016

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 8.0
Width: -
Joint Length: 8.00
Total Length: 399.900
Len. Surveyed: 399.900

Upstream MH: W516.020
Downstream MH: W516.010
Certificate Number: U-1209-9830
Drainage Area: -
Street Address: Woodland Rd 233
Direction: D
Shape: C
Ln. Method: -
Purpose: H
Weather: 1
Measurements:
Rim to Invert: 4.10 / -
Grade to Invert: - / -
Rim to Grade: /
Sewer Category: -

Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	Starting Manhole: W516.020
	MWL	Miscellaneous Water Level	0	0	
4.50	RPR	Point Repair Replacement	0	0	PVC
	MWLS	Miscellaneous Water Level Sag	0	4	Adjusted after inspection. CA-JR
10.10	MWLS	Miscellaneous Water Level Sag	0	0	Adjusted after inspection. CA-JR
10.10	MCU	Miscellaneous Camera Underwater	4	0	
	RPR	Point Repair Replacement	0	0	PVC
59.20	RFJ	Roots Fine Joint	12 to 12	1	0
68.80	RFJ	Roots Fine Joint	12 to 12	1	0
399.80	RFJ	Roots Fine Joint	12 to 12	0	0
399.90	AMH	Access Point Manhole	0	0	W516.010

Survey ID: W530.0401_53633
 Surveyor's Name: Jason Roos
 Pipe Segment Ref.: 3104
 City: Kent Woodlands

Location Details: -
 Sewer Use: SS
 Flow Control: N
 Material: VCP
 Media Number: -
 Pre-Cleaning: J

Date: 4/16/2019
 Time: 11:38

Cleaned: 4/16/2019

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 180.000
 Len. Surveyed: 209.700

Upstream MH: W530.030
 Downstream MH: W530.040
 Certificate Number: U-513-17964
 Drainage Area: -
 Street Address: Woodland Ave 435
 Direction: U
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1

Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

Dist.(ft)	Code	Description	Clock At	D	M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0		Starting Manhole: W530.030
	MWL	Miscellaneous Water Level	0	0		
11.10	RFJ	Roots Fine Joint	10	1	0	
32.60	TFC	Tap Factory Capped	12	0	0	
32.80	JAM	Joint Angular Medium	0	1		
69.70	RTJ	Roots Tap Joint	1	2	0	
124.00	TB	Tap Break-in/Hammer	3	0	0	
133.40	JOM	Joint Offset Medium		0	1	
139.90	BSV	Broken Soil Visible	1 to 3	0	5	
154.60	RFJ	Roots Fine Joint	8 to 4	1	0	
	JOM	Joint Offset Medium		0	1	
157.90	BSV	Broken Soil Visible	7 to 10	0	5	
169.60	RMJ	Roots Medium Joint	8 to 4	3	0	
	B	Broken	3	0	3	
184.20	RTJ	Roots Tap Joint	12	2	0	
208.10	TBI	Tap Break-in Intruding	10	2	0	
209.70	MSA	Miscellaneous Abandoned Survey	0	0		TBI

Survey ID: W531.0201_61258
 Surveyor's Name: AUSTIN SANFILIPPO
 Pipe Segment Ref.: W531.020_W531.010.1
 City: Kent Woodlands

Location Details: -

Sewer Use: SS
 Flow Control: N
 Material: VCP

Media Number: -

Pre-Cleaning: L

Date: 6/16/2021

Time: 21:46

Cleaned: -

Year Laid: -

Year Rehab.: -

Additional Information: -

Height: 6.0
 Width: -
 Joint Length: 3.00
 Total Length: 93.900
 Len. Surveyed: 93.900

Upstream MH: W531.020
 Downstream MH: W531.010
 Certificate Number: U-111-070300321
 Drainage Area: -
 Street Address: Woodland Rd KW
 Direction: D
 Shape: C
 Ln. Method: -
 Purpose: H
 Weather: 1

Measurements: U / D
 Rim to Invert: - / -
 Grade to Invert: - / -
 Rim to Grade: /
 Sewer Category: -

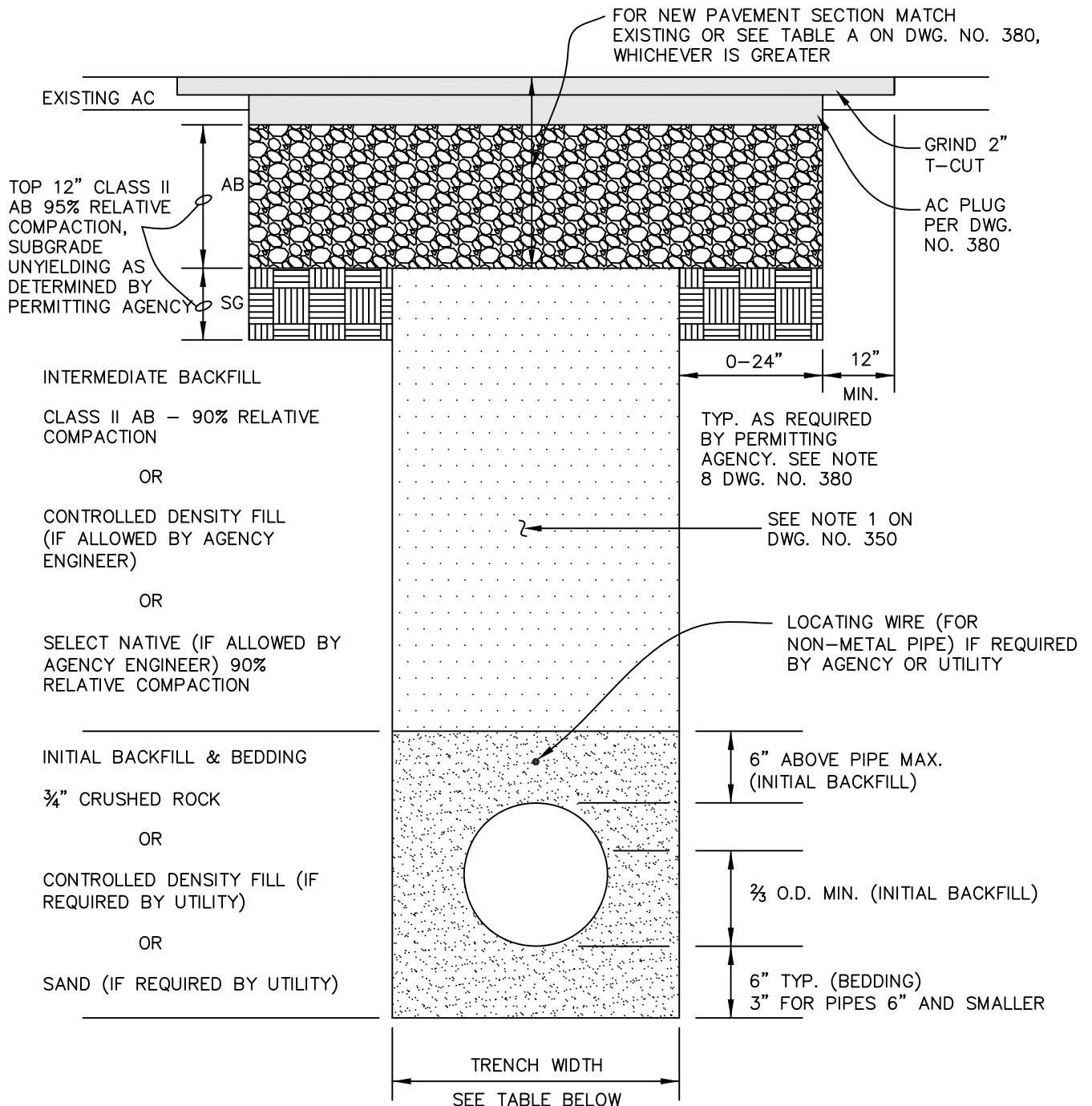
Dist. (ft)	Code	Description	Clock At	D and M	Structural Remarks
0.00	AMH	Access Point Manhole	0	0	W531.020
	MWL	Miscellaneous Water Level	0	0	
7.20	RFJ	Roots Fine Joint	9	1	0
11.10	RFJ	Roots Fine Joint	9 to 3	1	0
43.80	CM	Crack Multiple	12 to 2	0	3
68.70	TB	Tap Break-in/Hammer	10	0	0
93.90	RFJ	Roots Fine Joint	9 to 3	0	0
	MSA	Miscellaneous Abandoned Survey	0	0	COULD NOT CRAWL ANY FURTHER

ROSS VALLEY SANITARY DISTRICT
Woodland Capacity and Creek Crossing Project

APPENDIX D

Marin County Pavement Restoration Standards

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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

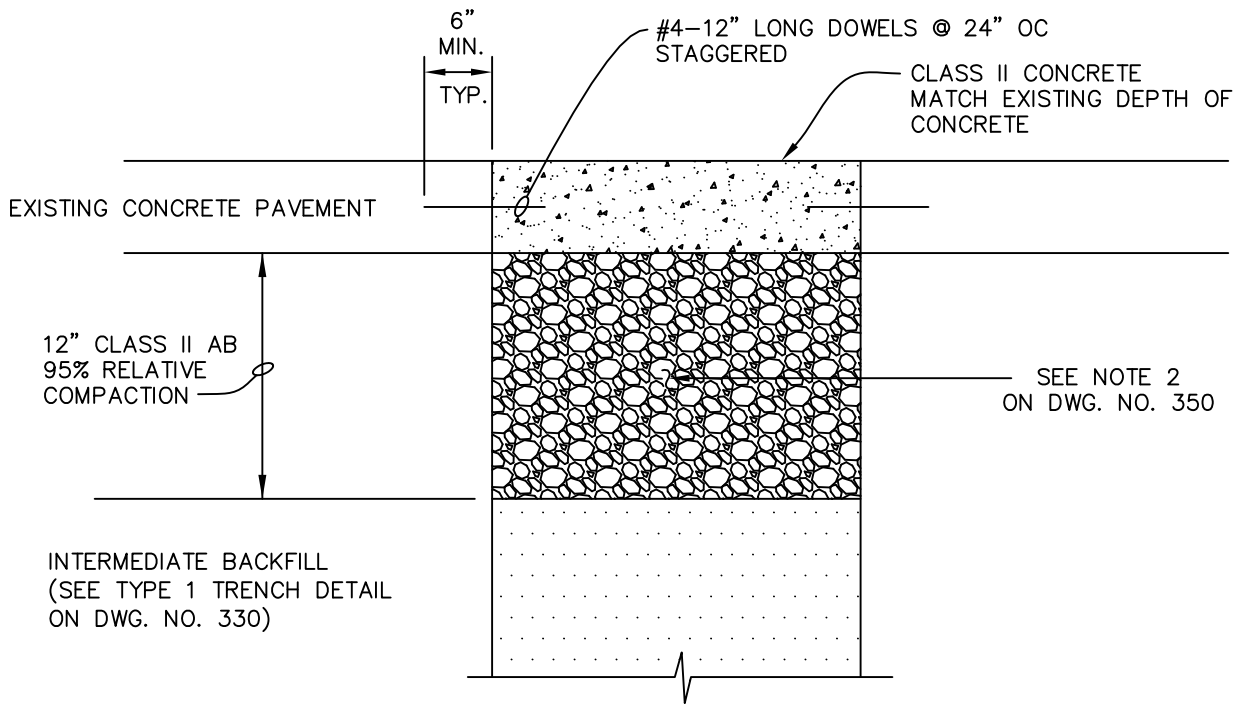
CONDUIT SIZE	LESS THAN 6"	6" TO 24"	OVER 24" TO 60"	OVER 60"
TRENCH WIDTH	O.D. + 12"	O.D. + 24"	O.D. + 24"	O.D. + 24"

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.

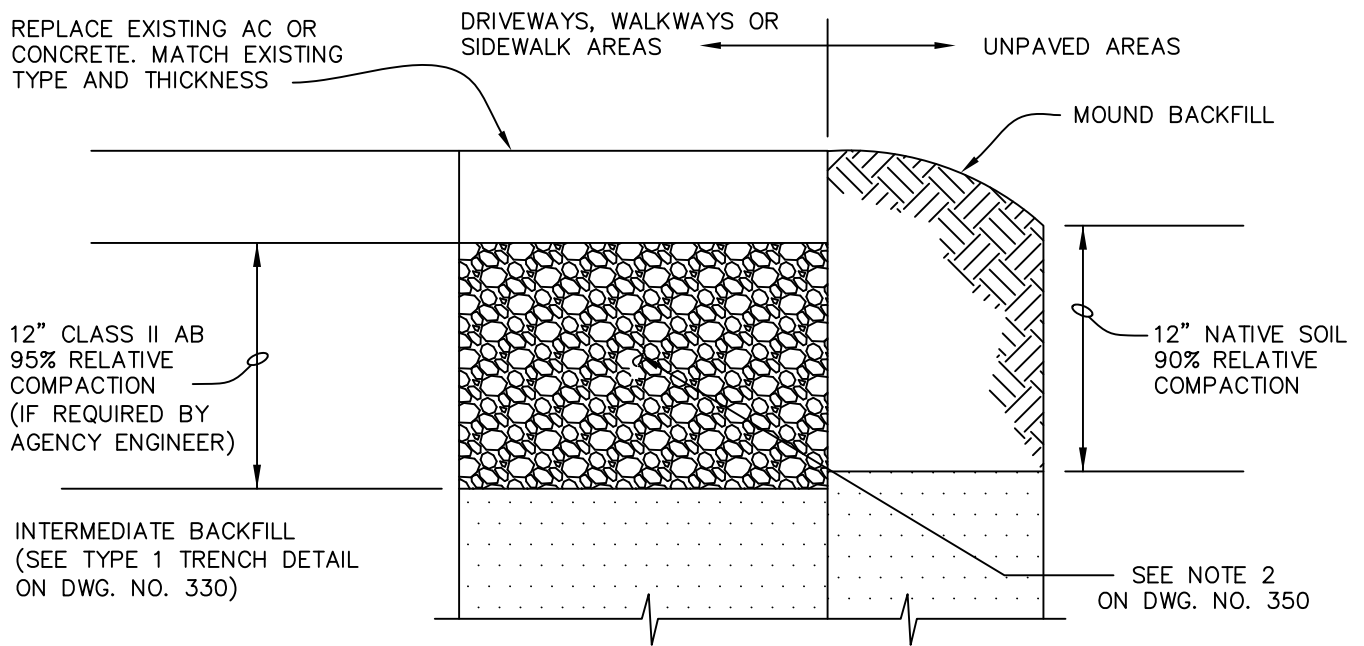
UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

TRENCH DETAILS
SHEET 1 OF 3

			MARCH 2018
			DWG. NO.
			330
REV.	DATE	BY	



TYPE 2
CONCRETE PAVED STREETS



NOTE: FOR TRENCHES IN UNPAVED SHOULDERS, TOP 12" SHALL BE CLASS II AB 95% RELATIVE COMPACTION.

TYPE 3
AREAS OTHER THAN STREETS IN
THE PUBLIC RIGHT OF WAY

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

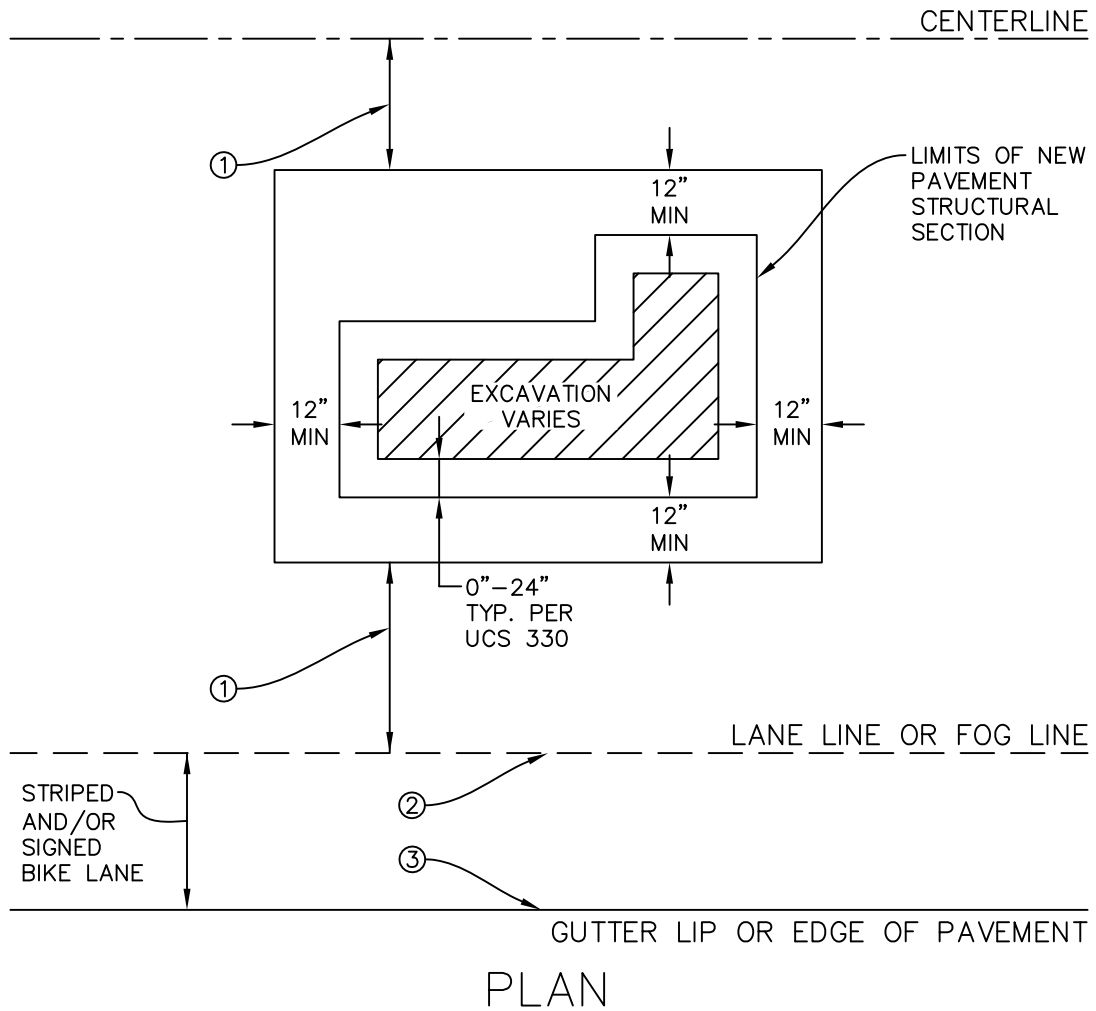
STANDARD
TRENCH BACKFILL
& RESURFACING
SHEET 2 OF 3

			MARCH 2018
			DWG. NO.
			340
REV.	DATE	BY	

MATERIAL AND COMPACTION REQUIREMENT FOR TRENCH BACKFILL

1. 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 90%.
2. 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.
3. 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).
4. 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.
5. "JETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
6. THE USE OF PEA GRAVEL (OR SIMILAR ROUNDED AGGREGATE), IS NOT PERMITTED.
7. THE USE OF CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE AGENCY ENGINEER PRIOR TO PLACEMENT.
8. TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE AGENCY ENGINEER. TRIMMING SHALL BE BY ROTARY GRINDER. TRENCH LINES SHALL HAVE THE LEAST AMOUNT OF JOGS AND REMAIN LINEAR AS MUCH AS POSSIBLE. REFERENCE DRAWING NO. 360, 370 & 380.
9. 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.
10. CONTRACTOR MUST SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.
11. ALL HOT MIX ASPHALT (HMA) MATERIAL, METHODS AND TOLERANCES SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE CALTRANS STANDARD SPECIFICATIONS.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	TRENCH NOTES SHEET 3 OF 3				MARCH 2018
					DWG. NO.
					350
		REV.	DATE	BY	



NOTES:

- ① FOR TRENCH REPAIRS IN THE VEHICLE TRAVEL LANE(S), THE RESTORATION SHALL BE EXTENDED TO THE LANE LINE OR CENTER OF LANE, IN ACCORDANCE WITH MINIMUM T-CUT DIMENSIONS SHOWN ON DRAWING 330.
- ② IF THE LIMITS OF RESTORATION ENTER A STRIPED AND/OR SIGNED BIKE LANE, THE RESTORATION SHALL BE EXTENDED TO COVER THE ENTIRE BIKE LANE WIDTH.
- ③ IF THE LIMITS OF EXCAVATION ARE WITHIN 4 FT OF THE GUTTER LIP OR EDGE OF PAVEMENT, THE RESTORATION SHALL BE EXTENDED TO THE GUTTER LIP OR EDGE OF PAVEMENT.

LEGEND:

- — — — — CENTERLINE
 - - - - - LINE LANE OR FOG LINE
 ————— GUTTER LIP OR EDGE OF PAVEMENT
 —————> DIRECTION OF TRAVEL

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

RESTORATION
OF ASPHALT
SHEET 1 OF 3

REV.

DATE

BY

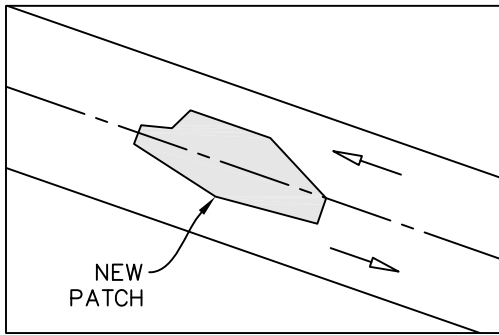
MARCH
2018

DWG. NO.

360

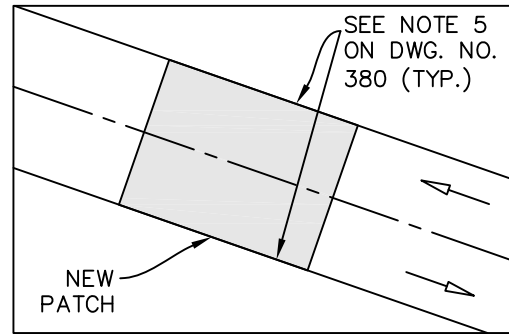
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CASE
A



NOTE: REFER TO DRAWING NO. 380

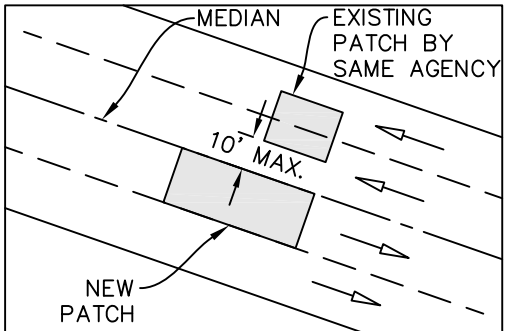
ACCEPTABLE



PLAN

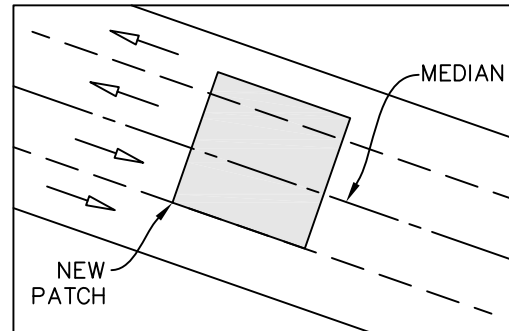
NOT ACCEPTABLE

CASE
B



NOTE: REFER TO DRAWING NO. 380 (NOTE 2)

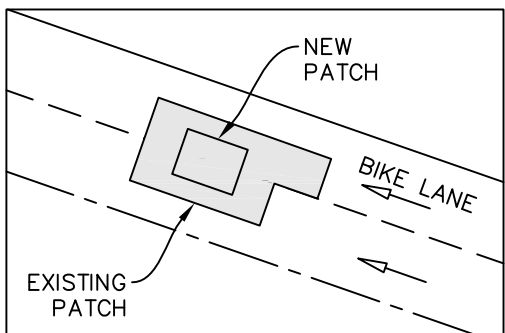
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PLAN

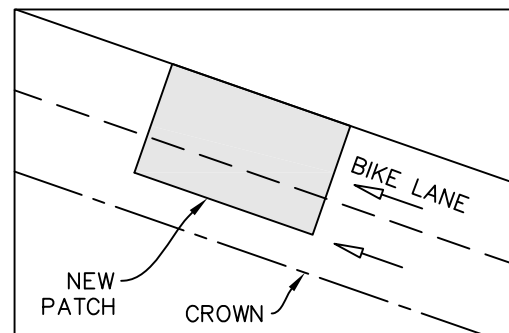
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CASE
C



NOTE: REFER TO DRAWING NO. 380 (NOTE 3)

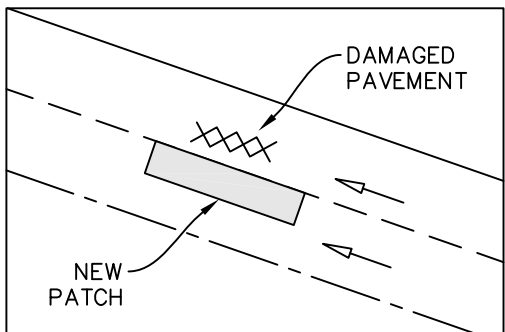
ACCEPTABLE



PLAN

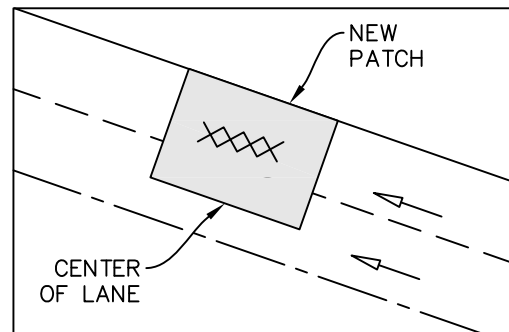
NOT ACCEPTABLE

CASE
D



NOTE: REFER TO DRAWING NO. 380 (NOTE 4) & NOTE 5

ACCEPTABLE



PLAN

*SEE DWG. NO. 360 FOR LINE TYPE LEGEND.

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

RESTORATION
OF ASPHALT
SHEET 2 OF 3

			MARCH 2018
			DWG. NO.
			370
REV.	DATE	BY	

RESTORATION OF ASPHALT REQUIREMENTS

NOTES:

- ① EXISTING PAVEMENTS SHALL BE REMOVED TO CLEAN, STRAIGHT LINES PARALLEL AND PERPENDICULAR TO THE FLOW OF TRAFFIC. DO NOT CONSTRUCT FINAL RESTORATION PATCHES WITH ANGLED SIDES AND IRREGULAR SHAPES.
- ② IF A PROPOSED CUT IS WITHIN 10 FT OF AN EXISTING PATCH ORIGINALLY PERFORMED BY THE SAME AGENCY, EXTEND THE FINAL RESTORATION TO THE EXISTING PATCH (FOR BELL HOLE OR TRENCH NO GREATER THAN 10 FT LONGITUDINAL).
- ③ IF A NEW PATCH IS DONE WITHIN AN EXISTING PATCH, THE BOUNDARIES OF THE FINAL RESTORATION FOR THE PATCHES SHALL COINCIDE.
- ④ IF A SECTION OF PAVEMENT IS DAMAGED DURING CONSTRUCTION, THE FAILED AREA SHALL BE REMOVED TO SOUND PAVEMENT AND PATCHED. IF THE DAMAGED AREA IS WITHIN 10 FT OF THE NEW PATCH, THE FINAL RESTORATION OF THE PATCHES SHALL COINCIDE.
- ⑤ LIMITS OF FINAL PAVEMENT RESTORATION TO STOP AT ONE OF THE FOLLOWING LOCATIONS: CENTER OF LANE, TRAVEL LANE LINE, BIKE LANE LINE, ISLAND CURB/GUTTER, EDGE OF ROADWAY PAVEMENT CURB/GUTTER. NO PAVING JOINTS SHALL BE ALLOWED IN A VEHICULAR WHEEL PATH.
- ⑥ STEEL PLATES USED FOR BRIDGING SHALL EXTEND A MINIMUM OF 1 FT BEYOND THE EDGE OF TRENCH. PLATES SHALL HAVE NONSKID ABRASIVE SURFACE PER CALTRANS SPECIFICATIONS, AND COUNTER-SINKING MAY BE REQUIRED WHEN DEEMED NECESSARY BY AGENCY ENGINEER.
- ⑦ CUTBACK SHALL NOT BE USED EXCEPT WHEN PRE-APPROVED BY THE AGENCY ENGINEER OR WHEN TRIMMING TRENCH PLATES.
- ⑧ ROADWAY RESTORATION WIDTH, BEYOND THE TRENCH EDGES, VARIES FROM 0"—24". DURING THE PERMIT PROCESS, THE AGENCY WILL REVIEW GEOTECHNICAL AND HISTORICAL INFORMATION OF THE TRENCHING LOCATION, AS PRESENTED BY THE UTILITY OWNER, AND CONSIDER EXISTING PAVEMENT CONDITION, SUITABLE SUBGRADE AND THE PROPOSED SCOPE OF WORK TO DETERMINE RESTORATION WIDTH. THE PERMITTING AGENCY RESERVES THE RIGHT TO ADJUST THE RESTORATION WIDTH DUE TO FIELD OBSERVATIONS DURING CONSTRUCTION SUCH AS, BUT NOT LIMITED TO, OBSERVING BREAKOUT, UNDERMINING OF ADJACENT PAVEMENT, UNSTABLE WALLS OF TRENCH, DAMAGE TO SURROUNDING UNDISTURBED PAVEMENT, AND/OR PAVEMENT OR SUBGRADE DAMAGE FROM CONTRACTOR OPERATIONS.

Table A

Road Type	Traffic Index**	Min. AC*** (TOTAL)	Final Surface AC, Min.	Pavement Repair Structural Section		
				Assumes R Value = 10*		
				AC Thickness	AB Thickness	Alternate Deep Lift A.C.
Local	5.0	5"	2.0"	5.0"	7.0"	7.0"
Collector	6.5	5"	2.0"	5.0"	11.0"	11.0"
Arterial**	8.0	10"	3.0"	10.0"	14.0"	14.0"

NOTES: *Unless applicant provides actual R-Value test results and pavement section design
 **Or as approved by City/County Engineer based on actual traffic loading
 ***Minimum AC thickness shall match existing or as shown in Table A, whichever is greater

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

RESTORATION
OF ASPHALT
SHEET 3 OF 3

1	3/14/18	rc
REV.	DATE	BY

MARCH
2018
DWG. NO.
380