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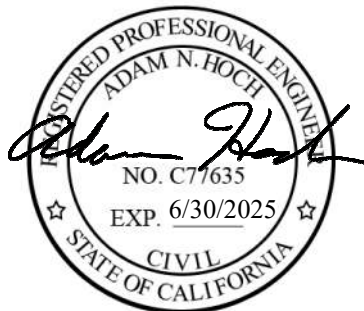
San Diego County, California

**CONTRACT DOCUMENTS
FOR THE CONSTRUCTION OF:**

**RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE
BARCELONA, VILLAGE PARK, AND SUMMERHILL**

July 2023

OMWD Project #: D800019



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OLIVENHAIN MUNICIPAL WATER DISTRICT

San Diego County, California


CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

**RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE
BARCELONA, VILLAGE PARK, AND SUMMERHILL**

OMWD PROJECT # D800019

JULY 2023

 07/21/2023

Lindsey Stephenson, P.E.
Engineering Manager

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BID FORM CHECKLIST

(To be placed in the Bidder's Contract Documents in front of the Table of Contents)

Bid Form Page	Requirement	Initial
1 of 30	BID NOTICE-Fill in date of the non-mandatory Pre-Bid Conference:	
1 of 30	BID FORM- Fill out the form and acknowledge <u>all</u> addenda in the spaces provided	
2 to 3 of 30	BIDDING INSTRUCTIONS- Examination of the site and review of the Contract Documents has been completed	
2 to 3 of 30	BIDDING INSTRUCTIONS- Bid Schedule and all Bid forms are to be submitted with this Bid Form Checklist	
4 to 13 of 30	BID SCHEDULES- Fill out all items in the Bid Schedule, including dollar amounts in words and in numbers for each item	
14 of 30	DESIGNATION OF SUBCONTRACTORS- Fill in all information required on the form	
15 of 30	LISTING OF MANUFACTURERS- Fill in all information required on the form	
16 of 30	Fill in the type of Bid Bond enclosed in the first paragraph, and list all principals of the company in the third paragraph	
17 of 30	Fill in Bidder's license classification, license number, and all other information required in the fourth paragraph, including signature and date	
18 to 19 of 30	CERTIFICATE OF DRUG-FREE WORKPLACE- Fill in Bidder's name at the top and Certification section at the bottom of the page, including signature and date	
20 of 30	CERTIFICATE OF NONDISCRIMINATION- Fill in all information required on the form, including signature and date	
21 of 30	NONCOLLUSION AFFIDAVIT- Fill in all information required on the form including signature and date and provide notarization	
22 of 30	BIDDER'S EXPERIENCE- Fill in all information required on the form and provide signature and date at the bottom	
23 of 30	INSURANCE ACKNOWLEDGEMENT- Fill in all information required on the form and provide signature and date where indicated	
24 of 30	EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION- Fill in all information required on the form, including signature and date	
25 of 30	FEDERAL LABOR CERTIFICATION- Fill in all information required on the form, including signature and date	
26 of 30	CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS- Fill in all information required on the form, including signature and date	
27 of 30	DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION: GOOD FAITH EFFORTS WORKSHEET- Fill in all information required on the form, including signature and date	
28 to 29 of 30	GOOD FAITH EFFORTS WORKSHEET INSTRUCTIONS- Examination of the instructions for completion of the DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION: GOOD FAITH EFFORTS WORKSHEET has been completed	

30 of 30	PROJECT FUNDING ACKNOWLEDGEMENT -Fill out the form and acknowledge all funding sources and provide signature and date.	
1 of 2	BID BOND- Fill in all required information including dollar amount	
2 of 2	BID BOND- Fill in all required information, provide signatures of the bidder and surety where indicated, provide notarization for principal of bidder and surety, and attach a certified Power of Attorney for surety	
Bid Notice 2 of 3	MARKING AND ADDRESSING BID ENVELOPE- Contract Documents are sealed in an envelope marked and addressed as required in this section	

Dated_____ Signature of Bidder_____

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Appendix E: Grant Agreements (Excerpts)

- Proposition 1 Round 2 Integrated Regional Water Management (IRWM) Implementation Grant from Department of Water Resources (DWR) (*Draft Agreement*)
- Title XVI Water Infrastructure Improvement for the Nation (WIIN) Act Grant FY 2021 and Amendment FY 2022 from U.S Bureau of Reclamation

REFERENCE STANDARDS

- 1 - Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities, "Standard Specifications", Current Edition
- 2 - Standard Specifications for Public Works Construction, "Greenbook", Current Edition
- 3 - City of Encinitas Engineering Design Manual, Current Edition
- 4 - City of Carlsbad Engineering Standards, Current Edition
- 5 - San Diego Regional Standard Drawings, Current Edition
- 6 - Other reference standards as may be identified elsewhere in the Contract Documents

PROJECT PLANS

RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL.

SUPPLEMENTAL DOCUMENTS

Addendum to the North San Diego Water Reuse Coalition Regional Recycled Water Project Final Program Environmental Impact Report (Project: FY23 Recycled Water Pipelines Project) (SCH #2014081028)

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PART I

BIDDING AND CONTRACT REQUIREMENTS

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NOTICE INVITING SEALED BIDS
FOR THE CONSTRUCTION OF
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK,
AND SUMMERHILL
FOR THE
OLIVENHAIN MUNICIPAL WATER DISTRICT

NOTICE IS HEREBY GIVEN that the Board of Directors of said District invites and will receive sealed bids up to the hour of **2:00 p.m. on August 22, 2023** for the furnishing to said District of all transportation, labor, materials, tools, equipment, services, permits, utilities, and other items necessary to construct said work. At said time, said bids will be publicly opened and read aloud at the office of the Olivenhain Municipal Water District, 1966 Olivenhain Road, Encinitas, CA 92024, (760) 753-6466.

The District will conduct a **NON-MANDATORY** Pre-Bid Conference at the Olivenhain Municipal Water District, 1966 Olivenhain Road, Encinitas, CA 92024 at **10:00 a.m. on August 3, 2023**.

Bids shall conform to and be responsive to the Contract Documents for the work. All questions relative to this project prior to the opening of bids shall be directed to the District. It shall be understood that no specification interpretations will be made by telephone nor will any "or equal" products be considered for approval prior to award of the contract. Bidders are encouraged to submit their pre-bid questions as early as possible, in writing via email, so they can be answered in writing through an addendum if necessary. Pre-bid questions will be received, in writing to prebid@olivenhain.com, up to **2:00 p.m. on August 11, 2023**, after which they will not be answered.

Contract Documents consisting of plans, specifications and bidding documents can be downloaded from the "Upcoming Projects and Planning Resources" link under the "Construction Projects" tab on the home page of the District's website at www.olivenhain.com. Contract documents are not available at the District. It will be the Bidder's responsibility to download and acknowledge receipt of all addenda. If you wish to be placed on the plan holders list, please send your company name, contact person, contact phone # and email to prebid@olivenhain.com.

Each bid shall be submitted on the bid form furnished as part of the Contract Documents and must state the required information. The license classification required for this project is Class A General Engineering. Each bid must be accompanied by cash, a cashier's check, a certified check, or a bidder's bond executed by an admitted surety insurer. This bid guarantee shall be in an amount of not less than 10 percent of the amount of the bid and made payable to the order of or for the benefit of the District.

Said cash, check, or bond shall be given as guarantee that the Bidder will enter into a contract with the District and furnish the required payment and performance bonds and insurance certificates and endorsements if awarded the work, and will be declared forfeited if the Bidder refuses to timely enter into said contract or furnish the required bonds or insurance certificates and endorsements if his bid is accepted.

Each bid shall be sealed and delivered to District personnel at **1966 Olivenhain Road, Encinitas, CA 92024** on or before the day and hour set for the opening of bids. Bids shall be sealed in an envelope marked and addressed as follows:

BID FOR CONSTRUCTION OF:
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL

OLIVENHAIN MUNICIPAL WATER DISTRICT
Attention: Prebid, Engineering Department
1966 Olivenhain Road
Encinitas, California 92024

IN-PERSON bids must be sealed and received as specified above by the district front office before the day and hour set for the opening of the bids.

MAILED BIDS shall be in sealed envelopes, shall be sent at bidder's risk via certified mail (or equivalent trackable delivery) with postage prepaid, shall be marked and addressed as indicated above, and received before the day and hour set for the opening of the bids. Any bidder electing to submit a bid by mail must notify the district prior to the bid opening at prebid@olivenhain.com of a mailed bid and provide the tracking number so the District can validate receipt.

ELECTRONICALLY transmitted bids are not considered sealed bids and will not be accepted.

Whether the bidder submits by mail or in-person, it is the sole responsibility of the bidder to see that his/her bid is received as specified by personnel of the Owner on or before the day and hour of bid opening. Bids not marked as being received by personnel of the Owner on or before the day and hour of bid opening will be rejected.

Bidders shall have successfully completed a minimum of five (5) similar projects during the last five (5) years performing the type and value of work required by this contract on public water or recycled water systems. Where the Bidder is a corporation or partnership, the entity must demonstrate the same experience. Bidders failing to demonstrate this experience may be rejected as nonresponsive at the option of the District.

Under the provisions of the California Public Works Apprenticeship Standards, Sections 1777.5, 1777.6, and 1777.7 of the Labor Code, a copy of the "Extract of Public Works Contract Award" has been included. This document will be filed with the California Department of Industrial Relations at the time of the award of the Contract.

The Board of Directors has obtained from the Director of the California Department of Industrial Relations a determination of the general prevailing rate of per diem, wages, and the general prevailing rate for legal holiday and overtime work in the locality in which said work is to be performed for each craft, classification, or type of worker needed. Not less than the determined rates shall be paid to all workers employed in the performance of the contract. Such rates of wages are on the file with the Department of Industrial Relations and in the office of the District and are available to any interested party upon request.

Pursuant to Public Contract Code Section 22300, the Contractor may substitute equivalent securities for retention amounts which this Contract requires. However, the District reserves the right to solely determine the adequacy of the securities being proposed by the Contractor and the value of those

securities. The District shall also be entitled to charge an administrative fee, as determined by the District in its sole discretion, for substituting equivalent securities for retention amounts.

The Contractor agrees that the District's decision with respect to the administration of the provisions of Public Contract Code Section 22300 shall be final and binding and not subject to subsequent litigation or arbitration of any kind as to acceptance of any securities being proposed, the value of these securities, the costs of administration and the determination of whether or not the administration should be accomplished by an independent agency or by the District. The District shall be entitled, at any time, to request the deposit of additional securities of a value designated by the District, in the District's sole discretion, to satisfy this requirement. If the District does not receive satisfactory securities within 12 calendar days of the date of the written request, the District shall be entitled to withhold amounts due Contractor until securities of satisfactory value to the District have been received.

Pursuant to Section 995.710 of the Code of Civil Procedures, the Contractor may substitute any of the instruments specified in Code of Civil Procedure Section 995.710 for the performance and payment bonds required by the Contract Documents. All such substitutions shall be subject to review and approval by the District. Contractor agrees to pay all attorney's fees and all other fees, costs, and expenses incurred by the District in reviewing substitutes proposed by the Contractor and in preparing and implementing any agreements determined appropriate by the District to adequately protect District.

All bidders shall agree to obtain and maintain in full effect all required insurance with limits not less than the amounts indicated. Bidders who fail to comply with the insurance requirements of this contract may have their bids rejected as nonresponsive at the election of the District.

Pursuant to California Labor Code Section 6705, the cost of sheeting, shoring, and bracing of trenches, or equivalent method, where part of the job, shall constitute a separate bid item under these contract documents.

District shall award the contract for the Project to the lowest responsive, responsible Bidder as determined by the District based on the total Base Bid price for Schedule A, Schedule B, and Schedule C. District reserves the right to award any or all Bid Schedules, reject any and all bids, to waive any irregularity in the bids received and to award the Contract on the basis of the responsive bids.

The Board of Directors of the District reserves the right to select the schedule(s) under which the bids are to be compared and contract(s) awarded, to reject any and all bids, and to waive any and all irregularities or defects in any bid.

OLIVENHAIN MUNICIPAL WATER DISTRICT

Dated: 07/21/2023



LINDSEY STEPHENSON, P.E.
ENGINEERING MANAGER

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BID FORM
BID TO
OLIVENHAIN MUNICIPAL WATER DISTRICT
SAN DIEGO COUNTY, CALIFORNIA
FOR THE CONSTRUCTION OF
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK,
AND SUMMERHILL

Name of Bidder: _____

Business Address: _____

_____ Phone No.: _____

TO THE GOVERNING BODY OF THE OLIVENHAIN MUNICIPAL WATER DISTRICT

Pursuant to and in compliance with your Notice Inviting Sealed Bids and the other documents relating thereto, the undersigned Bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the work, and the cost of the work at the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated in the Special Provisions Section 00810 of the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, material, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete in a workmanlike manner, all of the work required in connection with the construction of said work all in strict conformity with the Plans and Specifications and other Contract Documents, including the Addenda for the prices hereinafter set forth.

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents:

Addendum No. _____ Date Issued _____

Addendum No. _____ Date Issued _____

Addendum No. _____ Date Issued _____

The undersigned as Bidder, declares that the only persons or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any person, firm, or corporation; and he proposes and agrees, if the bid is accepted, that he will execute a Contract with the Owner in the form set forth in the Contract Documents and that he will accept in full payment thereof the following prices, to wit:

BIDDING INSTRUCTIONS
FOR THE CONSTRUCTION OF
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK,
AND SUMMERHILL

Prior to the opening of bids, all questions relative to this project shall be directed to the **Olivenhain Municipal Water District, Attn: Pre-bid..** Bidders are encouraged to submit their pre-bid questions as early as possible, in writing to prebid@olivenhain.com, so they can be answered in writing through addendum, if necessary. Pre-bid questions will be received up to **2:00 p.m., August 11, 2023**, after which they will not be answered.

Bidders shall submit information demonstrating relevant project experience, on public water or recycled water systems, on the Bid Forms included within these Contract Documents. performing the type of work and magnitude required by this Contract. Bidders failing to demonstrate this experience may be rejected as nonresponsive at the option of the Owner.

Bidders agree to obtain and maintain in full effect all required insurance with limits not less than the amounts indicated. Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company. Bidders who fail to comply with the insurance requirements of this Contract may have their bids rejected as nonresponsive at the election of the Owner.

The Bidder's attention is directed to Article 3-1 "Award of Contract or Rejection of Bids" in the General Provisions concerning the above conditions.

The complete contract includes all the contract documents set forth herein, to wit: Notice Inviting Sealed BidBids, Bid Form, Bid Bond, Agreement, Performance Bond, Payment Bond, Contractor's Certificate Regarding Workers' Compensation, Certificate of Insurance (Workers' Compensation and Employer's Liability), Insurance Endorsement (Workers' Compensation and Employer's Liability), Certificate of Insurance (Liability), Insurance Endorsement (Liability), Certificate of Insurance (Builders' Risk "All Risk"), Insurance Endorsement (Builders' Risk "All Risk"), General Provisions, Special Provisions, Exhibits 1 through 5, Appendices, Standard Specifications, Standard Drawings, Referenced Permits, Drawings, Technical Specifications, Plans, and also addenda thereto and supplemental agreements.

Bidders must satisfy themselves as to the character of the work to be performed by examination of the site and review of the Contract Documents. After bids have been submitted, the Bidder expressly waives the right to assert that there was a misunderstanding concerning the nature of the work to be done. Any bid protests must be submitted within three (3) calendar days of the bid.

The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other personnel shall not affect the risks or obligations assumed by the Contractor, or relieve him from fulfilling any of the conditions of the Contract.

Bids shall be submitted on the Bid Form and Bid Bond included within these Contract Documents. Bidders shall designate the subcontractors and list the manufacturers of materials to be used in the Project on the Designation of Subcontractors form included with these Contract Documents. All subcontractors listed to perform any of the work must be licensed in the State of California. No single subcontractor may perform more than 25% of the work listed in the Bid Schedule unless specifically approved in advance by the District prior to the submission of bids. The Owner reserves the right to

find a bid non-responsive in its sole discretion if a Bidder lists any unlicensed subcontractors to perform any of the work.

Submit with the bid the completed Certificate of Drug-Free Workplace; Certificate of Nondiscrimination; Noncollusion Affidavit; Designation of Subcontractors; Bidder's Experience; Insurance Acknowledgment; Equal Employment Opportunity Certification; Federal Labor Certification; Certification Regarding Debarment, Suspension, and Other Responsibility Matters; and Good Faith Efforts Worksheet for Disadvantaged Business Enterprise (DBE) Utilization included in the Bid Form. Completely fill out the one page Bid Form Checklist included in front of the Table of Contents and include it with the bid. The Project is recipient of USBR Title XVI and WIIN Grant and IRWM Proposition 1 funding subject to aforementioned certifications and acknowledgments. The Owner reserves the right to find a bid non-responsive in its sole discretion if a Bidder fails to complete or include any of the aforementioned certificates or acknowledgements.

The pay items listed in each Bid Schedule are described in Specification Section 01150 – Measurement and Payment. The prices in the Bid Schedule shall include all labor, materials, removal, overhead, profit, insurance, and incidentals required to complete the work.

There are multiple Bid Schedules. In order for the Owner to consider a Bidder's bid and for a bid to be considered responsive, all bid schedules must be completed. If any bid schedule is not filled in, the bid will be determined to be non-responsive and will be rejected. The Owner reserves the right to delete certain Bid Schedules, to select the Bid Schedules under which the bids are to be compared, to reject any and all bids, to waive any irregularity in the bids received and to award the Contract on the basis of the responsive bids.

Basis for the award shall be based on the total price for Base Bid Schedule A, Base Bid Schedule B, and Base Bid Schedule C. The District reserves the right to award any or all Bid Schedules, regardless of order or priority.

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**BASE BID SCHEDULE A
SITE NO. 1 (CITY OF CARLSBAD)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL**

Item	Description	Quantity	Unit	Unit Cost	Total Amount
A.1	Mobilization, Demobilization, Bonds, Permits, Insurance, & Cleanup ¹	1	LS	\$ _____	\$ _____
A.2	Excavation Support Systems	1	LS	\$ _____	\$ _____
A.3	Traffic Control	1	LS	\$ _____	\$ _____
A.4	Storm Water Pollution Prevention	1	LS	\$ _____	\$ _____
A.5	Potholing	1	LS	\$ _____	\$ _____
A.6	6-inch PVC C-900 DR14	3,222	LF	\$ _____	\$ _____
A.7	2-inch Blow Off Assembly	5	EA	\$ _____	\$ _____
A.8	2-inch Manual Air Release Assembly	2	EA	\$ _____	\$ _____
A.9	2-inch Combination Air Valve Assembly	4	EA	\$ _____	\$ _____
A.10	2-inch Combination Air Valve and Recycled Water Fill Station	1	EA	\$ _____	\$ _____
A.11	1-inch Recycled Water Service	2	EA	\$ _____	\$ _____
A.12	2-inch Recycled Water Service	5	EA	\$ _____	\$ _____
A.13	Connections to Existing 6-inch and 8-inch PVC Recycled Water Pipeline	2	EA	\$ _____	\$ _____
A.14	6" Valve	6	EA	\$ _____	\$ _____
A.15	8" Valve	2	EA	\$ _____	\$ _____
A.16	Site Restoration	1	LS	\$ _____	\$ _____
A.17	Additional Potholing if Required	10	EA	\$ _____	\$ _____
A.18	Over-excavation and Imported Bedding	100	CY	\$ _____	\$ _____

**BASE BID SCHEDULE A
SITE NO. 1 (CITY OF CARLSBAD)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL**

Item	Description	Quantity	Unit	Unit Cost	Total Amount
A.19	Base Pavement Asphalt Concrete	6,712	SF	\$ _____	\$ _____
A.20	Final Pavement Asphalt Concrete: 3-inch Cold Mill & Overlay	13,638	SF	\$ _____	\$ _____
A.21	Restriping	1	LS	\$ _____	\$ _____

TOTAL AMOUNT OF BASE BID SCHEDULE A \$ _____

TOTAL AMOUNT OF BASE BID SCHEDULE A (IN WORDS)

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

¹Mobilization is limited to 5% of the total bid price for Base Bid Schedule A.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.

**ADDITIVE ALTERNATE BID SCHEDULE A1
SITE NO. 1 (CITY OF CARLSBAD)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL**

Item	Description	Quantity	Unit	Unit Cost	Total Amount
A1.1	Use of Foreign Iron and Steel in lieu of Buy America Requirements for Base Bid - Bid Schedule A	1	LS	\$ _____	\$ _____

TOTAL AMOUNT OF ADDITIVE ALTERNATE BID SCHEDULE A1* \$ _____

TOTAL AMOUNT OF ADDITIVE ALTERNATE BID SCHEDULE A1* (IN WORDS)

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.

Note: The amount for Additive Alternate Bid Schedule A1 is intended to be a lump sum deduct to the contract for use of foreign iron and steel in lieu of Buy America requirements imposed throughout bid items listed in Base Bid - Schedule A.

BASE BID SCHEDULE B
SITE NO. 2 (PARK DALE LN & GATEPOST RD, CITY OF ENCINITAS)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL

Item	Description	Quantity	Unit	Unit Cost	Total Amount
B.1	Mobilization, Demobilization, Bonds, Permits, Insurance, & Cleanup ¹	1	LS	\$ _____	\$ _____
B.2	Excavation Support Systems	1	LS	\$ _____	\$ _____
B.3	Traffic Control	1	LS	\$ _____	\$ _____
B.4	Storm Water Pollution Prevention	1	LS	\$ _____	\$ _____
B.5	Potholing	1	LS	\$ _____	\$ _____
B.6	6-inch PVC C-900 DR14	1,200	LF	\$ _____	\$ _____
B.7	2-inch Blow Off Assembly	2	EA	\$ _____	\$ _____
B.8	2-inch Combination Air Valve Assembly	3	EA	\$ _____	\$ _____
B.9	2-inch Recycled Water Service	3	EA	\$ _____	\$ _____
B.10	2-inch Combination Air Valve and Recycled Water Fill Station	1	EA	\$ _____	\$ _____
B.11	Connections to Existing 6-inch PVC Recycled Water Pipeline	2	EA	\$ _____	\$ _____
B.12	6" Valve	2	EA	\$ _____	\$ _____
B.13	Site Restoration	1	LS	\$ _____	\$ _____
B.14	Additional Potholing if Required	10	EA	\$ _____	\$ _____
B.15	Over-excavation and Imported Bedding	100	CY	\$ _____	\$ _____
B.16	Base Pavement Asphalt Concrete	2,500	SF	\$ _____	\$ _____
B.17	Final Pavement Asphalt Concrete: 2-inch Cold Mill & Overlay	4,848	SF	\$ _____	\$ _____
B.18	Final Pavement Asphalt Concrete: 1.5-inch Cold Mill & Overlay	4,413	SF	\$ _____	\$ _____

BASE BID SCHEDULE B
SITE NO. 2 (PARK DALE LN & GATEPOST RD, CITY OF ENCINITAS)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL

Item	Description	Quantity	Unit	Unit Cost	Total Amount
B.19	Restriping	1	LS	\$ _____	\$ _____
TOTAL AMOUNT OF BASE BID SCHEDULE B				\$ _____	

TOTAL AMOUNT OF BASE BID SCHEDULE B (IN WORDS)

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

¹Mobilization is limited to 5% of the total bid price for Base Bid Schedule B.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.

ADDITIVE ALTERNATE BID SCHEDULE B1
SITE NO. 2 (PARK DALE LN & GATEPOST RD, CITY OF ENCINITAS)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL

Item	Description	Quantity	Unit	Unit Cost	Total Amount
B1.1	Use of Foreign Iron and Steel in lieu of Buy America Requirements for Base Bid - Bid Schedule B	1	LS	\$ _____	\$ _____

TOTAL AMOUNT OF ADDITIVE ALTERNATE BID SCHEDULE B1* \$ _____

TOTAL AMOUNT OF ADDITIVE ALTERNATE BID SCHEDULE B1* (IN WORDS)

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.

Note: The amount for Additive Alternate Bid Schedule B1 is intended to be a lump sum deduct to the contract for use of foreign iron and steel in lieu of Buy America requirements imposed throughout bid items listed in Base Bid - Schedule B.

BASE BID SCHEDULE C
SITE NO. 3 (VILLAGE CENTER DR & SUMMERHILL DR, CITY OF ENCINITAS)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL

Item	Description	Quantity	Unit	Unit Cost	Total Amount
C.1	Mobilization, Demobilization, Bonds, Permits, Insurance, & Cleanup ¹	1	LS	\$ _____	\$ _____
C.2	Excavation Support Systems	1	LS	\$ _____	\$ _____
C.3	Traffic Control	1	LS	\$ _____	\$ _____
C.4	Storm Water Pollution Prevention	1	LS	\$ _____	\$ _____
C.5	Potholing	1	LS	\$ _____	\$ _____
C.6	6-inch PVC C-900 DR14	1,186	LF	\$ _____	\$ _____
C.7	2-inch Blow Off Assembly	5	EA	\$ _____	\$ _____
C.8	2-inch Manual Air Release Assembly	2	EA	\$ _____	\$ _____
C.9	2-inch Combination Air Valve Assembly	2	EA	\$ _____	\$ _____
C.10	1-inch Recycled Water Service	1	EA	\$ _____	\$ _____
C.11	1.5-inch Recycled Water Service	2	EA	\$ _____	\$ _____
C.12	2-inch Recycled Water Service	1	EA	\$ _____	\$ _____
C.13	Connections to Existing 8-inch PVC Recycled Water Pipeline	2	EA	\$ _____	\$ _____
C.14	6" Valve	2	EA	\$ _____	\$ _____
C.15	8" Valve	4	EA	\$ _____	\$ _____
C.16	Site Restoration	1	LS	\$ _____	\$ _____
C.17	Additional Potholing if Required	10	EA	\$ _____	\$ _____
C.18	Over-excavation and Imported Bedding	100	CY	\$ _____	\$ _____

BASE BID SCHEDULE C
SITE NO. 3 (VILLAGE CENTER DR & SUMMERHILL DR, CITY OF ENCINITAS)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL

Item	Description	Quantity	Unit	Unit Cost	Total Amount
C.19	Base Pavement Asphalt Concrete	2,470	SF	\$ _____	\$ _____
C.20	Final Pavement Asphalt Concrete: 1.5-inch Cold Mill & Overlay	4,818	SF	\$ _____	\$ _____
C.21	Restriping	1	LS	\$ _____	\$ _____
TOTAL AMOUNT OF BASE BID SCHEDULE C				\$ _____	

TOTAL AMOUNT OF BASE BID SCHEDULE C (IN WORDS)

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

¹Mobilization is limited to 5% of the total bid price for Base Bid - Bid Schedule C.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.

ADDITIVE ALTERNATE BID SCHEDULE C1
SITE NO. 3 (VILLAGE CENTER DR & SUMMERHILL DR, CITY OF ENCINITAS)
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL

Item	Description	Quantity	Unit	Unit Cost	Total Amount
C1.1	Use of Foreign Iron and Steel in lieu of Buy America Requirements for Base Bid - Bid Schedule C	1	LS	\$ _____	\$ _____
TOTAL AMOUNT OF ADDITIVE ALTERNATE BID SCHEDULE C1*				\$ _____	

TOTAL AMOUNT OF ADDITIVE ALTERNATE BID SCHEDULE C1* (IN WORDS)

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.

Note: The amount for Additive Alternate Bid Schedule C1 is intended to be a lump sum deduct to the contract for use of foreign iron and steel in lieu of Buy America requirements imposed throughout bid items listed in Base Bid - Schedule C.

**BASE BID SCHEDULE A, B, & C
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK,
AND SUMMERHILL**

**TOTAL AMOUNT OF BASE BID SCHEDULE A, BASE
BID SCHEDULE B, AND BASE BID SCHEDULE C*** \$ _____

**TOTAL AMOUNT OF BASE BID SCHEDULE A, BASE BID SCHEDULE B, AND BASE BID SCHEDULE
C* (IN WORDS)**

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

*Basis for the award shall be based on the total Base Bid price for Schedule A, Schedule B, and Schedule C; all other bid items or schedules, regardless of order or priority, may be awarded at the District's sole discretion. The District reserves the right to award any or all Bid Schedules, regardless of order or priority.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.

DESIGNATION OF SUBCONTRACTORS

In compliance with the provisions of Section 4100-4114 of the Public Contract Code of the State of California, and any amendments thereof, each Bidder shall set forth below, the name, license number, and location of the mill, shop or office of each subcontractor who will perform work or labor, or render service to the Contractor in an amount in excess of one-half (1/2) of one (1) percent (0.5%) of the total bid, and the portion of the work which will be done by each subcontractor. All subcontractors listed must be licensed to perform the subcontract work in the State of California. No single subcontractor may perform work in excess of 25% of the total work listed in the Bid Schedule unless specifically approved by the District in advance of submission of the Bid. Bidders who list any unlicensed subcontractors on this form may have their bid rejected as non-responsive in the sole discretion of Owner.

If the Bidder fails to specify a subcontractor for any portion of the work in excess of one-half (1/2) of one (1) percent (0.5%) of the total bid to be performed under the Contract, he shall be deemed to have agreed to perform such portion himself, and he shall not be permitted to subcontract that portion of the work except under conditions permitted by law.

Subletting or subcontracting any portion of the work as to which no subcontractor was designated in the original bid shall only be permitted in case of public emergency or necessity, or otherwise permitted by law, and then only after a finding is reduced to writing as a public record of the Owner.

[illegible]

LISTING OF MANUFACTURERS

The Contractor shall submit this sheet with his bid, completed, to list the manufacturers of materials he intends to use. It shall be understood that where the Contractor elects to not use the material manufacturers called for in the Specifications, he will substitute only items of equal quality, durability, functional character, and efficiency as determined and approved by the Owner. The Contractor should ascertain the acceptability of substitutes prior to bidding. Only one manufacturer shall be listed for each item.

[illegible]

Substitutions shall be allowed only if requested in accordance with Article 5-10 of the General Provisions within 35 calendar days of the date the Contract is awarded. Should a substitution be allowed, there will be no increase in the amount of the bid originally submitted.

ACCOMPANYING THIS BID IS _____
(insert the words "cash", "a cashier's check", "a certified check", or "a Bidder's bond" as the case may be) in an amount equal to at least 10 percent of the total amount of the Bid, payable to the

OLIVENHAIN MUNICIPAL WATER DISTRICT

The undersigned deposits the above-named security as a bid guarantee and agrees that it shall be forfeited to the Owner as liquidated damages in case this bid is accepted by the Owner and the undersigned fails to execute a contract with the Owner as specified in the Contract Documents or fails to furnish the required payment and performance bonds, and insurance certificates and endorsements. Should the Owner be required to engage the services of an attorney in connection with the enforcement of this bid, Bidder promises to pay Owner's reasonable attorneys' fees, incurred with or without suit.

The names of all persons interested in the foregoing bids as principals are as follows: (NOTICE - If Bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a general partnership, state true name of firm, also names of all individual partners composing firm; if a limited partnership, the names of all general partners and limited partners; if Bidder or other interested person is an individual, state first and last names in full; if the Bidder is a joint venture, state the complete name of each venturer).

The Owner has determined the license classification necessary to bid and perform the subject contract. In no case shall this Contract be awarded to a specialty contractor whose classification constitutes less than a majority of the project. When a specialty contractor is authorized to bid a portion of the work of this contract, all work to be performed outside of the contractor's license specialty, except work specifically authorized by the Owner, shall be performed by a licensed subcontractor in compliance with the Subletting and Subcontracting Fair Practices Act commencing with Section 4100 et seq., of the Public Contract Code. See Business and Professions Code Section 7059.

The Contractor's license classification(s) required for this project are as follows:

CLASS A – GENERAL ENGINEERING _____

It is the Owner's intent that "plans," as used in Public Contract Code Section 3300, is defined as the construction Contract Documents, which include both the Plans and the Specifications.

Bidder warrants and represents that it has the required experience performing the type of work required by this Contract.

Bidder warrants and represents, under penalty of perjury, that license(s) required by California State Contractor's License Law for the performance of the subject project are in full effect and proper order. Bidders must state, under penalty of perjury, the Contractor's applicable license classification, license number, license expiration date, name of license holder, and relationship to Bidder. Any bid not containing this information may be considered nonresponsive and may be rejected by the Owner.

Bidders relying upon licenses of Responsible Managing Employees (RME) or Responsible Managing Officers (RMO) agree to provide the Owner with all information it determines necessary to verify that the Bidder complies with California State Contractor's License Law.

DIR Registration Number: _____

License Classification: _____

License Number: _____

Expiration Date: _____

Name of License Holder: _____

Relationship to Bidder: _____

Name of Bidder: _____

Signatures: _____

Dated: _____, 20____

NOTE: If Bidder is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation and the corporate seal; if Bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; if the Bidder is an individual, his signature shall be placed above; if the Bidder is a joint venture, the name of the joint venture shall be set forth above with the signature of an authorized representative of each venturer.

CERTIFICATE OF DRUG-FREE WORKPLACE

BIDDER: _____

The Bidder named above hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The above named Bidder will comply with the following, including but not limited to:

1. Adopting a drug-free workplace policy, which includes but is not limited to:
 - (a) A statement that the employer prohibits the unlawful manufacture, distribution, dispensation possession, or use of a controlled substance in the workplace
 - (b) Specified actions that will be taken against employees who violate the policy;
 - (c) Notifications to employees engaged in performance of the grant or contract that they must abide by the above prohibitions and notify the employer within 5 days after the employee is convicted of violating a criminal drug statute for conduct occurring in the workplace.
2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
 - (a) The dangers of drug abuse in the workplace,
 - (b) The person's or organization's policy of maintaining a drug-free workplace,
 - (c) Any available counseling, rehabilitation and employee assistance programs, and
 - (d) Penalties that may be imposed upon employees for drug abuse violations.
3. Provide as required by Government Code Section 8355(c), that every employee who works on the proposed contract or loan:
 - (a) Will receive a copy of the company's drug-free policy statement, and
 - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract or loan.

CERTIFICATE OF DRUG-FREE WORKPLACE

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized legally to bind the Bidder to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California. I understand that a false statement on this certification may be grounds for the rejection of this bid or the termination of the award.

OFFICIAL'S NAME: _____

DATE EXECUTED: _____ EXECUTED IN COUNTY OF: _____

OFFICIAL'S SIGNATURE: _____

TITLE: _____

☐ I am unable to certify the above statement. Attached is my explanation and how the requirements for Drug Free Workplace are satisfied and meet USBR Title XVI and WIIN Grant funding requirements (Appendix E).

CERTIFICATE OF NONDISCRIMINATION

1. During the performance of this contract, Bidder and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. Bidders and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Bidder and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 or the California Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth in full. Bidder and its subcontractor shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
2. This Bidder shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

THE UNDERSIGNED CERTIFIES THAT THE BIDDER WILL COMPLY WITH THE ABOVE REQUIREMENTS.

BIDDER NAME: _____

CERTIFIED BY:

NAME: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

NONCOLLUSION AFFIDAVIT

State of _____)
) ss.
County of _____)

I, _____, being duly sworn, deposes
and says that he or she is _____ of

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

Signature of Bidder: _____

Subscribed and sworn to before me on this _____ day of _____, 20__.

BIDDER'S EXPERIENCE

Name of Bidder: _____

License Number: _____

DIR Registration Number: _____

List a minimum of five (5) similar projects successfully completed by the Bidder during the last five (5) years on public water or recycled water systems. Projects not similar in scope, fee, and complexity will not be considered as representative of this project.

Project Name and Location	Prime or Subcontractor to the Project	Project Owner's Name, Address, & Phone No.	Cost of Bidder's Work	Date Completed
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I declare, under penalty of perjury, that the foregoing is true and correct.

Dated: _____, 20____

(Signature of Bidder)

INSURANCE ACKNOWLEDGMENT

On behalf of the Bidder making this bid, the undersigned warrants and represents that the Bidder has carefully read and understood all of the insurance requirements of the Contract Documents and has included the full cost of providing insurance meeting all requirements of the Contract Documents in the bid. The minimum insurance coverage shall be set forth in the Special Provisions Section 00810.

Upon request by Owner prior to the time of Award, the Bidder agrees to promptly provide Owner with letters from insurance companies meeting the requirements of the Contract Documents verifying that they are prepared to issue insurance to Bidder meeting all requirements of the Contract Documents. The failure of Bidder to provide Owner with this proof of insurance prior to the time of Award shall entitle Owner to reject the Bidder's bid as nonresponsive and to Award the bid to the next lowest Bidder at the sole discretion of Owner.

The failure of Bidder to provide Owner with insurance meeting all requirements of the Contract Documents within 15 calendar days after the Award, shall constitute a material breach of the Contract, entitling Owner to terminate the Contract and call the bid bond.

By dating and executing this Insurance Acknowledgment, Bidder hereby accepts all terms and conditions of this Insurance Acknowledgment and agrees to be bound by all of its terms.

Dated: _____, 20____

(Name of Bidder)

(Signature)

(Typed Name and Title)

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION
CERTIFICATION BY PROPOSED PRIME OR SUBCONTRACTOR
REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246, Part II, Section 203 (b), (30 F.R. 12319-25). Any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicated that the prime or subcontractor has not filed a compliance report due under applicable instruction, such contractor shall be required to submit a compliance report.

CONTRACTOR'S CERTIFICATION

Contractor's Name: _____

Address: _____

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes _____ No _____
2. Compliance Reports were required to be filed in connection with such contract or subcontract. Yes _____ No _____
3. Bidder has filed all compliance reports due under applicable instructions, including EEO- Yes _____ No _____
4. If answer to item 3 is NO, please explain in detail on reverse side of this certification.

Certification – The information above is true and complete to the best of my knowledge and belief. (A willfully false statement is punishable by law – U.S. Code, Title 18, Section 1001).

Name and Title of Signer (Please Type)

Signature Date

FEDERAL LABOR CERTIFICATION

CERTIFICATION BY PROPOSED PRIME OR SUBCONTRACTOR REGARDING FEDERAL LABOR REQUIREMENTS

I certify, to the best of my knowledge and belief, that the above referenced project complies with Davis-Bacon and Related Acts, and that all laborers and mechanics employed by contractors and subcontractors during the above referenced period were paid wages at rates not less than those listed on the prevailing wage rate contained in the contract documents and that all applicable provisions of the Davis-Bacon and Related Acts have been met.

I understand that a false statement on this certification may be grounds for termination of the agreement.

Signature of the Contractor/Subcontractor Representative

Name and Title of Contractor/Subcontractor Representative

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The CONTRACTOR/SUBCONTRACTOR certifies, to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in transactions under federal nonprocurement programs by any federal department or agency;
2. Have not, within the three-year period preceding the bid, had one or more public transactions (federal, state, or local) terminated for cause or default; and
3. Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) and have not, within the three-year period preceding the bid, been convicted of or had a civil judgment rendered against it:
 - a. For the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction (federal, state, or local) or a procurement contract under such a public transaction;
 - b. For the violation of federal or state antitrust statutes, including those proscribing prices fixing between competitors, the allocation of customers between competitors, or bid rigging; or
 - c. For the commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

I understand that a false statement on this certification may be grounds for the rejection of this bid or the termination of the award. In addition, under 18 U.S.C. §1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to five years, or both.

Name and Title of Authorized Representative

Name of CONTRACTOR/SUBCONTRACTOR

Signature of Authorized Representative

Date

☐ I am unable to certify to the above statement. Attached is my explanation and how the requirements for Drug Free Workplace are satisfied and meet USBR Title XVI and WIIN Grant funding requirements (Appendix E)..

**DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION: GOOD FAITH EFFORTS
WORKSHEET**

BIDDER: _____

Subcontract Scope of Work (one per worksheet): _____

Outreach Goal: Solicit a minimum of three (3) DBEs via email/letter/fax. It is recommended that various sources be used to locate the minimum number of DBEs. The California Department of Transportation (Caltrans) website and www.sam.gov registries may be two resources used to find a minimum of three DBEs.

List the DBEs contacted for the above area of work and complete the following information for each DBE.

Company Name	Type of Contact	Date of Contact	Price Quote Received	Accepted/ Rejected	Please Explain if Rejected

Explanation for Not Achieving a Minimum of Three Contacts; you may include a printout of the Caltrans and www.sam.gov search results (attach extra sheets if necessary):

Other Efforts (attach extra sheets if necessary):

Please include the completed worksheet and supporting documentation with the bid bid.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION

Instructions to Bidders for the Completion of the Good Faith Efforts Worksheet

1. Separate worksheets must be provided for each scope of work to be subcontracted out. This includes both major and minor subcontracts.
2. A minimum of three (3) DBEs must be contacted by a verifiable means of communication such as e-mail, letter, or fax for each area of work to be subcontracted out. Copies of the solicitation letters/e-mails and fax confirmation sheets must be provided with the worksheet.
3. If less than three (3) DBEs exist statewide for the area of work, then provide documentation that other DBE resources were consulted. This may include the Caltrans and www.sam.gov registries and an advertisement in a publication. A printout of the website searched (conducted prior to the end of the bid period) must be submitted.
4. Posting solicitations for quotes/bids from DBEs in media whose readership includes a significant number of underrepresented individuals is highly recommended to facilitate participation in the competitive process whenever possible. The solicitation needs to identify the project and the areas of work to be subcontracted out. A copy of the advertisement must be submitted with the Good Faith Efforts worksheet.
5. If the area of work is so specialized that no DBEs exist, then an explanation is required to support that conclusion, including the documentation required in No. 3 above.
6. The date of the DBE contact must be identified, as it is important to document that the DBE solicitation was made during the bid period and that sufficient time was given for the DBE to return a quote.
7. Each DBE firm's price quote must be identified if one was received or N/A entered on the worksheet if a quote was not received. Copies of all quotes must be submitted with the worksheet.
8. If a quote was received, indicate if it was accepted or rejected. Justification for not accepting a quote and not using the DBE subcontractor must be provided.
9. Under Other Efforts, please indicate additional steps you have taken to obtain DBE contractors and provide the appropriate supporting documentation such as:
 - Follow-up e-mails, faxes, or letters.
 - Copies of announcements/postings in newspapers, trade publications, or minority media that target DBE firms.

Reporting Requirements

After the AGENCY awards the construction contract, the CONTRACTOR is required to comply with the following:

1. The CONTRACTOR shall forward a copy of each DBE subcontract as soon as possible.
2. The CONTRACTOR shall pay subcontractors for satisfactory performance no more than 30 days from the CONTRACTOR'S receipt of payment. Proof of such payment shall be

provided to the AGENCY within ten days of request.

3. The CONTRACTOR shall complete and submit to the AGENCY EPA Form 5700-52A) biannually, with reporting periods ending March 31st and September 30th. Submission of this report is required even if there is no DBE activity to report; this is called a Negative Report. Failure to meet this requirement may result in payments being withheld.
4. The CONTRACTOR shall report any proposed changes/additions from the approved subcontractor list to the AGENCY prior to initiation of the action along with the following items:
 - a. A revised/updated EPA 6100-4 Form "DBE Subcontractor Utilization Form".
 - b. Reason for the proposed deviation.
 - c. Evidence of the prime contractor's continued good faith efforts to secure a DBE firm for the new and/or replacement subcontract work.
 - d. A "DBE Subcontractor Performance Form" (EPA Form 6100-3) if work is subcontracted to a new DBE firm.
 - e. An Equal Employment Opportunity Certification from the new Subcontractor
 - f. A Certification Regarding Debarment, Suspension and Other Responsibility Matters

PROJECT FUNDING ACKNOWLEDGMENT

The Bidder shall be aware Federal and State funding is being applied to the Project. On behalf of the Bidder submitting this bid, the undersigned warrants and represents that the Bidder has carefully read and understood all of the standard award terms and conditions provided in Appendix E and has included the full cost of meeting all requirements in the bid.

Funding Source

Initial

- Standard Conditions of the Proposition 1 Round 2 Integrated Regional Water Management (IRWM) Implementation Grant Agreement _____
- Title XVI Water Infrastructure Improvement for the Nation (WIIN) Act Grant _____

The failure of the Bidder to provide the Owner with this acknowledgement prior to the time of Award shall entitle Owner to reject the Bidder's bid as nonresponsive and to Award the bid to the next lowest responsive Bidder at the sole discretion of Owner.

The failure of the Bidder to provide the Owner with required bonds, certificates, and acknowledgements within 15 calendar days after the Award, shall constitute a material breach of the Contract, entitling Owner to terminate the Contract and call the bid bond.

Federal and State funding may be subject to termination if the Contractor has made false certification, or the Contractor violates the certification by failing to carry out the requirements noted in the award terms and conditions provided in Appendix E. The Owner reserves the right to recover from the Contractor any costs and/or damages sustained by the Owner as the result of having funding suspended or terminated, to the extent such damages are attributable to the Contractor's failure to comply with all applicable funding requirements.

By dating and executing this Acknowledgment, the Bidder hereby accepts all terms and conditions of this Acknowledgment and agrees to be bound by all of its terms.

Dated: _____, 20____

(Name of Bidder)

(Signature)

(Typed Name and Title)

(BLANK)

BID BOND

We, _____ as Principal, and
_____ as Surety, jointly and severally, bind
ourselves, our heirs, representatives, successors and assigns, as set forth herein, to the

OLIVENHAIN MUNICIPAL WATER DISTRICT

(herein called Owner) for payment of the penal sum of _____ Dollars
(\$ _____), lawful money of the United States. Principal has submitted the accompanying bid
for the construction of

RW PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL

If the Principal is awarded the Contract and enters into a written contract, in the form prescribed by the Owner, at the price designated by his bid, and files two bonds with the Owner, one to guarantee payment for labor and materials and the other to guarantee faithful performance, in the time and manner specified by the Owner, and carries all insurance in type and amount which conforms to the Contract Documents and furnishes required certificates and endorsements thereof, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Forfeiture of this bond, or any deposit made in lieu thereof, shall not preclude the Owner from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing.

Principal and Surety agree that if the Owner is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay Owner's reasonable attorney's fees incurred with or without suit.

Executed on _____, 20__

PRINCIPAL

By: _____

(Seal if Corporation)

Title: _____

(Attach Acknowledgment of Authorized Representative of Principal)

Any claims under this bond may be addressed to:

_____ (name and address of Surety)

_____ (name and address of Surety's
agent for service of process in
California, if different from above)

(telephone number of Surety's
agent in California)

(Attach Acknowledgment)

SURETY

By: _____
(Attorney-in-Fact)

NOTICE:

No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business in and have an agent for service of process in California. A certified copy of the Power of Attorney must be attached.

(BLANK)

AGREEMENT

THIS AGREEMENT, made and entered into by and between the

OLIVENHAIN MUNICIPAL WATER DISTRICT

hereinafter referred to as "OWNER" and

_____ ;

a corporation under the laws of the state of _____ ;

a partnership composed of _____ ;

_____ ;

a joint venture composed of _____ ;

_____ ;

an individual doing business as _____ ;

hereinafter referred to as "CONTRACTOR."

OWNER and CONTRACTOR agree as follows:

- (1) **SCOPE OF WORK:** CONTRACTOR will furnish all materials and will perform all of the work for the construction of the

RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL

in accordance with the plans and specifications and other contract documents therefor.

- (2) **TIME OF COMPLETION:** The work shall be completed within the times set forth in the Special Provisions Section 00810. Time is of the essence.
- (3) **CONTRACT SUM:** OWNER will pay CONTRACTOR in accordance with the prices shown in the Bid Form.
- (4) **PAYMENTS:** Monthly progress payments and the final payment will be made in accordance with the General Provisions as modified by the Special Provisions. The filing of the notice of completion by OWNER shall be preceded by acceptance of the work made only by an action of the Governing Body of OWNER in session.
- (5) **COMPLIANCE WITH PUBLIC CONTRACTS LAW:** OWNER is a public agency in the State of California and is subject to the provisions of law relating to public contracts. It is agreed that all provisions of law applicable to public contracts are a part of this Contract to the same extent as though set forth herein and will be complied with by CONTRACTOR.

- (6) **CONTRACT DOCUMENTS:** The complete contract includes all the contract documents set forth herein, to wit: Notice Inviting Sealed Proposals (Bids), Bid Form, Bid Bond, Agreement, Performance Bond, Payment Bond, Contractor's Certificate Regarding Workers' Compensation, Certificate of Insurance (Workers' Compensation and Employer's Liability), Insurance Endorsement (Workers' Compensation and Employer's Liability), Certificate of Insurance (Liability), Insurance Endorsement (Liability), Certificate of Insurance (Builders' Risk "All Risk"), Insurance Endorsement (Builders' Risk "All Risk"), General Provisions, Special Provisions, Exhibits 1 through 5, Appendices, Standard Specifications, Standard Drawings, Referenced Permits, Drawings, Technical Specifications, Plans, and also addenda thereto and supplemental agreements.

This Agreement is executed by the OWNER pursuant to an action of its Governing Body in session on _____, 20____, authorizing the same, and CONTRACTOR has caused this Agreement to be duly executed.

Dated: _____, 20____ By: _____
(Authorized Representative of Owner)

Title: _____ GENERAL MANAGER

Dated: _____, 20____ _____
(Contractor)

By: _____
(Authorized Representative of Contractor)

Title: _____

(Seal if Corporation)

(Attach Acknowledgment for Authorized Representative of Contractor)

APPROVED:

(Attorney for OWNER)

Date

CERTIFICATE OF CONTRACTOR

I, _____, certify that I am a/the

[designate sole proprietor, partner in partnership, or specify corporate office, e.g., secretary] in the entity named as CONTRACTOR in the foregoing contract.

I hereby expressly certify that the name of the entity to which I am associated is _____

_____;

that this entity is in good standing and has complied with all applicable laws and regulations, and that I have been expressly authorized by the proper parties in this entity to execute this contract on behalf of the above-named entity.

(Signature)

ATTEST:

Name: _____

(Please Type)

Title: _____

(BLANK)

PERFORMANCE BOND

We, _____ as Principal,
and _____ as Surety, jointly and
severally, bind ourselves, our heirs, representatives, successors and assigns, as set forth herein, to
the

OLIVENHAIN MUNICIPAL WATER DISTRICT

(herein called Owner) for payment of the penal sum of _____
_____, Dollars (\$ _____),

lawful money of the United States. Owner has awarded Principal a contract for the construction of

RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Principal shall in all things abide by and well and truly keep and perform the covenants, and agreements in the said contract, and any alteration thereof made as therein provided, on his part to be kept and performed at the time and in the manner therein specified, including all guarantees of workmanship and/or materials for a three (3) year period, and shall indemnify and save harmless the Owner, District, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents, as therein stipulated, this obligation shall become null and void, otherwise, it shall be and remain in full force and effect.

Surety agrees that no change, extension of time, alteration, or addition to the terms of the contract, or the work to be performed thereunder, or the plans and specifications shall in any wise affect its obligation on this bond, and it does hereby waive notice thereof.

Principal and Surety agree that if the Owner is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay Owner's reasonable attorney's fees incurred, with or without suit, in addition to the above sum.

Executed in four original counterparts on _____, 20__

PRINCIPAL

By: _____

(Seal if Corporation) Title: _____

(Attach Acknowledgment of Authorized Representative of Principal)

Any claims under this bond may be addressed to:

_____ (name and address of Surety)

_____ (name and address of Surety's agent for service of process in California, if different from above)

_____ (telephone number of Surety's agent in California)

(Attach Acknowledgment) _____
SURETY

By: _____
(Attorney-in-Fact)

APPROVED:

(Attorney for OWNER) Date

NOTICE:

No substitution or revision to this bond form will be accepted. Sureties must meet all requirements of Code of Civil Procedure Section 995.660(a). A certified copy of the Power of Attorney must be attached.

PAYMENT BOND

We, _____ as Principal,
and _____ as Surety, jointly and
severally, bind ourselves, our heirs, representatives, successors and assigns, as set forth herein, to
the

OLIVENHAIN MUNICIPAL WATER DISTRICT

(herein called Owner) for payment of the penal sum of _____
_____, Dollars (\$ _____),

lawful money of the United States. Owner has awarded Principal a contract for the construction of

RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL

If Principal or any of his subcontractors fails to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract or during the three-year guarantee period, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, then Surety will pay the same in an amount not exceeding the sum specified above, and also will pay, in case suit is brought upon this bond, such reasonable attorney's fees as shall be fixed by the court.

This bond shall inure to the benefit of any of the persons named in Section 3181 of the California Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Surety agrees that no change, extension of time, alteration, or addition to the terms of the contract, or the work to be performed thereunder, or the plans and specifications shall in any wise affect its obligation on this bond, and it does hereby waive notice thereof.

Principal and Surety agree that should Owner become a party to any action on this bond that, each will also pay Owner's reasonable attorney's fees incurred therein in addition to the sum above set forth.

Executed in four original counterparts on _____, 20____

PRINCIPAL

By: _____

(Seal if Corporation) Title: _____

(Attach Acknowledgment of Authorized Representative of Principal)

Any claims under this bond may be addressed to:

_____ (name and address of Surety)

_____ (name and address of Surety's agent for service of process in California, if different from above)

_____ (telephone number of Surety's agent in California)

(Attach Acknowledgment) _____
SURETY

By: _____
(Attorney-in-Fact)

APPROVED:

(Attorney for OWNER) Date

NOTICE:

No substitution or revision to this bond form will be accepted. Sureties must meet all requirements of Code of Civil Procedure Section 995.660(a). A certified copy of the Power of Attorney must be attached.

**CONTRACTOR'S CERTIFICATE
REGARDING WORKERS' COMPENSATION**

Name of Contract: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE
BARCELONA, VILLAGE PARK, AND SUMMERHILL**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Labor Code Section 3700:

"Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.
- (c) For all political subdivisions of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702."

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

Dated: _____, 20____

(Contractor)

By: _____
(Authorized Representative of Contractor)

Title: _____

(Seal if Corporation)

(Labor Code Section 1861 provides that the above certificate must be signed and filed by the Contractor with the Owner prior to performing any work under this Contract.)

CERTIFICATE OF INSURANCE

Name of Contract: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY INSURANCE**

THIS IS TO CERTIFY that the following policy has been issued by the below-stated company in conformance with the requirements of Articles 8-1 and 8-2 of the General Provisions and is in force at this time.

The Company will give at least 30 days' written notice by certified mail to the Owner and Engineer/Architect prior to any material change or cancellation of said policy.

<u>POLICY NUMBER</u>	<u>EXPIRATION DATE</u>	<u>TYPE OF INSURANCE</u>	<u>LIMITS OF LIABILITY</u>	
_____		A. WORKERS' COMPENSATION	Statutory Limits Under the Laws of the State of California	
_____		B. EMPLOYER'S LIABILITY	Each Employee	Each Accident
		Bodily Injury By Accident	\$	\$
		Bodily Injury By Disease	\$	\$

_____ Named Insured (Contractor)	_____ Insurance Company
_____ Street Number	_____ Street Number
_____ City and State	_____ City and State

By: _____
(Company Representative)
(SEE NOTICE ON PAGE 3 OF 3)

NOTARY PUBLIC

State of _____)
County of _____) ss.

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

On _____ before me, _____
Date Here Insert Name and Title of the Officer

Personally appeared _____
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing 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

NOTARY PUBLIC

Insurance Company Agent for Service
of Process in California:

Name

Agency

Street Number

Street Number

City and State

City and State

Telephone Number

Telephone Number

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

NOTICE:

No substitution or revision to the above certificate form will be accepted. If the insurance called for is provided by more than one insurance company, a separate certificate in the exact above form shall be provided for each insurance company.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

(BLANK)

INSURANCE ENDORSEMENT

Name of Contract: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY INSURANCE**

This endorsement forms a part of Policy No. _____.

ENDORSEMENT:

It is agreed that with respect to such insurance as is afforded by the policy, the Company waives any right of subrogation it may acquire against the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents by reason of any payment made on account of injury, including death resulting therefrom, sustained by any employee of the insured, arising out of the performance of the above-referenced contract.

This endorsement does not increase the Company's total limits of liability.

Named Insured (Contractor)

Insurance Company

Street Number

Street Number

City and State

City and State

By: _____
(Company Representative)

(SEE NOTICE ON PAGE 2 OF 2)

State of _____)
County of _____) ss.

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

On _____ before me, _____
Date Here Insert Name and Title of the Officer

Personally appeared _____
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing 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

NOTARY PUBLIC

NOTICE:

No substitution or revision to the above endorsement form will be accepted. If the insurance called for is provided by more than one policy, a separate endorsement in the exact above form shall be provided for each policy.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

CERTIFICATE OF INSURANCE

Name of Contract: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **LIABILITY INSURANCE**

THIS IS TO CERTIFY that the following policies have been issued by the below-stated company in conformance with the requirements of Articles 8-1 and 8-3 of the General Provisions and are in force at this time. The policy shall be an occurrence policy with a deductible not to exceed \$5,000.

<u>POLICY NUMBER</u> <u>EXPIRATION DATE</u>	<u>TYPE OF INSURANCE</u>	LIMITS OF LIABILITY In Thousands (000)	
		Occurrence	Aggregate
_____	A. GENERAL LIABILITY		
	Bodily Injury, Personal Injury, and Property Damage Combined	\$	\$
_____	B. EXCESS GENERAL LIABILITY	\$	\$
_____	C. AUTOMOBILE LIABILITY		
	Bodily Injury and Property Damage Combined	\$	\$
_____	D. EXCESS AUTOMOBILE LIABILITY	\$	\$

The following types of coverage are included in said policies (indicate by "X" in space):

A. GENERAL LIABILITY

Comprehensive Form-----YES___ NO___

Premises-Operations -----YES___ NO___

Explosion and Collapse Hazard----- YES___ NO___

Underground Hazard-----YES___ NO___

Products/Completed Operations Hazard-----YES___ NO___

Contractual Insurance -----YES___ NO___

Broad Form Property Damage Including Completed Operations -----YES___ NO___

Independent Contractors-----YES___ NO___

Personal Injury -----YES___ NO___

B. EXCESS GENERAL LIABILITY

Umbrella Form-----YES___ NO___

Other Than Umbrella Form-----YES___ NO___

If other than Umbrella Form, please explain below:

C. AUTOMOBILE LIABILITY

Comprehensive Form Including Loading and Unloading-----YES___ NO___

Owned-----YES___ NO___

Hired -----YES___ NO___

Non-Owned -----YES___ NO___

D. EXCESS AUTOMOBILE LIABILITY

Umbrella Form-----YES___ NO___

Other Than Umbrella Form-----YES___ NO___

If other than Umbrella Form, please explain below:

This certificate or verification of insurance is not an insurance policy and does not amend, extend, or alter the coverage afforded by the policies listed herein. However, the insurance provided shall meet the requirements of the Contract Documents and include coverage as specified in this certificate.

The Company will give at least 30 days' written notice by certified mail to the Owner and the Engineer/Architect prior to any material change or cancellation of said policies.

Named Insured (Contractor)

Insurance Company

Street Number

Street Number

City and State

City and State

By: _____
(Company Representative)

(SEE NOTICE ON PAGE 5 OF 5)

State of _____)
County of _____) ss.

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

On _____ before me, _____
Date Here Insert Name and Title of the Officer

Personally appeared _____
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing 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

NOTARY PUBLIC

Insurance Company Agent for Service
of Process in California:

Name

Agency

Street Number

Street Number

City and State

City and State

Telephone Number

Telephone Number

NOTICE:

No substitution or revision to the above certificate form will be accepted. If the insurance called for is provided by more than one insurance company, a separate certificate in the exact above form shall be provided for each insurance company.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

(BLANK)

INSURANCE ENDORSEMENT

Name of Contract: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **LIABILITY INSURANCE**

This endorsement forms a part of Policy No. _____.

ENDORSEMENT:

The Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents are included as additional insureds under said policies but only while acting in their capacity as such and only as respects operations of the named insured, his contractors, any subcontractor, any supplier, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable in the performance of the above-referenced contract. This insurance shall not apply if the loss or damage is ultimately determined to be the result of the sole and exclusive negligence (including any connected with the preparation or approval of maps, drawings, opinions, reports, surveys, designs, or specifications) of one or more of the aforesaid additional insureds. The insurance afforded to these additional insureds is primary insurance. If the additional insureds have other insurance which might be applicable to any loss, the amount of this insurance shall not be reduced or prorated by the existence of such other insurance.

The Contractual Liability Insurance afforded is sufficiently broad to insure all of the matters set forth in the article entitled "Indemnity" in the General Provisions of the above-referenced contract except those matters set forth in the third paragraph thereof.

This endorsement does not increase the Company's total limits of liability.

Named Insured (Contractor)

Insurance Company

Street Number

Street Number

City and State

City and State

By: _____
(Company Representative)

(SEE NOTICE ON PAGE 2 OF 2)

State of _____)
County of _____) ss.

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

On _____ before me, _____
Date Here Insert Name and Title of the Officer

Personally appeared _____
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal

NOTARY PUBLIC

NOTICE:

No substitution or revision to the above endorsement form will be accepted. If the insurance called for is provided by more than one policy, a separate endorsement in the exact form shall be provided for each policy.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

CERTIFICATE OF INSURANCE

Name of Contract: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **BUILDERS' RISK "ALL RISK" INSURANCE**

THIS IS TO CERTIFY that the following policy has been issued by the below-stated company in conformance with the requirements of Articles 8-1 and 8-4 of the General Provisions and is in force at this time:

POLICY NUMBER	EXPIRATION DATE	LIMITS OF LIABILITY
		\$
		(Not Less Than Contract Amount)
		Deductible:
		\$
	(Not Sooner Than Contract Completion Date)	(Not More Than \$100,000)

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

The Company will give at least 30 days' written notice by certified mail to the Owner and the Engineer/Architect prior to any material change or cancellation of said policy.

Named Insured (Contractor)

Insurance Company

Street Number

Street Number

City and State

City and State

By: _____
(Company Representative)

(SEE NOTICE ON PAGE 4 OF 4)

State of _____)
County of _____) ss.

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

On _____ before me, _____
Date Here Insert Name and Title of the Officer

Personally appeared _____
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing 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

NOTARY PUBLIC

Insurance Company Agent for Service
of Process in California:

Name

Agency

Street Number

Street Number

City and State

City and State

Telephone Number

Telephone Number

NOTICE:

No substitution or revision to the above certificate form will be accepted. If the insurance called for is provided by more than one insurance company, a separate certificate in the exact above form shall be provided for each insurance company.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

INSURANCE ENDORSEMENT

Name of Contract: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **BUILDERS' RISK "ALL RISK" INSURANCE**

This endorsement forms a part of Policy No. _____.

ENDORSEMENT:

The Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents are included as additional insureds under said policy but only while acting in their capacity as such with respect to the above-referenced contract.

The insurance afforded to these additional insureds is primary insurance. If the additional insureds have other insurance which might be applicable to any loss, the amount of this insurance shall not be reduced or prorated by the existence of such other insurance.

This endorsement does not increase the Company's total limits of liability.

Named Insured (Contractor)

Insurance Company

Street Number

Street Number

City and State

City and State

By: _____
(Company Representative)

(SEE NOTICE ON PAGE 2 OF 2)

State of _____)
County of _____) ss.

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

On _____ before me, _____
Date Here Insert Name and Title of the Officer

Personally appeared _____
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal

NOTARY PUBLIC

NOTICE:

No substitution or revision to the above endorsement form will be accepted. If the insurance called for is provided by more than one policy, a separate endorsement in the exact above form shall be provided for each policy.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

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GENERAL PROVISIONS

SECTION 1 DEFINITIONS, TERMS, AND ABBREVIATIONS

1-1 DEFINITIONS

Whenever the following terms occur in the Contract Documents, the meaning shall be interpreted as follows:

ACCEPTANCE, FINAL ACCEPTANCE - The formal action by the Owner accepting the work as being complete.

ACCEPTED BID - The bid (proposal) accepted by the Owner.

ATTORNEY FOR OWNER – Alfred E. Smith, Nossaman, LLP, 777 S. Figueroa Street, 34th Floor, Los Angeles, CA. 90017, (213) 612-7831

BIDDER - Any individual, partnership, corporation, joint venture, or other combination thereof submitting a proposal for the work contemplated, acting directly or through an authorized representative.

CALENDAR DAY - Means all days of the week including Saturdays, Sundays and Holidays with the first day counted being the first day following the date specified.

CONTRACT - The written agreement executed between the Owner and the Contractor covering the performance of the work.

CONTRACTOR - The individual, partnership, corporation, joint venture, or other combination thereof who has entered into the contract with the Owner for the performance of the work. The term "Contractor" means the Contractor or his authorized representative.

CONTRACT DOCUMENTS - The Contract Documents set forth in the Agreement; also any and all supplemental agreements amending or extending the work contemplated. Supplemental agreements are written agreements covering alterations, amendments, or extensions to the contract and include contract change orders.

DAYS - Unless otherwise specified, days shall mean calendar days.

ENGINEER/ARCHITECT – The term "Engineer/Architect" means the Engineer/Architect or his authorized representative.

OWNER - The public entity identified as such in the Agreement. The term "Owner" means the Owner or his authorized representative.

OWNER'S REPRESENTATIVE - The person or firm authorized by the Owner to represent it during the performance of the work by the Contractor. The term "Owner's Representative" means the Owner's Representative or his assistants.

PLANS, DRAWINGS - The Plans (drawings), or reproductions thereof, which show the location, character, dimensions, and details of the work to be done.

SPECIAL PROVISIONS - Additions, deletions, and changes to the General Provisions and Standard Specifications.

SPECIFICATIONS - The directions, provisions, and requirements contained in the General Provisions and Standard Specifications as supplemented by the Special Provisions.

STANDARD SPECIFICATIONS - The Contract Documents identified or referenced as such.

SUBCONTRACTOR - An individual, partnership, corporation, joint venture, or other combination thereof who has a contract with the Contractor to perform any of the work at the site. Subcontractor also means an individual, partnership, corporation, joint venture, or other combination thereof who has a contract with another subcontractor to perform any of the work at the site.

STANDARD DRAWINGS, STANDARD PLANS - That portion of the Plans identified or referenced as such.

UTILITY - Public or private fixed works for the transportation of fluids, gases, power, signals, or communications.

WORK - Any and all obligations, duties, and responsibilities necessary to complete the construction assigned to, or undertaken by, the Contractor pursuant to the Contract Documents including all materials, equipment, and supplies incorporated or to be incorporated in the construction. Also, the completed construction or parts thereof required to be provided under the Contract Documents.

1-2 TERMS

Wherever the terms "required," "permitted," "ordered," "designated," "directed," "prescribed," or terms of like import are used, it shall be understood that the requirements, permission, order, designation, direction, or prescription of the Owner's Representative is intended. Similarly, the terms "acceptable," "satisfactory," "or equal," or terms of like import shall mean acceptable to or satisfactory to the Owner's Representative, unless otherwise expressly stated. The word "provide" shall be understood to mean furnish and install.

1-3 ABBREVIATIONS

Wherever abbreviations are used, they shall have the meanings as set forth in the Special Provisions.

SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS

2-1 CONTRACT DOCUMENTS

The Contract Documents are set forth in the Agreement form and the definition of "Contract Documents" is in Article 1-1 DEFINITIONS.

2-2 LICENSE AND BIDDER'S EXPERIENCE

No bid will be accepted from a bidder who is not licensed to conduct business in the state of California and licensed to perform the class of work defined by the Contract Documents. All bidders shall complete the Bidder's Experience form as part of their bid. Bidders failing to complete and submit the Bidder's Experience form with their bid may be treated as nonresponsive at the option of the Owner. Bidders unable to demonstrate five (5) years of successful prior experience performing the type and magnitude of work required by this contract may also be rejected as nonresponsive.

2-3 BIDS

Bids shall be made upon the Bid Form furnished by the Owner and a part of the Contract Documents. The Bid Form Checklist, Bid Form and Bid Bond must be submitted with the bid. All bids shall be properly executed and with all items filled in; the signatures of all persons signing shall be in longhand. Erasures, interlineations, or other corrections shall be authenticated by affixing in the margin immediately opposite the correction the initials of a person signing the bid. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. If the unit price and the total amount named by a bidder for any item are not in agreement, the unit price alone shall be considered as representing the bidder's intention, and the totals shall be corrected to conform thereto.

Bids shall not contain any recapitulation of the work to be done. Alternative proposals will not be considered, except as called for. No oral, telegraphic, or telephonic proposals or modifications will be considered.

Bids shall be accompanied by a "Proposal Guarantee" in the form of a cashier's check, a certified check, or bidder's bond executed by an admitted surety insurer, in an amount not less than 10% of the amount of bid, and made payable to or for the benefit of the Owner. Said check, or bond shall be given as a guarantee that the bidder will enter into a contract and furnish the required bonds or substitutes and insurance certificates and endorsements if awarded the contract, and in case of refusal or failure to enter into said contract and furnish the required bonds or substitutes and insurance certificates and endorsements within 15 calendar days after notice of award by the Owner in writing, the cash or the check and the money represented by said check shall be forfeited to the Owner, or in the event that a bond is deposited, said security shall be forfeited. Forfeiture does not preclude the Owner from seeking all other remedies provided by law to recover losses sustained as a result of the Contractor's failure to enter into the contract or to furnish the required bonds or insurance certificates and endorsements.

Bids shall be sealed in an envelope marked and addressed as set forth in the Notice Inviting Sealed Bids. Bids shall be delivered to personnel of the Owner at the location designated in the Notice Inviting Sealed Bids on or before the day and hour set for the opening of bids.

2-4 WITHDRAWAL OF BID

A bidder may withdraw his bid by a signed written request any time prior to the day and hour for receiving bids designated in the Notice Inviting Sealed Proposals. Thereafter the Bid may

be withdrawn only as permitted in accordance with Public Contract Code Section 5100, et seq., regarding relief of Bidders.

The withdrawal of a bid does not prejudice the right of a bidder to file a new bid so long as the new bid is delivered as set forth in Article 2-3 PROPOSALS prior to the closing time specified for all bids.

2-5 BIDDERS INTERESTED IN MORE THAN ONE BID

No person, partnership, or corporation shall be allowed to make or file, or be interested in more than one bid for the work, unless alternative bids are called for. A person, partnership, or corporation submitting a subproposal to a bidder, or who has quoted prices on material to a bidder, is not thereby disqualified from submitting a subproposal or quoting prices to other bidders.

2-6 INTERPRETATION OF PLANS AND OTHER CONTRACT DOCUMENTS

If any person or entity contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the Plans, Specifications, or other Contract Documents, or finds discrepancies in, or omissions from the Plans and Specifications or other Contract Documents, he may submit to the Owner a written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery prior to the last date/time noticed for prebid questions as stipulated in the Notice Inviting Sealed Proposals (Bids). An interpretation or correction of the Contract Documents will be made only by Addendum duly issued by the Owner and made available on the District website at www.olivenhain.com. The Owner and the Engineer/Architect will not be responsible for any other explanation or interpretation of the documents.

2-7 ADDENDA

Addenda issued before the time in which to submit bids expires shall be included in the bid and shall be made a part of the contract.

2-8 EXISTING CONDITIONS AND EXAMINATION OF CONTRACT DOCUMENTS

The bidder represents that he has carefully examined the Contract Documents and the site where the work is to be performed and that he has familiarized himself with all local conditions and federal, state and local laws, ordinances, rules, and regulations that may affect in any manner the performance of the work. The bidder further represents that he has studied all surveys and investigation reports about subsurface and latent physical conditions pertaining to the jobsite, that he has performed such additional surveys and investigations as he deems necessary to complete the work at his bid price, and that he has correlated the results of all such data with the requirements of the Contract Documents. The submittal of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, including locality, uncertainty of weather and all other contingencies, and as to the character, quality, quantities, and scope of the work.

The Plans and Specifications for the work show subsurface conditions or otherwise hidden conditions as they are supposed or believed by the Engineer/Architect to exist; but it is not intended or to be inferred that the conditions as shown thereon constitute a representation

that such conditions are actually existent. Except as otherwise specifically provided in the Contract Documents, the Owner, the Engineer/Architect, and their consultants shall not be liable for any loss sustained by the Contractor as a result of any variance of such conditions as shown on the Plans and the actual conditions revealed during the progress of the work or otherwise.

Where the Owner or the Engineer/Architect or their consultants have made investigations of subsurface conditions in areas where the work is to be performed, such investigations were made only for the purpose of study and design. The conditions indicated by such investigations apply only at the specific location of each boring or excavation at the time the borings or excavations were made. Where such investigations have been made, bidders or Contractors may inspect the records as to such investigations subject to and upon the conditions hereinafter set forth. The inspection of the records shall be made at the office of the Engineer/Architect.

The records of such investigations are not a part of the contract and are shown solely for the convenience of the bidder or Contractor. It is expressly understood and agreed that the Owner, the Engineer/Architect, and their consultants assume no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations; the records thereof; or of the interpretations set forth therein or made by the Owner's consultants, the Engineer/Architect or his consultants in the use thereof by the Engineer/Architect, and there is no warranty or guarantee, either express or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions, densities, or other characteristics different from, those indicated may not be encountered.

When a log of test borings showing a record of the data obtained by the investigation of subsurface conditions by the Owner, the Engineer/Architect, or their consultants is included with the Plans or other documents, it is expressly understood and agreed that said log of test borings does not constitute a part of the contract, represents only the opinion of the Owner or the Engineer/Architect or their consultants as to the character of the materials encountered by them in the test borings, is included in the Plans or other documents only for the convenience of bidders, and its use is subject to all of the conditions and limitations set forth in this article.

The availability or use of information described in this article is not to be construed in any way as a waiver of the provisions of the first paragraph in this article and a bidder or Contractor is cautioned to make such independent investigations and examination as he deems necessary to satisfy himself as to conditions to be encountered in the performance of the work.

No information derived from such inspection of records of investigations or compilation thereof made by the Owner, the Engineer/Architect, or their consultants will in any way relieve the bidder or Contractor from any risk or from properly fulfilling the terms of the contract nor entitle the Contractor to any additional compensation.

SECTION 3 AWARD AND EXECUTION OF CONTRACT

3-1 AWARD OF CONTRACT OR REJECTION OF BIDS

The award of the contract, if it be awarded, will be to the lowest responsible responsive bidder complying with the instructions contained in the Contract Documents. The Owner, however, reserves the right to select the schedules under which the bids are to be compared; to delete certain bid items from the Bid Schedule, to reject any and all bids, and to waive any irregularity in bids received. If, in the judgment of the Owner, a bid is unbalanced or if the bidder is not responsible, it shall be considered sufficient grounds for rejection of the entire bid.

The Owner shall have the period of time set forth in the Special Provisions after the opening of bids within which to accept or reject the bids. No bidder may withdraw his bid during said period. The Owner will return the proposal guarantees, except any guarantees which have been forfeited, and except bidders' bonds, to the respective bidders whose proposals they accompanied after the execution of the contract by the successful bidder or rejection of all bids or upon receipt of a written request therefor received after said period of time set forth in the Special Provisions. The proposal guarantee of the unsuccessful bidders will be returned by the Owner no later than 60 calendar days following the date of award of contract.

Before award of the contract, any bidder shall furnish upon request, proof of required insurance, a recent statement of his financial condition, and previous construction experience or such other evidence of his qualifications as may be requested by the Owner. If a bidder fails to furnish in a timely manner the information requested, it shall be considered sufficient grounds for rejection of such bidder's entire bid.

3-2 EXECUTION OF CONTRACT

The form of agreement, bonds, and other documents which the successful bidder, as Contractor, will be required to execute are included as a part of the Contract Documents.

The contract shall be signed by the successful bidder and returned to the Owner, together with the bonds or substitutes and insurance certificates and endorsements, within 15 calendar days or such additional time as may be allowed by the Owner from the date of the mailing of notice from the Owner to the bidder or from the date of personal delivery of notice from the Owner to the bidder that the agreement is ready for signature. The agreement, bonds or substitutes, insurance certificates and endorsements, and other documents to be executed by the Contractor shall be executed in original-triplicate, one each of which shall be filed with the Owner and one each with the Attorney for the Owner and the Contractor.

3-3 BONDS

The successful bidder, simultaneously with execution of the Contract Documents, shall either furnish a Payment Bond and Performance Bond each in an amount equal to 100% of the contract amount, or equivalent cash or securities in lieu of these bonds in accordance with Code of Civil Procedure Section 995.710. The failure of Contractor to make a written request to Owner to use alternative securities meeting the requirements of Code of Civil Procedure Section 995.710 at the time the Contract Documents are signed shall be deemed a waiver of the right of Contractor to subsequently substitute these alternative securities. Alternative securities proposed by the Contractor shall be subject to review and approval by Owner. Contractor agrees to provide Owner with a deposit in a sum determined adequate by the Owner to cover all attorney's fees and all other fees, costs, and expenses incurred by the Owner in reviewing Contractor's request to use alternative securities in lieu of the required

bonds and to prepare all agreements determined necessary by Owner to adequately protect Owner's interest. Performance and Payment Bonds shall be furnished by surety companies meeting the requirements of Code of Civil Procedure Section 995.660(a) and shall be completed on the forms furnished as part of the Contract Documents. Surety companies, to be acceptable to Owner, must meet all requirements of Code of Civil Procedure Section 995.660(a).

If at any time a surety on any such bond fails to comply with Code of Civil Procedure Section 995.660(a), the Contractor shall, within 10 calendar days after notice from the Owner, substitute new bonds with surety companies meeting all requirements of Code of Civil Procedure Section 995.660(a). All premiums on these new bonds shall be paid solely by the Contractor. No further progress payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished new bonds to Owner meeting all requirements of Code of Civil Procedure Section 995.660(a).

The Performance Bond and the Payment Bond, or alternative securities meeting the requirements of Code of Civil Procedure Section 995.710 approved by the Owner, must remain in full effect throughout the period of the Work and for a period of two-year thereafter as required by Article 5-14 TWO-YEAR GUARANTEE.

3-4 INSURANCE REQUIREMENTS

The successful bidder will be required to furnish the Owner proof of full compliance with all insurance requirements as specified in SECTION 8 CONTRACTOR'S INSURANCE. The forms of Certificate of Insurance and Endorsement which the successful bidder, as Contractor, will be required to furnish are included as a part of the Contract Documents.

3-5 FAILURE TO EXECUTE CONTRACT

Failure by a bidder to whom the contract is awarded to execute the contract or to furnish the required bonds or insurance certificates and endorsements within the period of time required by Section 3-2 Execution of Contract shall be just cause for the annulment of the award and the forfeiture of the proposal guarantee.

A bidder who is awarded the contract and fails to execute the contract or furnish the required bonds or substitutes, or insurance certificates and endorsements shall be liable to the Owner for all damages resulting therefrom including reasonable attorneys' fees. The proposal guarantee forfeited shall not be a limitation thereon.

SECTION 4 SCOPE OF WORK

4-1 WORK TO BE DONE

The work to be done consists of furnishing all transportation, labor, materials, tools, equipment, services, permits, utilities and all other items which are necessary or appurtenant to construct and complete the entire project and construct the project designated in the Contract Documents, and to leave the grounds in a neat and presentable condition.

4-2 CHANGES IN THE WORK

The Owner may require changes in, additions to, or deductions from the work, including complete termination thereof. Adjustment, if any, in the amounts to be paid to the Contractor by reason of any such change, addition, or deduction shall be determined as set forth in SECTION 9 ESTIMATES AND PAYMENTS.

The Owner's Representative may order minor changes in the work not involving an increase or decrease in the contract amount, not involving a change in the time for completion, and not inconsistent with the purposes for which the work is being constructed. **If the Contractor believes that any order for minor changes in the work for which the contract amount or time for completion should be changed, he shall not proceed with the changes in the work so ordered and shall within seven calendar days of the receipt of such order notify the Owner's Representative in writing of his estimate of the changes in the contract amount and time for completion he believes to be appropriate.**

No payment for changes in the work will be made and no changes in the time for completion by reason of changes in the work will be made, unless the changes are covered by a written change order approved by the Owner in advance of the Contractor's proceeding with the changed work.

4-3 OBSTRUCTIONS

The Contractor shall remove and dispose of all structures, debris, or other obstructions of any character necessary to accommodate the work. Where such obstructions consist of improvements not required by law to be removed by the owner thereof, all such improvements shall be removed, maintained, and permanently replaced by the Contractor at his expense except as otherwise specifically provided in the Contract Documents.

4-4 UTILITIES

The Engineer/Architect has endeavored to determine the existence of utilities at the site of the work from the records of the owners of known utilities in the vicinity of the work. The positions of these utilities as derived from such records are shown on the Plans. The service connections to these utilities are not shown on the Plans.

The Contractor shall make his own investigations, including exploratory excavations, to determine the locations and type of existing service laterals or appurtenances when their presence can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of the work. If the Contractor discovers utility facilities not identified in the Plans or Specifications or in a position different from that shown in the Plans and Specifications, he shall immediately notify in writing the Owner's Representative and the owner of the utility facility.

The Owner shall have the responsibility for the timely removal, relocation, protection, and temporary maintenance of existing main or trunkline utility facilities which are not indicated in the Plans and Specifications with reasonable accuracy.

In case it should be necessary to remove, relocate, protect, or temporarily maintain a utility because of interference with the work, the work on such utility shall be performed and paid for as follows:

When it is necessary to remove, relocate, protect, or temporarily maintain an existing main or trunkline utility facility not indicated in the Plans and Specifications with reasonable accuracy, the Owner will compensate the Contractor for the costs of locating, for the costs of repairing damage not due to the failure of the Contractor to exercise reasonable care, for the costs of removing, relocating, protecting, or temporarily maintaining such utility facilities, and for the costs for equipment on the site necessarily idled during such work. These costs, the work to be done by the Contractor in locating, removing, relocating, protecting, or temporarily maintaining such utility facilities shall be covered by a written change order conforming to the provisions of Article 4-2 CHANGES IN THE WORK and Article 9-1 PAYMENT FOR CHANGES IN THE WORK. The Owner may make changes in the alignment and grade of the work to obviate the necessity to remove, relocate, protect, or temporarily maintain such utility facilities or to reduce the costs of the work involved in removing, relocating, protecting, or temporarily maintaining such utility facilities. Changes in alignment and grade will be ordered in accordance with Article 4-2 CHANGES IN THE WORK.

When it is necessary to remove, relocate, protect, or temporarily maintain a utility (other than [1] existing main or trunkline utility facilities not indicated in the Plans and Specifications with reasonable accuracy, or [2] existing service laterals or appurtenances when their presence cannot be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of the work) the cost of which is not required to be borne by the owner thereof, the Contractor shall bear all expenses incidental to the work on the utility or damage thereto. The work on the utility shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the utility has the option of doing such work with his own forces, or permitting the work to be done by the Contractor. No representations are made that the obligations to remove, relocate, protect, or temporarily maintain any utility and to pay the cost thereof is or is not required to be borne by the owner of such utility, and it shall be the responsibility of the Contractor to investigate to find out whether or not said cost is required to be borne by the owner of the utility.

The right is reserved to governmental agencies and to owners of utilities to enter at any time upon any street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the work and for the purpose of maintaining and making repairs to their property.

4-5 PLANS AND SPECIFICATIONS FURNISHED BY THE OWNER

The Owner will furnish to the Contractor free of charge up to five (5) full size copies of Plans and Specifications reasonably necessary for the execution of the work. The Contractor shall keep one set of Plans and Specifications in good order with red line changes available to the Owner's Representative at the site of the work.

4-6 FINAL CLEANUP

Upon completion and before making application for acceptance of the work, the Contractor shall clean all rights-of-way, streets, borrow pits, and all other grounds occupied by him in connection with the work of all rubbish, excess materials, temporary structures, and equipment, and all parts of the work and grounds occupied by him shall be left in a neat and presentable condition.

SECTION 5 QUALITY OF THE WORK

5-1 AUTHORITY OF THE OWNER'S REPRESENTATIVE

The Owner's Representative shall decide any and all questions which may arise as to the interpretation of the Plans and Specifications and shall have authority to disapprove or reject materials and equipment furnished and work performed which, in his opinion, is not in accordance with the Contract Documents. The Owner's Representative shall also have the authority to require the Contractor or any subcontractor to replace any workman or supervisor who, in his opinion, is not performing the work in a safe manner, fails to follow the instructions of the Owner's Representative, fails to perform work in accordance with the Contract Documents, fails to properly supervise the work, or demonstrates lack of competence to perform the particular work assigned to the workman or supervisor. The failure of the Contractor or any subcontractor to replace a worker or supervisor as directed by the Owner's Representative shall constitute a material breach of this agreement. Neither the Owner's Representative nor the Owner shall be liable to Contractor, any subcontractor, or any other person or entity for removing a workman or supervisor in accordance with the terms of this article.

5-2 SUPPLEMENTAL DRAWINGS

The Plans shall be supplemented by such drawings as are necessary to better define the work. All such drawings delivered to the Contractor by the Owner's Representative shall be deemed written instructions to the Contractor. If the Contractor believes that any supplemental drawings call for changes in the work for which the contract amount or time for completion should be changed, he shall not proceed with the changes in the work so called for and shall within seven calendar days of the receipt of the supplemental drawings notify the Owner's Representative in writing of his estimate of the changes in the contract amount and time for completion he believes to be appropriate.

No payment for changes in the work will be made and no change in the time for completion by reason of changes in the work will be made, unless the changes are covered by a written change order approved by the Owner in advance of the Contractor's proceeding with the changed work.

5-3 CONFORMITY WITH CONTRACT DOCUMENTS AND ALLOWABLE DEVIATIONS

The work shall conform to the lines, grades, dimensions, tolerances, and material and equipment requirements shown on the Plans or set forth in the Specifications. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Owner's Representative shall be the sole judge as to whether the work or materials deviate from the Plans and Specifications, and his decision as to any allowable deviations therefrom shall be final.

If specific lines, grades, and dimensions are not shown on the Plans, those furnished by the Owner's Representative shall govern.

5-4 MANUFACTURER'S INSTRUCTIONS

All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier, or distributor, except as otherwise specifically provided in the Contract Documents.

5-5 COORDINATION OF PLANS AND SPECIFICATIONS

The Plans, Specifications, and other Contract Documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for the complete work. In the event of an apparent difference between Plans and Specifications, reference shall be made to the Owner's Representative whose decision thereon shall be final.

Special Provisions shall govern over General Provisions and Standard Specifications.

5-6 INTERPRETATION OF PLANS AND SPECIFICATIONS

Figured dimensions on drawings shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Large-scale details shall take precedence over smaller scale drawings as to shape and details of construction. Specifications shall govern as to materials and workmanship. Plans and Specifications are intended to be fully complementary and to agree. The Specifications calling for the higher quality material or workmanship shall prevail. Materials or work described in words which so applied have a well known technical or trade meaning shall be deemed to refer to such recognized standards. In the event of any discrepancy between any drawings and the figures thereon, the figures shall be taken as correct. In the event of any doubt or question arising respecting the true meaning of the Plans or Specifications, reference shall be made to the Owner's Representative whose decision thereon shall be final.

5-7 ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR

It is the duty of the Contractor to promptly notify the Owner's Representative in writing of any design, materials, or specified method that the Contractor believes may prove defective or insufficient. If the Contractor believes that a defect or insufficiency exists in design, materials, or specified method and fails to promptly notify the Owner's Representative in writing of this belief, the Contractor waives any right to assert that defect or insufficiency in design, materials, or specified method at any later date in any legal or equitable proceeding against Owner, or in any subsequent mediation, arbitration, or settlement conference between the Owner and the Contractor. The Owner's Representative, on receipt of any such notice, will promptly investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after he comes to the belief that a defect or insufficiency exists in design, materials, or specified method which is directly or indirectly affected by such alleged defect or insufficiency in design, materials, or specified method will be at his own risk and he shall bear all cost arising therefrom.

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between the Plans and the Specifications or between either of them and the physical conditions at the site of the work or finds any error or omission in any of the Plans or in any survey, he shall promptly notify the Owner's Representative of such discrepancy, error, or omission. If the Contractor observes that any Plans or Specifications are at variance with any applicable law, ordinance, regulation, order, or decree, he shall promptly notify the Owner's Representative in writing of such conflict. The Owner's Representative, on receipt of any such notice, will promptly investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after his discovery of such error, discrepancy, or conflict which is directly or indirectly affected by such error, discrepancy, or conflict will be at his own risk and he shall bear all cost arising therefrom.

5-8 SUPERVISION AND SUPERINTENDENCE

The Contractor shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents.

The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but the Contractor shall not be solely responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence, or procedure of construction which is indicated in and required by the Contract Documents except as otherwise provided in Article 5-7 ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR.

The Contractor shall be responsible to see that the completed work complies with the Contract Documents.

The Contractor shall designate and keep on the work at all times during its progress a competent superintendent who shall not be replaced without written notice to the Owner's Representative. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor. During periods when the work is suspended, the Contractor shall make appropriate arrangements for any emergency work which may be required.

Whenever the superintendent is not present on any particular part of the work where the Owner's Representative may desire to inform the Contractor relative to interpretation of the Plans and Specifications or to the disapproval or rejection of materials or work performed, the Owner's Representative may so inform the foreman or other worker in charge of the particular part of the work in reference to which the information is given. Information so given shall be as binding as if given to the superintendent.

5-9 SHOP DRAWINGS

Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are prepared by the Contractor or any subcontractor, manufacturer, supplier, or distributor and which illustrates some portion of the work.

The Contractor shall review, mark with his approval, and submit for review by the Owner's Representative shop drawings as called for in the Special Provisions and Standard Specifications or requested by the Owner's Representative. Shop drawings shall be submitted by email as a PDF to the Owner's Representative and be accompanied by the Shop Drawing Submittal Form included at the end of the General Provisions. Shop drawings shall show the name of the project, the name of the Contractor, and, if any, the names of suppliers, manufacturers, and subcontractors. Shop drawings shall be submitted with promptness and in orderly sequence so as to cause no delay in prosecution of the work.

Shop drawings shall be complete in all respects. If the shop drawings show any deviations from the requirements of the Plans and Specifications because of standard shop practices or other reasons, the deviations and the reasons therefor shall be set forth in the Shop Drawing Submittal Form.

By submitting shop drawings, the Contractor represents that material, equipment, and other work shown thereon conforms to the Plans and Specifications, except for any deviations set forth in the Shop Drawing Submittal Form. A log shall be maintained by the Contractor showing the following information: sequential shop drawings number, brief description, date submitted, date approved, any other data relevant to the shop drawings.

Within 30 calendar days after receipt of said shop drawings, the Owner's Representative will return via electronic mail (email) the shop drawings to the Contractor with any comments noted thereon.

If so noted by the Owner's Representative, the Contractor shall correct the drawings and resubmit them in the same manner as specified for the original submittal. The Contractor, in the Shop Drawing Submittal Form accompanying resubmitted shop drawings, shall direct specific attention to revisions other than the corrections requested by the Owner's Representative on previous submittals.

The review by the Owner's Representative is only of general conformance with the design concept of the project and general compliance with the Plans and Specifications and shall not be construed as relieving the Contractor of the full responsibility for: providing materials, equipment, and work required by the contract; the proper fitting and construction of the work; the accuracy and completeness of the shop drawings; selecting fabrication processes and techniques of construction; and performing the work in a safe manner.

No portion of the work requiring a shop drawing submittal shall be commenced until the submittal has been reviewed by the Owner's Representative and returned to the Contractor with a notation indicating that resubmittal is not required.

If the Contractor believes that any shop drawing or communication relative thereto calls for changes in the work for which the contract amount or time for completion should be changed, he shall not proceed with the changes in the work so called for and shall within seven calendar days of the receipt of the shop drawings notify the

Owner's Representative in writing of his estimates of the changes in the contract amount and time for completion he believes to be appropriate.

No payment for changes in the work will be made and no change in the time for completion by reason of changes in the work will be made, unless the changes are covered by a written change order approved by the Owner in advance of the Contractor's proceeding with the changed work.

5-10 QUALITY AND SAFETY OF MATERIALS AND EQUIPMENT

All equipment, materials, and supplies to be incorporated in the work shall be new, unless otherwise specified. All equipment, materials, and supplies shall be produced in a good and workmanlike manner. When the quality of a material, process, or article is not specifically set forth in the Plans and Specifications, the best available quality of the material, process, or article shall be provided.

Whenever any material, process, or article is indicated or specified by grade, patent or proprietary name, or by name of manufacturer, such Specification shall be deemed to be used for the purpose of facilitating description of the materials, process, or articles desired and shall be deemed to be followed by the words "or equal", and the Contractor may offer any material, process, or article which shall be substantially equal or better in every respect to that so indicated or specified; provided, however, that if the material, process, or article offered by the Contractor is not, in the opinion of the Owner's Representative, equal or better in every respect to that specified, then the Contractor must furnish the material, process, or article specified or one that in the opinion of the Owner's Representative is the substantial equal or better in every respect. In the event that the Contractor furnishes material, process, or article more expensive than that specified, the difference in cost of such material, process, or article so furnished shall be borne by the Contractor.

In accordance with Public Contract Code Section 3400, the Contractor shall submit data substantiating requests for substitution of "equal" items within 35 calendar days after award of the contract. This 35-day period of time is included in the number of days allowed for the completion of the work.

All materials, equipment, and supplies provided shall, without additional charge to Owner, fully conform with all applicable state and federal safety laws, rules, regulations, and orders, and it shall be Contractor's responsibility to provide only such materials, equipment, and supplies notwithstanding any omission in the Contract Documents therefor or that a particular material, equipment, or supply was specified.

All machinery and equipment provided by the Contractor for the work shall include locking mechanisms capable of locking any shut-down devices on the machinery and equipment before commencement of any repairs or other work. Any machinery or equipment provided by the Contractor, which does not have this locking ability, shall be altered at the expense of the Contractor to provide these locking mechanisms without compromising any safety features on the equipment or machinery prior to the commencement of any repairs or work on the equipment or machinery. The Contractor shall not commence any work or repairs on any machinery or equipment which has been shut down until the locking mechanism has been activated and the Contractor has tagged the applicable machinery or equipment with a tag stating "Danger Do Not Operate." This tag shall include the name of the employee who

locked the equipment prior to the commencement of any work or repairs. The Contractor shall insure that all equipment and machinery fully complies with Title 8 of California Administrative Code Sections 3202, 3314, 6003, 2320.4-2320.6, 2530.43, and 2530-86 at all times during performance of the work.

5-11 STANDARDS, CODES, SAMPLES, AND TESTS

Whenever reference is made to a standard, code, Specification, or test and the designation representing the date of adoption or latest revision thereof is omitted, it shall mean the latest revision of such standard, code, Specification, or test in effect on the day the Notice Inviting Sealed Proposals (Bids) is dated.

Tests shall be made in accordance with commonly recognized procedures of technical organizations and such special procedures as may be prescribed elsewhere in the Plans and Specifications. The Contractor shall furnish without charge such samples for testing as may be required by the Owner's Representative.

5-12 OBSERVATION OF WORK BY OWNER'S REPRESENTATIVE

The Owner's Representative shall at all times have access to the work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship, and character of materials and equipment used and employed in the work.

Whenever the Contractor varies the normal period during which work or any portion of it is carried on each day, he shall give timely notice to the Owner's Representative so that the Owner's Representative may, if he wishes, be present to observe the work in progress. If the Contractor fails to give such timely notice, any work done in the absence of the Owner's Representative will be subject to rejection. Any time spent by the Owner's Representative in the observation of work in progress that exceeds eight (8) hours in any single day shall be compensated back to the Owner by the Contractor at the Owner's fully loaded rate.

The Contractor shall give timely notice to the Owner's Representative in advance of backfilling or otherwise covering any part of the work so that the Owner's Representative may, if he wishes, observe such part of the work before it is concealed.

The observation, if any, by the Owner's Representative of the work shall not relieve the Contractor of any of his obligations to fulfill the contract as prescribed. Defective work shall be made good, and materials and equipment furnished and work performed which is not in accordance with the Contract Documents may be rejected notwithstanding the fact that such materials, equipment, and work have been previously observed by the Owner's Representative or that payment therefor has been included in an estimate for payment.

5-13 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

Any work which does not conform the requirements of the Contract Documents or which is found unacceptable or deficient by the Owner or the Owner's Representative shall be remedied or removed and replaced by the Contractor at the Contractor's sole cost and expense, together with any other work which may be displaced in so doing, and no compensation will be allowed the Contractor for such removal, replacement, or remedial work. All materials found inadequate or deficient by the Owner or the Owner's Representative shall be immediately removed from the site.

Any work done beyond the lines and grades shown on the Plans or established by the Owner or any changes in, additions to, or deductions from the work done without written authority from the Owner will be considered as unauthorized and will not be paid for. Work so done will be ordered remedied, removed, or replaced by the Owner or the Owner's Representative at the Contractor's sole cost and expense.

Upon failure on the part of Contractor to comply promptly with any order of the Owner or Owner's Representative made under the provisions of this article the Owner or Owner's Representative shall have authority to cause all non-conforming materials, rejected work, or unauthorized work to be remedied, removed, or replaced at the Contractor's sole cost and expense and to deduct all fees and costs incurred by the Owner including staff time from any monies due or to become due the Contractor under this contract.

5-14 TWO-YEAR GUARANTEE

Besides guarantees required elsewhere, the Contractor shall and hereby does guarantee all work, materials, parts, equipment and supplies to be free from all defects due to faulty materials or workmanship for a period of two-years after the date of formal acceptance of the work by the Board of Directors of Owner except for any portion of the work that is utilized or placed into service by the Owner in accordance with the provisions of Article 6-6 USE OF COMPLETED PORTIONS. The guarantee period for portions of the work so utilized or placed into service shall be two-years commencing on the date of the written notification to the Contractor described in Article 6-6 USE OF COMPLETED PORTIONS. The Contractor shall repair or remove and replace any and all such work, together with any other work which may be displaced in so doing, that is found to be defective by Owner in workmanship and/or materials, equipment, parts or supplies within the two-year period, at the Contractor's sole cost and expense, ordinary wear and tear and unusual abuse or neglect excepted. In the event the Contractor fails to correct all defects identified by the Owner within seven (7) consecutive days after written notice of the defects from Owner, the Owner is hereby authorized to proceed to have the defects remedied and made good at the sole expense of the Contractor who hereby agrees to pay the cost and charges therefore immediately on demand. Such action by the Owner will not relieve the Contractor of the guarantees required by this article or elsewhere in the Contract Documents.

The Performance Bond and the Payment Bond shall continue in full force and effect for the guarantee period.

If, in the opinion of the Owner, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the Owner or to prevent interruption of operations of the Owner, the Owner may require the Contractor to correct the

defects in a shorter period of time determined solely by Owner. If the Contractor does not correct the defects within the time specified by Owner, Owner may proceed to make such corrections or provide such attention; and all fees and costs of such correction or attention shall be charged against the Contractor. Such action by the Owner will not relieve the Contractor of the guarantees required by this article or elsewhere in the Contract Documents.

This article does not in any way limit the guarantee on any items for which a longer guaranty is specified or on any items for which a manufacturer or supplier gives a guarantee for a longer period. The Contractor agrees to act as a co-guarantor with such manufacturer or supplier and shall furnish the Owner all appropriate guarantee or warranty certificates upon completion of the project. No guarantee period whether provided for in this article or elsewhere in this contract shall in any way limit the liability of the Contractor or his subcontractors, materialmen, suppliers, sureties or insurers for the full statutory periods provided by California law.

SECTION 6 PROSECUTION AND PROGRESS

6-1 CONTRACTOR'S LIABILITY

The Contractor shall be solely liable and responsible to the Owner for all acts and omissions of the Contractor's directors, officers, agents, owners, and employees and for all acts and omissions of all subcontractors, materialmen and suppliers and their respective directors, officers, managers, members, agents, owners and employees performing any of the work or providing any materials or supplies included as part of the work. The Owner, the Engineer/Architect and the Owner's Representative shall not be liable in any way for any acts or omissions of the Contractor, any subcontractors, any materialmen, any suppliers, or any of their respective directors, officers, managers, members, agents, employees or owners. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor materialman, or supplier and the Owner. The Contractor shall bind all subcontractors to all terms of the Contract Documents for all work being performed by those subcontractors.

The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the work among subcontractors.

6-2 ASSIGNMENT

The performance of the contract may not be assigned, except upon the written consent of the Owner. Consent will not be given to any proposed assignment which would relieve the original Contractor or his sureties or insurers of their responsibilities under the contract, nor will the Owner consent to any assignment of a part of the work under the contract.

Upon obtaining a prior written consent of the Owner, the Contractor may assign moneys due or to become due him under the contract, to the extent permitted by law, but any assignment of moneys shall be subject to all proper setoffs in favor of the Owner and to all deductions provided for in the contract, and particularly all money withheld, whether assigned or not, shall be subject to being used by the Owner for the completion of the work in the event that the Contractor should be in default therein.

No assignment of this contract will be approved unless it shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for performance of the work called for under the contract in favor of all persons, firms, or corporations rendering such services or supplying such materials and that the Owner may withhold funds due until all work required by the Contract Documents is completed to the Owner's satisfaction.

In the event of bankruptcy of the Contractor, whether voluntary or involuntary, this Agreement may be automatically terminated at the election of the Owner. The election to terminate in accordance with this provision shall be deemed effective as of the date the Owner mails notice of termination in accordance with this section to the Contractor at the Contractor's last known address without any further action of any party. Upon termination in accordance with this provision, the Contractor shall be entitled to no further payments over and above the reasonable value of the actual Work completed as of the date the termination notice is mailed.

6-3 CONTRACTOR'S CONSTRUCTION SCHEDULE AND COST BREAKDOWN

Within fourteen (14) days after Notice to Proceed, the Contractor shall deliver to the Owner's Representative a construction progress schedule and cost breakdown in bar chart form showing the proposed dates of commencement and completion and cost of each of the various parts of the work and the anticipated amount of each monthly payment that will become due the Contractor in accordance therewith. The Owner shall be entitled to terminate this Contract if, in the Owner's opinion, the Contractor is failing to carry on the work diligently or in accordance with the approved construction schedule and breakdown. The Contractor has been advised and understands that time is of the essence with respect to completion of all phases of the work in accordance with the approved construction schedule.

6-4 TIME FOR COMPLETION AND FORFEITURE DUE TO DELAY

The Contractor shall complete all or any designated portion of the work called for under the contract within the time set forth in Special Provisions. Time is of the essence in this contract.

Failure of the Contractor to perform any covenant or condition contained in the Contract Documents within the time period specified shall constitute a material breach of this contract entitling the Owner to terminate the contract unless the Contractor applies for, and receives, an extension of time in accordance with the procedures set forth in this article and Article 6-5 EXTENSION OF TIME.

Failure of the Owner to insist upon the performance of any covenant or condition within the time period specified in the Contract Documents shall not constitute a waiver of the Contractor's duty to complete performance within the designated periods unless the waiver is in writing.

The Owner's agreement to waive a specific time provision or to extend the time for performance shall not constitute a waiver of any other time provisions contained in the Contract Documents. Failure of the Contractor to complete performance promptly within the additional time authorized in the waiver or extension of time agreement shall constitute a material breach of this contract entitling the Owner to terminate.

In accordance with Government Code 53069.85, Contractor agrees to forfeit and pay Owner the amount per day set forth in the Special Provisions for each and every day of delay which shall be deducted from any payments due or to become due the Contractor.

The Contractor shall not be deemed in breach of this contract and no forfeiture due to delay shall be made because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor provided the Contractor requests an extension of time in accordance with the procedures set forth in this article and Article 6-5 EXTENSION OF TIME. Unforeseeable causes of delay beyond the control of Contractor shall include acts of God, acts of a public enemy, acts of the government, acts of the Owner, or acts of another contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and weather, or delays of subcontractors due to such causes, or delays caused by failure of the Owner or the owner of a utility to provide for removal or relocation of existing utility facilities. Delays caused by actions or neglect of Contractor or his agents, servants, employees, officers, subcontractors, directors, or of any party contracting to perform part or all of the work or to supply any equipment or materials shall not be excusable delays. Excusable delays (those beyond Contractor's control) shall not entitle the Contractor to any additional compensation. The sole remedy of the Contractor shall be to seek an extension of time.

6-5 EXTENSION OF TIME

The Contractor shall not be entitled to any increase in the contract price as a result of the Owner's approval of any extension of time except to the extent that the Owner approves an increase in the contract price on a properly executed Change Order.

The time specified for completion of all of the work or any part of the work may be extended only by a written change order executed by the Owner or other written form executed by the Owner.

Requests for an extension of time must be delivered to the Owner's Representative within ten consecutive calendar days following the date of the occurrence which caused the delay. The request must be submitted in writing and must state the cause of the delay, the date of the occurrence causing the delay, and the amount of additional time requested. Requests for extensions of time shall be supported by all evidence reasonably available or known to the Contractor which would support the extension of time requested. Requests for extensions of time failing to include the information specified in this article and requests for extensions of time which are not received within the time specified above shall result in the forfeiture of the Contractor's right to receive any extension of time requested.

If the Contractor is requesting an extension of time because of weather, he shall supply daily written reports to the Owner's Representative describing such weather and the work which could not be performed that day because of such weather or conditions resulting therefrom and which he otherwise would have performed.

The Owner's acceptance of the daily reports shall not be deemed an admission of the Contractor's right to receive an extension of time or a waiver of the Owner's right to strictly enforce the time provisions contained in the Contract Documents.

When the Contractor has submitted a request for an extension of time in accordance with the procedures of this article and Article 6-4 TIME FOR COMPLETION AND FORFEITURE DUE TO DELAY, the Owner will ascertain the facts and extent the delay and extend the time for completing the work if, in its judgment, the findings of fact justify such an extension, and its findings of facts thereon shall be final and conclusive. An extension of time may be granted by the Owner after the expiration of the time originally fixed in the contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration.

Any extension of time shall not release the sureties upon any bond required under the contract.

6-6 USE OF COMPLETED PORTIONS

When the work or any portion of it is sufficiently complete to be utilized or placed into service, the Owner shall have the right upon written notification to the Contractor to utilize such portions of the work and to place the operable portions into service and to operate same.

Upon said notice and commencement of utilization or operation by the Owner, the Contractor shall be relieved of the duty of maintaining the portions so utilized or placed into operation; provided, however, that nothing in this article shall be construed as relieving the Contractor of the full responsibility for completing the work in its entirety, for making good defective work and materials, for protecting the work from damage, and for being responsible for damage and for the work as set forth in the General Provisions and other Contract Documents nor shall such action by the Owner be deemed completion and acceptance, and such action shall not relieve the Contractor, his sureties, or insurers of the provisions of SECTION 8 CONTRACTOR'S INSURANCE, of Article 7-12 INDEMNITY, and of Article 5-14 TWO-YEAR GUARANTEE.

SECTION 7 LEGAL RELATIONS AND RESPONSIBILITIES

7-1 OBSERVING LAWS AND ORDINANCES

The Contractor shall keep himself fully informed of all existing and future laws, ordinances, and regulations which in any manner affect those engaged or employed to perform any of the work or providing any materials or supplies or which in any way affect the conduct of the work and of all statutes, laws, rules, regulations, orders, decisions, and decrees of any court or governmental agency having any jurisdiction or authority over all or any of the work or the conduct of the work, including all federal, state and local safety rules, regulations, and orders. This shall expressly include all ordinances, rules, regulations, and requirements applying to the work or the conduct of the work enacted by the Owner. If any discrepancy or inconsistency is discovered in the Plans, Specifications, or contract for the work the relation to any such law, rule, regulation, ordinance, order or decree, the Contractor shall forthwith report the same to the Owner's Representative in writing and cease operations on that part of the work until the Owner's Representative has given him appropriate instructions as provided for Article 5-7 ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR.

The Contractor shall at all times observe and comply with and shall cause all of his directors, officers, agents, managers, members, owners, employees, subcontractors, materialmen and suppliers to observe and comply with all existing and future laws, ordinances, regulations,

orders, and decrees, and shall hold harmless, indemnify, and defend the Owner, the Water Authority, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents from and against any and all liability, claims, causes of action, damages, losses, claim fees and costs, staff time, expenses, fees, and costs, including all costs of defense and attorneys' fees, arising from or based on the violation any such law, ordinance, regulation, order, or decree by the Contractor, any subcontractor, any materialman or supplier or any of their respective directors, officers, agents, managers, members, owners, or employees.

7-2 PERMITS AND LICENSES

The Contractor shall be solely liable and responsible for securing all permits and licenses necessary to perform all of the work, for paying all fees and charges necessary to secure any such permit, license, or approval, and for giving all notices which are appropriate or necessary to the proper and safe prosecution of the work. The Owner shall have no obligation to procure any permit, license, or approval necessary to perform all or any portion of the work. The Contractor shall also be solely liable and responsible for fully complying with all requirements of any permits, licenses or approvals pertaining to all or any of the work. The failure of Contractor to strictly comply with all requirements of any permits, licenses, or approvals applying to all or any of the work shall constitute a material breach of the contract.

7-3 INVENTIONS, PATENTS, AND COPYRIGHTS

The Contractor shall pay all royalties and assume all costs arising from the use of any invention, design, process, materials, equipment, product, or device which is the subject of patent rights or copyrights.

The Contractor shall hold harmless, indemnify, and defend the Owner, the Water Authority, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents from and against all claims, damages, losses, expenses, and other costs, including costs of defense and attorneys' fees, arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work or resulting from the incorporation in the work of any invention, design, process, materials, equipment, product or device, and shall defend all such claims in connection with any alleged infringement of such rights.

7-4 PUBLIC CONVENIENCE AND SAFETY

The Contractor shall conduct his operations at all times in a manner that creates the least possible obstruction and inconvenience to the public, and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to the rights of the public and all property owners in the area of the work. The Contractor shall be solely liable and responsible for ensuring that all of the work is conducted at all times in a safe manner that does not injure or damage any workers, members of the public or private or public property.

Convenient access to driveways, houses, and buildings along the line of work shall be maintained and temporary crossings shall be provided and maintained in good condition at all times during performance of the work. Not more than one crossing or intersecting street or road shall be closed at any one time.

The Contractor shall provide and maintain such fences, barriers, directional signs, lights, and flagmen as are necessary to give adequate warning to the public at all times of any conditions to be encountered as a result of the work and to give directions to the public. The Contractor shall ensure that all unsafe conditions created by the work are promptly remedied and that any unsafe conditions created by the work are protected by barriers, safeguards and warnings preventing vehicular, bicycle or walking access in any unsafe areas.

It shall also be the sole responsibility of the Contractor to ensure that the work is performed at all times in a manner that does not injure or harm any person or injure or damage any real or personal property of any person or entity.

The Contractor shall perform the work only the areas expressly identified in the Contract Documents. The Contractor must operate entirely within the limits of the project site. No equipment or materials may be parked, stockpiled, or stored outside the project site or designated Contractor staging areas. The Contractor shall not enter onto, occupy, or disturb any privately owned land or any public or private habitat not scheduled for removal in the approved plans with any men, tools, materials, dirt, or equipment except with the prior express written consent of the Owner and all owners of any privately-owned land. The Contractor has been advised, and understands, that any request to enter onto, occupy, or disturb any privately-owned land or habitat must be submitted to the General Manager of the Owner for written approval prior to entering onto, occupying, or disturbing any privately-owned land or public or private habitat for any purpose. The violation of this section by Contractor shall constitute a material breach of this contract.

The Contractor and any subcontractors, materialmen, or suppliers shall not, at any time, conduct any of the work in any manner that creates any public or private nuisance or trespass on the land of any private party or public agency. It shall be the sole responsibility of Contractor to conduct the work at all times in a manner that avoids creating any nuisance or trespass on any real or personal property owned by any private party or public agency.

The Contractor hereby agrees to indemnify, defend, and hold harmless the Owner, City of Encinitas, City of Carlsbad, Leucadia Wastewater District, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents from and against any and all liability, claims, causes of action, actions, damages, losses, fees, costs, or expenses, of whatever type or nature, including all costs of defense, attorneys' fees, and claim fees or costs, arising out of or resulting from performance of any of the work by the Contractor, its subcontractors, materialmen, or suppliers, or their respective directors, officers, agents, managers, members, owners, or employees which results in any injury or damage to persons or property including wrongful death regardless of whether or not such claim, cause of action, damage, loss or expense is caused in whole or in part by the negligence, active or passive, of Owner, the Engineer/Architect, or the Owner's Representative excepting only those claims and causes of action caused by the sole active negligence or intentional misconduct of the Owner, the Engineer/Architect, or the Owner's Representative. From and after the date of submission of any claim or demand to Owner, the indemnified parties shall recover from the Contractor all attorneys fees, expert fees and costs, claim costs, and staff time involved in handling the claim or any subsequent action on the claim at the standard hourly rates for staff handling the claim or action.

7-5 RESPONSIBILITY FOR LOSS, DAMAGE, OR INJURIES

The Contractor shall be solely responsible for all liability, claims, causes of action, demands, losses, costs, fees, expenses, and damages, of whatever type or nature, from any cause arising out of or resulting from or in connection with the performance of any of the work, excepting only those claims and causes of action caused solely and exclusively by the active negligence or intentional misconduct of the Owner, the Engineer/Architect, the Owner's Representative, or their consultants, directors, officers, employees, and agents. This exclusive responsibility shall extend to all liability, claims, causes of action, demands, losses, costs, fees, and expenses, of whatever type or nature, after completion of the work as well as during the progress of the work.

In the event any hazardous or toxic materials, including but not limited to asbestos, are utilized in construction or hazardous or toxic materials are otherwise encountered during construction, the Contractor shall take all appropriate precautions to protect persons and property and shall comply with all applicable regulations for the installation and handling of such hazardous or toxic materials. The Contractor is solely responsible for protection of all persons and property that could be affected by any construction or work and for the proper handling and disposal of all such hazardous or toxic materials.

Contractor has been advised that the Owner has Safety Data Sheets (hereinafter "SDS") available for review on any hazardous chemical they may be exposed to while working in or around Owner facilities. It shall be the sole responsibility of Contractor to request and inspect these SDS forms prior to commencement of any work and to alert all employees and agents of Contractor of potential hazardous waste exposure from Owner facilities. It shall be the sole responsibility of Contractor to provide the Owner's Representative with completed SDS forms for all hazardous or toxic substances that the Contractor utilizes as part of the work prior to the use of any hazardous or toxic substances and to provide these SDS forms to the Contractor's agents and employees prior to their exposure to any hazardous or toxic substance utilized by the Contractor. Further, Contractor shall comply with all provisions contained in General Industry Safety Orders Section 5194 of Title 8 of the California Administrative Code (the California Hazardous Communication Regulation) at all times during performance of the work.

7-6 CONTRACTOR'S RESPONSIBILITY FOR THE WORK

Until formal acceptance of the work by action of the Board of Directors of Owner, the Contractor shall be solely liable and responsible for all aspects of the work and all equipment materials and supplies to be provided as part of the work (including materials for which he has received partial payment or materials which have been furnished by the Owner) and shall bear the sole risk of injury, loss, or damage to any of the work, or any materials, supplies, or equipment being used or provided in conjunction with the work from any act of nature or the elements and from all other causes, whether arising from the execution or from the non-execution of the work.

The Contractor, at the Contractor's sole cost and expense, shall rebuild, repair, restore, and make good all injuries, losses, or damages whatsoever to any portion of the work or to any materials, equipment, or supplies from any cause before completion and formal acceptance of the work by formal action of the Board of Directors of Owner and shall solely bear the expense thereof. Where the Owner or the Owner's Representative determines it is

necessary to protect the work or materials from any damage or injury, the Contractor shall at his sole expense provide suitable drainage and erect any additional structures and take all additional protective actions determined necessary or appropriate by either the Owner or the Owner's Representative to protect the work or materials from further damage or injury. The suspension of the work or the granting of an extension of time from any cause whatsoever shall not relieve the Contractor of his sole responsibility for the work, materials, or equipment as specified herein.

In an emergency affecting the safety of life or property, including any adjoining property, the Contractor, without special instructions or authorizations, shall promptly act to prevent such threatened loss or injury. The Contractor shall also promptly implement any and all directions given by the Owner or the Owner's Representative to protect the safety of life or property during any emergency as determined by Owner.

Notwithstanding the foregoing provisions of this section, the Contractor shall not be responsible for the cost of repairing or restoring damage to the work where the damage has been determined to have been caused solely by an Act of God in excess of 5% of the contract and amount provided that the work damaged is built in accordance with accepted and applicable building standards and in strict compliance with the Plans and Specifications. For the purpose of this paragraph, "Acts of God" shall include only earthquakes in excess of a magnitude of 3.5 on the Richter Scale and tidal waves. No other actions of the elements, nature, or man shall be treated as Acts of God under this paragraph.

7-7 PRESERVATION OF PROPERTY

The Contractor shall be solely liable and responsible for avoiding injury or damage or interfering with the construction or operation of any and all existing improvements or facilities, all utility facilities, all personal and real property whether owned by any public agency or private party, and any and all trees, shrubbery, landscaping and habitat that are not to be removed. The Contractor shall be solely liable and responsible for any and all damage and injury to any real or personal property of any person or entity both during and after performance of the work.

All trees, shrubbery, and landscaping that are not to be removed, and all lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines both under or above ground, all sewer and water pipelines or facilities, all highway or street facilities, and any and all other improvements, facilities, habitat, trees, or landscaping within or adjacent to the work not to be removed in the approved plans shall be protected by the Contractor from all injury or damage and the Contractor shall provide and install suitable safeguards to protect all such objects from any injury or damage. If any of the foregoing objects are injured or damaged either during or after performance of the work, they shall be promptly replaced or restored to a condition as good as when the Contractor commenced work or as good as required by the Plans and Specifications if any such objects or are part of the work being performed, at the Contractors sole cost and expense. The Owner, the Engineer/Architect and the Owners Representative and their respective Directors, officers, agents and employees shall have no liability whatsoever for any injury or damage caused in whole or in part by the actions or omissions of the Contractor, any subcontractor, any materialmen or supplier, or any of their respective directors, officers, agents, employees, managers, or members except where the injury or damage is caused by the sole and exclusive active negligence or intentional misconduct of the Owner, the Engineer/Architect, the Owners

Representative, or their consultants, directors, officers, employees, and agents. The Contractor shall also be solely liable and responsible for any and all damage or injury to any landscaping or habitat caused in whole or in part by the actions or omissions of the Contractor, any subcontractor, any materialmen or supplier, or their respective directors, officers, agents, employees, managers, owners, or members.

The fact that any pipeline or other underground facility is not shown on the Plans, shall not relieve the Contractor of his responsibility under this section.

In addition to any requirements imposed by law, the Contractor shall shore up, brace, underpin, and protect all foundations, structures, or improvements adjacent to or adjoining the site of the work which are in any way affected by the excavations or by any of the work. Whenever any notice is required to be given by the Owner or the Contractor at any adjacent or adjoining landowner or other party before commencement of any work, this notice shall be given by the Contractor.

7-8 REGIONAL NOTIFICATION CENTER CONTACT

The Contractor, except in an emergency, shall contact the appropriate regional notification center prior to commencing any excavation work. Notify the center at least two working days in advance or up to a maximum of 14 calendar days in advance of any excavation work. The Contractor shall delineate the proposed excavation site with white paint on paved surfaces or with markings such as flags or stakes in unpaved areas. The Contractor shall provide the regional notification center with all job site location information. The regional notification center will assign to the Contractor a Dig Alert Number which validates the Contractor's excavation permit and will notify all of its members having subsurface installations in the area. No excavation shall be commenced and carried out by the Contractor until all existing subsurface installations have been field marked and the Owner has been given the Dig Alert Number by the Contractor.

Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage (Government Code Section 4216).

Subsurface installation means any underground pipeline, conduit, duct, wire, or other structure operated or maintained in or across a public street or public right-of-way (Government Code Section 4216).

7-9 EXCAVATION PLANS FOR WORKER PROTECTION REQUIRED BY LABOR CODE SECTION 6705

If the total amount of the contract is in excess of \$25,000, the Contractor shall submit to the Owner for acceptance, in advance of excavation, a detailed Plans 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 any trench or trenches 5 feet or more in depth. The Plans shall be prepared by a registered civil or structural engineer. As a part of the Plans, a note shall be included stating that the registered civil or structural engineer certifies that the Plans complies with all CAL-OSHA Construction Safety Orders and

regulations, or that the registered civil or structural engineer certifies that the Plans is not less effective than the shoring, bracing, sloping, or other provisions of the Safety Orders and regulations.

The Owner or the Engineer/Architect or their consultants may have made investigations of subsurface conditions in areas where the work is to be performed. If so, these investigations are identified in the Special Provisions and the records of such investigations are available for inspection at the office of the Engineer/Architect. The detailed Plans showing the design of shoring, etc., which the Contractor is required to submit to the Owner for acceptance in advance of excavation will not be accepted by the Owner if the Plans are based on subsurface conditions which are more favorable than those revealed by the investigations made by the Owner or the Engineer/Architect or their consultants; nor will the Plans be accepted if it is based on soils-related design criteria which is less restrictive than the criteria set forth in the report on the aforesaid investigations of subsurface conditions.

The detailed Plans showing the design of shoring, etc., shall include surcharge loads for nearby embankments and structures, for spoil banks, and for construction equipment and other construction loadings.

The Plans shall indicate for all trench conditions the minimum horizontal distances from the side of the trench at its top to the near side of the surcharge loads.

Nothing contained in this article shall be construed as relieving the Contractor of the full responsibility for providing shoring, bracing, sloping, or other provisions which are adequate for worker protection.

7-10 SAFETY

In accordance with generally accepted construction practices, 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, and the Contractor shall fully comply with all state, federal and other laws, rules, regulations, and orders relating to safety of the public and workers.

The right of the Engineer/Architect or the Owner's Representative to conduct construction review or observation of the Contractor's performance will not include review or observation of the adequacy of the Contractor's safety measures in, on, or near the construction site.

7-11 PERSONAL LIABILITY

No director, officer, employee, or agent of the Owner, the Engineer/Architect, the Owner's Representative, or their consultants shall be personally responsible for any liability arising under or by virtue of the contract.

7-12 DEFENSE AND INDEMNITY

The Contractor hereby agrees to indemnify, defend, and hold harmless the Owner, the Engineer/Architect, and the Owner's Representative and their respective directors, officers, agents, employees and consultants from and against any and all liability, claims, demands, causes of action, actions, damages, losses, fees, costs, or expenses, of whatever type or

nature, including all costs of defense and attorneys' fees, caused in whole or in part, or claimed to be caused in whole or in part, by any act or omission of the Contractor, any subcontractor, any supplier or materialman or any of their respective directors, officers, agents, employees, managers, members, or owners except only those claims and causes of action caused by the sole active negligence or intentional misconduct of the Owner, the Engineer/Architect or the Owner's Representative or their respective agents or employees. This indemnification shall extend to all claims, demands, causes of action, actions, or liability occurring after completion of the project as well as during the progress of the Work.

The Contractor further agrees to indemnify, defend, and hold harmless the Owner, the Engineer/Architect, and Owner's Representative and their respective directors, officers, agents, employees, and consultants from and against any and all liability, claims, causes of action, actions, losses, fees, costs, expenses, or damages, of whatever type or nature, including all costs of defense and attorneys' fees, as a result of the failure of or claimed failure of the Contractor to strictly comply with any of the Contractor's obligations under this contract. This indemnity shall expressly include claims by the Owner for any injury, damages, losses, costs, fees or expenses arising from or related to the failure of the Contractor or any of his subcontractors, materialmen, or suppliers to strictly comply with all terms of this contract or as a result of any improper workmanship or defective supplies or materials.

The Contractor's indemnity obligations as contained in this section shall remain in full force and effect and shall apply whether or not the claim, cause of action, damage, cost, fee, or expense is covered by any applicable insurance policy and regardless of any position that may be taken by any insurance company regarding a defense or coverage for any claim or cause of action asserted. From and after the date any claim or demand is submitted to Owner covered by these indemnity provisions, the indemnified parties shall be entitled to recover from Contractor all fees and costs incurred in investigating the claim, all staff time involved in handling the claim or any subsequent action on the claim at staff's ordinary hourly rates, all expert fees and costs, all attorneys' fees, and all court costs. The Contractor shall also be solely liable and responsible for paying any and all damages, fees or costs awarded to the claimant as a result of any settlement or final judgment of any cause of action or action covered by these indemnity provisions. This indemnity shall expressly include all wrongful death actions as well as any actions asserting any damage or injury to any persons or real or personal property.

From and after submission of any claim or demand to any of the indemnified parties, the indemnified party shall be entitled to appoint their own independent counsel to represent them and the Contractor shall pay all fees, costs, and expenses of whatever type or nature (including all staff time) incurred by each of the indemnified parties within thirty (30) consecutive days of receipt of a demand for reimbursement of these costs, fees, or expenses by each of the indemnified parties. A breach of this indemnity provision by Contractor shall constitute a material breach of the contract.

7-13 HOURS OF LABOR

The Contractor shall forfeit as a penalty to the Owner \$25 for each worker employed in the execution of the contract by the Contractor or any subcontractor under him for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of the Labor Code and, in particular, Section 1810 to Section 1815 thereof, inclusive, except that

work performed by employees of Contractors in excess of 8 hours per day and 40 hours during any one week shall be permitted upon compensation for all hours worked in excess of 8 hours per day at not less than one and one-half times the basic rate of pay as provided in said Section 1815.

7-14 PREVAILING WAGE

The Contractor shall comply with Labor Code Section 1775. In accordance with said Section 1775, the Contractor shall forfeit as a penalty to the Owner \$50 for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed for any work done under the contract by him or her or by any subcontractor under him or her in violation of the provisions of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. In addition to said penalty and pursuant to said Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor. Pursuant to Labor Code Section 1775, to the extent there is insufficient money due a contractor to cover all penalties forfeited and amounts due, the Division of Labor Standards Enforcement shall be notified of the violation and the Division of Labor Standards Enforcement shall be entitled to maintain an action in any court of competent jurisdiction to recover the penalties and the amounts due pursuant to Labor Code Section 1775.

Section 1776 of the Labor Code requires each contractor and its subcontractors to keep accurate payroll records showing the name, address, social security number, work classification, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the work required by these Contract Documents. These payroll records shall be made available for inspection or furnished to all employees, any representative of the Owner, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations. Contractor shall provide a certified copy of these payroll records to any of the aforementioned parties within 10 calendar days after receipt of a written request for these records. Contractor understands that it is the responsibility of the Contractor to ensure that these payroll records are maintained by Contractor and all subcontractors performing the work in accordance with Labor Code Section 1776(h). The payroll records shall be on forms provided by the Division of Labor Standard Enforcement or provide the same information as the information required by this form.

Pursuant to Labor Code Section 1777.1, whenever any contractor or subcontractor performing a public works project is found by the Labor Commissioner or the Owner to be in violation of Labor Code Section 1770 et seq., except Section 1775, the contractor or subcontractor or any firm, corporation, partnership, or association of which the contractor or any subcontractor has a substantial interest, shall be ineligible to bid on or to receive any public works contract for a period of not less than one-year or more than three years. The period of debarment shall run from the date the determination of the violation is made by the Labor Commissioner.

The Owner shall be entitled to withhold wages and penalties due as a result of any violation of the Labor Code from Payments due the Contractor in accordance with Labor Code Section 1726. These withheld amounts shall be paid to the Labor Commissioner for disbursement in

accordance with Labor Code Section 1730. The Contractor's right to recover these wages and penalties shall be limited as provided in the Labor Code.

7-15 TRAVEL AND SUBSISTENCE PAYMENTS

Each worker needed to execute the work must be paid travel and subsistence payments as defined in the applicable collective bargaining agreements filed in accordance with Labor Code Section 1773.8.

7-16 APPRENTICES

Attention is directed to the provisions in Sections 1777.5, 1777.6, and 1777.7 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him.

The Contractor and any subcontractor under him shall comply with the requirements of Sections 1777.5 and 1777.6 of the Labor Code in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

Willful violations of Section 1777.5 will result in the Contractor, and the business entity under which the Contractor is doing business, being denied the right to bid on, or to receive, any public works contract for a period of up to one year for the first violation and for a period of up to three years for the second and subsequent violations commencing from the date the determination of noncompliance by the Administrator of Apprenticeship Council. In addition, if the Contractor violates Section 1777.5, he will forfeit as a civil penalty the sum of \$50 for each calendar day of non-compliance which shall be withheld from progress payments by Owner upon notice from the Department of Industrial Relations. (Labor Code Section 1777.7.)

7-17 WARRANTY OF TITLE

No materials, supplies, or equipment for the work under this contract shall be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants clear and good title to all materials, supplies, and equipment installed and 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 him to the Owner free from any claims, liens, encumbrances, or charges and further agrees that neither he nor any person, firm, or corporation furnishing any material or labor for any work covered by the contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. Nothing contained in this article, 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 right under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The

provisions of this article shall be inserted in all subcontracts and material contracts, and notices of its provision shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

7-18 PROPERTY RIGHTS IN MATERIALS

Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil. All such materials shall become the property of the Owner upon being so attached or affixed. Soil, stone, gravel, and other materials found at the site of the work and which conform to the Plans and Specifications for incorporation into the work may be used in the work. No other use shall be made of such materials except as may be otherwise described in the Plans and Specifications.

7-19 MUTUAL RESPONSIBILITY OF CONTRACTORS

Nothing in the contract shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by the Owner in the construction of the project, to the end that the Contractor may perform this contract in the light of such other contracts, if any.

The Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the project. If the performance of any contract for the project is likely to be interfered with by the simultaneous performance of some other contract or contracts, the Owner's Representative shall decide which contractor shall cease work temporarily and which contractor shall continue or whether the work under the contracts can be coordinated so that the contractors may proceed simultaneously. On all questions concerning conflicting interest of contractors performing related work, the decision of the Owner's Representative shall be binding upon all contractors concerned and the Owner, the Engineer/Architect, the Owner's Representative, and their consultants shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly or indirectly from the award or performance or attempted performance of any other contract or contracts on the project or caused by a decision or omission of the Owner's Representative respecting the order of precedence in the performance of the contracts.

If through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration, if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the Owner, the Engineer/Architect, the Owner's Representative, or their consultants or any of their directors, officers, employees, or agents on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor who shall hold harmless, indemnify, and defend the Owner, the City of Encinitas, City of Carlsbad, Leucadia Wastewater District, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents against any such claim, including all attorneys' fees and any other costs incurred by the indemnified parties relative to any such claim.

7-20 TERMINATION FOR BREACH

If the Contractor refuses or fails to prosecute the work or any separable part thereof with such diligence as will ensure its completion within the time specified herein, or any extension thereof, or fails to complete such work within such time, or if the Contractor should be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he files a petition to take advantage of any debtor's act, or if he or any of his subcontractors should violate any of the provisions of the contract, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials to complete the work in the time specified, or if he should fail to make prompt payment to subcontractors or for material or labor, or if he should persistently disregard laws, ordinances, or instructions given by the Owner or Owner's Representative, the Owner may, without prejudice to any other right or remedy, serve written notice upon the Contractor and his surety of his intention to terminate the contract, said notice to contain the reasons for such intention to terminate the contract, and unless within ten days after the service of such notice such violations shall cease and satisfactory arrangements for the corrections thereof be made, the contract shall upon the expiration of said ten days cease and terminate. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished.

In the event of any such termination, the Owner shall immediately serve written notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and perform the contract; provided, however, that if the surety within 15 calendar days after the serving upon it of a notice of termination does not give the Owner written notice of its intention to take over and perform the contract or does not commence performance thereof within 30 calendar days from the date of serving said notice, the Owner may take over the work and prosecute the same to completion by contract or by any other method it may deem advisable for the account and at the expense of the Contractor, and his surety shall be liable to the Owner for any excess cost or other damage occasioned the Owner thereby, and in such event the Owner may, without liability for so doing, take possession of and utilize in completing the work such materials, appliances, plants, and other property belonging to the Contractor that may be on the site of the work and be necessary therefor. For any portion of such work that the Owner elects to complete by furnishing its own employees, materials, tools, and equipment, the Owner shall be compensated for such in accordance with the schedule of compensation for force account work in Article 9-1 PAYMENT FOR CHANGES IN THE WORK.

If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the work, including, but not limited to, all costs to Owner arising from professional services and attorneys' fees and all costs generated to insure or bond the work of substituted contractors or subcontractors utilized to complete the work, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner promptly upon demand; on failure of Contractor to pay, the surety shall pay on demand by Owner. Any portion of such difference not paid by Contractor or surety within 30 calendar days following the mailing of a demand for such costs by Owner shall earn interest at the rate of 10% per annum or the maximum rate authorized by California law, whichever is lower.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the Owner.

7-21 NOTICE AND SERVICE THEREOF

Any notice required or given under the contract shall be in writing, be dated, and signed by the party giving such notice or his duly authorized representative, and be served as follows:

If to the Owner, by personal delivery or by deposit in the United States mail.

If to the Contractor, by personal delivery to the Contractor or to his authorized representative at the site of the project or by deposit in the United States mail.

If to the surety or any other person, by personal delivery to said surety or other person or by deposit in the United States mail.

All mailed notices shall be in sealed envelopes, shall be sent by certified mail with postage prepaid, and shall be addressed to the addresses in the Contract Documents or such substitute addresses which a party designates in writing and serves as set forth herein.

7-22 PARTIAL INVALIDITY

If any provision of this contract is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

7-23 ATTORNEYS' FEES

In the event any arbitration proceeding, administrative proceeding or litigation in law or in equity, including an action for declaratory relief, is brought to invalidate, enforce, or interpret any term or provision of this contract, the prevailing party shall recover all attorneys' fees, all expert fees and costs, and all costs of the proceeding which shall be determined by the Court or the presiding officer at the proceeding authorized to make a determination of the issues or in a separate action brought for that purpose, in addition to any other relief provided by California law.

If any party to this agreement becomes a party to any litigation, administrative proceeding or arbitration concerning the invalidation, enforcement or interpretation of the provisions of this agreement or the performance of this agreement by reason of any act or omission of another party or authorized representative of another party to this agreement and not by any act or omission of a party that becomes a party to that proceeding or any act or omission of its authorized representatives, the party that causes another party to become involved in the proceeding shall be liable to that party for all expert fees and costs, all attorneys' fees, and all costs of the proceeding. The award of these expert fees and costs, attorneys' fees, and costs shall be determined as provided above.

From and after any date of submission of any demand or claim to Owner or any of the other indemnified parties covered by any indemnity provisions of this contract, the indemnified party shall be entitled to appoint their own independent counsel to represent them and the Contractor shall pay all fees and costs incurred by the indemnified parties to investigate and

evaluate the claim or cause of action, for all staff time at the hourly rates of each staff member handling the claim or cause of action, all attorneys' fees, all expert fees and costs, and all court costs when and as these fees and costs are incurred by each of the indemnified parties. The Contractor agrees to pay all of these fees, costs, and expenses to each of the indemnified parties not later than thirty (30) days following a demand for reimbursement of these fees, costs, and expenses by each of the indemnified parties. Amounts not paid by the Contractor within this thirty (30) day period shall earn interest at the rate of one percent (1%) per month until paid by Contractor in full.

In the event opposing parties have each prevailed on one or more cause of action actually contested or admitted by pleadings or pre-hearing documents on file, the presiding officer may offset such fees and costs between prevailing parties after considering the necessity of the proceeding and the importance of the issue or issues upon which a party has prevailed. However, the court or presiding officer shall have no authority to relieve the Contractor of the Contractor's obligation to pay all damages, fees, costs, and expenses of each of the indemnified parties as provided in the indemnity provisions of this contract.

The term "prevail" as used in this section shall include any action at law, in equity, or pursuant to arbitration in which either party has been successful including, but not limited to, demurrers, motions to strike, judgments on the pleadings, summary judgments or summary adjudications of issues, any other motion of whatever type or nature, or any trial proceeding or motion.

7-24 LANDS AND RIGHTS-OF-WAY

The lands and rights-of-way for the facility to be constructed will be provided by the Owner. The Contractor shall make his own arrangements and pay all expenses for additional area required by him outside the limits of the Owner's lands and rights-of-way.

Work in public right-of-way shall be done in accordance with the requirements of the permit issued by the public agency in whose right-of-way the work is located in addition to conforming to the Plans and Specifications. If a permit is not required, the work shall conform to the standards of the public agency involved in addition to conforming to the Plans and Specifications.

7-25 NO WAIVER OF RIGHTS OR REMEDIES

No action or failure to act by the Owner, Engineer/Architect, or Owner's Representative shall constitute a waiver of any right or duty afforded any of them under the Contract Documents, nor shall any such action or failure to act constitute an approval of or acquiescence in an breach of this contract by Contractor. No oral waiver of any rights or remedies granted to the Owner, Engineer/Architect, or Owner's Representative shall be effective for any purpose. To be effective, the waiver must be in writing and executed by an authorized representative of Owner, the Engineer/Architect, or the Owner's Representative. Contractor has been informed, and understands, that the Engineer/Architect and Owner's Representative have no authority whatsoever to waive any rights or remedies granted to the Owner by this contract or to alter any term or provision of the Contracts Documents or the approved Plans and Specifications. Any such purported waiver shall be void and unenforceable.

7-26 TAXES

The Contractor shall pay all sales, consumer, use, and other taxes.

NOTICE OF TAXABLE POSSESSORY INTEREST - The terms of this document may result in the creation of a possessory interest. If such a possessory interest is vested in a private party to this document, the private party may be subjected to the payment of personal property taxes levied on such interest.

7-27 ASSIGNMENT OF ANTI-TRUST ACTIONS

In entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. 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, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. 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 by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

Contractor shall insure that a comparable provision is included in all subcontracts at all tier levels which are executed pursuant to this Agreement.

7-28 PAYROLL RECORDS

It shall be the responsibility of the Contractor to maintain an accurate payroll record showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each employee in accordance with Labor Code Section 1776, and to ensure that each subcontractor also complies with all provisions of Labor Code Section 1776 and this contract provision.

All payroll records shall be certified as accurate by the applicable contractor or subcontractor or its agent having authority over such matters.

The Contractor shall ensure that all payroll records are available for inspection at the Contractor's principal office during normal business hours and shall notify the Owner, in writing, of the place where all payroll records are located from time to time.

The Contractor shall furnish a copy of all payroll records, upon request, to employees or their authorized agents, to the Owner, to the Division of Labor Standards Enforcement, and to the

Division of Apprenticeship Standards of the Department of Industrial Relations. The Contractor shall also furnish a copy of payroll records to the general public upon request provided the public request is made through the Owner, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement of the Department of Industrial Relations. In no event shall members of the general public be given access to payroll records at the Contractor's principal office.

Records made available to the general public in accordance with the prior paragraph shall be marked or obliterated in such a manner that the name and address of the Contractor and/or subcontractor and the name, address, and telephone number of all employees does not appear on the modified record.

The Contractor shall file a certified copy of any requested payroll records with the entity that requested such records within ten days of the date a written request for payroll records has been received.

Failure of the Contractor to comply with any provisions of this article or Labor Code Section 1776 within ten days of the date of a written request for compliance is received shall result in a forfeiture of up to \$50 per calendar day or portion thereof, for each worker, until strict compliance is obtained. Upon notification by the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement of the Department of Industrial Relations, the Owner shall withhold penalties under this article or Labor Code Section 1776 from the Contractor's payments then due.

7-29 MODIFICATION

This contract may not be altered in whole or in part except by modification in writing and properly executed by all parties hereto or by change as provided herein.

7-30 JURISDICTION AND VENUE

In the event any legal or equitable proceeding is commenced to invalidate, enforce, or interpret any of the terms or provisions of this contract, the parties expressly agree that jurisdiction and venue shall lie only in the Superior Court located in the North County Judicial District, County of San Diego, State of California. The Contractor acknowledges and agrees that this contract has been executed and requires performance solely within the jurisdiction and venue of the North County Judicial District and that the contract requires work solely within the jurisdiction and venue of the North County Judicial District.

7-31 HAZARDOUS WASTE

It shall be the responsibility of the Contractor to pay all fees and costs associated with removal and cleanup of any hazardous waste used at or brought to the job site by the Contractor, any subcontractor, or any agent, representative, or employee of the Contractor or any subcontractor.

The Contractor shall identify and remove all such hazardous waste in accordance with all federal, state, and local rules and regulations and shall promptly notify the Owner's Representative of any such hazardous waste. If hazardous waste is discovered during performance of the work which has not been brought to, or used at, the job site by the

Contractor, any subcontractor, or any agent, representative, or employee of the Contractor or any subcontractor, the Contractor shall identify and remove this hazardous waste in accordance with all federal, state, and local rules and regulations and in accordance with directions of the Owner and the Contractor shall be entitled to request an increase in compensation due for these removal and cleanup costs in accordance with Article 9-1 PAYMENT FOR CHANGES IN THE WORK.

7-32 EXCAVATIONS BELOW FOUR (4) FEET

If any work required by this contract includes digging trenches or other excavations that extend deeper than four feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the Owner in writing of any:

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 the provisions of existing law.

Subsurface or latent physical conditions at the site differing from those indicated.

Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

Nothing in this article is intended to relieve the Contractor of his responsibility to carefully examine the Contract Documents and the site where the work is to be performed in accordance with Article 2-8 EXISTING CONDITIONS AND EXAMINATION OF CONTRACT DOCUMENTS; to familiarize himself with all local conditions and federal, state, and local laws, ordinances, rules, and regulations that may affect the performance of any work; to study all surveys and investigation reports about subsurface and latent physical conditions pertaining to the job site; to perform such additional surveys and investigations as the Contractor deems necessary to complete the work at his bid price; and to correlate the results of all such data with the requirements of the Contract Documents.

If the Owner determines that hazardous waste exists and that conditions exist which Contractor could not discover through the investigations required by the preceding paragraph, the Owner shall notify the Contractor and the Contractor may request a change order in accordance with Article 9-1 PAYMENT FOR CHANGES IN THE WORK. Nothing in this article shall relieve the Contractor of the obligation to pay all fees and costs associated with removal and cleanup of any hazardous waste used at, or brought to, the job site by the Contractor as specified in Article 7-31 HAZARDOUS WASTE. Nor shall this article relieve the Contractor of responsibility for site conditions discoverable by any investigation required by the preceding paragraph.

In the event that a dispute arises between the Owner and the Contractor involving hazardous waste and whether site conditions differ materially from those the Contractor could or should have discovered by the investigations required by this contract, the Contractor shall not be excused from the scheduled completion date provided in the Contract Documents and shall proceed with all work in the manner and in the time required by the Contract Documents.

7-33 ARBITRATION

All public works claims between the Contractor and Owner relating to this contract where the total claims of both parties are equal to or less than \$375,000 shall be submitted to mediation first and then to arbitration in accordance with Public Contract Code Section 20104, et seq. A copy of Public Contract Code Section 20104, et seq stating these arbitration requirements is attached following the General Provisions. When a total payment of the Contractor and the Owner exceed a total of \$375,000, this section shall not apply and neither the Owner nor the Contractor shall have any obligation to arbitrate the claim.

SECTION 8 CONTRACTOR'S INSURANCE

8-1 GENERAL

The Contractor shall not commence or continue to perform any work unless he, at his own expense, has in full force and effect all required insurance. The Contractor shall not permit any subcontractor to perform work on this project unless the Workers' Compensation Insurance requirements have been complied with by such subcontractor.

The types of insurance the Contractor shall obtain and maintain are Workers' Compensation Insurance and Employer's Liability Insurance, Liability Insurance, Builders' Risk "All Risk" Insurance, all as set forth herein.

Workers' Compensation Insurance and Employer's Liability Insurance and Liability Insurance shall be maintained in effect for the full guarantee period.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

As evidence of specified insurance coverage, the Contractor shall provide certificates of insurance and endorsements on the forms provided as a part of the Contract Documents. No alteration or substitution of said forms will be allowed.

8-2 WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY INSURANCE

Upon execution of the Agreement, the Contractor shall provide a Certificate(s) of Insurance certifying that he has obtained for the period of the contract full Workers' Compensation Insurance coverage for no less than the statutory limits and Employer's Liability Insurance coverage in limits not less than the amounts set forth in the Special Provisions, for all persons whom he employs or may employ in carrying out the work under the contract. At the same time, the Contractor shall provide the Insurance Endorsement(s) on the forms provided as part of the Contract Documents. This insurance shall be in strict accordance with the requirements of the most current and applicable state Workers' Compensation Insurance laws.

8-3 LIABILITY INSURANCE

Upon execution of the Agreement, the Contractor shall provide a Certificate(s) of Insurance showing that he has Liability Insurance coverage in limits not less than the amounts set forth

in the Special Provisions. At the same time, the Contractor shall provide the Insurance Endorsement(s) on the forms provided as part of the Contract Documents.

All liability insurance shall include occurrence coverage with a deductible amount not exceeding the amount specified on the liability certificate form.

Included in such insurance shall be a "Cross Liability" or "Severability of Interest" clause.

The Liability Insurance coverage shall include each of the following types of insurance:

A. General Liability

- (1) Comprehensive Form.
- (2) Premises-Operations.
- (3) Explosion and Collapse Hazard.
- (4) Underground Hazard.
- (5) Products/Completed Operations Hazard.
- (6) Contractual Insurance.
- (7) Broad Form Property Damage Including Completed Operations.
- (8) Independent Contractors.
- (9) Personal Injury.

B. Automobile Liability

- (1) Comprehensive Form Including Loading and Unloading.
- (2) Owned.
- (3) Hired.
- (4) Non-Owned.

The Liability Insurance shall include as additional insureds: the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents. The insurance afforded to these additional insureds shall be primary insurance. If the additional insureds have other insurance which might be applicable to any loss, the amount of the insurance provided under this article on LIABILITY INSURANCE shall not be reduced or prorated by the existence of such other insurance.

8-4 BUILDERS' RISK "ALL RISK" INSURANCE

Upon execution of the Agreement, the Contractor shall provide a Certificate(s) of Insurance showing that he has obtained for the period of the contract Builders' Risk "All Risk" completed value insurance coverage (including any damage attributable directly or indirectly to surface

water, runoff, rainfall or flood but excluding earthquake and tidal wave) upon the entire project which is the subject of the contract and including completed work and work in progress. At the same time, the Contractor shall provide the Insurance Endorsement(s) on the forms provided as a part of the Contract Documents. Such insurance shall include as additional insureds: the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents.

Such insurance may have a deductible clause but not to exceed \$25,000.

8-5 CONTRACTOR'S LIABILITY NOT LIMITED BY INSURANCE

Nothing contained in these insurance requirements is to be construed as limiting the liability of the Contractor or the right of the Owner to secure damages in excess of any insurance which may be provided.

SECTION 9 ESTIMATES AND PAYMENTS

9-1 PAYMENT FOR CHANGES IN THE WORK

The Contractor shall not be entitled to any increase in the contract price due to any change in the work unless the Contractor submits a written request within seven calendar days from the date of the event which causes the Contractor to request a change in the price.

Changes in, additions to, or deductions from the work, including increases or decreases in the quantity of any item or portion of the work, shall be set forth in a written change order executed by the Owner and by the Contractor which shall specify:

The changes, additions, and deductions to be made.

The increase or decrease in compensation due the Contractor, if any.

Adjustment in the time of completion, if any.

Adjustment in the compensation due the Contractor shall be determined by one or more of the following methods in the order of precedence listed below:

Unit price contained in the contract.

Mutually agreeable lump sum or unit prices. If requested by the Owner's Representative, the Contractor shall furnish an itemized breakdown of the quantities and prices used in computing proposed lump sum and unit prices.

Force account whereby the Contractor is compensated for furnishing labor, materials, tools, and equipment as follows:

Cost of labor plus 15% for workers directly engaged in the performance of the work. Cost of labor shall include actual wages paid including employer payments to or on behalf of the workers for health and welfare, pension, vacation, and similar purposes plus payments imposed on payroll amounts by state and federal laws plus subsistence and travel allowance payments to workers.

Cost of material plus 15%. Cost of material shall include sales tax, freight, and delivery charges. The Owner reserves the right to furnish such materials as he deems advisable and the Contractor shall not be paid the 15% markup on such materials.

For tools and equipment actually engaged in the performance of the work, rental rates plus 15%. The rental rates shall be those prevailing in the area where the work is performed. No rental charge shall be made for the use of tools or equipment having a replacement value of \$500 or less.

Subcontractor invoices to the Contractor plus 5%. Subcontractor invoices shall be based on the above-described cost of labor plus 15%, cost of material plus 15%, and tool and equipment rental rates plus 15%.

No payment shall be made for any item not set forth above, including without limitation, Contractor's overhead, general administrative expense, supervision, or damages claimed for delay in prosecuting the remainder of the work.

For force account work, the Contractor shall submit to the Owner's Representative for his verification, daily work sheets showing an itemized breakdown of labor, materials, tools, and equipment used in performing the work. No payment will be made for work not verified by the Owner's Representative.

9-2 PROGRESS PAYMENTS

The Contractor shall, on or before the third day of each calendar month after actual construction work is started, prepare the Progress Estimate and Payment Form included at the end of the General Provisions. The Contractor and the Owner's Representative shall review each work item and agree on the total value of work performed during the previous month. In the event the Contractor and the Owner's Representative cannot agree on the estimated total value of work during the previous month, the estimated total value of work performed as determined by the Owner's Representative during the previous month shall be used. No progress payment will be processed by the Owner until certified payroll is submitted to the Owner's appointed Third Party Labor Compliance Representative in accordance with the Special Provisions Section 00810. No progress payment will be processed by the Owner until all information required by the Progress Estimate and Payment Form has been completed and the Contractor has signed the form. By signing the Progress Estimate and Payment Form, the Contractor expressly waives and releases any claims the Contractor may have, of whatever type or nature, for the period specified which is not shown as a retention amount or a disputed claim on the Release Form included at the end of the General Provisions. The Contractor shall submit to the Owner representative, as described during the Preconstruction meeting, within seven days from signing the Progress Estimate and Payment Form a completed and signed Release Form that corresponds to the same pay estimate work period. The Owner shall have no obligation to pay the Contractor for any work done until the Release Form has been executed by the Contractor and submitted to the Owner for the corresponding pay period in accordance with Article 9-6 REQUIRED RELEASES.

Properly submitted Progress Estimate and Payment Form with corresponding Release Form shall be paid by the Owner within thirty days after receipt. Properly submitted forms not paid

within this thirty-day period shall earn interest at the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure. The Contractor and Owner agree that the thirty-day period for payment shall not commence until the Contractor has executed and submitted the Release Form to the Owner for the corresponding pay period.

In preparing any progress payment with the Contractor, the Owner's Representative shall use the cost breakdown in by Article 6-3 CONTRACTOR'S CONSTRUCTION SCHEDULE AND COST BREAKDOWN. No allowance shall be made for materials delivered but not installed. In evaluating any progress payment, the Owner's Representative may take into consideration any facts and conditions deemed proper by him or her in his or her sole discretion including, but not limited to, the ratio of the difficulty or cost of the work done to the probable difficulty or cost of the work remaining to be done under the contract, the value of the work actually completed, and the estimated cost to complete all of the work in accordance with the contract price. In the event of any dispute between the Owner and the Contractor on the amount that should be paid for any progress payment, the determination of the Owner or the Owner's Representative shall control and be binding on the Contractor. No dispute between the Contractor and the Owner concerning the amount to be paid for any progress payment shall relieve the Contractor of its continuing obligation to complete all contract work within the time required by the Contract Documents, and to complete the work for the contract price and shall not relieve the Contractor of any other obligations contained in the Contract Documents. Owner shall retain five percent (5%) of each progress payment approved by the Owner's Representative as part security for the fulfillment of the contract by Contractor, unless Contractor has substituted adequate equivalent securities as required by Article 9-5 WITHHELD CONTRACT FUNDS. The total amount retained will equal 5% of the contract price. In the event of a dispute between the Owner and Contractor, the Owner shall have the right to withhold an amount up to 150% of the disputed amount in accordance with Public Contract Code Section 7107(c). As part of any progress payment the Owner shall have the express right to deduct and withhold from any payments due the Contractor any amounts the Owner or the Owner's Representative determines are necessary or appropriate to cover all fees, costs, expenses, and damages incurred or estimated by the Owner as a result of any breach of this contract by the Contractor and to cover any and all damages suffered or estimated by the Owner as a result of the breach of any term or provision of the contract by the Contractor. Amounts the Owner may withhold also expressly include any and all liquidated damages authorized by the terms of this contract.

9-3 FINAL ESTIMATE AND PAYMENT

Contractor shall not make any request for the final payment until all work required by the Plans and Specifications of the Contract Documents has been completed to the satisfaction of the Owner's Representative. Upon receipt of a request from Contractor for final payment, the Owner's Representative will make a final inspection of the work done and advise the Contractor of additional work required before final payment will be processed. All prior progress estimates and payments shall be subject to correction in the final estimate and payment.

The final payment shall not be due and payable until 60 calendar days after the date of filing a Notice of Completion of the accepted work. The date of completion shall be determined in accordance with Public Contract Code Section 7107. In the event of a dispute between the Owner and the Contractor, Owner shall be entitled to withhold an amount up to 150% of the disputed amount.

It is mutually agreed between the parties to the contract that no certificate given or payment made under this contract shall constitute evidence of performance of the contract and no payment by Owner shall be construed as an acceptance of any defective work or improper materials.

Contractor shall not be entitled to payment of the final amount due until Contractor has executed a Release Form in accordance with Article 9-6 REQUIRED RELEASES. Contractor hereby expressly agrees that payment of the final amount due under the contract shall release the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents, from any and all claims relating to the work for which Contractor is being paid. It is the declared intention of the parties that this provision comply with Public Contract Code Section 7100 and that this section shall be construed as in compliance with Public Contract Code Section 7100 to the maximum feasible extent.

9-4 OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

In addition to the amounts which the Owner may retain under Sections 9-2 and 9-3 of this contract, the Owner may withhold a sufficient amount or amounts from any payment otherwise due to the Contractor (including any final payment) as may be necessary or appropriate in Owner's sole and exclusive judgment to cover each of the following:

Payments which are or may be past due and payable for properly filed claims against the Contractor or any subcontractors for any labor, materials, or equipment furnished in or about the performance of the work on the project under this contract including any amounts asserted as attorneys' fees, costs, or interest by the claimant.

All fees, costs, and expenses estimated by the Owner for correcting any work determined to be defective by the Owner.

Any amounts determined appropriate or necessary by the Owner to cover the Owner's estimate of any damages paid or payable as a result of any claim or cause of action on the contract caused, or claimed to be caused by any action or omission of Contractor, any subcontractor, supplier or materialmen or their respective directors, officers, agents, employees, members, managers or consultants and all fees, costs, and expenses, including all attorneys' fees, expert fees and costs, staff time at each staff members' normal hourly rates and all court costs estimated by the Owner in responding to the claim or cause of action.

Any amounts determined necessary or appropriate by Owner to cover all of the indemnity obligations of Contractor under this contract.

Any amounts claimed by the Owner as forfeiture due to delay and any and all other amounts, fees, costs, or expenses estimated by the Owner as offsets.

The Owner has the express authority to withhold any amount or amounts determined appropriate by Owner from time to time from any payments otherwise due Contractor to cover all or any of the preceding items in the Owner's sole and exclusive judgment. The Owner may also apply all or any portion of any such withheld amount or amounts to the payment of

any claims in such amounts and at such times as are determined appropriate by Owner, in Owner's discretion. In withholding any sums permitted by this section or in paying any claims, the Owner shall be deemed the agent of the Contractor and any payments made by the Owner on any claim shall be considered as a payment made under the contract by the Owner to the Contractor. The Owner shall not be liable to the Contractor for Owner's withholding of any and all amounts permitted by this section or Owner's payment of any claims as permitted by this section. Such withholdings and payments may be made by Owner at any time without prior judicial determination of the merits of any claims or causes of action. The Owner will render to the Contractor a proper account of any funds withheld or disbursed as permitted by this section.

9-5 WITHHELD CONTRACT FUNDS

Pursuant to Public Contract Code Section 22300, the Contractor may substitute equivalent securities for retention amounts which this Contract requires. However, the Owner reserves the right to solely determine the adequacy of the securities being proposed by the Contractor and the value of those securities. The Owner shall also be entitled to charge an administrative fee, as determined by Owner in its sole discretion, for substituting equivalent securities for retention amounts.

The Contractor agrees that the Owner's decision with respect to the administration of the provisions of Section 22300 shall be final and binding and not subject to subsequent litigation or arbitration of any kind as to acceptance of any securities being proposed, the value of these securities, the costs of administration and the determination of whether or not the administration should be accomplished by an independent agency or by the Owner. The Owner shall be entitled, at any time, to request the deposit of additional securities of a value designated by the Owner, in Owner's sole discretion, to satisfy this requirement. If the Owner does not receive satisfactory securities within 12 calendar days of the date of the written request, Owner shall be entitled to withhold amounts due Contractor until securities of satisfactory value to Owner have been received.

9-6 REQUIRED RELEASES

In accordance with Public Contract Code Section 7100, the Contractor shall not be entitled to any payment specified in this Contract which is undisputed until such time as the Contractor has executed the Release Form(s) included at the end of the General Provisions releasing the Owner from all claims relating to work for which the Contractor is being paid. The Release Form contains space for the Contractor to claim any disputed amount and to designate the retention amount for each pay period associated with the release. Contractor hereby expressly agrees that failure on his part to designate any disputed amount or to designate the correct retention amount for each release period on the Release Form shall constitute an express waiver of the right of the Contractor to claim any disputed amount or any retention amount at any later date. The Owner shall have no obligation to pay the Contractor for any work done until the Release Form at the end of the General Provisions has been executed by the Contractor and submitted to the Owner.

SECTION 10 AUTHORITY AND STATUS OF OWNERS REPRESENTATIVES

10-1 STATUS OF OWNERS REPRESENTATIVES

The Contractor has been informed, and understands, that the Engineer/Architect and the Owner's Representative are not agents or employees of Owner. They are independent contractors retained by Owner to assist in preparation of the design plans for the work and in supervising the work to be performed by the Contractor. Owner does not direct the Engineer/Architect or the Owner's Representative in the performance of their respective duties and obligations. Owner shall not be liable for any errors or omissions of the Engineer/Architect, the Owners Representative or their respective directors, officers, agents or employees.

10-2 AUTHORITY OF OWNER'S REPRESENTATIVES

Contractor has been informed, and understands, that the Engineer/Architect and the Owner's Representative have no authority to alter any of the terms or provisions of the Contract Documents or to alter any of the requirements contained in the plans and specifications approved by Owner. In the event that Contractor desires to modify any term or provision of the Contract Documents or to modify any of the requirements of the approved plans and specifications, a written request must be submitted with the requested changes to the Owner through the Owner's Representative. Only the general manager of Owner has the authority to alter or modify any of the terms or provisions of the Contract Documents. No modification or change to the Contract Documents shall be effective for any purpose unless the change or modification has been expressly approved, in writing, by the general manager of Owner. Any requested changes by the Contractor to the approved plans and specifications must be submitted to the Owner's Engineer for review and approval through the Owner's Representative. No changes to the approved plans or specifications shall be effective for any purpose unless the Owner's Engineer has expressly approved of the change, in writing. The Contractor is expressly prohibited from entering onto private property, disturbing any habitat, or using private property to stockpile, store, or spread any men, tools, equipment, materials, or dirt without the express prior written consent of the general manager of Owner. The violation of this section by Contractor or any of its subcontractors, materialmen, or suppliers or their respective directors, officers, managers, members, agents, consultants or employees shall constitute a material breach of this Agreement.

SECTION 11 FORMS

11-1 APPROVED MATERIALS LIST SUBMITTAL

The Contractor shall complete the Approved Materials List (AML) which can be found on the Bids and Planning page of the District's website at www.olivenhain.com as called for in the Special Provisions and Standard Specifications and submit as directed by the Owner's Representative. No substitution or revision to this form will be accepted or approved by the Owner.

11-2 SHOP DRAWING SUBMITTAL FORM

The Contractor shall complete the Shop Drawing Submittal Form included at the end of the General Provisions when submitting Shop Drawings as called for in the Special Provisions

and Standard Specifications or requested by the Owner's Representative. Duplication of this form is permissible to comply with the requirements of the Contract Documents. No substitution or revision to this form will be accepted and approved by the Owner.

11-3 PROGRESS ESTIMATE AND PAYMENT FORM

The Contractor will use the Progress Estimate and Payment Form included at the end of the General Provisions when preparing the monthly progress payment for review. No progress payment will be processed to pay the Contractor until the progress estimate and payment form and the release form included at the end of these general provisions have been fully completed and submitted by the Contractor to the Owner's Representative and approved by the Owner.

11-4 RELEASE FORM(S)

The Contractor shall complete the Conditional and/or Final Release Forms (as appropriate) included at the end of the General Provisions and submit to the Owner for the corresponding pay period in accordance with Article 9-6, REQUIRED RELEASES. Duplication of this form is permissible to comply with the requirements of the Contract Documents. No substitution or revision to this form will be accepted. No payment request to the Contractor will be processed until the Release Form has been fully completed and submitted by the Contractor.

END OF SECTION

(BLANK)

SHOP DRAWING SUBMITTAL FORM

TO: OWNER'S REPRESENTATIVE
c/o Olivenhain Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024

From: (Contractor)
(Address)

Contractor Job Number _____

Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT** OMWD PN: D800019

Project: **RECYCLED WATER PIPELINE EXTENSIONS
FOR CALLE BARCELONA, VILLAGE PARK,
AND SUMMERHILL** OWNER'S REP ACCT NO. _____

SUBMITTAL NO.: _____

RESUBMITTAL: ☐ Yes ☐ No

SPECIFICATION SECTION: _____

DESCRIPTION: _____

This Shop Drawing Submittal has been prepared by the Contractor or any subcontractor, manufacturer, supplier, or distributor and illustrates some portion of the work. The Contractor warrants one of the following conditions:

- ☐ The Contractor has approved this submittal and represents that the material, equipment, and other work shown conforms to the Plans and Specifications.
- ☐ The Contractor has approved this submittal but represents that this is a deviation from the requirements of the Plans and Specifications and has set forth the reasons for the deviation below.

DEVIATION/REVISIONS:

By: _____

Title: _____

(BLANK)

PROGRESS ESTIMATE AND PAYMENT FORM

Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT** OMWD **D800019**
 Project: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL** Contract End Date _____
 Contractor: _____ Revised Contract End Date _____
 PAY ESTIMATE NO. _____ Contract Job No. _____
 PERIOD WORK PERFORMED: _____ Date Created _____

Work Item	Description of Work Item	Total Cost of Work Item	Percent Complete	Value of Work

Total Project Cost of Work Items			-----
Estimated Total Value of Work Performed this Period			
Less Five Percent (5%) of Such Estimated Total Value			
Total Amount Due for Work Performed			
Less All Previous Payments			
AMOUNT DUE AND PAYABLE TO THE CONTRACTOR			

Prepared by Owner's Representative _____

 Accepted by CONTRACTOR _____
 By: _____ Date: _____

 Approved by OWNER _____
 By: _____ Date: _____

Distribution: ☐ Owner ☐ Contractor ☐ Engineer ☐ Finance

(BLANK)

**CONDITIONAL WAIVER AND RELEASE ON
PROGRESS PAYMENT**

(CA CIVIL CODE §8132) (1)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information:

Name of Claimant: _____

Name of Customer: **Olivenhain Municipal Water District**

Job Location: **Recycled Water Pipeline Extensions for Calle Barcelona, Village Park, & Summerhill**

Owner: **Olivenhain Municipal Water District**

Through Date: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: **Olivenhain Municipal Water District**

Amount of Check: _____

Check Payable to: _____

This document does not affect any of the following:

- (1) Retentions.
- (2) Extras for which the claimant has not received payment.
- (3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:
Date(s) of waiver and release: _____
Amount(s) of unpaid progress payment(s): \$ _____
- (4) Contract rights, including:
(A) a right based on rescission, abandonment, or breach of contract, and
(B) the right to recover compensation for work not compensated by the payment.

SIGNATURE

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

(BLANK)

**CONDITIONAL WAIVER AND RELEASE ON
FINAL PAYMENT**
(CA CIVIL CODE §8136) (3)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Identifying Information:

Name of Claimant: _____

Name of Customer: **Olivenhain Municipal Water District** _____

Job Location: Recycled Water Pipeline Extensions for Calle Barcelona, Village Park, & Summerhill _____

Owner: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: Olivenhain Municipal Water District _____

Amount of Check: _____

Check Payable To: _____

Exceptions

This document does not affect any of the following:

Disputed claims for extras in the amount of: \$ _____

SIGNATURE

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

(BLANK)

PROPOSED CHANGE ORDER

Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

OMWD PN: D800019

Project: **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE
BARCELONA, VILLAGE PARK, SUMMERHILL**

Contractor: _____

PROPOSED CHANGE ORDER NO. _____

Date: _____

*A change to the contract documents for the above referenced project is being considered. Please provide cost and schedule impact(s) for the following described work:

DESCRIPTION OF CHANGE / PCO's	Cost Impact \$ _____	Schedule Impact _____ Day(s)
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TOTAL	\$ _____	_____ Calendar Day(s)
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NOTE: Attention is called to the sections in the General Provisions on Scope of Work and Estimates and Payments.

THIS PROPOSED CHANGE ORDER IS NOT EFFECTIVE UNTIL A CONTRACT CHANGE ORDER HAS BEEN APPROVED BY OWNER.

This PCO was initiated by

On _____

Submitted

Contractor

On _____

(BLANK)

Article 1.5

RESOLUTION OF CONSTRUCTION CLAIMS

Section	Section
20104. Application of article; provisions included in plans and specifications.	20104.6. Payment on undisputed portion of claim; interest on arbitration awards or judgments
20104.2. Claims; requirements; tort claims excluded.	20104.8. Repealed.
20104.4. Civil action procedures; mediation and arbitration; trial de novo; witnesses.	

Article 1.5 was added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.

Former Article 1.5, Resolution of Construction Claims, consisting of §§20104 to 20104.8, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994.

§ 20104. Application of article; provisions included in plans and specifications

(a) (1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and local agency.

(2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.

(b) (1) “Public work” has the same meaning as in Sections 3100 and 3106 of the Civil Code, except that “public work” does not include any work or improvement contracted for by the state or the Regents of the University of California.

(2) “Claim” means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

(c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.

(d) This article applies only to contracts entered into on or after January 1, 1991.

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

Historical and Statutory Notes

1990 Legislation

Former § 20104 was renumbered Public Contract Code § 20103.5 and amended by Stats. 1990, c. 1414 (A.B. 4165), § 1.

Former § 20104, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, relating to application of article regarding resolution

of construction claims, was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

Derivation: Former § 20104, added by Stats. 1990, c. 1414, § 2.

§ 20104.2 Claims; requirements; tort claims excluded

For any claim subject to this article, the following requirements apply:

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

(b) (1) For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 80 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 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, whichever is greater.

(c) (1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 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.

(d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

(f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of Government Code.

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

Historical and Statutory Notes

1990 Legislation

Former § 20104.2, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, amended by Stats. 1991, c. 1029 (A.B. 1086), § 1, relating to requirements for claims filed under the article,

was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

Derivation: Former § 20104.2, added by Stats. 1990, c. 1414, § 2, amended by Stats. 1991, c. 1029, § 1.

Library Reference

California Practice Guide: Alternative Dispute Resolution, Knight, Fannin & Disco, see Guide's Table of Statutes for chapter paragraph number references to paragraphs discussing this section.

Civil Procedure Before Trial, Well & Brown, Guide's Table of Statutes for chapter paragraph number references to paragraphs discussing this section.

§ 20104.4 Civil action procedures, mediation and arbitration; trial de novo; witnesses

The following procedures are established for all civil actions filed to resolve claims subject to the article:

(a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b) (1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

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

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

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

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

Historical and Statutory Notes

1990 Legislation

Former § 20104.4, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, amended by Stats. 1991, c. 1029 (A.B. 1086), § 2, relating to procedures for civil actions filed to resolve construction claims, was repealed by Stats. 1990, c. 1414

(A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

Derivation: §20104.4, added by Stats. 1990, c. 1414, § 2, amended by Stats. 1991, c. 1029, § 2.

Library Reference

California Practice Guide: Alternative Dispute Resolution,
Knight, Fannin & Disco, see Guide's Table of Statutes

for chapter paragraph number references to paragraphs
discussing this section.

§ 20104.6 Payment on undisputed portion of claim; interest on arbitration awards or judgments

(a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

Historical and Statutory Notes

1990 Legislation

Former § 20104.6, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, relating to payment of undisputed portion of claims, was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

Derivation: Former § 20104.6, added by Stats. 1990, c. 1414, § 2.

§ 20104.8 Repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994

Historical and Statutory Notes

The repealed section, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, related to application of the article to specified

contracts and provided for repeal of the article on Jan 1, 1994.

SECTION 00810 – SPECIAL PROVISIONS

1.01 DEFINITIONS

Whenever the following terms occur in the Contract Documents, the meaning shall be interpreted as follows:

ATTORNEY FOR Owner – Alfred E. Smith, Nossaman LLP, 777 South Figueroa Street, 34th Floor, Los Angeles, CA 90017, (213) 612-7831

BOARD OF DIRECTORS - Board of Directors of the Olivenhain Municipal Water District.

CONTRACT TIME – The number of consecutive days stated in the contract documents commencing from the date of the notice of award, for completion of the Work.

DATE OF AWARD OF CONTRACT - The date of the District Resolution (formal action of the Board of Directors of the District) awarding the Contract.

DISTRICT - Olivenhain Municipal Water District (OMWD), 1966 Olivenhain Road, Encinitas, California 92024, (760) 753-6466.

DISTRICT'S REPRESENTATIVE - The Owner's Representative.

DRAWINGS or PLANS – Construction drawings entitled, “**RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL**” and referenced Standard Drawings or Regional Standard Drawings.

ENGINEER / DESIGN ENGINEER – Hoch Consulting, 804 Pier View Way, Suite 100, Oceanside, CA 92054, Tel: (858) 431-9767.

OWNER - Olivenhain Municipal Water District (OMWD), 1966 Olivenhain Road, Encinitas, California 92024, Tel: (760) 753-6466; Fax: (760) 753-1578.

OWNER'S REPRESENTATIVE - The person or engineering/architectural firm authorized by the District to represent it during the performance of the work and until final acceptance. The Owner's Representative is referred to throughout the Contract Documents as if singular in number and masculine in gender. The Owner's Representative means the Owner's Representative and his assistants.

PUBLIC WORKS SPECIFICATIONS - Standard Specifications for Public Works Construction 2006 Edition by APWA/AGC, the "GREENBOOK" with 2019 Errata.

REGIONAL STANDARD DRAWINGS – Standard Drawings for Agencies in the San Diego Region as recommended by the Regional Standards Committee and published by the San Diego County Department of Public Works, October 2018.

SPECIAL PROVISIONS - Section 00810 of the specifications.

SPECIFICATIONS - Division 1 to 17 of the technical specifications contained in these Contract Documents, and those technical specifications contained in the Drawings.

STANDARD DRAWINGS - Drawings A-1.1 through G-15 of the Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities, dated February 2017, with revisions.

STANDARD SPECIFICATIONS - Divisions 1 through 16 of the Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities, dated February 2017, with revisions.

STATE STANDARD SPECIFICATIONS - State of California, Department of Transportation, Standard Specifications, 2018, Caltrans.

STATE STANDARD PLANS - State of California, Department of Transportation, Standard Plans, 2018, Caltrans.

WATER AUTHORITY – San Diego County Water Authority

Whenever the following terms appear in the State Standard Specifications or Public Works Specifications, the meaning shall be interpreted as follows:

AGENCY, BOARD or DEPARTMENT - The Owner.

ENGINEER - The Owner's Representative.

1.02 TERMS

Command type sentences used in the Contract Documents refer to and are directed to the Contractor.

1.03 ABBREVIATIONS

Interpret abbreviations used on the Drawings and in the Specifications as explained on the Drawings.

1.04 MARKING AND ADDRESSING BID ENVELOPE

Bids shall be sealed in an envelope marked and addressed as set forth in the Notice Inviting Sealed Proposals (Bids).

1.05 AWARD OF CONTRACT OR REJECTION OF BIDS

Within a period of 90 calendar days after the opening of bids, the District will accept or reject the bids.

1.06 CONTRACTOR'S LICENSING REQUIREMENTS

The District has determined the license classification necessary to bid and perform the subject contract. In no case shall this contract be awarded to a specialty contractor whose classification constitutes less than a majority of the portion of the work of this contract, all work to be performed outside of the contractor's license specialty, except work specifically authorized by District, shall be performed by a licensed subcontractor in compliance with the Subletting and Subcontractor Fair Practices Act commencing with Section 4100 et seq., of the Public Contract Code. See Business and Professions Code Section 7059.

The Contractor's license classification required for this project is a California State Contractor's License Class A.

It is the District's intent that "plans", as used in Public Contract Code Section 3300, is defined as the construction Contract Documents, which include both the Drawings and the Specifications

1.07 TIME FOR COMPLETION AND FORFEITURE DUE TO DELAY

All work shall be completed within THREE HUNDRED AND THIRTY (330) CONSECUTIVE CALENDAR DAYS from and after the date of the Notice to Proceed.

The Contractor will not be permitted to begin work until the agreement, bonds or substitutes, insurance certificates and endorsements are acceptable to the District and Attorney for Owner. This period of time is set forth in Paragraph 3-2 Execution of Contract in the General Provisions. Time is of the essence in this contract.

The Contractor shall complete all work in its entirety as specified in the Contract Documents within these time periods. Time of completion shall also include time for all submittals and coordination required to satisfy the requirements of these Contract Documents.

The Contractor agrees that the work shall be prosecuted regularly, diligently, and uninterruptedly and at such rate of progress as will insure full completion thereof within the Time for completion stated above. It is expressly understood and agreed, by and between Contractor and Owner that the Time for completion is reasonable for the completion of the WORK, taking into consideration the average climatic range, usual industrial conditions prevailing in this locality, and lead time required to procure equipment.

Pursuant to Government Code 53069.85, liquidated damages as forfeiture for each day completion is delayed beyond the time allowed for Base Bid will be at the rate of \$2,500.00 per day, except as noted below.

1.08 PERMITS

The Contractor shall obtain all required permits and provide copies of all permits to the District's Representative prior to starting work. The Contractor shall comply with the ordinances, directives, and regulations of the respective agencies with jurisdiction over the area of the work including but not limited to the City of Encinitas, City of Carlsbad, the County of San Diego, the Olivenhain Municipal Water District, the North County Transit District, and

the San Diego County Air Pollution Control District's permits for construction and operation of diesel generators. All work not specifically covered in the required permits shall conform to the requirements of these Specifications. The cost of all permits and plan check review shall be borne by the Contractor and included in the Contractor's bid.

The Contractor shall be responsible for developing haul routes for the importing or exporting of materials or equipment for the project and obtaining all required permits from the affected agencies of jurisdiction, i.e., City of Encinitas and City of Carlsbad. The Contractor shall provide copies of all permits to the District's Representative prior to starting work. The Contractor shall comply with the ordinances, directives, and regulations of the respective agencies with jurisdiction over the area of the work. All costs for transport fees, dump fees, plan or haul route reviews, permits, and related incidentals shall be borne by the Contractor and included in the Contractor's bid.

The Contractor shall be responsible for securing approved traffic control permits for all jurisdictional agencies where work is to occur or where traffic control measures will be placed at no cost to the District.

1.09 USE OF ASBESTOS PRODUCTS NOT PERMITTED

The intent of the Contract Documents is to provide asbestos-free components throughout the project in accordance with the recent Environment Protection Agency stated policy seeking a ban on the use of all products containing asbestos. Where the Contract Documents or the referenced specifications, standards, codes, or tests refer to products containing asbestos, the Contractor shall provide acceptable alternatives under those documents, or in the absence of such referenced alternatives, he shall submit a proposed substitute to the District's Representative for review and acceptance.

1.10 ASBESTOS CEMENT PIPE REMOVAL AND DISPOSAL

If asbestos cement (AC) pipe must be cut and handled in the field to accomplish the work, the Contractor is solely responsible for and shall take all appropriate precautions for protecting against threats to health and safety of the work force and general public arising out of construction involving asbestos. The Contractor shall comply with all applicable regulations for the handling, cutting, shaping, installation and disposal of asbestos. AC pipe to be disposed shall be properly manifested, prepared for transport following criteria of County of San Diego Department of Public Works, Solid Waste Division, and delivered to a landfill permitted for disposal of non-friable asbestos containing materials. The completed Generator copy (yellow) manifest shall be returned to the District's Representative. All cost for disposal of the AC pipe shall be included in the Contractor's bid.

1.11 ABATEMENT OF AIR POLLUTION

- A. Comply with all applicable Federal, State, County, and City laws and regulations concerning the prevention and control of air pollution.
- B. Conduct construction activities and equipment in a manner so as to minimize atmospheric emissions or discharges of air contaminants. Equipment or vehicles that show excessive emissions of exhaust gases shall not be operated on the site.

1.12 NOISE CONTROL REQUIREMENTS

- A. The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the Contract.
 - 1. The Contractor shall familiarize themselves with the City of Encinitas Title 30 Zoning Performance Standards and comparable City of Carlsbad standards applicable to night work and day work.
- B. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.
- C. Noise level requirements shall apply to all equipment on the job or related to the job, including but not limited to trucks and transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety for the protection of personnel.
 - 1. Each vehicle equipped with a back-up alarm shall use a white noise back-up alarm Brigade BBS-97 or equal at all times.
 - 2. The Contractor shall utilize hydraulically assisted tailgates on all dump style trucks to prevent slamming noises during all night work operations including off-site staging areas.

1.13 AMOUNT OF LIABILITY INSURANCE

- A. Employer's Liability Insurance:
 - 1. Bodily injury coverage by accident shall be for not less than \$1,000,000 for each employee and \$1,000,000 for each accident.
 - 2. Bodily injury coverage by disease shall be for not less than \$1,000,000 for each employee and \$1,000,000 for each disease.
- B. General Liability:

Bodily injury, personal injury, and property damage coverage shall be in a combined single limit of not less than \$1,000,000 for each occurrence and \$3,000,000 aggregate.
- C. Automobile Liability:

Bodily injury and property damage coverage shall be in a combined single limit of not less than \$1,000,000 for each occurrence.
- D. Builder's Risk Insurance:

Builder's risk insurance shall be provided for the full contract amount.

E. Earthquake and Tidal Wave Insurance:

Earthquake and Tidal Wave Insurance is not required for this project.

F. Additional Insured:

In addition to the additional insureds required for Liability insurance in the General Provisions, 8-3 LIABILITY INSURANCE, and 8-4 BUILDER'S RISK "ALL RISK" INSURANCE, the OWNER and each of its directors, officers, employees, and agents and its Design Engineer shall be named as additional insureds for all Liability insurance and Builders' Risk Insurance provided herein.

1.14 USE OF THE STANDARD DRAWINGS

Where the Drawings or Specifications make reference to the Standard Drawings, construct the item in accordance with the details and materials as specified in the Contract Documents. For items not included in the Standard Drawings that are part of the Contract Documents, construct the item in accordance with the latest edition of the Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities. These District Standard Drawings and Standard Specifications are available for purchase at the office of the District or available online.

1.15 CONSTRUCTION SCHEDULE AND BID BREAKDOWN

The Contractor shall conform to the requirements of Article 6-3 Contractor's CONSTRUCTION SCHEDULE AND COST BREAKDOWN of the General Provisions within 15 days after the date of award of contract. Submit to the District's Representative a construction progress schedule and bid breakdown in bar chart form. Divide each lump sum bid item into its major elements of work and show separately labor, materials and equipment costs. The District's Representative will use this cost breakdown as a basis for the monthly progress estimate and payment. The schedule shall specifically include and identify the construction sequence requirements defined on the plans.

1.16 STORM WATER POLLUTION PREVENTION

- A. The Contractor is responsible for Implementation, Maintenance, Inspection, Monitoring and Construction/Installation of all Best Management Practices (BMPs) required by the Storm Water Pollution Prevention Plan (SWPPP), Construction General Permit (CGP), and the Erosion Control Plan for the purpose of preventing the discharge of pollutants from the construction site throughout the duration of the project. The Contractor is to provide all labor, materials and equipment to perform all work necessary to accomplish the work described below and per the Plans, Specifications and Special Provisions listed in the Bid Documents and References herein. The Contractor shall develop a site-specific Storm SWPPP in accordance with Standard Specification Section 01300 or a Water Pollution Control Plan (WPCP) or similar document if a SWPPP is not required. The SWPPP shall be written, amended, and certified by a Qualified SWPPP Developer (QSD) in accordance with the

General Permit. Three (3) copies of the SWPPP must be submitted to the District seven (7) days in advance of any mobilization and/or construction at the project location. A copy of the SWPPP or WPCP must also be kept on the project site at all times.

1. The District has preliminarily calculated less than 1-acre of soil disturbance from activities related to the installation of improvements indicated on the Contract Plans. The Contractor shall perform their own analysis and include disturbances from their staging operations. If greater than 1 acre is calculated to be disturbed by the Contractor, they shall prepare a SWPPP.
2. If a SWPPP is required, the project type is anticipated to be a Linear Underground/Overhead Project (LUP); however the District has not determined which Type due to our calculations of less than 1-acre of disturbed soil. Should the contractor calculate greater than 1-acre of disturbed soil, it shall determine the type and submit its calculations and findings to the District. The Contractor will then be required to comply with all requirements of the construction general permit including, but not limited to, effluent standards, receiving water monitoring, and numeric action levels.

B. SCOPE OF WORK

1. The Contractor shall provide the required documents for submission of a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) at no-cost to the District. The District will file the NOI application and pay all SWRCB permit fees. The District will designate a SWPPP Manager in writing to the Contractor. The Contractor shall provide the services of a Qualified Stormwater Practitioner (QSP) and will be responsible for adhering to and implementing the monitoring requirements set forth in the SWPPP and the CGP. The name of the QSP, together with their qualifications and certifications, shall be submitted to the District as a formal submittal.
2. No work shall commence on the project prior to the District submitting the Permit Registration Documents (PRDs) and a Waste Discharge Identification Number (WDID#) being issued by the SWRCB.
3. The SWPPP shall remain within the project limits at all times during the duration of the project or at a location approved by the District. The Contractor shall make the SWPPP available at all times per the requirements of the CGP.
4. The Contractor shall monitor the National Oceanic Atmospheric Administration (NOAA) website at www.noaa.gov for the current weather conditions on a daily basis. Contractor shall inform the District of any potential rain and/or storm conditions. A printed copy of the NOAA forecast shall be attached to all inspection reports.
5. The Contractor's QSP shall perform all of the required inspections, reporting and maintenance according to the appropriate sections and attachments per the CGP for the established risk level of the project including Annual Reports. Inspections and reporting shall continue for the duration of the project until the Notice of Termination (NOT) has been accepted by the SWRCB. The District will file the NOT.

6. Inspection reports shall be kept on site in the SWPPP binder. The Contractor shall be responsible to send an electronic copy of each inspection report to the District's Project Manager and SWPPP Manager no later than the end of each week for review.
7. Each report must be accompanied with appropriate pictures to adequately document the effectiveness of installed BMPs and SWPPP practices.

C. DELIVERABLES

1. After the construction project is complete, the Contractor shall deliver hardcopies of all inspections reports, an electronic copy of all pictures, and any miscellaneous SWPPP documents to the District.
2. The delivery of the required reports and pictures to the District shall be within 14 days of project completion.

D. NON-COMPLIANCE

1. Should the Contractor not perform all required inspections per the CGP and SWPPP as determined by the District's SWPPP Manager, the site shall be deemed to be out of compliance. The Contractor will have 48 hours, upon notification by the District, to generate the proper reports and return the project back in compliance of the CGP. If after the 48 hour time frame the project is still considered out of compliance, the District may take any actions necessary to return the project back in compliance with the requirements of the CGP and SWPPP. Any and all costs expended by the District to bring the project back in compliance as determined by the SWPPP Manager, in his/her sole discretion, shall be charged to the Contractor.
2. Should the Contractor not install all required BMPs per the CGP and SWPPP as determined by the District's SWPPP Manager, the site shall be deemed to be out of compliance. The Contractor will have 48 hours, upon notification by the District, to install or repair any BMPs necessary to keep the project in compliance with the CGP. If after the 48 hour time frame, the project is still considered out of compliance, the District may take any actions necessary to return the project back into compliance with the requirements of the CGP and SWPPP. Any and all costs expended by the District to bring the project back in compliance as determined by the SWPPP Manager, in his/her sole discretion, shall be charged to the Contractor.
3. If the District receives any non-compliance notifications or fines from Governing Municipalities and/or the State, the Contractor shall indemnify and defend the District. Any and all costs resulting from a violation and/or fine will be borne by the Contractor to include District staff, legal, and consulting costs at the Contractor's sole expense.
4. The District and the District's SWPPP Manager will be onsite, throughout the duration of the project, to monitor and verify that all reporting and BMP Implementation is being performed per the requirements of the CGP.
5. If at any time the site is deemed to be out of compliance as determined by the SWPPP Manager, in his/her sole discretion, the District reserves the right to stop all construction

activities. The site will remain inactive until the Contractor performs all the necessary actions to return the project back in compliance with the requirements of the CGP and SWPPP.

6. There will not be any days given to the Contractor for an extension of the contract for the time the site is deemed to be out of compliance. The Contractor is solely responsible for maintaining all of the necessary BMPs at all times and ensure the project meets all of the CGP and SWPPP requirements.

E. IMPLEMENTATION OF BMPs

1. The Contractor shall be responsible to protect the site at all times per the requirements of the CGP and the project SWPPP.
2. The Contractor shall be responsible to protect but is not limited to the following:
 - A. Stockpiles (Soil, Asphalt, Concrete, Sand, Gravel and other material)
 - B. Concrete Washouts
 - C. Trash Containers and Dumpsters
 - D. Slopes and Disturbed areas
 - E. Equipment and Vehicles
 - F. Bagged and Boxed materials
 - G. Liquid and Hazardous materials
 - H. Portable Toilets and Storage Facilities
3. The Contractor shall install, implement and maintain the BMPs to the Maximum Extent Practical (MEP) to prevent or reduce pollutant discharges to local storm drain, storm drain conveyance systems and/or receiving waters from construction activities. BMPs are to be installed per the California Stormwater Quality Association (CASQA) BMP Handbook (2009) and shall be applied to but not limited to the following:
 - A. Erosion Control on Slopes
 - B. Erosion Control on Flat areas; or BMPs to desilt runoff from flat areas
 - C. Runoff Velocity Reduction
 - D. Sediment Control
 - E. Offsite Sediment Tracking Control
 - F. Materials Management
 - G. Stockpile Management
 - H. Waste Management
 - I. Vehicle and Equipment Management
 - J. Temporary Soil Stabilization
 - K. Storm Drain Inlet Protection
 - L. Wind Erosion Control
 - M. De-watering an Hydrostatic Operations
 - N. Materials Pollution Control

- O. Water Conservation
 - P. Structure Painting and Construction
 - Q. Paving Operations
 - R. Planned Construction Operations
 - S. Downstream Erosion Control
 - T. Prevention of Non-Storm Water Discharges
 - U. Protection of Ground Water
4. BMPs are to be installed by qualified personnel only. The Contractor's QSP is responsible to inspect all BMPs for proper installation per the CGP, CASQA BMP Handbook, Erosion Control Plan, and the SWPPP.
 5. The Contractor shall inform the District of any BMP failures, malfunctions, breeches and/or discharges during the course of construction. The Contractor will be responsible for the repair and clean-up of any breach and or discharge caused or related to their work at no additional cost to the District.
 6. The Contractor shall be responsible for maintaining proper dust control during the course of construction per the (spell out first) Air Quality Management District (AQMD) standards.
 7. All entrances and exits of work and storage areas shall be inspected on a daily basis. Any dirt, dust, or debris leaving the project site will be the sole responsibility of the Contractor to correct immediately upon occurrence.
 8. All slopes and stockpiles that have been inactive for 14 days or in the event of a rain storm shall be properly protected per the requirements of the CGP and SWPPP.
 9. Contractor shall be responsible to implement Post Construction BMPs for permanent control of erosion from slopes and required vegetation areas. These BMPs shall include but are not limited to:
 - A. BMPs and Landscaping shown on the erosion control and project plans
 - B. Structures to convey runoff safely from slopes and walls
 - C. Vegetation or alternative stabilization of all disturbed slopes
 - D. Re-vegetation of any natural drainage systems to the MEP

F. COMPLIANCE CERTIFICATION

1. An officer or other authorized representative of the Contractor shall certify that the site is and/or was in full compliance with the CGP during construction activities.

2. The District will file all Annual Reports in the Storm Water Multiple Application and Report Tracking System (SMARTS). The Contractor shall provide the District with all of the necessary inspection reports, photos, corrective actions, BMP failures, sampling (if required by the SWPPP), etc. This data shall be given to the District's SWPPP Manager no later than 30 days prior to the Annual Report's due date.

G. TERMINATION

1. At the end of the project, the Contractor shall be responsible for removal of all temporary BMP measures, all construction related materials, equipment, trash/litter/debris, portable toilets, stockpiles of materials and any trash and concrete washout containers. The Contractor is responsible to re-install, plant, repair or replenish, any vegetation, landscaping or permanent structure damaged or disturbed during the course of construction of which is not called out or listed on the bid documents and plans.

H. TRAINING

1. Prior to the commencement of construction, all personnel that will be on site shall go through a formal SWPPP training provided by the District. This training will take place at a mutually agreed upon location and will last for 1 hour. Additional training shall take place at a minimum of once a month as determined by the Owner's Representative throughout the course of construction and until such time that an NOT has been filed and accepted by the SWRCB.

I. REFERENCES

1. State Water Resources Control Board (SWRCB) Construction General Permit (CGP) Order No. 2010-0014-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity.
2. California Stormwater Quality Association, CASQA Construction BMP Handbook/Portal.
3. San Diego County Ordinance No. 9424 (*Watershed Protection, Stormwater Management and Discharge Control*)

1.17 ACCESS OF DISTRICT'S REPRESENTATIVE TO CONFINED SPACES IN STRUCTURES UNDER CONSTRUCTION

- A. The Contractor shall be aware that some or all portions of the work may be designated as a PERMIT REQUIRED CONFINED SPACE. The Contractor is required to provide the Owner with a copy of the Contractor's Confined Space Program for Owner's review and acceptance

prior to beginning work. Contractor's Confined Space Program shall be in compliance with Cal-OSHA's Confined Space regulatory requirements. The Contractor is required to perform all work in accordance with Cal-OSHA Confined Space requirements and Title 8, Subchapter 20 "*Tunnel Safety Orders*".

- B. The Contractor shall provide the following assistance to the personnel of the District's Representative when said personnel must enter confined spaces in structures under construction or structures which have not been accepted by the District.
 - 1. Training program for the personnel of the District's Representative relevant to the specific structures being entered.
 - 2. Testing equipment and personnel to operate said equipment for testing the atmosphere in the confined spaces for oxygen deficiency, explosive gases, and toxic gases.
 - 3. Authorized competent person to stand by each confined space while entrants are inside the space.
 - 4. Safety equipment (breathing apparatus, harnesses, and rescue equipment) in good working order.
 - 5. Communication equipment.
 - 6. Access equipment (hoists and ladders).
 - 7. Signs.
 - 8. Alarm system.
 - 9. Ventilation system.
- C. The Contractor shall identify confined spaces on the project, mark them with warning signs per CAL/OSHA requirements, and notify the District's Representative that these structures now exist.

1.18 PROTECTION OF EXISTING UTILITIES

The Contractor shall coordinate their efforts with the District and shall take every precaution to protect all existing utilities and structures at the project site. The Contractor shall be responsible for all Underground Service Alert notification and mark outs prior to the beginning of work.

1.19 COORDINATION WITH DISTRICT OPERATIONS

- A. The Contractor shall coordinate all work with the District sufficiently ahead of time so as to not interfere with the District's operation of their system. The Contractor shall submit a detailed sequence of work to the District for all work. This proposed sequence of work shall be reviewed with the District prior to construction for consistency with the Sequence of Work as described in these Contract Documents and the District's required operation and shut-down plan.

- B. The District will operate all existing valves. Therefore, the Contractor must coordinate connection work with operations. Once the pipelines have been isolated, the Contractor shall dechlorinate and drain all lines. At its sole discretion, the District may use its own forces to dechlorinate and drain lines at above ground facilities only. The management of water drained into a trench, regardless of the origin or cause of the water, shall be the sole responsibility of the Contractor.

1.20 PRE-CONSTRUCTION CONFERENCE AND PROGRESS MEETINGS

A Pre-Construction Conference shall be scheduled prior to start of project as described in Section 01039 Preconstruction Conference. The District, the Contractor, and the District's Construction Manager shall be present. The Contractor's detailed sequence of work and a list of labor, material and equipment rates for additional work shall be established and maintained throughout the project. Contractor shall identify all personnel assigned to the project and a complete set of approved submittal data for use by inspection personnel. Contractor shall have a designated representative for this project.

The Contractor shall also attend a project planning meeting as described in Specification Section 01039, Progress Meetings.

1.21 HOURS OF WORK

Hours of work shall be Monday through Friday 8:30 A.M. to 3:30 P.M. Saturday and nighttime work will only be allowed with prior written approval by the Owner. If allowed, nighttime work hours shall be 9:00 P.M. to 6:00 A.M. Overtime and shift work may be established as short-term procedure by Contractor with written notice to and written permission from Owner. **Absolutely no equipment shall be started or warmed up prior to 8:30 AM or after 3:30 PM.** No work other than overtime and shift work approved by Owner shall be done between the hours of 3:30 P.M. and 8:30 A.M., nor on weekends, or District recognized holidays, except such work as is necessary for the proper care and protection of the work already performed, except in case of emergency, and as specified herein. The District recognized holidays are as follows:

Veterans Day	Martin Luther King Jr. Day
Thanksgiving Day	Presidents' Day
Day after Thanksgiving	Memorial Day
Christmas Day	Independence Day
New Year's Day	Labor Day

Hours of work may be restricted at the sole discretion of the jurisdictional agency responsible for the road right-of-way due to traffic impacts per the permit approval process. The Contractor shall expect restricted hours for any work impacting the Mission Estancia Elementary, Park Dale Lane Elementary, and La Costa Canyon High Schools as detailed in Item 1.41 below.

1.22 CONSTRUCTION SURVEYS

A. LAND MONUMENTS

The Contractor shall notify the District and the District's Representative of any existing Federal, State, City, County, and private land monuments encountered. All monuments shall be preserved, or if necessary to be destroyed during performance of the Work, shall be replaced by a licensed surveyor under contract to the Contractor at the cost of the Contractor. Additionally, any monuments and/or vertical control benchmarks which are moved, disturbed, or destroyed during construction shall be replaced by a licensed surveyor under contract to the Contractor at the cost of the Contractor. Appropriate record of survey drawings shall be filed with the City of Encinitas and County of San Diego for all replaced monuments. When government monuments are encountered, the Contractor shall notify the District's Representative at least two (2) weeks in advance of the proposed construction and provide for surveying of the existing monument before it is disturbed or destroyed.

B. CONSTRUCTION STAKING

1. The Contractor shall furnish construction staking to execute the work as described in the Contract Documents. Preserve all construction stakes, reference points, and other survey points. In case of their loss or destruction, the Contractor shall be liable for their replacement. If the field survey stakes are not available for review by the District's Representative, the work may not proceed.
2. The Contractor's surveyor will establish the following minimum points along the pipeline alignment: one offset stake for line, station and grade at all angle points, beginning and ending of curves and points along the centerline of pipe with a maximum distance of 25.00 feet between stakes for pipeline to be constructed by open trench construction. Additional stakes may be requested for clarification of construction at the request of the District's Representative at no additional cost to the District.

1.23 GEOTECHNICAL WORK

A. SUBSURFACE INVESTIGATIONS

Historic soil borings were performed in the project vicinity. See Appendix B: "Geotechnical Evaluation, Village Park Recycled Water Project (Ninyo & Moore, 2014)".

This report, other available investigation reports and the project site should be thoroughly reviewed by each potential Contractor prior to submission of a bid.

1. The Contractor may make independent subsurface, soil, or geotechnical investigations of the project site in order to satisfy himself of the subsurface conditions that may be encountered. No additional compensation will be made for such investigations.
2. Bidders shall make their own independent evaluation of the rippability of rock and include all costs associated with the proper equipment to excavate, remove and dispose of rock in their bid. Blasting will only be permitted upon the approval of the District if a benefit to the District and the project can be demonstrated.

B. CONSTRUCTION TESTING

1. The Owner shall furnish compaction testing for all bedding, backfill, and soil compaction testing.
2. The Owner shall furnish all materials testing and special inspections called for in the Contract Documents.
3. When any work is determined to be unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents, the costs incurred by the Owner for additional tests or inspections shall be reimbursed by the Contractor. Said costs shall be paid by the Owner and deducted from progress payments to the Contractor.

1.24 CONSTRUCTION WATER

- A. The Contractor shall obtain and pay for a construction water meter from the District and shall be responsible for all highlines and other temporary equipment and facilities necessary to provide adequate construction water to the project site. The Contractor shall coordinate the locations of water supply with the District. The following conditions must also be met:
 1. Excess water must be available in the pipeline at the connection point.
 2. The Contractor shall submit a construction water service connection plan a minimum of two weeks prior to the need for water. This plan shall indicate all piping, valves, and other materials necessary to connect to District owned piping at designated blow-off, air vacuum, and air release structures located within the project site. Do not install piping, meter, or valves until the District's Representative has approved the water service plan.
 3. Accurately measure all water use and submit meter readings to the District's Representative when the meter is installed, at the end of each month and when the meter is removed.
 4. Securely lock the installed valve in the closed position at the end of each workday and during all times of inactivity. Avoid wasting water and prevent unauthorized use. Do not use water from the District on any other project.
 5. Coordinate all use of water, flushing of pipelines and filling of pipelines with the District's representative. All requests for use of water and for increases or decreases in quantity shall be made in writing to the District's Representative two working days in advance.

1.25 POWER AND LIGHTING

- A. The Contractor shall provide all power required for construction operations, and shall provide and maintain all temporary power facilities required to perform the work in a safe and satisfactory manner. All electrical facilities shall conform to the requirements of the requirements of Title 8, Industrial Relations, Subchapter 5, Electrical Safety Orders, of the

California Code of Regulation; and Subpart K of the OSHA Safety and Health Standards for Construction.

- B. The Contractor shall provide adequate light for work conducted at night or under low light conditions to provide adequate facilities for inspection and safe working conditions and to insure proper work.
- C. Temporary connections for electricity shall be subject to approval of the District's Representative and the power company representative. Remove temporary electrical connections in like manner prior to final acceptance of the work.

1.26 CONTRACTOR STAGING AND LAYDOWN AREA

For use of roadway right-of-way areas, Contractor shall apply for and obtain City of Encinitas and City of Carlsbad approval for use, as appropriate. For any private property to be used by the Contractor, the Contractor shall coordinate with the property owner, obtain written permission from the property owner for use of the area, coordinate with any resource or permitting agency that may have jurisdiction over the area, obtain and pay for any permits or agreements and provide any environmental mitigation required, and pay any fees or rental charges required for use of the area. Staging areas shall be delineated with perimeter fencing, shall be secure, shall implement all required BMP's, and shall adhere to all noise and dust requirements. The Contractor shall be responsible for returning all areas used to their original conditions. At least 14 days prior to moving onto any site, the Contractor shall submit to the District Representative a copy of the written permission letter from the Property Owner of that area, and a description of any permits and mitigation actions that are required for use of the area. Submittals shall be in accordance with Standard Specification Section 01300. All requests for the use of privately-owned land must be submitted to the Owner for written approval by the District's General Manager prior to its use. The Owner may deny use of any privately owned property for this project in its sole discretion.

1.27 DUST CONTROL AND CLEANUP

- A. Throughout all phases of construction, including suspension of work, and until final acceptance of the project, the Contractor shall keep the work site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning or sweeping and sprinkling with water or other means as necessary, in accordance with the San Diego Air Pollution Control District's regulations. The use of water resulting in mud on public streets and/or private property will not be permitted as a substitute for cleaning, sweeping, or other methods. Every day, and as required by the Owner's Representative, the Contractor shall furnish and operate a motorized, self-loaded sweeper with water spray nozzles to keep paved areas affected by the work acceptably clean and dust free.
- B. The Contractor shall keep the premises free at all times from accumulations of waste materials and rubbish. Contractor shall provide adequate trash receptacles about the site, and shall promptly empty the containers when filled. Wastes shall not be buried or burned on the site or disposed of into storm drains, sanitary sewers, streams, or waterways. All wastes shall be removed from the site and disposed of in a manner complying with local ordinances and antipollution laws. Volatile wastes shall be properly stored in covered metal containers and removed daily. Construction materials shall be neatly stacked by the Contractor when

not in use. The Contractor shall promptly remove splattered concrete, asphalt, oil, paint, corrosive liquids, and cleaning solutions from surfaces to prevent marring or other damage.

1.28 SANITATION AND DRINKING WATER

- A. The Contractor shall provide toilet and wash-up facilities for his work force at the site of work. They shall comply with applicable laws, ordinances, and regulations pertaining to the public health and sanitation of dwellings and camps. The facilities shall be stored within the staging areas overnight and on weekends. The Contractor shall maintain the sanitary facilities in an acceptable condition from the beginning of work to completion and shall remove the facilities and disinfect the premises.
- B. The Contractor shall provide safe drinking water at all times at the jobsite.

1.29 SAFETY

- A. Owner and its inspectors, consultants, agents and other representatives are in no way responsible for safety and are there only to observe the work compliance with plans and specifications.
- B. The Contractor acknowledges responsibility for jobsite and acknowledges that the District, Engineer and their agents, employees, consultants and representatives will not have any such responsibility. To the fullest extent permitted by law the Contractor shall indemnify, defend and hold harmless the District, Engineer, their present companies, subsidiaries, agents, and employees from and against all claims, damages, losses and expenses, including but not limited to attorney fees and claim costs, arising out of or resulting from performance of work by the Contractor, its subcontractors, or their agents and employees, which results in damage, loss or expense is caused in whole or in part by the negligence, active or passive, of District, Engineer, their parent and subsidiary companies, as well as their agents and employees, excepting only the sole negligence of District, Engineer, their parent or subsidiary companies and their agents and employees.

1.30 INDEMNIFICATION

- A. Contractor hereby releases and agrees to indemnify, defend, hold harmless the District, Engineer, their parent and subsidiary companies, agents, employees, consultants and representatives for any and all damage to persons or property or wrongful death regardless of whether or not such claim, damage, loss or expense is caused in whole or in part by the negligence, active or passive, of District, Engineer, their parent and subsidiary companies, as well as their agents and employees, excepting only the sole negligence of District, Engineer, their parent or subsidiary companies and their agents and employees to the fullest extent permitted by law. Such indemnification shall extend to all claims, demands, actions, or liability for injuries, death or damages occurring after completion of the project, as well as during the work's progress. Contractor further agrees that it shall accomplish the above at its own cost, expense and risk exclusive of and regardless of any applicable insurance policy or position taken by any insurance company regarding coverage.
- B. Contractor shall defend, indemnify and hold the District, Engineer, its employees, officers, or agents, harmless against any and all claims by any parties arising from, or related to, any

and all damages, including legal costs and attorney's fees, resulting from interference with, interruption of, damage to, or any and all injuries which result from damage caused to subsurface installation, which is unforeseen and despite Engineer's/Architect's effort during the design process was not located, excepting only the gross negligence or willful misconduct of Engineer in providing its services.

1.31 AUDIO-VIDEO DOCUMENTATION OF PROJECT SITE

- A. A minimum of two (2) weeks prior to start of construction and delivery of any equipment, materials or supplies to the site, the Contractor shall provide pre-construction digital color audio-video documentation as specified herein for the purpose of establishing the surface conditions existing in all of the areas to be affected by the construction and to avoid potential construction repair disputes. The Contractor shall be responsible for repairing any damage or defect not documented as existing prior to construction. The Contractor shall coordinate with the District a minimum of two (2) weeks in advance of the intended audio-video documentation and accommodate a joint walkthrough of each area by all interested stakeholders, which may include but is not limited to the Engineer, Cities, District, and Construction Manager.
- B. Digital color audio-video documentation shall consist of the recordation of surface features taken along the entire length of the project, including all work, storage, and staging areas and all intersecting roadways. Prior to audio-video taping of the project, all areas to be documented shall be investigated visually with notations made of items not readily visible by taping methods.
- C. Coverage of the digital color audio-video documentation shall include, but not be limited to: all existing driveways, sidewalks, curbs, streets, access roads, signs, landscaping, trees, catch basins, fences, monuments, visible utilities and all buildings located within the zone of influence. Of particular concern are any existing faults, fractures, cracks, defects or other features. Audio description shall be made simultaneously with and support the video coverage.
- D. One (1) copy of the digital color audio-video documentation shall be provided to the Owner's Representative on DVD, USB Flash Drive or other electronic data storage device suitable or transferred electronically to the Owner prior to the start of construction. Utility mark out (USA) shall be completed prior to the audio-video documentation and shall be included in the pre-construction audio-video documentation. Any project areas not fully documented shall be re-shot as directed by the Owner's Representative.
- E. Construction work shall not commence until audio-video documentation has been delivered to the Owner's Representative.

1.32 JURISDICTIONAL COORDINATION

- A. The Contractor shall coordinate construction activities with the operations of the jurisdictional agency where work is to occur, including the City of Encinitas and the City of Carlsbad. Coordination shall include communication with the agency representative and the agency's project contractor.

1.33 MEASUREMENT AND PAYMENT

A. General:

1. The measurement and payment provisions of these Contract Documents shall govern over those of referenced standards, if any.
2. The price set forth in the Bid Form for the work shall include all costs and expenses incidental to completing the work, and payment of the price bid will be payment in full under this contract, except as provided by Article 9-1 PAYMENT FOR CHANGES IN THE WORK of the General Provisions.
3. As a condition precedent to approval of the Contractor's monthly payment application by the District's Representative, the Contractor shall submit a monthly construction schedule properly updated and accurately showing the work completed to date and the work yet to be performed in the remaining Contract time. Contractor must provide hard copies of all Certified Payroll Records to the Owner's appointed Third Party Labor Compliance Representative (TPLCR). The Contractor agrees failure to comply with the foregoing to the satisfaction of the District's Representative shall delay the monthly progress payment to the Contractor without penalty to the District.

B. Lump Sum Work Items Listed in the Bid Schedules:

1. The lump sum prices include full compensation for furnishing the labor, materials, tools, and equipment and doing all the work involved to complete the work included in lump sum work items listed in the Bid Schedules and defined by the Contract Documents.
2. The application for payment for a lump sum payment item will be for that specific work item based on the percentage completed. The percentage complete will be based on the value of partially completed work relative to the value of the item when entirely completed and ready for service. The application for payment will be in accordance with Article 9-2 PROGRESS PAYMENTS of the General Provisions.

C. Unit Price Work Items Listed in the Bid Schedules:

1. The unit prices include full compensation for furnishing the labor, materials, tools, and equipment and doing all the work involved to complete the work included in the unit price work items listed in the Bid Schedules and defined by the Contract Documents.
2. The application for payment for a unit price payment item will be for that specific work item based on the units of work that are entirely completed and ready for service. The application for payment will be in accordance with Article 9-2 PROGRESS PAYMENTS of the General Provisions.

D. Work Items Not Listed in the Bid Schedules:

1. The General Provisions and items in the Special Provisions which are not listed in the Bid Schedules of the Bid Form are, in general, applicable to more than one listed work item, and no separate work item is provided therefor. Include the cost of work not listed

but necessary to complete the project designated in the Contract Documents in the various listed work items of the Bid Form.

2. The bids for the work are intended to establish a total cost for the work in its entirety. Should the Contractor feel that the cost for the work has not been established by specific items in the Bid Form, he shall include the cost for that work in some related bid item so that his proposal for the project does reflect his total cost for completing the work in its entirety.

1.34 NOTICE OF COMPLETION

Contractor shall apply for acceptance of the work encompassed in the Base Bid. Upon substantial completion of the work encompassed in the executed Schedule, the District, at the District's sole discretion, will issue a Notice of Substantial Completion for this work.

Upon completion of all work in the Bid Schedules in accordance with the contract documents, Contractor shall apply for acceptance of the work. Upon acceptance of the work encompassed in the Bid Schedules, the District, at the District's sole discretion, will prepare a Notice of Completion for consideration and approval by the District Board of Directors.

1.35 GUARANTEE

For all work a two-year guarantee shall be furnished by the Contractor as required in the General Provisions, Article 5-14, except that any guarantee included for materials or equipment beyond the period specified herein shall be solely the responsibility of the guarantor and not the Contractor. This guarantee period shall commence with the District's issuance of a Notice of Substantial Completion for the applicable Bid Schedule.

1.36 LABOR COMPLIANCE PROGRAM AND CONTRACTOR REGISTRATION WITH STATE OF CALIFORNIA

- A. In accordance with requirements defined by the California State Legislature via Senate Bill 854, all contractors and subcontractors involved with public works project shall be registered with the State Department of Industrial Relations. Registration is completed through an on-line application process and the payment of a fee to the State. The registration process requires contractors and subcontractors to provide workers' compensation coverage to its employees, hold a valid Contractors State Board License, have no delinquent unpaid wage or penalty assessments, and not be subject federal or state debarment. The registration form is located on the State Department of Industrial Relations website:

<http://www.dir.ca.gov/DLSE/dlsepublicworks.html>

- B. This project is subject to monitoring by the Compliance Monitoring Unit (CMU) of the California Department of Industrial Relations (DIR). The Owner will be implementing and enforcing a labor compliance program (LCP) to ensure compliance with provisions of the California Labor Code. The Contractor must post a jobsite notice stating that the project is subject to CMU monitoring and upload all CPR's to the CMU. Contractor must provide hard copies of all CPR's to the Owner's appointed Third Party Labor Compliance Representative (TPLCR). The Owner's TPLCR is: Golden State Labor Compliance, LLC. 38733 9th Street East, Suite W, Palmdale, CA 93550.

- C. The Contractor and all subcontractors listed within the bid must attend a mandatory Pre-Job Conference with the TPLCR to receive a briefing on labor law requirements and procedures of the LCP for this Project. The Contractor shall make the work site available during normal work hours to the TPLCR for regular monitoring.

1.37 PUBLIC NOTICE BY CONTRACTOR

- A. Contractor shall furnish and coordinate public notices to be distributed by the District at least one (1) week before starting construction in the form of door hangers using a format submitted to and approved by the District. This notice shall be distributed to all:

1. Residents and occupants within 300 feet of where construction work is to be performed, and;
2. Schools, fire stations and businesses within 500 feet of where construction work is to be performed.

Notice format shall include, but is not limited to, project name, District's project website address and hotline number. Contractor shall provide a draft notice to District's Representative for approval a minimum of 15 calendar days prior to printing.

- B. Contractor shall furnish and coordinate public notices to be distributed by the District 72 hours in advance of shutdowns and low pressure notifications in the form of door hangers using a format submitted to and approved by the District. This notice shall be distributed to all impacted customers
- C. All costs for printing, distributing and hanging of notices shall be the District's responsibility.
- D. For all construction activity taking place on private property outside of the public right-of-way or District easement areas, Contractor shall coordinate with the property owner and the District to obtain written permission from the property owner for use of the area including the terms and conditions of use. The Contractor shall coordinate with any resource or permitting agency having jurisdiction over the area, obtain and pay for any permits for use of the area, provide any environmental mitigation required, and pay any fees or rental charges required for use of the area. Prior to accessing the private property, Contractor shall contact each owner individually a minimum of 30 days prior to commencing the Work.
- E. If the Work is delayed longer than 14 days from initial notification, the Contractor shall compensate the District to re-notify residents and occupants of the new work schedule.

For work involving the temporary closure of a marked crosswalk or sidewalk, Contractor shall post a notice of the closure at each end of the crosswalk/sidewalk not less than 7 days prior to the scheduled date of closure. In addition to any other public notice requirements, the notice shall include the project name, project logo, District's project hotline number, and estimated times and dates for closure.

1.38 ABANDONMENT OF EXISTING FACILITIES

- A. Existing facilities shall not be abandoned, broken into, or taken out of service until all new facilities have been completed and accepted by the Owner; all proposed connections are completed and accepted by the Owner; the proposed facilities are complete and in full operation.
- B. The Contractor shall submit to the Owner a detailed sequence and method of work for the abandonment of the existing facilities including, but not limited to, overview and general sequence of work, the method and procedure for each increment of abandonment, and dates and times for the proposed work.
- C. Contractor shall remove and legally dispose any existing pipeline or subsurface structure interfering with the construction of new improvements per the Contract Documents.
- D. Remove existing thrust or anchor blocks where interfering with the proposed facilities.
- E. Voids created by the removal of abandoned facilities shall be backfilled in accordance with the Standard Specifications.
- F. Pipeline Abandonment
 - 1. Pipelines shown as abandoned or abandoned per the Contractors construction methods shall be plugged per the San Diego Regional Standard Drawings WP-03, including at intervals of 200 feet for pipelines 14" and smaller. Pipelines 16" and larger shall be filled along its entire length by pressured grout only.
 - 2. All valves and appurtenances associated with an abandoned pipeline or as indicated in the Contract Documents shall be abandoned by removing the valve can material, concrete ring, and frame and lid in its entirety. Piping and fittings associated with an appurtenance shall be cut and removed to a depth of three (3) feet below finished grade. All piping should be capped as described elsewhere in the Contract Documents. All removals shall be legally disposed of. Any voids created by the removal of abandoned facilities shall be backfilled in accordance with the Standard Specifications.
 - 3. Where steel pipe is shown on the Contract Documents to be abandoned, but indicated to still be in use as a cathodic conduit, shall have bond wires connected between any sections to be cut. Bond wires shall consist of two (2) #2 AWG wires bonded to the pipe and shall be installed and tested per the Standard Specifications. Wire shall be installed in 3" schedule 40 conduit surrounded by 12" of sand with marking tape located 12" above the conduit per the Standard Specifications.
 - A. The Contractor shall notify the District 2-weeks in advance of cutting into existing pipe.
- G. Structure Abandonment
 - 1. Remove all mechanical and electrical systems and appurtenant equipment including ladders, gauges, fans, pipe supports, valves, and piping. Salvage to the Owner or legally dispose of per direction of the Owner's Representative.

2. Cut, remove, and legally dispose of the upper three (3) feet of all structures including frames and covers, concrete collars, grade rings, hatches, vents, and vault roofs and walls.
3. Break or core drill 4-inch holes into the floor of the structure. One hole per 16-square feet shall be made.
4. Inlet and outlet piping shall be plugged with concrete. Plug shall consist of a cast of 12" thick concrete.
5. Backfill structure with sand or 1-sack sand/cement slurry mix.
6. Site to be restored to existing conditions including, but not limited to, minor grading, pavement and/or concrete replacement, and landscaping/irrigation.

1.39 SITE RESTORATION

Contractor shall return all disturbed areas to pre-construction conditions including, but not limited to topographic elevations, grade and material of existing surface, slopes, curb and gutter, sidewalks, driveways, striping, seal coatings, landscaping, sod grass, fences, irrigation lines and facilities, railroad ties, District facilities, and structures.

All valve cans, whether new or existing, located within the final paving limits, shall be raised to grade per the Standard Specifications at no additional cost to the District.

1.40 TREE PROTECTION

Contractor shall protect trees in place in accordance with the Contract Documents. No tree shall be cut or trimmed without approval of a certified arborist and a District Representative. The cutting of roots greater than 2-inches in diameter shall not be allowed and hand-digging will be required.

1.41 TRAFFIC REGULATIONS

- A. The Contractor shall furnish maintenance of Traffic and Detours in accordance with these Specifications for all portions of this contract within or adjacent to public or private rights-of-way, streets and drives and replace all striping, reflectors, dots, or other traffic control materials.
- B. Traffic shall be maintained throughout the project in conformance with these Specifications and the traffic control permit. The Contractor shall furnish, construct, maintain and finally remove detours, road closures, lights, signs, barricades, fences, miscellaneous traffic devices, flagmen, and reconstruct paving and other such items and services as necessary to adequately safeguard the public from hazard and inconvenience. All such work shall be as provided in the Contract Documents herein or as directed by the Owner and shall comply with the ordinances, directives, and regulations of authorities with jurisdiction over the public

or private roads in which the construction takes place, and over which detoured traffic is routed by the Contractor.

- C. It is the intent of these Specifications to provide for adequate traffic detour routing and signing to maintain a smooth and safe flow of traffic through and around the construction areas.
- D. Prior to the start of construction operations, the Contractor shall provide the fire and police departments having jurisdiction within the project area with the construction schedule giving the expected starting date, sequence of work, and time for each phase of construction completion date, and the name and direct telephone number (no voicemail) of three responsible persons who may be contacted at any hour in the event of a condition requiring immediate correction.
- E. The Contractor shall submit traffic control permit(s) and the approved traffic control plans to the District before any Work requiring traffic control may begin.
 - 1. The Contractor shall be aware of the long lead time for jurisdictional agency permit approval and shall account for all associated costs and schedule impacts at no additional cost to the District.
- F. Traffic control warning signs, lights, and devices shall be in accordance with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUCTD), current edition.
- G. The Contractor shall include the placement of changeable message signs beginning 14-days prior to the beginning of work and for the duration of all work. Contractor shall retain sign installations and update the message as required for the duration of the work.
- H. The Contractor shall expect restricted hours of 9:00 AM to 2:00 PM Monday to Thursday and 9:00 AM to 12:00 PM on Fridays for any work impacting Mission Estancia Elementary School and La Costa Canyon High School, located at the eastern and western extents, respectively, of Site No. 1 along Calle Barcelona in the City of Carlsbad and for any work impacting Park Dale Lane Elementary School, located in proximity to the eastern extent of Site No. 2 along Park Dale Lane in the City of Encinitas. The Contractor shall obtain updated school calendars and verify restricted working hours in school zones. For the Contractor's convenience, the following are the anticipated school hours during the anticipated construction timeframe:
 - 1. Mission Estancia Elementary and Park Dale Lane Elementary Schools are in session from August 15, 2023 until June 12, 2024 with normal school hours of 8:00 AM to 2:20 PM Monday to Thursday and 8:00 AM to 12:45 PM on Fridays. Contractor shall obtain the latest school calendars and verify extended school breaks with no school in session accordingly.
 - 2. La Costa Canyon High School is in session from August 15, 2023 until May 31, 2024 with normal school hours of 8:30 AM to 3:30 PM. Contractor shall obtain the latest

school calendars and verify extended school breaks with no school in session accordingly.

1.42 FUNDING TERMS

A. The contractor shall be aware grant funding is being applied to the Project. The Contractor shall comply with all terms of funding sources used to fund the Work. Refer to Appendix E for Standard Conditions. The following funding sources are anticipated to be used to fund the Work:

- a. Title XVI Water Infrastructure Improvement for the Nation (WIIN) Act Grant administered by the U.S. Bureau of Reclamation (USBR)
- b. Proposition 1 Round 2 Integrated Regional Water Management (IRWM) Implementation Grant
- c. Municipal Bonds

B. See Exhibit 1 through 5 of this Section:

- a. EXHIBIT 1: BUY AMERICA DOMESTIC PROCUREMENT PREFERENCE
- b. EXHIBIT 2: FAIR EMPLOYMENT PRACTICES PROVISIONS
- c. EXHIBIT 3: NOTICE OF EQUAL EMPLOYMENT OPPORTUNITIES
- d. EXHIBIT 4: FEDERAL LABOR REQUIREMENTS
- e. EXHIBIT 5: DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS

1.43 PROJECT IDENTIFICATION SIGN

A. The Contractor shall furnish a project identification sign recognizing both funding sources, at both ends of each Base Bid Schedule (A, B, and C) for a total of six (6). The Contractor shall submit details for the signs in accordance with Standard Specification Section 01300, USBR requirements for Title XVI Water Infrastructure Improvement for the Nation (WIIN) Act Grant, and Integrated Regional Water Management (IRWM) Implementation Grant Funding. Refer to Appendix E. Project identification sign shall be located within the public right-of-way, subject to the discretion of the jurisdictional agency, and shall be prominently visible to the

public. Contractor shall submit proposed signs and proposed locations to the Owner for review and approval.

1.44 ENVIRONMENTAL COMPLIANCE

- A. If construction occurs during the general breeding season (February 15 to August 31) but away from any potentially occupied habitat during the species-specific breeding seasons listed in the Addendum to the North San Diego Water Reuse Coalition Regional Recycled Water Project Final Program Environmental Impact Report (Project: FY23 Recycled Water Pipelines Project) SCH #2014081028, the Owner shall supply a qualified biologist to conduct a pre-activity nesting bird survey in the suitable habitat within 300 feet of the location of proposed construction activity. The pre-activity nesting bird survey shall occur one week before any construction activity is to occur. The Contractor shall notify the District four (4) weeks in advance of any construction activity so a survey may be performed. If an active nest is detected, the Contractor shall coordinate with the Owner to delay activities within 300 feet of the nest until species specific measures to prevent impacts to the birds are determined and applied by the qualified biologist.
 - a. If construction must occur during any of the breeding seasons of the following sensitive bird species, noise monitoring shall be conducted by the Owner and noise attenuation measures may be required to ensure noise levels do not exceed a 60 A-weighted decibels hourly average at the edge of potentially occupied habitat.

1.45 BUY AMERICA REQUIREMENTS

- A. The Contractor shall be aware federal funding is being applied to the project. The Contractor shall follow requirements in accordance with the California Department of Transportation (Caltrans) Construction Manual Chapter 3 General Provisions, Section 6: Control of Materials, Subsection 3-604.
- B. Contractor shall provide "Buy America" certifications when the applicable material is delivered to the project. These certifications shall be reviewed for compliance with "Buy America" requirements and any noted deficiency resolved prior to the material being incorporated into the project and payment being made to the Contractor.
- C. "Buy America" provisions do allow use of a small portion of foreign steel and iron materials (less than one tenth of one percent of the total contract cost [0.1%] or \$2500, whichever is greater). The Contractor shall provide the proper documentation if required. See Exhibit 1 of the Special Provisions for additional procurement preferences.

EXHIBIT 1: BUY AMERICA DOMESTIC PROCUREMENT PREFERENCE

OLIVENHAIN MUNICIPAL WATER DISTRICT RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL Project #: D800019

As required by Section 70914 of the Bipartisan Infrastructure Law (also known as the Infrastructure Investment and Jobs Act), P.L. 117-58, on or after May 14, 2022, none of the funds under a federal award that are part of Federal financial assistance program for infrastructure may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States, unless subject to an approved waiver. The requirements of this section must be included in all subawards, including all contracts and purchase orders for work or products under this program.

Recipients of an award of Federal financial assistance are hereby notified that none of the funds provided under this award may be used for a project for infrastructure unless:

1. all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
2. all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
3. all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

For further information on the Buy America preference, please visit www.doi.gov/grants/BuyAmerica. Additional information can also be found at the White House Made in America Office website: www.whitehouse.gov/omb/management/made-in-america/.

Waivers

When necessary, recipients may apply for, and the Department of the Interior (DOI) may grant, a waiver from these requirements, subject to review by the Made in America Office. The DOI may waive the application of the domestic content procurement preference in any case in which it is determined that one of the below circumstances applies:

1. Non-availability Waiver: the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality;
2. Unreasonable Cost Waiver: the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent; or
3. Public Interest Waiver: applying the domestic content procurement preference would be inconsistent with the public interest.

There may be instances where an award qualifies, in whole or in part, for an existing DOI general applicability waiver as described at:

www.doi.gov/grants/BuyAmerica/GeneralApplicabilityWaivers. If the specific financial assistance agreement, infrastructure project, or non-domestic materials meets the criteria of an existing general applicability waiver within the limitations defined within the waiver, the recipient is not required to request a separate waiver for non-domestic materials.

If a general applicability waiver does not already apply, and a recipient believes that one of the above circumstances applies to an award, a request to waive the application of the domestic content procurement preference may be submitted to the financial assistance awarding officer in writing. Waiver requests shall include the below information. The waiver shall not include any Privacy Act information, sensitive data, or proprietary information within their waiver request.

Waiver requests will be posted to www.doi.gov/grants/buyamerica and are subject to public comment periods of no less than 15 days. Waiver requests will also be reviewed by the Made in America Office.

1. Type of waiver requested (non-availability, unreasonable cost, or public interest).
2. Requesting entity and Unique Entity Identifier (UEI) submitting the request.
3. Department of Interior Bureau or Office who issued the award.
4. Federal financial assistance listing name and number (reference block 2 on DOI Notice of Award)
5. Financial assistance title of project (reference block 8 on DOI Notice of Award).
6. Federal Award Identification Number (FAIN).
7. Federal funding amount (reference block 11.m. on DOI Notice of Award).

8. Total cost of Infrastructure expenditures (includes federal and non-federal funds to the extent known).
9. Infrastructure project description(s) and location(s) (to the extent known).
10. List of iron or steel item(s), manufactured goods, and construction material(s) the recipient seeks to waive from Buy America requirements. Include the name, cost, countries of origin (if known), and relevant PSC or NAICS code for each.
11. A certification that the recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with the prime contractor.
12. A statement of waiver justification, including a description of efforts made (e.g., market research, industry outreach) by the recipient, in an attempt to avoid the need for a waiver. Such a justification may cite, if applicable, the absence of any Buy America-compliant bids received in response to a solicitation.
13. Anticipated impact if no waiver is issued.

Approved waivers will be posted at www.doi.gov/grants/BuyAmerica/ApprovedWaivers; recipients requesting a waiver will be notified of their waiver request determination by an awarding officer.

Questions pertaining to waivers should be directed to the financial assistance awarding officer.

Definitions

1. "Construction materials" includes an article, material, or supply that is or consists primarily of:
 - a. non-ferrous metals;
 - b. plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
 - c. glass (including optic glass);
 - d. lumber; or
 - e. drywall.
2. "Construction Materials" does not include cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.
3. "Domestic content procurement preference" means all iron and steel used in the project are produced in the United States; the manufactured products used in the project are produced

in the United States; or the construction materials used in the project are produced in the United States.

4. "Infrastructure" includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.
5. "Project" means the construction, alteration, maintenance, or repair of infrastructure in the United States.

EXHIBIT 2: FAIR EMPLOYMENT PRACTICES PROVISIONS

OLIVENHAIN MUNICIPAL WATER DISTRICT RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL Project #: D800019

Under the terms of the Contract Documents for the above stated project, the CONTRACTOR, and all subcontractors, suppliers, and vendors, shall comply with all AGENCY, State and Federal laws, ordinances, codes, executive orders, or regulations, including amendments, and any other requirements regarding equal employment opportunities and fair employment practices, including the following provisions.

The CONTRACTOR in executing the Bid Documents, certifies that it shall meet and fully comply with these Fair Employment Practices Provisions.

The CONTRACTOR agrees to provide written evidence of compliance with these provisions upon request by the AGENCY.

1. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation of such person. The CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
2. CONTRACTOR certifies that affirmative action has been taken to seek out minority and women business enterprises to the maximum extent feasible.
3. The CONTRACTOR shall post a copy of EXHIBIT 3 of the Contract Documents, the "Notice of Equal Employment Opportunities", in conspicuous places available to employees or applicants for employment.
4. The CONTRACTOR shall notify in writing each labor union or representative of workers with which the CONTRACTOR has a collective bargaining agreement or other contract or understanding, of the content of these Fair Employment Practices Provisions.
5. The CONTRACTOR will permit access to its records of employment, employment advertisements, application forms, and other pertinent data and records by the Fair Employment and Housing Commission, AGENCY, or any other appropriate agency of the County of San Diego, or the State of California, designated by the awarding authority, for

the purpose of investigation to ascertain compliance with the Fair Employment Practices Provisions of this Contract.

6. The CONTRACTOR shall notify in writing all supervisors, foremen and other personnel officers, of the content of these Fair Employment Practices Provisions.
7. The CONTRACTOR shall notify in writing all sources of employee referrals (including unions, employment agencies, advertisements, California Employment Development) of the content of these Fair Employment Practices Provisions.
8. Personally, or through its representatives, the CONTRACTOR shall, through negotiations with the unions with whom the CONTRACTOR has agreements, attempt to develop an agreement which will:
 - a. Spell out responsibilities for non-discrimination in hiring, referral, upgrading and training.
 - b. Otherwise implement an affirmative anti-discrimination program in terms of the union's specific areas of skill and geography, to the end that qualified minority workers will be available and given an equal opportunity for employment.
9. The CONTRACTOR shall notify the awarding authority of opposition to the anti-discrimination clause by individuals, firms or organizations during the period of its prequalification.
10. If the CONTRACTOR or any subcontractor is in violation of these provisions, the AGENCY will serve written notice on the CONTRACTOR setting forth the nature of the violation. The CONTRACTOR shall meet promptly with the AGENCY to determine the manner and time for correcting the violations. If the CONTRACTOR fails or refuses to so correct the violation, the AGENCY will pursue all remedies which may be required under the law.
11. A finding of willful violation of any of the Fair Employment Practices Provisions of this Contract or of the California Fair Employment and Housing Act shall be regarded by the awarding authority as a basis for determining the CONTRACTOR to be not a "responsible bidder" as to future contracts for which such CONTRACTOR may submit bids.
12. The AGENCY shall deem a finding of willful violation of the California Fair Employment and Housing Act to have occurred upon receipt of written notice from the Fair Employment and Housing Commission that it has investigated and determined that the CONTRACTOR has violated the California Fair Employment and Housing Act and has issued an order under Government Code Section 12970 or obtained an injunction under Government Code Section 12973.
 - a. Nothing contained in the Fair Employment Practices Provisions shall be construed in any manner or fashion so as to prevent the AGENCY as awarding authority from pursuing any other remedies that may be available at law.

- b. Nothing contained in the Fair Employment Practices Provisions shall be construed in any manner or fashion so as to require or permit the hiring of an employee not permitted by the National Labor Relations Act.
- 13. The CONTRACTOR shall include these Fair Employment Practices Provisions in every first-tier subcontract or purchase order, and shall require each subcontractor, supplier, or vendor to similarly bind each further subordinate agreement.
- 14. The CONTRACTOR shall take action with respect to any subcontractor, supplier, or vendor as may be directed by the AGENCY or any other governing body to ensure enforcement of these provisions.

EXHIBIT 3: NOTICE OF EQUAL EMPLOYMENT OPPORTUNITIES

OLIVENHAIN MUNICIPAL WATER DISTRICT
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND
SUMMERHILL
Project #: D800019

CONTRACTOR: _____

You are hereby notified as a union, labor representative, or other source of employee referrals that _____, as CONTRACTOR, as under contract with, _____, as AGENCY for the performance of the above-stated project. Under the terms of said contract, and in compliance with all AGENCY, State, and Federal orders regarding equal employment opportunities and fair employment practices, the CONTRACTOR will affirmatively ensure that no employee or applicant for employment is discriminated against on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation during the course of said contract. This obligation for affirmative action includes recruiting, advertising, or soliciting for employment; hiring, placing, training, upgrading, transferring, or demoting; selection for training or apprenticeship; rates of pay or other forms of compensation; and layoff or termination.

The CONTRACTOR shall carry out applicable requirements of 40 CFR part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies. Any comments or questions regarding said provisions should be submitted promptly in writing to the CONTRACTOR.

Copies of this notice will be posted by the CONTRACTOR in conspicuous places available to employees or applicants for employment.

Contractor

By:

Date:

Address

Telephone

EXHIBIT 4: FEDERAL LABOR REQUIREMENTS

OLIVENHAIN MUNICIPAL WATER DISTRICT **RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND** **SUMMERHILLProject #: D800019**

The Recycled Water Pipeline Extensions for Calle Barcelona, Village Park, and Summerhill is subject to both State Labor Code requirements and Federal Labor Requirements. The General Provisions Section provides information specific to State Labor Code Requirements. This Exhibit provides information specific to Davis Bacon Act Requirements. The CONTRACTOR shall comply with both State and Federal Labor Requirements, and shall implement the most restrictive requirement where direct conflicts occur (e.g. wage rate determinations).

WIIN funding requires compliance with Federal Labor Standards and adherence to the current U.S. Department of Labor Wage Decision. Attention is called to the fact that not less than the minimum salaries and wages as set forth in the most recent Wage Decision must be paid on this project. The Wage Decision, including modifications, must be posted by the Contractor on the job site.

E4.1 Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the most recent wage determination of the Secretary of Labor, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph E4.1 (iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph E4.1 (ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an

additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers, or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to Paragraphs E4.1 (ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside, in a separate account, assets for the meeting of obligations under the plan or program.

E4.2 Withholding.

(i) The AGENCY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and

mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

E4.3 Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics, including guards and watchment, working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the U.S. EPA if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the U.S. EPA. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347.pdf> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the U.S. EPA if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the U.S. EPA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own

records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph E4.3(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph E4.3(i) of this section available for inspection, copying, or transcription by authorized representatives of the AGENCY, U.S. EPA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

E4.4 Apprentices and Trainees

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to

journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

E4.5 Compliance with Copeland Act requirements.

(i) The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

E4.6 Subcontracts.

(i) The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the U.S. EPA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

E4.7 Contract Termination: Debarment.

(i) A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

E4.8 Compliance with Davis-Bacon and Related Act requirements.

(i) All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

E4.9 Disputes Concerning Labor Standards.

(i) Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

E4.10 Certification of Eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

E4.11 Contract Work Hours and Safety Standards Act.

(i) By entering into this contract, the CONTRACTOR certifies that it will comply with the Contract Work Hours and Safety Standards Act including but not limited to the following requirements:

(A) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit

any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(B) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph E4.11(i)(A) of this section the contractor and any subcontractor responsible there for shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph E4.11(i)(A) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph E4.11(i)(A) of this section.

(C) Withholding for unpaid wages and liquidated damages. The U.S. EPA or AGENCY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph E4.11(i)(B) of this section.

(D) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph E4.11(i)(A) through (D) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs E4.11(i)(A) through (D) of this section.

EXHIBIT 5: DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS

OLIVENHAIN MUNICIPAL WATER DISTRICT RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK, AND SUMMERHILL Project #: D800019

E5.1 General

(i) Prime contractors bidding on this project must follow, document, and maintain documentation of their Good Faith Efforts, as listed below, to ensure that Disadvantaged Business Enterprises (DBEs) have the opportunity to participate in the project by increasing DBE awareness of procurement efforts and outreach. Bidders must make the following Good Faith Efforts for any work that will be subcontracted.

(A) Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. Place DBEs on solicitation lists and solicit DBEs whenever they are potential sources.

(B) Make information on forthcoming opportunities available to DBEs. Arrange time-frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. Whenever possible, post solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date. The DBEs should be given a minimum of 5 days to respond to the posting.

(C) Consider in the contracting process whether firms competing for large contracts can be subcontracted with DBEs. Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.

(D) Encourage contracting with a consortium of DBEs when a contract is too large for one DBE firm to handle individually. Use the services and assistance of the Small Business Administration and the Minority Business Development Agency of the U.S. Department of Commerce.

(ii) Subsequent to compliance with the Good Faith Efforts, the following conditions also apply under the DBE requirements. Completed Good Faith Efforts Worksheets (See Bid Forms), along with the required supporting documentation outlined in the instructions, must be submitted with your bid proposal. EPA form 6100-2 must also be provided at the pre-bid meeting.

(A) The prime contractor must pay its subcontractor for work that has been satisfactorily completed no more than 30 days from the prime contractor's receipt of payment from the owner.

(B) The prime contractor must notify the owner in writing prior to the termination of any DBE subcontractor for convenience by the prime contractor and employ the Good Faith Efforts if soliciting a replacement contractor.

(C) If a DBE contractor fails to complete work under the subcontract for any reason, the prime contractor must employ the Good Faith Efforts if soliciting a replacement contractor.

(D) The prime contractor must employ the Good Faith Efforts.

E4.1 DBE Participation Goal

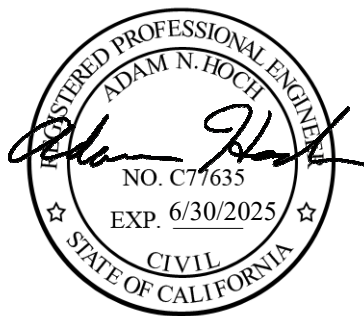
(i) The DBE Participation Goal for this project is 8%.

END OF SECTION

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PART II

TECHNICAL SPECIFICATIONS



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SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 LOCATION AND DESCRIPTION OF WORK

- A. Work for this project will consist of construction of approximately 5,607 linear feet of new 6" PVC recycled water pipeline; installation of new recycled water services; installation of OMWD standard recycled water appurtenances; installation of a stabilized pipe bedding; dewatering of trench excavations; and all incidental work necessary to complete the pipe restoration in accordance with the Contract Documents. The project is divided into the following work areas:
 - a. Site No. 1 - Calle Barcelona pipeline extension in the City of Carlsbad: Approximately 2,826 LF of 6-inch pipe in Calle Barcelona, completing a loop to an existing pipeline in Calle Acervo and an additional 396 LF of 6-inch pipe on Via San Clemente. Groundwater may be encountered along the eastern extent of Calle Barcelona and along Calle San Felipe.
 - b. Site No. 2 - Village Park Recreation Club #1 and Village Park Townhomes #1 HOA extensions in the City of Encinitas: Approximately 850 LF of 6-inch pipe on Park Dale Lane, Village Run East, and Village Green Road. Additionally, approximately 350 LF of 6-inch pipe on Gate Post Road and Village Run East (Village Park Townhomes #1 HOA).
 - c. Site No. 3 - Summerhill HOA extension in the City of Encinitas: Approximately 1,186 LF of 6-inch pipe on Summerhill Drive and Village Center Drive.

1.2 CONTRACTS

- A. The Work shall be constructed under one prime contract.

1.3 WORK BY OTHERS

- A. Work by Franchise Utilities. All costs for coordination with the franchise utilities or for any Work performed by Contractor associated with franchise utilities shall be borne by Contractor at no additional cost to Owner. Costs for compensation to franchise utilities for work performed by their forces shall be paid for by the Contractor.

1.4 SALVAGE

- A. The Owner may desire to salvage certain items of existing equipment which are to be dismantled and removed during the course of construction. Prior to removal of any existing equipment from the site of the Work, the Contractor shall ascertain from the Engineer whether or not the particular item or items are to be salvaged. Items to be salvaged shall be stockpiled on the site in a location as directed by the Engineer. All other items of equipment shall be disposed of off-site by the Contractor at his own expense.

1.5 CONTRACT METHOD

- A. The Contractor shall include all Contract Documents as a part of all its subcontract agreements.

SECTION 01010 - SUMMARY OF WORK

1.6 NOT USED

1.7 CONTRACTOR'S USE OF PREMISES

- A. Contractor's use of the premises shall be confined to the areas shown on the Drawings.
- B. Contractor shall:
 - 1. Assume full responsibility for protection and safekeeping of products stored on or off premises.
 - 2. Move stored products that interfere with the operations of Owner or other contractors.
 - 3. Obtain and pay for all additional storage or work areas required for his operations.

1.8 OWNER'S USE OF THE PROJECT

- A. The Contractor shall cooperate with the Owner to minimize interference with the Owner's operations and to facilitate the Owner's operations in accordance with Section 01043.

1.9 NOT USED

1.10 OPERATION OF EXISTING WATER AND RECYCLED WATER SYSTEM PROHIBITED

- A. The Contractor shall at no time undertake to close off any lines, open any valves or take any other action which would affect the operation of the existing water or recycled water system, except as specifically required by the Contract Documents and after approval is granted by the Owner. Request approval a minimum of twenty-one (21) calendar days in advance of the time that interruption of the existing system is required.
- B. Work on existing structures and facilities shall be performed on a schedule and in a manner that will permit the existing facility to operate continuously, unless otherwise approved in writing by the Owner of the existing utility and/or facility affected.

1.11 CONTRACT TERMINATION

- A. The Owner may terminate this Contract without cause by giving seven (7) calendar days prior written notice to the Contractor. In event of a contract termination the Owner will pay the Contractor for that portion of the Contract completed as of the date of termination, less the aggregate of previous payments already disbursed. The Owner will also reimburse the Contractor for all costs necessarily incurred for organizing and carrying out the stoppage of the work and paid directly by the Contractor, not including overhead, general expenses and profit. Contractor shall not be entitled to profit on any portion of the project which has not been completed.

SECTION 01010 - SUMMARY OF WORK

1.12 OWNER'S RIGHT TO STOP WORK

- A. The Owner reserves the right to stop work for any reason, at any time. The Contractor's claim for compensation shall apply to an adjustment in the completion time of the project only. Any additional costs incurred due to any stop work order, shall be incurred by the Contractor.

1.13 HAZARDOUS WASTE

- A. The Contractor shall perform work in such a manner that there will be no hazardous wastes (fuel, oil, chemical, etc.) generated or left on the site. Should the generation of hazardous waste be necessary in order to complete the Work, it shall be the Contractor's responsibility to take all necessary steps to legally dispose of the waste and any contaminated soil or material. All hazardous waste and/or contaminated soil found on the site which has been left by the Contractor shall be properly disposed of by the Contractor. All necessary documentation of the disposal shall be obtained by the Contractor and shall be submitted to the Owner.

Note: It is unacceptable to store fuels and/or oils on site. The Contractor and Subcontractors must make provisions to fuel equipment on a mobile basis only.

1.14 WATER CONSERVATION

- A. Water resources shall be utilized in a manner that promotes maximum efficiency in the conservation of water. Water storage facilities, transport vehicles or systems shall not be permitted to operate in a faulty/leaky condition. Drop tanks, high lines, and other water handling or water-use facilities shall be kept out of public view, whenever possible. Contractor shall be responsible for making all arrangements for temporary water service with the appropriate agency. All water used on the project during construction shall be paid for by the Contractor.
- B. The Contractor shall coordinate pipeline flushing activities with the Owner to ensure clear communication and coordination of those activities.
- C. When "Flushing" new water systems in preparation for agency bacteria testing, a conscientious effort shall be made to recover, store or reuse the water. This may require the use of temporary "High Line" or "Fire Hose" to transport the used water to a temporary holding pond or tank.
- D. Water waste in site preparation, storm drain, sewer, water and miscellaneous operations, is not acceptable in any form. The Contractor shall adjust operations, as required, to meet conservation goals noted herein. If excessive waste occurs, the Owner will direct the Contractor in writing to make the necessary changes within twenty-four (24) hours to conserve water. If water waste continues the Contract may be terminated.

END OF SECTION

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SECTION 01039 – COORDINATION AND MEETINGS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies the methods and requirements of coordination and meetings required for project coordination.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 00810 – Special Provisions
- B. Section 01310 – Construction Progress Schedules
- C. Section 01370 – Schedule of Values.

1.3 COORDINATION AND PROJECT CONDITIONS

- A. Contractor shall coordinate scheduling, submittals, and Work of the various sections of the Project to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

1.4 PRECONSTRUCTION MEETING

- A. Owner will schedule a Preconstruction meeting after the Notice to Proceed and before commencement of construction activities.
- B. Attendance Required: The Owner's Representative, Project Manager, representative of relevant jurisdictional agencies, Contractor, Superintendent, Foreman, and Representatives from Subcontractors.
- C. The Owner will distribute an agenda including, but not limited to the following:

SECTION 01039 – COORDINATION AND MEETINGS

1. Distribution of Contract Documents.
 2. Submission of list of Subcontractors and project schedule.
 3. Designation of personnel representing the parties in Contract.
 4. Procedures and processing of field decisions, submittals, and substitutions, applications for progress payment, proposal requests, Change Orders, and Contract closeout procedures.
 5. Scheduling.
 6. Scheduling activities of Subcontractors.
 7. Procedures for testing.
 8. Procedures for maintaining record documents.
 9. Certified Payroll
 10. Labor Compliance Program
- D. The Contractor shall submit the following items prior to or at the Preconstruction Meeting:
1. Construction schedule and phasing in accordance with Section 01310 and Section 01043.
 2. Schedule of Values in accordance with Section 01370.
 3. Equipment rates and labor rates.
- E. The Owner's Representative shall record minutes and distribute copies within five working days after meeting to participants and those affected by decisions made.

1.5 LABOR COMPLIANCE PROGRAM PRE-JOB CONFERENCE

- A. Owner will schedule a Pre-job conference with the Owner's appointed Third Party Labor Compliance Representative (TPLCR) after the Notice to Proceed and before commencement of construction activities. The Owner's TPLCR is: Golden State Labor Compliance, LLC. 38733 9th Street East, Suite W, Palmdale, CA 93550.
- B. The Contractor and all subcontractors listed within the bid must attend a mandatory Pre-Job Conference with the TPLCR to receive a briefing on labor law requirements and procedures of the LCP for this Project.

1.6 PROGRESS MEETINGS

- A. The Owner's Representative shall schedule and administer meetings throughout progress of the Work at a maximum interval of every two weeks.
- B. The Owner's Representative will make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. Contractor shall provide a two-week look-back work review and a three-week look-ahead work projection.

SECTION 01039 – COORDINATION AND MEETINGS

- D. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, and as appropriate to agenda topics for each meeting.
- E. The scheduled progress meetings will include, but not be limited to, the following agenda items:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work Progress
 - 3. Safety
 - 4. Weather
 - 5. Field observations, problems, and decisions.
 - 6. Identification of problems which impede planned progress.
 - 7. Review of submittals schedule and status of submittals.
 - 8. Review of off-site fabrication and delivery schedules.
 - 9. Maintenance of progress schedule.
 - 10. Corrective measures to regain projected schedules.
 - 11. Review of three-week lookahead. Planned progress during succeeding work period including planned shutdowns
 - 12. Coordination of projected progress.
 - 13. Maintenance of quality and work standards.
 - 14. Effect of proposed changes on progress schedule and coordination.
 - 15. Status of Certified Payroll and Labor Compliance Program, including subcontractors
 - 16. Other business relating to Work.
- F. The Owner's Representative will record minutes and distribute copies within 7 days after meeting to participants and those affected by decisions made.

END OF SECTION

SECTION 01043 - COORDINATION WITH OWNER'S OPERATIONS

PART 1 - GENERAL

1.1 CONTINUATION OF OPERATIONS

- A. The Contractor will be performing work adjacent to a pressurized water pipeline in an active residential, business, and school area. Under these conditions, precautions will be necessary to assure that no damage or unscheduled shutdowns occur to any facilities, including piping, utilities, roads, and structures that are to remain in operation and are not to be modified or replaced. Any temporary facilities, materials, equipment and labor required to achieve this objective shall be provided by the Contractor at his own expense. At the completion of work, all such temporary facilities, materials and equipment remaining shall be removed from the site.
- B. Regarding connection to existing buried piping and facilities at or adjacent to the site, it shall be the responsibility of the Contractor to uncover and verify their locations; elevations; bearings and inclinations; joint locations relative to connection points; materials; and dimensions prior to beginning construction or fabrication of any new materials or facilities which are dependent on the location of existing facilities.

1.2 ORDER OF THE WORK

- A. The work shall be carried on at such places on the project and also in such order or precedence as may be found necessary by the Engineer to expedite the completion of the project. After work has begun on any portion or designated part of the project, it shall be carried forward to its final completion.
- B. The proposed phasing of work is as follows in two (2) phases due to active pavement moratoriums in the City of Encinitas:
 - B.1 Phase 1 – Site No. 1 (City of Carlsbad) and Site No. 2 (Park Dale Ln & Gatepost Rd, City of Encinitas).
 - B.2 Phase 2 – Site No. 3 (Village Center Dr & Summerhill Dr, City of Encinitas). No construction activities which cause disturbance to the roadway surface shall occur until after the Site No. 3 roadway pavement moratoriums expire on August 11, 2024. Contractor shall be responsible for any pavement restoration required by the City of Encinitas and the Trench Cut Moratorium Policy 2019-95 due to pavement disturbance generated prior to the moratorium expiration.

1.3 SHUTDOWNS AND TIE-INS

- A. The intent of the project is to limit shutdowns for all customers.
- B. Any proposed shutdowns must be indicated on the Contractor's preliminary schedule to be submitted for review by the District's Representative at the Pre-Construction Conference. The actual allowable durations of the shutdowns will be determined during the preparation of the detailed construction schedule.
- C. No water system shutdowns or tie-ins to existing pipes will be allowed on a Monday

SECTION 01043 - COORDINATION WITH OWNER'S OPERATIONS

or a Friday.

- D. No water system shutdowns or tie-ins to existing pipes which would impact potable water services to Mission Estancia Elementary, Park Dale Lane Elementary, and La Costa Canyon High Schools will be allowed while school is in session and therefore shall take place during school breaks, or at night or on weekends with District and the jurisdictional School District's approval. Recycled water service disruptions shall not exceed 24 hr, unless otherwise approved.
- E. Lockout/Tagouts shall be performed in accordance with the District's procedures or the Contractor's procedures, whichever are more stringent.
- F. The Contractor shall compile a detailed list of all items of work which must be accomplished during any shutdown. The Contractor shall coordinate his work to minimize the required number of shutdowns by accomplishing as many tasks as possible during each shutdown period. The Contractor shall submit this list of items to the District Representative for his review as a part of the construction schedule defined within Section 01310. The schedule shall indicate all periods and duration of each proposed shutdown and the items of work which will be accomplished. The Contractor shall make specific written requests for all shutdowns twenty-one (21) calendar days in advance of the proposed shutdown for review and approval by the District Representative. The written request shall include a complete detailed plan of the Contractor's proposed activities including schedule, manpower, equipment, materials and methods which will be utilized to perform the required work during the proposed shutdown. If, in the opinion of the District Representative, the Contractor's proposed plan is insufficient to successfully complete the required work during the period of the shutdown, the Contractor shall make the appropriate revisions in his proposed plan to the satisfaction of the District Representative. The District reserves the right, at its sole discretion, to cancel any planned shutdown at any time for safety or operational reasons, including the day of the shutdown or during the shutdown. A canceled shutdown will not constitute the basis for an increase in compensation due the Contractor.
- G. All water services shall remain in service for the duration of construction except when performing reconnections and tie-ins.

1.4 SEQUENCE OF CONSTRUCTION

- A. General: Work under the Contract shall be scheduled and performed in such a manner as to result in the least possible disruption to the operation of the existing District facilities and to the general public. The Contractor shall coordinate all connections to existing meters and mains with the Owner. The Contractor will install all highline piping required by the Owner for continuity of service.
- B. The Contractor shall notify Owner a minimum of fourteen (14) calendar days prior to the commencement of construction, unless otherwise permitted by Owner. Contractor shall coordinate the manual operation of valves with Owner operations.
- C. The following construction constraints and requirements must be used as a guideline in preparing the scheduling for each phase of work. At the sole discretion of the

SECTION 01043 - COORDINATION WITH OWNER'S OPERATIONS

District Representative, deviation from these suggested sequences is permitted if techniques and methods known to the Contractor will result in reducing the disruption of the facility operation and upon the concurrence of the District Representative.

1. Obtain updated school calendars and verify restricted working hours in school zones.
2. Obtain a Trench Moratorium Waiver from the City of Encinitas for Site No. 2.
3. Verify the expiration of Site No. 3 pavement moratoriums with the City of Encinitas for any changes. Follow the proposed phasing of work accordingly.
4. Field stake the alignments and notify DigAlert for field mark out of all existing utilities that are crossing or paralleling (within 5 feet horizontally) of the proposed construction.
5. A minimum of three (3) weeks prior to start of excavation, pothole all existing utilities that are crossing or paralleling (within 5 feet horizontally) of the proposed pipeline including connection points to existing pipelines and as defined on the Drawings. Provide potholing results to the Owner and inform of any discrepancies at connection points, or at crossing or paralleling utilities, and allow sufficient time for District to make adjustments to the vertical and horizontal alignments, where necessary.
6. Construct recycled water pipeline, meters, and appurtenances.
7. Flushing and pressure testing of recycled water pipelines.
8. Base and Final paving shall be completed. Slurry seal and restriping to be completed.
9. At the District's sole discretion, additional new recycled water connections may be approved including all surface improvements.

END OF SECTION

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SECTION 01045 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 GENERAL

- A. The Section includes all cutting and patching of all Work under construction, completed Work and existing facilities in order to accommodate the coordination of Work, install other Work, uncover Work for access, inspection or testing, or similar purposes. Execute all cutting and patching, including excavation, backfill and fitting required to:
1. Remove and replace defective Work or Work not conforming to requirements of the Contract Documents.
 2. Remove samples of installed Work as required for testing.
 3. Remove all construction required to provide for specified alteration or addition to existing Work.
 4. Uncover Work to provide for the Engineer's inspection of covered Work or inspection by regulatory agencies having jurisdiction.
 5. Connect to completed Work that was not accomplished in the proper sequence.
 6. Remove or relocate existing utilities and pipes which obstruct the Work to which connections must be made.
 7. Make connections or alterations to existing or new facilities.
 8. Notify the District 21-calendar days in advance of cutting into existing PVC main pipes.
- B. Restore all existing Work to a state equal to that which it was in prior to cutting and restore new Work to the standards of these Specifications.
- C. Submittals:
1. Prior to cutting which may affect integrity and design function of Project, Owner's operations, or work of another contractor, submit written notice to Engineer, requesting consent to proceed with cutting, including:
 - a. Identification of Project.
 - b. Description of affected Work of Contractor and work of others.
 - c. Necessity for cutting.
 - d. Effect on other work and on structural integrity of Project.
 - e. Description of Proposed Work. Designate:

SECTION 01045 - CUTTING AND PATCHING

- 1) Scope of cutting and patching.
- 2) Contractor, Subcontractor or trade to execute Work.
- 3) Products proposed to be used.
- 4) Extent of refinishing.
- 5) Schedule of operations.
- e. Alternatives to cutting and patching, if any.
- g. Designation of party responsible for cost of cutting and patching.
2. Should conditions of Work, or schedule, indicate change of materials or methods, submit written recommendation to Engineer, including:
 - a. Conditions indicating change.
 - b. Recommendations for alternative materials or methods.
 - c. Submittals as required for substitutions.
3. Submit written notice to Engineer, designating time Work will be uncovered, to provide for observation. Do not begin cutting or patching operations until authorized by the Engineer.
- D. Provide shoring, bracing and support as required to maintain structural integrity of Project and protect adjacent Work from damage during cutting and patching.
- E. Conform to all applicable Specifications for application and installation of materials used for patching.

END OF SECTION

SECTION 01090 - REFERENCE STANDARDS

PART 1 - GENERAL

1.1 GENERAL

- A. Applicable Publications: Whenever in these specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the Work is advertised for bids shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the drawings shall be waived because of any provision of, or omission from, said standards or requirements.
- B. When a reference standard is specified, comply with requirements and recommendations stated in that standard, except when they are modified by the Contract Documents, or when applicable laws, ordinances, rules, regulations or codes establish stricter standards. The latest provisions of applicable standards shall apply to the Work.
- C. Reference standards include, but are not necessarily limited to, the following:
1. American Association of State Highway and Transportation Officials.
 2. American Concrete Institute.
 3. American Gear Manufacturers Association.
 4. American Institute of Steel Construction.
 5. American Iron and Steel Institute.
 6. American National Standards Institute.
 7. American Society of Heating, Refrigerating and Air Conditions Engineers.
 8. American Society of Mechanical Engineers.
 9. American Society for Testing and Materials.
 10. American Water Works Association.
 11. American Welding Society.
 12. City of Encinitas Standard Drawings.
 13. City of Carlsbad Standard Specifications and Drawings.
 14. Concrete Reinforcing Steel Institute.
 15. Factory Mutual Association.

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16. Institute of Electrical and Electronics Engineers.
17. National Electrical Manufacturer's Association.
18. National Fire Protection Association.
19. Prestressed Concrete Institute.
20. Underwriter's Laboratories, Inc.
21. Standard Specifications for Public Works Construction (SSPWC), Current Edition (Greenbook).
22. San Diego Area Regional Standard Drawings, Current Edition.
23. State of California, Department of Transportation Standard Specifications (Standard Specifications), Current Edition.
24. San Diego County Hydraulic Design Manual, Current Edition.
25. Olivenhain Municipal Water District Standard Specifications and Drawings.
26. All other applicable standards listed in the Specifications, and the standards of utility service companies, where applicable.

1.2 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Without limiting the generality of other requirements of the specifications, all Work specified herein shall conform to or exceed the requirements of all applicable codes and the applicable requirements of the following documents to the extent that the provisions of such documents are not in conflict with the requirements of these Specifications nor the applicable codes.
- B. References herein to "Building Code" or shall mean the California Building Code (CBC). The latest edition of the code as approved and used by the local agency as of the date of award, as adopted by the agency having jurisdiction, shall apply to the Work herein, including all addenda, modifications, amendments, or other lawful changes thereto. The CBC is hereby incorporated in and made a part of these Contract Documents, to the extent of the applicable references thereto.
- C. No provisions of any referenced standard specification, manual or code, whether or not specifically incorporated by reference in the Contract Documents, shall be effective to change the duties and responsibilities of the Owner, Engineer, or Contractor from those set forth in the Contract Documents. Nor shall they be effective to assign to the Engineer any duty of authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of the Contract Documents.
- D. In case of conflict between codes, reference standards, drawings and the other Contract Documents, the most stringent requirements shall govern. All conflict shall

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be brought to the attention of the Engineer for clarification and directions prior to ordering or providing any materials or labor. The Contractor shall bid the most stringent requirements.

- E. Applicable Standard Specifications: The Contractor shall construct the Work specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and specifications listed herein.
- F. References herein to "SSPWC" or "Green Book" shall mean "Standard Specifications for Public Works Construction," latest addition, including the County of San Diego Regional and City of San Diego Supplement Amendments.
- G. References to "Standard Drawings" shall mean the "San Diego Area Regional Standard Drawings, Current Edition" including all current supplements, addenda, and revisions thereof.
- H. Reference herein to "OMWD Standard Specifications" shall mean the "Olivenhain Municipal Water District Standard Specifications" dated February 2017, and including all current supplements, addenda, and revisions thereof. The specifications and standard drawing details contained in these Contract Documents shall take precedence over the "OMWD Standard Specifications".
- I. References herein to "Cal-OSHA" shall mean State of California, Department of Industrial Relations, Construction Safety Orders, as amended to date, and all changes and amendments thereto which are effective as of the date of construction.
- J. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- K. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

1.3 TRADE NAMES AND ALTERNATIVES

- A. For convenience in designation in the Contract Documents, materials to be incorporated in the Work may be designated under a trade name or the name of a manufacturer and its catalog information. The use of alternative material which is equivalent in quality and of the required characteristics for the purpose intended will be permitted, subject to the following requirements:
 - 1. The burden of proof as to the quality and suitability of such alternative equipment, products, or other materials shall be upon the Contractor.
 - 2. The Engineer will be the sole judge as to the comparative quality and suitability of such alternative equipment, products, or other materials and its decision shall be final.

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- C. Wherever in the Contract Documents the name or the name and address of a manufacturer or distributor is given for a product or other material, or if any other source of a product or material is indicated therefore, such information is given for the convenience of the Contractor only, and no limit, restriction, or direction is indicated or intended thereby, nor is the accuracy or reliability of such information guaranteed. It shall be the responsibility of the Contractor to determine the accurate identity and location of any such manufacturer, distributor, or other source of any product or material called for in the Contract Documents.
- C. The Contractor may offer any material, process or equipment which it considers equivalent to that indicated. Unless otherwise authorized in writing by the Engineer, submission of data substantiating a request for a substitution of "an equal" item shall be submitted after bid opening and prior to 60 calendar days after award of the Contract. The Contractor, at its sole expense, shall furnish data concerning items it has offered as equivalent to those specified. The Contractor shall provide any materials as required by the Engineer to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the items will fulfill its intended function.
- Installation and use of a substitute item shall not be made until approved by the Engineer. If a substitute offered by the Contractor is found to be not equivalent to the specified material, the Contractor shall furnish and install the specified material.
- D. The Contractor's attention is further directed to the requirement that its failure to submit data substantiating a request for a substitution of an "equivalent" item within said period prior to and after the award of the contract, shall be deemed to mean that the Contractor intends to furnish one of the specific brand-named products named in the specification, and the Contractor does hereby waive all rights to offer or use substitute products in each such case. Wherever a proposed substitute product has not been submitted within said period, or wherever the submission of a proposed substitute product fails to meet the requirements of the specifications and an acceptable resubmittal is not received by the Engineer within said period, the Contractor shall furnish only one of the products originally named in the Contract Documents.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION

SECTION 01150 – MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The items described below in Paragraph 1.5 - Pay Items refer to and are the same pay items listed in the Bid Form. They constitute all of the pay items for the completion of the Work. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant, services, Contractor's or Engineer's field offices, layout surveys, job signs, sanitary requirements, testing, safety devices, shop drawings, record drawings, water supplies, power, maintaining traffic, removal of waste, watchmen, bonds, insurance, and all other requirements of the Contract Documents. Compensation for all such services, materials, and items shall be included in the prices stipulated for the lump sum or unit price pay items listed herein.
- B. The lump sum bid prices and unit cost bid prices will be deemed to include an amount considered by the Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- C. As a condition precedent to approval of the Contractor's monthly payment application by the District's Representative, the Contractor shall submit a monthly construction schedule properly updated and accurately showing the work completed to date and the work yet to be performed in the remaining Contract time. Contractor shall also keep the record drawings properly updated. Contractor must provide hard copies of all Certified Payroll Records to the Owner's appointed Third Party Labor Compliance Representative (TPLCR). The Contractor agrees failure to comply with the foregoing to the satisfaction of the District's Representative shall delay the monthly progress payment to the Contractor without penalty to the District.

1.2 SCOPE

- A. Payment shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies and manufactured articles and for all labor, operations and incidentals that are appurtenant to the items of Work and necessary to complete the various items of Work in accordance with the requirements of the Contract Documents. This shall include all appurtenances and the costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).
- B. Payment shall include all measures necessary to comply with all applicable State and Federal requirements for handling, transporting and disposal of asbestos containing materials (i.e., asbestos cement) including special handling these materials in a manner that will preclude their classification as regulated asbestos containing material and worker protection to reduce health and safety risks resulting from exposure to asbestos containing materials.
- C. **WORK BY OTHERS**

SECTION 01150 – MEASUREMENT AND PAYMENT

1. Interference with work on utilities: The Contractor shall cooperate fully with all utility forces of the District or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of utilities which interfere with the progress of work by others, and shall schedule the work so as to minimize interference with said relocation, altering, or other rearranging of facilities.

1.3 BREAKDOWN OF CONTRACT PRICE OF LUMP SUM CONTRACTS

- A. Prior to the execution of a lump sum contract, the Contractor shall submit a detailed price breakdown showing the allocated portion of the total bid price to the various items of Work. Contractor must submit a preliminary price breakdown for the review and approval of the Engineer. The Owner reserves the right to reject any breakdown submitted by the Contractor which the Owner judges insufficient to allow for the preparation of accurate monthly progress payment estimates or extra work, whether addition or deletion, similar in nature to the Work included in the Contractor's bid. The detailed price breakdown shall be listed by specification section number and shall include a separate cost item for all items of equipment or work. The price breakdown shall typically be a unit price type breakdown and shall include quantities, unit prices and total bid cost for each cost item. Where a unit price breakdown is judged impractical, the Owner may allow a breakdown by lump sum for certain cost items. This information will be used by the Owner in preparing monthly progress payment estimates.

1.4 PIPELINE AND APPURTENANT PAY ITEMS

- A. The following requirements, as applicable, shall apply to pipeline, valves, water services, facility abandonments, and all appurtenant pay items listed in this Section, together with the additional requirements listed under each pay item. Payment shall include, but is not limited to, field surveying and staking; record of survey and replacement of monuments; pavement saw cutting; pavement hauling and disposal; excavation; notification and coordination prior to cutting into existing pipelines; removal of abandoned structures and interfering pipe/fittings/valves or concrete thrust blocks from within trench excavations; cutting and plugging of abandoned pipe; subgrade preparation and compaction; surplus material disposal; conditioning of native material for backfill; imported bedding and backfill material and compaction for pipe zone and trench zone; slurry backfill where approved or where shown in the Plans; recessed trench plating; installation, removal, and disposal of temporary asphalt concrete pavement; pipe and fittings; tubing; concrete thrust blocks, anchors, supports, and/or restraint devices; marking tape and tracer wire; concrete accelerate; relocation and/or protection of existing water services in conflict with new pipe installation; protection of the existing water main to maintain service to existing customers; routing copper tubing to avoid conflict with existing utilities; pressure testing; disinfection and sampling; polyethylene encasement; wax tape coating system; valve stem extensions; valve wells and covers; valve and lid grade adjustments with final paving; linings and coatings for metallic pipe; painting; temporary highlining; temporary or permanent connections to existing pipelines; dewatering and handling water from connecting pipes isolated by District forces; protection of existing District facilities, existing cathodic protection system, and existing road facilities such as sidewalks, driveways, curb

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and gutter, medians, signs, fencing, and light standards; removal of vegetation, landscaping, trees, or irrigation in conflict with improvements; tree root protection; tree trimming upon approval of a certified arborist; equipment or permits not included in any other bid item; working around existing utilities; coordination with the District and private property owners for access to perform work on private property; and all incidental work, complete in place, in accordance with the District Standard Specifications and Drawings and the Contract Documents. No adjustment to the Contract Price will be made for variations in trench width, pavement removal width, pavement material, or pavement thickness.

Unless otherwise listed as a separate bid item, the pipeline payment shall also include, but not be limited to, furnishing all labor, materials, tools, and equipment and performing all work required for over-excavation, placement of fabric in accordance with product manufacturer's recommendations, and placement of crushed rock below the design trench subgrade elevation in accordance with the Contract Documents.

Unless otherwise listed as a separate bid item, the pipeline payment shall include all labor, materials, tools, equipment and incidentals necessary to remove and replace material determined to be unsuitable by the District for use in the trench or pipe zone, including, but not limited to removal and disposal of unsuitable material, handling unsuitable or wet material, containment and clean-up of wet unsuitable material, additional shoring or dewatering, providing and placement of suitable backfill material, including hauling, mixing, and screening as necessary, compaction, and any schedule impacts.

All excavations may encounter varying soil and excavation conditions. All types of condition including rock removal and shoring due to unstable slopes, will be considered as part of the various items of work and no further compensation shall be made.

1.5 PAY ITEMS

A. Base Bid Schedule A – Site No. 1 (Calle Barcelona Area, City of Carlsbad)

1. Bid Item A.1 - Mobilization, Demobilization, Bonds, Permits, Insurance, & Cleanup

Payment shall include compensation for all labor, materials, tools and equipment including, but not limited to, the following principal items: obtaining and complying with permits not included in any other bid item; mobilizing labor force, equipment and construction facilities; providing Contractor field offices and storage yard (if Contractor deems necessary); securing construction water supply; providing all temporary construction fencing and safety barriers; providing on-site sanitary facilities; obtaining groundwater discharge permits or waivers; posting OSHA requirements and establishing safety programs; daily cleanup; preparing the Schedule of Values prior to the pre-construction meeting; preconstruction/progress video and photographs; installing, maintaining and removing project identification signs; compliance with the Owners Labor Compliance Program; compliance with the Owner's Final Initial Study/Environmental Checklist and Mitigated Negative Declaration environmental measures,

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Buy America requirement coordination; compliance with Davis-Bacon, compliance with all other federal funding riders, whether specifically listed or not, work not specified for payment in any other bid item; and all incidentals for the mobilization, demobilization, and permitting for construction of the project as described in the Contract Documents. This work also includes the cost for maintaining and submitting the project record drawings at the end of the project. These record drawings must be reviewed monthly with the District to receive payment for any work.

Payment shall also include bonds, insurance (including the City of Carlsbad as additional insured with \$1,000,000 coverage limits), permit applications and fees for City of Carlsbad and incidentals thereto to construct the project in its entirety in accordance with the Contract Documents. City of Carlsbad construction inspection fees only will be paid for by the Owner. Traffic control and right-of-way/encroachment fees are the responsibility of the Contractor. Earthquake & Tidal Wave Insurance is not required.

Payment for this item shall be limited to five (5) percent of the total bid schedule for Schedule A.

2. Bid Item A.2 – Excavation Support Systems

Payment shall include, but is not limited to, obtaining and complying with all permits and regulations of the California Occupational Safety and Health (Cal/OSHA); preparing and submitting plans by a licensed Engineer and obtaining State Division of Industrial Safety permit(s) for excavations that are 5 feet deep or greater; and all incidental work for sheeting, shields, shoring, sloping or benching of excavation side slopes, or other protective systems necessary for the support of trench excavations and for worker protection from materials or equipment that could pose a hazard by falling or rolling into excavations, including but not limited to railing and fence.

All types of excavation conditions may be encountered including loose soils. A geotechnical report has not been provided for this area. The Contractor shall satisfy himself as to the geotechnical conditions at the site by performing geotechnical investigations as needed. This bid item shall include trench shoring sufficient so as not to cause damage to adjacent paving or facilities. Damage to adjacent paving of facilities due to insufficient trench shoring methods shall be the responsibility of the Contractor and no additional payment methods shall be made thereof.

3. Bid Item A.3 – Traffic Control

Payment shall include compensation for all labor, materials, tools, and equipment including, but not limited to the following principal items: preparation of traffic control plans for review and approval by the City of Carlsbad; payment of all jurisdictional agency traffic control fees; implementation of traffic control devices per the approved plans for the duration of construction for all construction activities including, but not limited to advance warning signs, changeable message signs, lights, reflectors, maintenance of detours, barricades, flagmen, control of parking, protection of cyclists and pedestrians; and all other incidental work as described in the Contract Documents.

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4. Bid Item A.4 – Storm Water Pollution Prevention

Payment shall include compensation for all labor, materials, tools, and equipment including but not limited to the following principal items: preparing and submitting City Form E-32 (Determination of Project SWPPP Tier Level and Construction Threat Level) and the resulting required documentation as associated with a Tier 2 Level SWPPP, or other storm water pollution prevention documentation in conformance with the Construction General Permit and/or jurisdictional authority (City of Carlsbad) as is applicable; implementing best management practices and erosion control measures in conformance with the SWPPP documentation; placement of erosion control measures, daily sweeping, sampling, monitoring, reporting, and any appurtenant work; and all other incidental work as described in the Contract Documents to be implemented throughout construction. The Contractor shall be responsible for providing a certified Qualified SWPPP Developer to prepare Permit Registration Documents (PRD) and comply with the SMARTS system and coordinate with the District's designated Legally Responsible Party (LRP) throughout the duration of the project.

5. Bid Item A.5 – Potholing

Payment for potholing shall include full compensation for all labor, materials, tools, equipment and incidentals for the potholing of utilities two (2) weeks in advance of propose pipeline installation that join, cross, or parallel the work (within 5 feet) prior to construction including surveying and staking, excavation, shoring, bracing, backfill, site restoration and incidental work necessary to verify the sizes, material types, elevations, inclinations and bearings of existing utilities within the work areas whether shown on the plans or located in the field in accordance with the Contract Documents. Potholing shall be conducted for the proposed pipelines, lateral piping for appurtenances and connections. Potholing of existing utilities that parallel the proposed pipelines shall be conducted at an interval sufficient to establish their locations with respect to the centerline of the proposed construction. Payment for this bid item shall include costs for traffic control, permits and related drawings for potholing activities that are not included in any other bid item, if necessary, prepared to the satisfaction of the governing jurisdiction. Repairs shall also be in strict conformance with the requirements of the City of Carlsbad.

6. Bid Item A.6 – 6-inch PVC C-900 DR14

Payment shall include all labor, materials, tools, equipment and incidentals to construct 6-inch diameter PVC C-900 DR14 recycled water pipeline in accordance with the Contract Documents, and as directed by the District. Contractor shall anticipate incidental dewatering and shall furnish and install temporary dewatering and surface water control systems to dewater and maintain excavation in a dry condition. Measurement of installed pipeline shall be made to the nearest foot along the centerline projection of the pipeline into a horizontal plane.

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7. Bid Item A.7 – 2-inch Blow Off Assembly
Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch blow off assemblies in accordance with Standard Drawing A-1.2 and the Contract Documents.
8. Bid Item A.8 – 2-inch Manual Air Release Assembly
Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch manual air release assemblies in accordance with Standard Drawing A-2.2 and the Contract Documents.
9. Bid Item A.9 – 2-inch Combination Air Valve Assembly
Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch combination air valve assemblies in accordance with Standard Drawing A-3.2 and the Contract Documents.
10. Bid Item A.10 – 2-inch Combination Air Valve and Recycled Water Fill Station
Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch combination air valve and recycled water fill station in accordance with Standard Drawing A-3.2 and the Contract Documents.
11. Bid Item A.11 – 1-inch Recycled Water Service
Payment shall include compensation for all labor, materials, tools, and equipment to construct new 1-inch recycled water services in accordance with Standard Drawing B-1.1 and the Contract Documents.
12. Bid Item A.12 – 2-inch Recycled Water Service
Payment shall include compensation for all labor, materials, tools, and equipment to construct new 2-inch recycled water services in accordance with Standard Drawing B-1.2 and the Contract Documents.
13. Bid Item A.13 – Connections to Existing 6-inch and 8-inch PVC Recycled Water Pipeline
Payment shall include compensation for all labor, materials, tools, and equipment to connect to existing infrastructure including, but not limited to, potholing connection point; dewatering pipe; concrete thrust blocks and concrete accelerants; removal of the existing end cap and concrete thrust block; transition or repair couplings; pipe and fittings as needed for field adjustments.
14. Bid Item A.14 – 6" Valve
Payment shall include compensation for all labor, materials, tools, and equipment to construct 6-inch resilient wedge gate valves in accordance with the Contract Documents.
15. Bid Item A.15 – 8" Valve
Payment shall include compensation for all labor, materials, tools, and equipment to construct 8-inch resilient wedge gate valves in accordance with the Contract Documents.

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16. Bid Item A.16 – Site Restoration

Payment shall include all labor, materials, tools, and equipment necessary to restore disturbed areas to like conditions from all work such as minor asphalt patches, sidewalk, driveways, pavers, DG trails, stamped concrete, colored concrete, curbs, gutters, medians, retaining and block walls, plantings (trees/bushes), landscaping features, sod & irrigation, irrigation fittings, fencings and railing; and all other incidental work as described in the Contract Documents. Completed work shall meet the approval of the jurisdictional agency. All work to restore areas to pre-construction conditions shall be included in this Pay Item and shall be at no additional cost to the Owner.

17. Bid Item A.17 – Additional Potholing if Required

Payment shall include all labor, materials, tools, equipment and incidentals necessary to locate the utility marked out in the field by Dig Alert but not shown on plans by reasonable means. Payment shall include traffic control, surveying and staking, excavation, ensuring continued operations of the utility and temporarily supporting the utility if necessary, working around the utility during pipeline installation, compaction and backfill, any schedule impacts, site restoration and incidental work necessary to verify the sizes, material types, elevations, inclinations and bearings of existing utilities within the work areas. All other potholing is included in Pay Item No. 5. . The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

18. Bid Item A.18 – Over-excavation and Imported Bedding

Payment shall include all labor, materials, tools, equipment and incidentals necessary to remove and replace material determined to be unsuitable by the District for use in the trench or pipe zone. This bid item does NOT apply to pipe subgrade which is covered under Standard Specification 02223-3.10 and overexcavation paid for under the individual Pay Items per Section 01150-1.4. Payment includes removal and disposal of unsuitable material, containment and clean-up of wet unsuitable material, additional shoring or dewatering, providing and placement of suitable backfill material, including hauling, mixing, and screening as necessary, compaction, and any schedule impacts. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

19. Bid Item A.19 – Base Pavement Asphalt Concrete

Payment for asphalt concrete shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for Asphalt Concrete base paving of the trench, both class II aggregate base and asphalt concrete material per Section 02743, Appendix A, and the City of Carlsbad Engineering Standards (whichever is more restrictive), complete in place, and shall include permits and traffic control not included in any other item of work; additional pavement grinding, saw cutting, removal, and disposal, removal and disposal of temporary pavement, and surface preparation not covered under another Pay Item; backfill and compaction of the class II aggregate base specified; prime and tack coat; asphalt concrete of the

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class and grade specified; base paving flush to adjacent surface; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. No measurement or payment shall be made for asphalt concrete paving that is not ordered by the Owner, that extends beyond the paving limits shown or specified on the Drawings or Standard Drawings, or for paving that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction. Payment will not be adjusted for variations in trench width, pavement removal width, pavement material, or pavement thickness. Refer to existing asphalt thickness per Appendix C. Payment will include paving limits requirements per Section 02743. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

20. Bid Item A.20 – Final Pavement Asphalt Concrete: 3-inch Cold Mill & Overlay

Payment for asphalt concrete shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for cold milling (3-inch) and 3-inch Asphalt Concrete pavement for the final trench overlay per Section 02743, Appendix A, and the City of Carlsbad Engineering Standards, complete in place, and shall include permits and traffic control not included in any other item of work; additional pavement grinding, saw cutting, removal, and disposal, removal and disposal of temporary pavement, and surface preparation; tack coat; asphalt concrete of the class and grade specified; pavement reinforcement membrane; grind and cap flush to adjacent surface; raising to grade all valves (District or other utility owners) within the area of the overlay; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. No measurement or payment shall be made for asphalt concrete paving that is not ordered by the Owner, that extends beyond the paving limits shown or specified on the Drawings or Standard Drawings, or for paving that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction. Payment will not be adjusted for variations in trench width, pavement removal width, pavement material, or pavement thickness. Payment will include paving limits requirements per Section 02743. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

21. Bid Item A.21 – Restriping

Payment for restriping shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for the application of pavement striping and markings and thermoplastic crosswalk striping per City of Encinitas Standards and the City of Carlsbad Engineering Standards (whichever is more restrictive), complete in place, and shall include permits and traffic control not included in any other item of work; removal of existing striping; temporary striping; pavement striping, markings, and raised markers; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. Pavement striping and marker removal shall be per City of Encinitas Standards and the City of Carlsbad Engineering Standards

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(whichever is more restrictive). No measurement or payment shall be made for striping that is not ordered by the Owner, or that extends beyond the limits shown or specified on the Drawings or Standard Drawings, or for striping that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction.

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B. Additive Alternate Base Bid Schedule A1 – Site No. 1

1. Bid Item A1.1 - Use of Foreign Iron and Steel in lieu of Buy America Requirements for Base Bid – Bid Schedule A

Payment the Contractors use of foreign iron and steel in lieu of Buy America requirements for Base Bid – Bid Schedule A shall constitute a deductive amount and shall cover all applicable materials throughout Base Bid Schedule A and as shown in the Contract Documents. Contractor shall submit a Schedule of Values.

C. Base Bid Schedule B – Site No. 2 (Village Park Area, City of Encinitas)

1. Bid Item B.1 - Mobilization, Demobilization, Bonds, Permits, Insurance, & Cleanup

Payment shall include compensation for all labor, materials, tools and equipment including, but not limited to, the following principal items: obtaining and complying with permits not included in any other bid item; mobilizing labor force, equipment and construction facilities; providing Contractor field offices and storage yard (if Contractor deems necessary); securing construction water supply; providing all temporary construction fencing and safety barriers; providing on-site sanitary facilities; obtaining groundwater discharge permits or waivers; obtaining a Trench Moratorium Waiver from the City of Encinitas; posting OSHA requirements and establishing safety programs; daily cleanup; preparing the Schedule of Values prior to the pre-construction meeting; preconstruction/progress video and photographs; installing, maintaining and removing project identification signs; compliance with the Owners Labor Compliance Program; compliance with the Owner's Final Initial Study/Environmental Checklist and Mitigated Negative Declaration environmental measures, Buy America requirement coordination; compliance with Davis-Bacon, compliance with all other federal funding riders, whether specifically listed or not, work not specified for payment in any other bid item; and all incidentals for the mobilization, demobilization, and permitting for construction of the project as described in the Contract Documents. This work also includes the cost for maintaining and submitting the project record drawings at the end of the project. These record drawings must be reviewed monthly with the District to receive payment for any work.

Payment shall also include bonds, insurance (including the City of Encinitas as additional insured with \$1,000,000 coverage limits), permit applications and fees for City of Encinitas and incidentals thereto to construct the project in its entirety in accordance with the Contract Documents. City of Encinitas construction inspection fees only will be paid for by the Owner. Traffic control and right-of-way/encroachment fees are the responsibility of the Contractor. Earthquake & Tidal Wave Insurance is not required.

Payment for this item shall be limited to five (5) percent of the total bid schedule for Schedule B.

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2. Bid Item B.2 – Excavation Support Systems

Payment shall include, but is not limited to, obtaining and complying with all permits and regulations of the California Occupational Safety and Health (Cal/OSHA); preparing and submitting plans by a licensed Engineer and obtaining State Division of Industrial Safety permit(s) for excavations that are 5 feet deep or greater; and all incidental work for sheeting, shields, shoring, sloping or benching of excavation side slopes, or other protective systems necessary for the support of trench excavations and for worker protection from materials or equipment that could pose a hazard by falling or rolling into excavations, including but not limited to railing and fence.

All types of excavation conditions may be encountered including loose soils. A geotechnical report is provided in Appendix B for reference only. The Contractor shall satisfy himself as to the geotechnical conditions at the site by performing geotechnical investigations as needed. This bid item shall include trench shoring sufficient so as not to cause damage to adjacent paving or facilities. Damage to adjacent paving of facilities due to insufficient trench shoring methods shall be the responsibility of the Contractor and no additional payment methods shall be made thereof.

3. Bid Item B.3 – Traffic Control

Payment shall include compensation for all labor, materials, tools, and equipment including, but not limited to the following principal items: preparation of traffic control plans for review and approval by the City of Encinitas; payment of all jurisdictional agency traffic control fees; implementation of traffic control devices per the approved plans for the duration of construction for all construction activities including, but not limited to advance warning signs, changeable message signs, lights, reflectors, maintenance of detours, barricades, flagmen, control of parking, protection of cyclists and pedestrians; and all other incidental work as described in the Contract Documents.

4. Bid Item B.4 – Storm Water Pollution Prevention

Payment shall include compensation for all labor, materials, tools, and equipment including but not limited to the following principal items: preparing and submitting a Stormwater Intake Form for All Developments and Standard / Basic Project SWQMP to the City of Encinitas, or other storm water pollution prevention documentation in conformance with the Construction General Permit and/or jurisdictional authority (City of Encinitas) as is applicable or required; implementing best management practices and erosion control measures in conformance with the SWPPP documentation CASQA Storm Water BMP Handbook; placement of erosion control measures, daily sweeping, sampling, monitoring, reporting, and any appurtenant work; and all other incidental work as described in the Contract Documents to be implemented throughout construction. The Contractor shall be responsible for providing a certified Qualified SWPPP Developer to prepare Permit Registration Documents (PRD) and comply with the SMARTS system and coordinate with the District's designated Legally Responsible Party (LRP) throughout the duration of the project.

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5. Bid Item B.5 – Potholing

Payment for potholing shall include full compensation for all labor, materials, tools, equipment and incidentals for the potholing of utilities two (2) weeks in advance of proposed pipeline installation that join, cross, or parallel the work (within 5 feet) prior to construction including surveying and staking, excavation, shoring, bracing, backfill, site restoration and incidental work necessary to verify the sizes, material types, elevations, inclinations and bearings of existing utilities within the work areas whether shown on the plans or located in the field in accordance with the Contract Documents. Potholing shall be conducted for the proposed pipelines, lateral piping for appurtenances and connections. Potholing of existing utilities that parallel the proposed pipelines shall be conducted at an interval sufficient to establish their locations with respect to the centerline of the proposed construction. Payment for this bid item shall include costs for traffic control, permits and related drawings for potholing activities that are not included in any other bid item, if necessary, prepared to the satisfaction of the governing jurisdiction. Repairs shall also be in strict conformance with the requirements of the City of Encinitas.

6. Bid Item B.6 – 6-inch PVC C-900 DR14

Payment shall include all labor, materials, tools, equipment and incidentals to construct 6-inch diameter PVC C-900 DR14 recycled water pipeline in accordance with the Contract Documents, and as directed by the District. Contractor shall anticipate incidental dewatering and shall furnish and install temporary dewatering and surface water control systems to dewater and maintain excavation in a dry condition. Measurement of installed pipeline shall be made to the nearest foot along the centerline projection of the pipeline into a horizontal plane.

7. Bid Item B.7 – 2-inch Blow Off Assembly

Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch blow off assemblies in accordance with Standard Drawing A-1.2 and the Contract Documents.

8. Bid Item B.8 – 2-inch Combination Air Valve Assembly

Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch combination air valve assemblies in accordance with Standard Drawing A-3.2 and the Contract Documents.

9. Bid Item B.9 – 2-inch Recycled Water Service

Payment shall include compensation for all labor, materials, tools, and equipment to construct new 2-inch recycled water services in accordance with Standard Drawing B-1.2 and the Contract Documents.

10. Bid Item B.10 – 2-inch Combination Air Valve and Recycled Water Fill Station

Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch combination air valve and recycled water fill station in accordance with Standard Drawing A-3.2 and the Contract Documents.

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11. Bid Item B.11 – Connections to Existing 6-inch and 8-inch PVC Recycled Water Pipeline

Payment shall include compensation for all labor, materials, tools, and equipment to connect to existing infrastructure including, but not limited to, potholing connection point; dewatering pipe; concrete thrust blocks and concrete accelerants; removal of the existing end cap and concrete thrust block; transition or repair couplings; pipe and fittings as needed for field adjustments.
12. Bid Item B.12 – 6" Valve

Payment shall include compensation for all labor, materials, tools, and equipment to construct 6-inch resilient wedge gate valves in accordance with the Contract Documents.
13. Bid Item B.13 – Site Restoration

Payment shall include all labor, materials, tools, and equipment necessary to restore disturbed areas to like conditions from all work such as minor asphalt patches, sidewalk, driveways, pavers, DG trails, stamped concrete, colored concrete, curbs, gutters, medians, retaining and block walls, plantings (trees/bushes), landscaping features, sod & irrigation, irrigation fittings, fencings and railing; and all other incidental work as described in the Contract Documents. Completed work shall meet the approval of the jurisdictional agency. All work to restore areas to pre-construction conditions shall be included in this Pay Item and shall be at no additional cost to the Owner.
14. Bid Item B.14 – Additional Potholing if Required

Payment shall include all labor, materials, tools, equipment and incidentals necessary to locate the utility marked out in the field by Dig Alert but not shown on plans by reasonable means. Payment shall include traffic control, surveying and staking, excavation, ensuring continued operations of the utility and temporarily supporting the utility if necessary, working around the utility during pipeline installation, compaction and backfill, any schedule impacts, site restoration and incidental work necessary to verify the sizes, material types, elevations, inclinations and bearings of existing utilities within the work areas. All other potholing is included in Pay Item No. 5. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.
15. Bid Item B.15 – Over-excavation and Imported Bedding

Payment shall include all labor, materials, tools, equipment and incidentals necessary to remove and replace material determined to be unsuitable by the District for use in the trench or pipe zone. This bid item does NOT apply to pipe subgrade which is covered under Standard Specification 02223-3.10 and overexcavation paid for under the individual Pay Items per Section 01150-1.4. Payment includes removal and disposal of unsuitable material, containment and clean-up of wet unsuitable material, additional shoring or dewatering, providing and placement of suitable backfill material, including hauling, mixing, and screening as necessary, compaction, and any schedule impacts. The Owner reserves the right to vary the quantity of

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this bid Item from 0%-200% of the original bid quantity with no change in unit price

16. Bid Item B.16 – Base Pavement Asphalt Concrete

Payment for asphalt concrete shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for Asphalt Concrete base paving of the trench, both class II aggregate base and asphalt concrete material per Section 02743, Appendix A, and the City of Encinitas Engineering Standards (whichever is more restrictive), complete in place, and shall include permits and traffic control not included in any other item of work; additional pavement grinding, saw cutting, removal, and disposal, removal and disposal of temporary pavement, and surface preparation not covered under another Pay Item; backfill and compaction of the class II aggregate base specified; prime and tack coat; asphalt concrete of the class and grade specified; base paving flush to adjacent surface; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. No measurement or payment shall be made for asphalt concrete paving that is not ordered by the Owner, that extends beyond the paving limits shown or specified on the Drawings or Standard Drawings, or for paving that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction. Payment will not be adjusted for variations in trench width, pavement removal width, pavement material, or pavement thickness. Refer to existing asphalt thickness per Appendix C. Payment will include paving limits requirements per Section 02743. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

17. Bid Item B.17 – Final Pavement Asphalt Concrete: 2-inch Cold Mill & Overlay

Payment for asphalt concrete shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for cold milling (2-inch) and 2-inch Asphalt Concrete pavement for the final trench overlay per Section 02743, Appendix A, and the City of Encinitas Engineering Design Manual and Trench Cut Moratorium Policy 2019-95, complete in place, and shall include permits and traffic control not included in any other item of work; additional pavement grinding, saw cutting, removal, and disposal, removal and disposal of temporary pavement, and surface preparation; tack coat; asphalt concrete of the class and grade specified; pavement reinforcement membrane; grind and cap flush to adjacent surface; raising to grade all valves (District or other utility owners) within the area of the overlay; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. No measurement or payment shall be made for asphalt concrete paving that is not ordered by the Owner, that extends beyond the paving limits shown or specified on the Drawings or Standard Drawings, or for paving that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction. Payment will not be adjusted for variations in trench width, pavement removal width, pavement material, or pavement thickness. Payment will include paving limits requirements per Section 02743. The Owner reserves

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the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

18. Bid Item B.18 – Final Pavement Asphalt Concrete: 1.5-inch Cold Mill & Overlay

Payment for asphalt concrete shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for cold milling (1.5-inch) and 1.5-inch Asphalt Concrete pavement for the final trench overlay per Section 02743, Appendix A, and the City of Encinitas Engineering Design Manual, complete in place, and shall include permits and traffic control not included in any other item of work; additional pavement grinding, saw cutting, removal, and disposal, removal and disposal of temporary pavement, and surface preparation; tack coat; asphalt concrete of the class and grade specified; pavement reinforcement membrane; grind and cap flush to adjacent surface; raising to grade all valves (District or other utility owners) within the area of the overlay; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. No measurement or payment shall be made for asphalt concrete paving that is not ordered by the Owner, that extends beyond the paving limits shown or specified on the Drawings or Standard Drawings, or for paving that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction. Payment will not be adjusted for variations in trench width, pavement removal width, pavement material, or pavement thickness. Payment will include paving limits requirements per Section 02743. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

19. Bid Item B.19 – Restriping

Payment for restriping shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for the application of pavement striping and markings and thermoplastic crosswalk striping per City of Encinitas Standards, complete in place, and shall include permits and traffic control not included in any other item of work; removal of existing striping; temporary striping; pavement striping, markings, and raised markers; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. Pavement striping and marker removal shall be per City of Encinitas Standards. No measurement or payment shall be made for striping that is not ordered by the Owner, or that extends beyond the limits shown or specified on the Drawings or Standard Drawings, or for striping that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction.

D. Additive Alternate Base Bid Schedule B1 – Site No. 2

1. Bid Item B1.1 - Use of Foreign Iron and Steel in lieu of Buy America Requirements for Base Bid – Bid Schedule B

Payment the Contractors use of foreign iron and steel in lieu of Buy America requirements for Base Bid – Bid Schedule B shall constitute a deductive

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amount and shall cover all applicable materials throughout Base Bid Schedule B and as shown in the Contract Documents. Contractor shall submit a Schedule of Values.

E. Base Bid Schedule C – Site No. 3 (Summerhill Area, City of Encinitas)

1. Bid Item C.1 - Mobilization, Demobilization, Bonds, Permits, Insurance, & Cleanup

Payment shall include compensation for all labor, materials, tools and equipment including, but not limited to, the following principal items: obtaining and complying with permits not included in any other bid item; mobilizing labor force, equipment and construction facilities; providing Contractor field offices and storage yard (if Contractor deems necessary); securing construction water supply; providing all temporary construction fencing and safety barriers; providing on-site sanitary facilities; obtaining groundwater discharge permits or waivers; posting OSHA requirements and establishing safety programs; daily cleanup; preparing the Schedule of Values prior to the pre-construction meeting; preconstruction/progress video and photographs; installing, maintaining and removing project identification signs; compliance with the Owners Labor Compliance Program; compliance with the Owner's Final Initial Study/Environmental Checklist and Mitigated Negative Declaration environmental measures, Buy America requirement coordination; compliance with Davis-Bacon, compliance with all other federal funding riders, whether specifically listed or not, work not specified for payment in any other bid item; and all incidentals for the mobilization, demobilization, and permitting for construction of the project as described in the Contract Documents. This work also includes the cost for maintaining and submitting the project record drawings at the end of the project. These record drawings must be reviewed monthly with the District to receive payment for any work.

Payment shall also include bonds, insurance (including the City of Encinitas as additional insured with \$1,000,000 coverage limits), permit applications and fees for City of Encinitas and incidentals thereto to construct the project in its entirety in accordance with the Contract Documents. City of Encinitas construction inspection fees only will be paid for by the Owner. Traffic control and right-of-way/encroachment fees are the responsibility of the Contractor. Earthquake & Tidal Wave Insurance is not required.

Payment for this item shall be limited to five (5) percent of the total bid schedule for Schedule C.

2. Bid Item C.2 – Excavation Support Systems

Payment shall include, but is not limited to, obtaining and complying with all permits and regulations of the California Occupational Safety and Health (Cal/OSHA); preparing and submitting plans by a licensed Engineer and obtaining State Division of Industrial Safety permit(s) for excavations that are 5 feet deep or greater; and all incidental work for sheeting, shields, shoring, sloping or benching of excavation side slopes, or other protective systems necessary for the support of trench excavations and for worker

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protection from materials or equipment that could pose a hazard by falling or rolling into excavations, including but not limited to railing and fence.

All types of excavation conditions may be encountered including loose soils. A geotechnical report is provided in Appendix B for reference only. The Contractor shall satisfy himself as to the geotechnical conditions at the site by performing geotechnical investigations as needed. This bid item shall include trench shoring sufficient so as not to cause damage to adjacent paving or facilities. Damage to adjacent paving or facilities due to insufficient trench shoring methods shall be the responsibility of the Contractor and no additional payment methods shall be made thereof.

3. Bid Item C.3 – Traffic Control

Payment shall include compensation for all labor, materials, tools, and equipment including, but not limited to the following principal items: preparation of traffic control plans for review and approval by the City of Encinitas; payment of all jurisdictional agency traffic control fees; implementation of traffic control devices per the approved plans for the duration of construction for all construction activities including, but not limited to advance warning signs, changeable message signs, lights, reflectors, maintenance of detours, barricades, flagmen, control of parking, protection of cyclists and pedestrians; and all other incidental work as described in the Contract Documents.

4. Bid Item C.4 – Storm Water Pollution Prevention

Payment shall include compensation for all labor, materials, tools, and equipment including but not limited to the following principal items: preparing and submitting a Stormwater Intake Form for All Developments and Standard / Basic Project SWQMP to the City of Encinitas, or other storm water pollution prevention documentation in conformance with the Construction General Permit and/or jurisdictional authority (City of Encinitas) as is applicable or required; implementing best management practices and erosion control measures in conformance with the SWPPP documentation CASQA Storm Water BMP Handbook; placement of erosion control measures, daily sweeping, sampling, monitoring, reporting, and any appurtenant work; and all other incidental work as described in the Contract Documents to be implemented throughout construction. The Contractor shall be responsible for providing a certified Qualified SWPPP Developer to prepare Permit Registration Documents (PRD) and comply with the SMARTS system and coordinate with the District's designated Legally Responsible Party (LRP) throughout the duration of the project.

5. Bid Item C.5 – Potholing

Payment for potholing shall include full compensation for all labor, materials, tools, equipment and incidentals for the potholing of utilities two (2) weeks in advance of propose pipeline installation that join, cross, or parallel the work (within 5 feet) prior to construction including surveying and staking, excavation, shoring, bracing, backfill, site restoration and incidental work necessary to verify the sizes, material types, elevations, inclinations and bearings of existing utilities within the work areas whether shown on the plans or located in the field in accordance with the Contract

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Documents. Potholing shall occur after expiration of pavement moratorium unless otherwise coordinated and approved with the City of Encinitas. Potholing shall be conducted for the proposed pipelines, lateral piping for appurtenances and connections. Potholing of existing utilities that parallel the proposed pipelines shall be conducted at an interval sufficient to establish their locations with respect to the centerline of the proposed construction. Payment for this bid item shall include costs for traffic control, permits and related drawings for potholing activities that are not included in any other bid item, if necessary, prepared to the satisfaction of the governing jurisdiction. Repairs shall also be in strict conformance with the requirements of the City of Encinitas.

6. Bid Item C.6 – 6-inch PVC C-900 DR14

Payment shall include all labor, materials, tools, equipment and incidentals to construct 6-inch diameter PVC C-900 DR14 recycled water pipeline in accordance with the Contract Documents, and as directed by the District. Contractor shall anticipate incidental dewatering and shall furnish and install temporary dewatering and surface water control systems to dewater and maintain excavation in a dry condition. Measurement of installed pipeline shall be made to the nearest foot along the centerline projection of the pipeline into a horizontal plane.

7. Bid Item C.7 – 2-inch Blow Off Assembly

Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch blow off assemblies in accordance with Standard Drawing A-1.2 and the Contract Documents.

8. Bid Item C.8 – 2-inch Manual Air Release Assembly

Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch manual air release assemblies in accordance with Standard Drawing A-2.2 and the Contract Documents.

9. Bid Item C.9 – 2-inch Combination Air Valve Assembly

Payment shall include compensation for all labor, materials, tools, and equipment to construct 2-inch combination air valve assemblies in accordance with Standard Drawing A-3.2 and the Contract Documents.

10. Bid Item C.10 – 1-inch Recycled Water Service

Payment shall include compensation for all labor, materials, tools, and equipment to construct new 1-inch recycled water services in accordance with Standard Drawing B-1.1 and the Contract Documents.

11. Bid Item C.11 – 1.5-inch Recycled Water Service

Payment shall include compensation for all labor, materials, tools, and equipment to construct new 1.5-inch recycled water services in accordance with Standard Drawing B-1.2 and the Contract Documents.

12. Bid Item C.12 – 2-inch Recycled Water Service

Payment shall include compensation for all labor, materials, tools, and equipment to construct new 2-inch recycled water services in accordance with Standard Drawing B-1.2 and the Contract Documents.

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13. Bid Item C.13 – Connections to Existing 6-inch and 8-inch PVC Recycled Water Pipeline
Payment shall include compensation for all labor, materials, tools, and equipment to connect to existing infrastructure including, but not limited to, potholing connection point; dewatering pipe; concrete thrust blocks and concrete accelerants; removal of the existing end cap and concrete thrust block; transition or repair couplings; pipe and fittings as needed for field adjustments.
14. Bid Item C.14 – 6" Valve
Payment shall include compensation for all labor, materials, tools, and equipment to construct 6-inch resilient wedge gate valves in accordance with the Contract Documents.
15. Bid Item C.15 – 8" Valve
Payment shall include compensation for all labor, materials, tools, and equipment to construct 8-inch resilient wedge gate valves in accordance with the Contract Documents.
16. Bid Item C.16 – Site Restoration
Payment shall include all labor, materials, tools, and equipment necessary to restore disturbed areas to like conditions from all work such as minor asphalt patches, sidewalk, driveways, pavers, DG trails, stamped concrete, colored concrete, curbs, gutters, medians, retaining and block walls, plantings (trees/bushes), landscaping features, sod & irrigation, irrigation fittings, fencings and railing; and all other incidental work as described in the Contract Documents. Completed work shall meet the approval of the jurisdictional agency. All work to restore areas to pre-construction conditions shall be included in this Pay Item and shall be at no additional cost to the Owner.
17. Bid Item C.17 – Additional Potholing if Required
Payment shall include all labor, materials, tools, equipment and incidentals necessary to locate the utility marked out in the field by Dig Alert but not shown on plans by reasonable means. Payment shall include traffic control, surveying and staking, excavation, ensuring continued operations of the utility and temporarily supporting the utility if necessary, working around the utility during pipeline installation, compaction and backfill, any schedule impacts, site restoration and incidental work necessary to verify the sizes, material types, elevations, inclinations and bearings of existing utilities within the work areas. All other potholing is included in Pay Item No. 5. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price
18. Bid Item C.18 – Over-excavation and Imported Bedding
Payment shall include all labor, materials, tools, equipment and incidentals necessary to remove and replace material determined to be unsuitable by the District for use in the trench or pipe zone. This bid item does NOT apply to pipe subgrade which is covered under Standard Specification 02223-3.10 and overexcavation paid for under the individual Pay Items per Section 01150-1.4. Payment includes removal and disposal of unsuitable

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material, containment and clean-up of wet unsuitable material, additional shoring or dewatering, providing and placement of suitable backfill material, including hauling, mixing, and screening as necessary, compaction, and any schedule impacts. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price

19. Bid Item C.19 – Base Pavement Asphalt Concrete

Payment for asphalt concrete shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for Asphalt Concrete base paving of the trench, both class II aggregate base and asphalt concrete material per Section 02743, Appendix A, and the City of Encinitas Engineering Standards (whichever is more restrictive), complete in place, and shall include permits and traffic control not included in any other item of work; additional pavement grinding, saw cutting, removal, and disposal, removal and disposal of temporary pavement, and surface preparation not covered under another Pay Item; backfill and compaction of the class II aggregate base specified; prime and tack coat; asphalt concrete of the class and grade specified; base paving flush to adjacent surface; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. No measurement or payment shall be made for asphalt concrete paving that is not ordered by the Owner, that extends beyond the paving limits shown or specified on the Drawings or Standard Drawings, or for paving that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction. Payment will not be adjusted for variations in trench width, pavement removal width, pavement material, or pavement thickness. Refer to existing asphalt thickness per Appendix C. Payment will include paving limits requirements per Section 02743. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

20. Bid Item C.20 – Final Pavement Asphalt Concrete: 1.5-inch Cold Mill & Overlay

Payment for asphalt concrete shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for cold milling (1.5-inch) and 1.5-inch Asphalt Concrete pavement for the final trench overlay per Section 02743, Appendix A, and the City of Encinitas Engineering Design Manual, complete in place, and shall include permits and traffic control not included in any other item of work; additional pavement grinding, saw cutting, removal, and disposal, removal and disposal of temporary pavement, and surface preparation; tack coat; asphalt concrete of the class and grade specified; pavement reinforcement membrane; grind and cap flush to adjacent surface; raising to grade all valves (District or other utility owners) within the area of the overlay; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. No measurement or payment shall be made for asphalt concrete paving that is not ordered by the Owner, that extends beyond the paving limits shown or specified on the Drawings or Standard Drawings, or for paving that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to

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the start of construction. Payment will not be adjusted for variations in trench width, pavement removal width, pavement material, or pavement thickness. Payment will include paving limits requirements per Section 02743. The Owner reserves the right to vary the quantity of this bid Item from 0%-200% of the original bid quantity with no change in unit price.

21. Bid Item C.21 – Restriping

Payment for restriping shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for the application of pavement striping and markings and thermoplastic crosswalk striping per City of Encinitas Standards, complete in place, and shall include permits and traffic control not included in any other item of work; removal of existing striping; temporary striping; pavement striping, markings, and raised markers; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents. Pavement striping and marker removal shall be per City of Encinitas Standards. No measurement or payment shall be made for striping that is not ordered by the Owner, or that extends beyond the limits shown or specified on the Drawings or Standard Drawings, or for striping that is required to restore existing pavements damaged by the Contractor's operations to the condition existing prior to the start of construction.

F. Additive Alternate Base Bid Schedule C1 – Site No. 3

1. Bid Item C1.1 - Use of Foreign Iron and Steel in lieu of Buy America Requirements for Base Bid – Bid Schedule C

Payment the Contractors use of foreign iron and steel in lieu of Buy America requirements for Base Bid – Bid Schedule C shall constitute a deductive amount and shall cover all applicable materials throughout Base Bid Schedule C and as shown in the Contract Documents. Contractor shall submit a Schedule of Values.

G. Basis for the award shall be based on the total Base Bid price for Schedule A, Schedule B, and Schedule C; all other bid items or schedules, regardless of order or priority, may be awarded at the District's sole discretion.

END OF SECTION

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SECTION 01300 – RECORD DRAWINGS AND SUBMITTALS

PART 1 - GENERAL

1.1 RECORD DRAWINGS

Provide and maintain on the jobsite one complete set of prints of all Drawings which form a part of the project. Immediately after each portion of the work is installed, indicate all deviations from the original design shown on the Drawings either by additional sketches or marked in red thereon. Upon completion of the job, deliver this record set to the Owner's Representative. The Engineer of Work or the Owner's Representative (as appropriate) will make the changes to the original Drawings indicating record conditions and deliver them to the District for review and approval.

A. Maintenance of Documents:

1. The Contractor shall maintain, in Contractor's field office in clean, dry, legible condition, complete sets of the following: Drawings, Specifications, Addenda, approved Shop Drawings, Samples, photographs, videos, Change Orders, other modifications of Contract Documents, test records, survey data, Field Orders, and all other documents pertinent to Contractor's Work.
2. The Contractor shall provide files and racks for proper storage and easy access. The filing format shall be in accordance with the format of the Construction Specification Institute (CSI), unless otherwise approved by Owner's Representative.
3. The Contractor shall make documents available at all times for inspection by the Engineer, Owner's Representative and Owner.
4. The Contractor shall not use Record Documents for any other purpose and shall not remove them from the Contractor's office without Owner's Representative approval.

B. Marking System: The Contractor shall provide electronic line colors for marking changes, revisions, additions and deletions, to the record set of Drawings. Use following color code unless otherwise approved by the Owner's Representative:

1. Process and Mechanical: Red
2. Architectural: Blue
3. Structural: Purple
4. Plumbing: Brown
5. Other Printed Notations: Black

C. Recording:

SECTION 01300 – RECORD DRAWINGS AND SUBMITTALS

1. The Contractor shall label each document "PROJECT RECORD" in 2-inch high printed letters.
 2. The Contractor shall keep record documents current.
 3. The Contractor shall not permanently conceal any Work until required information has been recorded.
 4. Drawings: The Contractor shall legibly mark to record actual construction the following items:
 - a. Depths of various elements of foundation in relation to datum.
 - b. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
 - c. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - d. Field changes of dimensions and details.
 - e. Changes made by Change Order or Field Order.
 - f. Details not on original Drawings.
 5. Specifications and Addenda: The Contractor shall legibly mark up each Section to record:
 - a. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
 - b. Changes made by Change Order or Field Order.
 - c. Other matters not originally specified.
- D. Submittal:
1. Upon Substantial Completion of the Work, the Contractor shall deliver record documents to Owner's Representative. Final payment will not be made until satisfactory record documents are received by Owner's Representative.
 2. The Contractor shall accompany the submittal with transmittal letter containing:
 - a. Date.
 - b. Project title and number.
 - c. Contractor's name and address.
 - d. Title and number of each record document.

SECTION 01300 – RECORD DRAWINGS AND SUBMITTALS

- e. Certification that each document as submitted is complete and accurate.
- f. Signature of Contractor, or his authorized representative.

1.2 APPROVED MATERIALS LIST

- A. The Approved Materials List (AML) details the District's approved materials the Contractor may use for any construction within the District's boundaries. The AML can be found on the Bids and Planning page of the District's website at www.olivenhain.com.
- B. The Contractor shall fill out and submit one (1) legible electronic copy of the completed AML to the District's Engineering Department as directed by the Owner's Representative within fourteen (14) calendar days of the Notice of Award. Failure to complete all fields in the AML shall result in the District rejecting the AML until filled out correctly.
- C. Within 30 calendar days after receipt of the completed AML package, the District's Representative will return the AML through the District's file sharing site to the Contractor with comments noted thereon. If resubmittal is not required, the District's Representative will return the AML with Approval noted thereon. If resubmittal is required, the District's Representative will return the AML and the Contractor shall correct the AML. Resubmit the corrected AML in the same manner as specified for the original AML.
- D. The review by the District's Representative is only of general conformance with the design concept of the project and general compliance with the Drawings and Standard Specifications and shall not be construed as relieving the Contractor of the full responsibility for: providing materials, equipment, and work required by the project; the proper fitting and construction of the work; the accuracy and completeness of the shop drawings; selecting fabrication processes and techniques of construction; and performing the work in a safe manner.
- E. No portion of the work requiring an AML submittal shall be commenced until the AML submittal has been reviewed by the District's Representative and returned with a notation indicating that resubmittal is not required. The Contractor is not required to provide Shop Drawings per this Specification Section 01300 for products that are identified on the AML.
- F. If the Contractor would like to use products other than those listed in the AML, he shall submit to the District's Representative a completed New Product Submittal Form. The purpose of the submittal form is to provide adequate information to determine if a product meets District criteria.

1.3 SHOP DRAWINGS

- A. Shop drawings are drawings, illustrations, schedules, performance charts, brochures, and other data which are prepared by the Contractor or any subcontractor,

SECTION 01300 – RECORD DRAWINGS AND SUBMITTALS

manufacturer, supplier, or distributor and which illustrates some portion of the work. Submit shop drawings where indicated. Place all required shop drawings in one complete package that illustrates the full scope of the project or as directed by the Owner's Representative. The intent of this requirement is to have one submittal package with all components of the project detailed in a single booklet.

- B. Submit one (1) legible electronic copy (PDF format) of submittals as directed by the Owner's Representative. Clearly indicate the name of the project specification section and drawing number to which each shop drawing is referenced. Each shop drawing shall be accompanied by the shop drawing submittal form which can be found in the General Provisions section.
- C. The submittals shall be reviewed first by the Contractor. Each copy of the submittal package shall be signed and dated by the Contractor. After these reviews, submit the submittal packages to the District's Representative for review.
- D. Submittals shall be complete in all respects. If the submittals show any deviations from the requirements of the Drawings and Standard Specifications because of standard shop practices or other reasons, the deviations and the reasons therefore shall be set forth in the letter of transmittal. By submitting submittals, the Contractor represents that material, equipment, and other work shown thereon conforms to the Drawings and Standard Specifications, except for any deviations set forth in the letter of transmittal.
- E. Within 30 calendar days after receipt of submittal package, the District's Representative will return the submittal packages to the Contractor with comments noted thereon. If resubmittal is not required, the District's Representative will return the submittal package with Approval noted thereon. If resubmittal is required, the District's Representative will return the submittal package and the Contractor shall correct the submittals. Resubmit the corrected submittal package in the same manner as specified for the original submittal. The Contractor in the letter of transmittal accompanying resubmitted packages shall direct specific attention to revisions other than the corrections requested by the District's Representative on previous submittals.
- F. The review by the District's Representative is only of general conformance with the design concept of the project and general compliance with the Drawings and Standard Specifications and shall not be construed as relieving the Contractor of the full responsibility for: providing materials, equipment, and work required by the project; the proper fitting and construction of the work; the accuracy and completeness of the shop drawings; selecting fabrication processes and techniques of construction; and performing the work in a safe manner.
- G. No portion of the work requiring a submittal shall be commenced until the submittal has been reviewed by the District's Representative and returned with a notation indicating that resubmittal is not required.

SECTION 01300 – RECORD DRAWINGS AND SUBMITTALS

1.03 INFORMATIONAL SUBMITTALS

A. Health and Safety Plans

- 1) Contractor shall prepare and submit a general company Health and Safety Plan (HSP), modified or supplemented to include job-specific considerations.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION

SECTION 01310 – PROGRESS SCHEDULES

PART 1 – GENERAL

- A. The Contractor shall provide a construction schedule which conforms to the requirements below, unless otherwise approved by the Engineer.

1.1 SECTION INCLUDES

- A. Format.
- B. Content.
- C. Revisions to schedules.
- D. Submittals.

1.2 RELATED SECTIONS

- A. Section 01010: Summary of Work
- B. Section 01039: Coordination and Meetings
- C. Section 01043: Coordination with Owner's Operations
- D. Section 01150: Measurement and Payment
- E. Standard Specification Section 01300: Record Drawings and Submittals

1.3 FORMAT

- A. Prepare network analysis system using the critical path method, as outlined in The Associated General Contractors of America (AGC) publication "The Use of CPM in Construction - A Manual for General Contractors".
- B. Hard Copy: Sheet size shall be 11 inches by 17 inches.
- C. Electronic Copy: The latest project schedule shall be made available in MS Project format.
- D. Time Scale: Indicate first date in each work week.
- E. Organization:
 - 1. Group Shop Drawing submittals and reviews into a separate sub-schedule.
 - 2. Group product deliveries into a separate sub-schedule.
 - 3. Group construction Work into a separate sub-schedule by Bid Schedule and by activity within each Bid Schedule.

SECTION 01310 – PROGRESS SCHEDULES

4. Group critical activities which dictate the rate of progress into a separate sub-schedule.
5. Organize each sub schedule by Specification Section number.

1.4 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by Specification Section number.
- C. Arrange construction Work into logically grouped activities for each Bid Schedule identified in Section 01150.
- D. Provide sub-schedules for each stage of Work identified in Section 01150, including dates for work in each street in each Bid Schedule per Sections 01043 and 01150.
- E. Provide sub-schedules to define critical portions of the entire Schedule.
- F. For work in each street in each Bid Schedule per Sections 01043 and 01150, provide the following details for any work that is to be performed outside the standard working hours:
 1. Dates when work during modified hours is planned.
 2. The number of consecutive days of work with modified hours.
 3. The frontage length of residential properties for segments near residential properties/subdivisions.
 4. Name any schools in the vicinity of the work.
 5. The nature of the work to be performed.
- G. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- H. Provide separate schedule of submittal dates for Shop Drawings, product data, factory and field testing dates, and dates reviewed submittals will be required from the Engineer.
- I. Indicate delivery dates for any Owner furnished items.
- J. Coordinate content with Schedule of Values specified in Section 01150.

SECTION 01310 – PROGRESS SCHEDULES

1.5 REVISIONS TO SCHEDULES

- A. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
- B. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- C. Provide narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including the effect of changes on schedules of separate contractors, if any.

1.6 SUBMITTALS

- A. Submit initial Schedules within 14 days after date of Notice to Proceed. After review, resubmit required revised data within ten days.
- B. Submit revised Progress Schedules monthly, or as directed by the Owner's Representative with the Progress Payment Form. Failure to submit an updated Progress Schedule will delay processing of Progress Pay Estimate until such time as a satisfactory Progress Schedule has been received and reviewed for adequacy by the Owner's Representative.
- C. Submit one electronic copy in PDF format.
- D. Attach a letter of transmittal to each submittal and include the following information in the letter:
 - 1. A listing of items which have changed since the last submittal.
 - 2. Discussion of problems causing delays, anticipated length of delays, and proposed countermeasures.

1.7 DISTRIBUTION

- A. Distribute copies of approved Schedules to project site file, Subcontractors, suppliers, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in Schedules.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION

(BLANK)

SECTION 01370 – SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Schedule of Values is an itemized list of the value or cost of each Bid Item of Work and the associated time of expenditures. It shall be used as the basis for submitting progress payments, projecting future payment schedule, and as the basis for negotiating changes (additions or deductions) in work per the General Provisions Section 4-2.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01039 – Coordination and Meetings

1.3 PREPARATION

- A. Schedule of Values shall be based on bid items and anticipated units completed each month.
- B. Schedule of Values shall be prepared on 8-1/2-inch by 11-inch white paper.
- C. The sum of the individual values shown on the Schedule of Values must equal the total Contract Price.
- D. Schedule shall show the purchase and delivery costs for materials and equipment that the Contractor anticipates he may request payment for prior to their installation.

1.4 CONTRACTOR SUBMITTAL

- A. A tentative schedule of values shall be submitted prior to or at the pre-construction meeting in accordance with Section 01039.
- B. The Contractor and Engineer shall meet and jointly review the preliminary schedule of values and make any adjustments in value allocation if, in the opinion of the Engineer, these are necessary to establish fair and reasonable allocation of values for the major Work components. Front end loading will not be permitted. This review and any necessary revisions or reallocation of the schedule of values shall be completed within 10 working days from the date of the Notice to Proceed.
- C. Submit one electronic copy of monthly updates of the schedule of values to the Engineer with requests for project payments.

END OF SECTION

(BLANK)

SECTION 01400 – QUALITY CONTROL

PART 1 - GENERAL

1.1 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. The Contractor shall verify all dimensions in the field and shall check field conditions continuously during construction. The Contractor shall be solely responsible for any inaccuracies built into the Work due to its failure to comply with this requirement.
- B. The Contractor shall inspect related and appurtenant Work and shall report in writing to the Owner's Representative any conditions which will prevent proper completion of the Work. Failure to report any such conditions shall constitute acceptance of all site conditions, and any required removal, repair, or replacement caused by unsuitable conditions shall be performed by the Contractor at its sole cost and expense.
- C. Points of connections to any existing pipelines must be accurately located by the Contractor. Information such as vertical elevations, pipe outside diameters, joints, materials of construction, shape, and pipe conditions must be obtained prior to beginning Work in the affected area and this information shall be transmitted to the Owner's Representative. The Owner's Representative shall make any necessary adjustments to the Drawings to reflect the actual field conditions. No additional payments will be made to the Contractor for any required adjustments in the Drawings at the points of connection to existing pipelines. No payment will be allowed for special transition couplings or jointing materials required for connections to existing pipelines.

1.2 INSPECTION OF THE WORK

- A. The Work shall be conducted under the general observation of the Owner's Representative and shall be subject to inspection by representatives of the Owner to ensure strict compliance with the requirements of the Contract Documents. Such inspection may include mill, plant, shop, or field inspection, as required. The Owner's Representative shall be permitted access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.

1.3 SAMPLING AND TESTING

- A. When not otherwise specified, all sampling and testing shall be in accordance with the methods prescribed in the current standards of the ASTM, as applicable to the class and nature of the article or materials considered; however, the Owner's Representative reserves the right to use any generally-accepted system of inspection which, in the opinion of the Owner's Representative will ensure that the quality of the workmanship is in full accord with the Contract Documents.

SECTION 01400 – QUALITY CONTROL

- B. Any waiver of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the specified testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance bond to assure execution of any necessary corrective or remedial Work, shall not be construed as a waiver of any technical or qualitative requirements of the Contract Documents.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION

SECTION 01410 – TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.1 GENERAL

- A. The Owner will employ and pay for an independent testing laboratory to perform testing services as delineated in the individual specification sections listed below. The Contractor shall employ and pay for an independent testing laboratory to perform testing services as delineated in the individual specification sections listed below, including repeat testing which results from the Contractor's failure to meet Specification requirements. These include, but are not limited to:
 - 1. Standard Specification Section 02200: Earthwork
 - 2. Section 02743 - Asphalt Concrete Paving
 - 3. Standard Specification Section 03000: General Concrete Construction
- B. Additionally, the Contractor shall pay for:
 - 1. Tests not listed above.
 - 2. Tests made for the Contractor's convenience.
 - 3. Repeat tests required because of the Contractor's failure to meet Specification requirements.
- C. The testing laboratory is not authorized to approve or accept any portion of the Work; rescind, alter or augment the requirements of the Contract Documents; or perform any duties of the Contractor.

1.2 QUALIFICATIONS OF LABORATORY

- A. Where applicable, the testing laboratory will meet "Recommended Requirements for Independent Laboratory Qualification", latest edition, published by American Council of Independent Laboratories and the basic requirements of ASTM E329 "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction". The Contractor shall submit the proposed laboratory for Owner approval.
- B. Testing equipment used by the laboratory will be calibrated at maximum 12-month intervals by devices of accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

1.3 LABORATORY DUTIES

- A. The testing laboratory will:
 - 1. Cooperate with Owner's Representative and Contractor and provide qualified personnel promptly on notice.
 - 2. Perform specified inspections, sampling and testing of materials and methods of construction; comply with applicable standards; ascertain compliance with requirements of Contract Documents.

SECTION 01410 – TESTING LABORATORY SERVICES

3. Promptly notify Owner's Representative and Contractor of irregularities or deficiencies of Work which are observed during performance of services.
4. Promptly submit two (2) copies of reports of inspections and tests to Owner's Representative, including:
 - a. Date issued.
 - b. Project title and number.
 - c. Testing laboratory name and address.
 - d. Date of inspection or sampling.
 - e. Record of temperature and weather.
 - f. Date of test.
 - g. Identification of product and Specification Section.
 - h. Location in Project.
 - i. Type of inspection or test.
 - j. Results of tests and observations regarding compliance with Contract Documents.
5. Perform additional tests and services as required by Owner.

1.4 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall:

- A. Cooperate with laboratory personnel; provide access to Work and to manufacturer's operations.
- B. Provide preliminary representative samples of materials to be tested to the laboratory in the required quantities.
- C. Furnish copies of product test reports.
- D. Furnish labor and facilities:
 1. To provide access to Work to be tested.
 2. To obtain and handle samples at the site.
 3. To facilitate inspections and tests.
 4. For the laboratory's exclusive use for storage and curing of test samples.

SECTION 01410 – TESTING LABORATORY SERVICES

- 5. Forms for preparing concrete test beams and cylinders.
- E. Notify laboratory and Owner's Representative sufficiently in advance of operations to allow for assignment of personnel and scheduling of tests.
- F. Arrange with laboratory and pay for additional samples and tests required for Contractor's convenience.

END OF SECTION

(BLANK)

SECTION 01545 – PROTECTION OF THE WORK AND PROPERTY

PART 1 - GENERAL

1.1 GENERAL

- A. Contractor shall be responsible for taking all precautions, providing all programs, and taking all actions necessary to protect the Work and all public and private property and facilities from damage as specified in the General Conditions and herein.
- B. In order to prevent damage, injury or loss, Contractor's actions shall include but not be limited to, the following:
 - 1. Store apparatus, materials, supplies, and equipment in an orderly safe manner that will not unduly interfere with the progress of the Work or the Work of any other contractor or utility service company.
 - 2. Provide suitable storage facilities for all materials which are subject to injury by exposure to weather, theft, breakage, or otherwise.
 - 3. Place upon the Work or any part thereof only such loads as are consistent with the safety of that portion of the Work.
 - 4. Clean up daily all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the Work shall present a safe, orderly and workmanlike appearance. Perform major cleaning every Friday, or Thursday if Friday is a holiday.
 - 5. Provide barricades and guard rails around openings, for scaffolding, for temporary stairs and ramps, around excavations, elevated walkways and other hazardous areas, including the FEBs while the aluminum railing is temporarily removed.
- C. Contractor shall not, except after written consent from proper parties, enter or occupy privately-owned land with men, tools, materials or equipment, except on easements provided herein.
- D. Contractor shall assume full responsibility for the preservation of all public and private property or facility on or adjacent to the site. If any direct or indirect damage is done by or on account of any act, omission, neglect or misconduct in the execution of the Work by the Contractor, it shall be restored by the Contractor, at his expense, to a condition equal to that existing before the damage was done.

1.2 PROTECTION OF EXISTING STRUCTURES

- A. Underground Structures:
 - 1. Underground structures are defined to include, but not be limited to, all sewer, water, gas, storm drains, and other piping, and manholes, chambers, electrical conduits, tunnels and other existing subsurface work located within or adjacent to the limits of the Work.

SECTION 01545 – PROTECTION OF THE WORK AND PROPERTY

2. All underground structures known to Engineer except water, sewer, electric, and telephone service connections are shown. This information is shown for the assistance of Contractor in accordance with the best information available, but is not guaranteed to be correct or complete.
3. Contractor shall explore ahead of his trenching and excavation Work and shall uncover and pothole all obstructing underground structures a minimum of two (2) weeks prior to start of excavation to determine their location, to prevent damage to them and to prevent interruption to the services which such structures provide. If Contractor damages an underground structure, he shall restore it to original condition at his expense.
4. Necessary changes in the location of the Work may be made by Engineer, to avoid unanticipated underground structures.
5. If permanent relocation of an underground structure or other subsurface facility is required and is not otherwise provided for in the Contract Documents, Engineer will direct Contractor in writing to perform the Work, which shall be paid for under the provisions of the General Conditions.
6. The Contractor shall call U.S.A. Dig Alert at 811 a minimum of two working days prior to any excavation.

B. Surface Structures:

1. Surface structures are defined as all existing buildings, structures and other facilities above the ground surface. Included with such structures are their foundations or any extension below the surface. Surface structures include, but are not limited to, buildings, tanks, walls, bridges, roads, dams, channels, open drainage, piping, railings, poles, wires, posts, signs, markers, curbs, walks and all other facilities that are visible above the ground surface.

C. Protection of Underground and Surface Structures:

1. Contractor shall sustain in their places and protect from direct or indirect injury all underground and surface structures located within or adjacent to the limits of the Work. Such sustaining and supporting shall be done carefully and as required by the party owning or controlling such structure. Before proceeding with the Work of sustaining and supporting such structure, Contractor shall satisfy the Engineer that the methods and procedures to be used have been approved by the party owning same.
2. Contractor shall assume all risks attending the presence or proximity of all underground and surface structures within or adjacent to the limits of the Work. Contractor shall be responsible for all damage and expense for direct or indirect injury caused by his Work to any structure. Contractor shall repair immediately all damage caused by his Work, to the satisfaction of the Owner of the damaged structure.

- D. All other existing surface facilities, including but not limited to, guard rails, posts, guard cables, signs, poles, markers, and curbs which are temporarily removed to facilitate

SECTION 01545 – PROTECTION OF THE WORK AND PROPERTY

installation of the Work shall be replaced and restored to their original condition at Contractor's expense.

- E. All pavement, pavement seal coatings, and striping damaged outside the work zone, including, but not limited to, staging area egress/ingress, parking, and haul routes, shall be repaired to the satisfaction of the jurisdictional agency at no additional cost to the District.

1.3 PROTECTION OF INSTALLED PRODUCTS

- A. Provide protection of installed products to prevent damage from subsequent operations. Remove protection facilities when no longer needed, prior to completion of Work.
- B. Control traffic to prevent damage to equipment, materials and surfaces.

1.4 PROTECTION OF SURVEY OR ROADWAY MARKERS

- A. The Contractor shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly referenced for easy and accurate restoration. It shall be the Contractor's responsibility to notify the proper representatives of the Owner of the time and location that Work will be done. Such notification shall be sufficiently in advance of construction so that there will be no delay due to waiting for survey points to be satisfactorily referenced for restoration. All survey markers or points disturbed without proper authorization by the Engineer will be accurately restored by the Owner at the Contractor's expense after all street or roadway resurfacing has been completed.

1.5 PROTECTION OF TREES AND LANDSCAPING

- A. The Contractor shall exercise all necessary precautions so as not to damage or destroy any trees or shrubs or other existing landscaping, including those lying within or beyond street rights-of-way and project limits, and shall not trim or remove any trees unless such trees have been approved for trimming or removal as described on the Plans, or by the Owner's Representative and the jurisdictional agency. Protection extends to the root structures of all existing trees and landscaping. All existing trees and landscaping which are damaged during the construction shall be trimmed or replaced in-kind (type and size) by the Contractor or a certified landscape maintenance company under permit from the jurisdictional agency and to the satisfaction of said agency and/or the Owner. In the event damage is made to any tree not designated for removal, the Contractor shall pay for an ISA Certified Arborist of the Owner's choosing to recommend corrective actions. All costs shall be borne by the Contractor.

END OF SECTION

(BLANK)

SECTION 01560 – TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 GENERAL

- A. The Contractor shall provide and maintain methods, equipment, and temporary construction, as necessary to provide controls over environmental conditions at the construction site and adjacent areas. Remove physical evidence of temporary facilities at completion of Work.

1.2 NOISE CONTROL

- A. Vehicles and equipment shall be such as to minimize noise to the greatest degree practicable. Noise levels shall conform to the latest OSHA standards and in no case will noise levels be permitted which interfere with the work of the Owner or others.
- B. Noise levels shall adhere to City of Encinitas and City of Carlsbad ordinances.

1.3 DUST CONTROL

- A. Control objectionable dust caused by the operation of vehicles and equipment, clearing or any reason whatsoever. Apply water and calcium chloride or use other dust control methods subject to the Engineer's approval.

1.4 PEST AND RODENT CONTROL

- A. Provide rodent and pest control as necessary to prevent infestation of construction or storage area. Employ methods and use materials which will not adversely affect conditions at the site or on adjoining properties.

1.5 WATER CONTROL

- A. Provide methods to control surface water and water from excavations and structures to prevent damage to the Work, the site, or adjoining properties.
 - 1. Control fill, grading and ditching to direct water away from excavations, pits, tunnels and other construction areas; and to direct drainage to proper runoff courses so as to prevent any erosion, damage or nuisance.
- B. Provide, operate and maintain equipment and facilities of adequate size to control surface water.
- C. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the site or to adjoining areas and in conformance with all environmental requirements.
- D. Control run-on water sources.

SECTION 01560 – TEMPORARY CONTROLS

1.6 POLLUTION CONTROL

- A. Provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
- B. Provide equipment and personnel, and perform emergency measures required to contain any spillages, and to remove soils or liquids contaminated as a result of Contactor's activities.
 - 1. Excavate and dispose offsite any contaminated soil or liquid and replace with suitable compacted fill and topsoil.
- C. Take special measures to prevent harmful substances from entering public waters.
 - 1. Prevent disposal of wastes, effluents, chemicals, or other such substances adjacent to streams, or in sanitary or storm sewers.
- D. Provide systems for control of atmospheric pollutants.
 - 1. Prevent toxic concentrations of chemicals.
 - 2. Prevent harmful dispersal of pollutants into the atmosphere.
- E. Equipment used during construction shall conform to all current federal, state and local laws and regulations.

1.7 EROSION CONTROL

- A. Plan and execute construction and earthwork by methods to control surface drainage from cuts and fills and from borrow and waste disposal areas, and to prevent erosion and sedimentation.
 - 1. Hold the areas of bare soil exposed at one time to a minimum.
 - 2. Provide temporary control measures such as berms, dikes and drains.
- B. Construct fills and waste areas by selective placement to eliminate surface silts or clays which will erode.
- C. Periodically inspect earthwork to detect any evidence of the start of erosion, apply corrective measures as required to control erosion.

END OF SECTION

SECTION 01570 – TRAFFIC CONTROL

PART 1 - GENERAL

1.1 DESCRIPTION

This Section describes procedures for traffic regulation during construction.

The Contractor shall be responsible for securing approved traffic control permits for all jurisdictional agencies where work is to occur or where traffic control measures will be placed at no cost to the District.

1.2 STANDARD SPECIFICATIONS AND REFERENCES

Traffic control devices and signing used for handling traffic and public convenience shall comply with the general requirements in accordance with the City with jurisdiction, the referenced Standard Specifications, the approved Traffic Control Plans, the Drawings, and the following special requirements, unless otherwise approved or revised by the OWNER.

See also Section 00810 for additional requirements.

1.3 SUBMITTAL

The Contractor shall prepare a traffic control plan signed and sealed by a California licensed civil or traffic engineer, and submit to the City of Encinitas Public Works Department, Traffic Control Division, and City of Carlsbad for review and approval, not less than fifteen (15) working days following NTP. No work involving or requiring traffic control shall begin until the appropriate City has approved a traffic control plan. The Contractor shall coordinate with Mission Estancia Elementary, Park Dale Lane Elementary, and La Costa Canyon High Schools for any work impacting the schools while in session.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 GENERAL

- A. Provide safe and continuous passage for pedestrian and vehicular traffic at all times.
- B. Furnish, install, construct, maintain, and remove signs, barricades, fences, miscellaneous traffic devices, flagmen, drainage facilities, paving, and such other items and services as are necessary to adequately safeguard the public from hazard and inconvenience. All such work shall comply with the approved Traffic Control Plan Laws and Regulations of authorities with jurisdiction over the public roads in which the construction takes place and over which detoured traffic is routed by the Contractor.
- C. Maintain and keep all temporary traffic control devices in good repair and working order until no longer required, at the Contractor's sole expense. Also pay the cost of replacing such devices that are lost or damaged, to such an extent as to require

SECTION 01570 – TRAFFIC CONTROL

replacement, regardless of the cause of such loss or damage.

- D. Prior to the start of construction operations, notify the Police and Fire Departments in the City of Encinitas and City of Carlsbad, giving the expected starting date and completion date. Notifications on progress to the emergency service agencies shall be in accordance with procedures and channels to be established at the preconstruction meeting.
- E. Provide a minimum of 7 days prior notice to the appropriate Agency for any work that may affect signal loops, equipment, or devices. In the event that any underground utilities, traffic devices, pipes, or conduits are damaged and require emergency repair by the appropriate Agency, all costs incurred by that Agency in making such repairs, plus 25 percent for administration costs, shall be paid solely by the Contractor.
- F. Post temporary “No Parking – Tow Away” signs 48 hours prior to work in areas where parking is normally permitted. The police department shall be notified 48 hours prior to the posting of any temporary parking restrictions in either City.
- G. Maintain a 24-hour emergency service to remove, install, relocate, and maintain warning devices and furnish to the authority having jurisdiction the names and telephone numbers of the person(s) responsible for this emergency service. The emergency response service shall be through cellular phones in order to minimize response time to a construction-related emergency. In the event these persons do not promptly respond or the authority having jurisdiction deems it necessary to call out other forces to accomplish emergency service, the Contractor shall pay the cost of such emergency service at no additional cost to the Owner.
- H. In the event the Engineer finds the Work site to be improperly barricaded or delineated and the Contractor is either unavailable or unresponsive to requests for improvement, the Owner will furnish and set up barricades and delineators as required. The Owner will charge One Thousand Dollars (\$1,000) to the Contractor for each setup event, plus a Five Dollars (\$5) “use fee” for each barricade or delineator for each day’s or partial day’s use until such barricades or delineators are returned in good condition by Contractor to the Owner’s Operations Services Center.

After devices have been installed, at Contractor’s sole expense, maintain and keep them in good repair and working order until no longer required. Also pay the cost of replacing such devices that are lost or damaged, regardless of the cause of such loss or damage.

3.2 TRAFFIC CONTROL DEVICES AND SIGNS

- A. Traffic control devices shall conform to the State Standard Plans and Specifications. Construction signs shall conform to the latest standards in accordance with the City with jurisdiction.

SECTION 01570 – TRAFFIC CONTROL

- B. The placement of construction signing, barricades, and other traffic control devices used for handling traffic and public convenience shall conform to the latest standards in accordance with the City with jurisdiction.
- C. Signs shall be reflectorized when they are used during hours of darkness. Barricades shall be equipped with flashers if in place during hours of darkness.

3.3 TEMPORARY STEEL PLATE BRIDGING, WITH A NONSKID SURFACE

When backfilling operations of an excavation in the traveled way, whether transverse or longitudinal, cannot be properly completed within a workday, provide steel plate bridging with a nonskid surface and shoring to preserve unobstructed traffic flow. In such cases, the following conditions shall apply:

- A. Steel plates used for bridging shall extend a minimum of 12 inches beyond the edges of the trench.
- B. Install steel plate bridging to operate with minimum noise.
- C. Shore the trench to support the bridging and traffic loads.
- D. Contractor shall recess the plates into the existing asphalt. At the Owner's sole discretion, the Contractor may be allowed to use temporary paving with cold asphalt concrete to feather the edges of the plates under limited circumstances.
- E. Secure bridging against displacement by using adjustable cleats, shims, or other devices.
- F. Attach approach plate(s) and ending plate (if longitudinal placement) to the roadway by a minimum of two dowels predrilled into the corners of the plate and drilled 2 inches into the pavement. Butt subsequent plates to each other. Compact fine graded asphalt concrete to form ramps, maximum slope 8.5% with a minimum 12-inch taper to cover all edges of the steel plates. When steel plates are removed, backfill the dowel holes in the pavement with either graded fines of asphalt concrete mix or concrete slurry.
- G. Maintain the steel plates, shoring, and asphalt concrete ramps.
- H. See OMWD Standard specification 02223 for requirements regarding length of open trench.
- H. Plates associated with a connection point can remain in place for no more than 5-work days.
- I. The following table shows the required minimal thickness of steel plate bridging required for a given trench width:

Trench Width (feet)	Minimum Plate Thickness (inches)
1	½

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1-½	¾
2	7/8
3	1
4	1-¼

NOTE: For spans greater than 4 feet, prepare a structural design by a California registered civil engineer and submit to the Owner for review.

- J. Contractor shall post signs indicating “steel plates ahead” where steel plates are present.

3.4 VEHICULAR TRAFFIC CONTROL

- A. Comply with the general requirements in accordance with the City with jurisdiction, the referenced Standard Specifications, the approved Traffic Control Plans, the Drawings, and the following special requirements, unless otherwise approved or revised by the OWNER.
- B. Where traffic is directed around or adjacent to the site, provide, install, maintain and remove delineators, barricades, lights, signs, and other devices required for the control of traffic. The OWNER reserves the right to direct the Contractor to relocate traffic control devices.
- C. Use temporary concrete barriers (K-rail) where a traffic line is within five feet of an excavation more than 18 inches deep. Remove K-rail at the end of each day in areas that require that all lanes of traffic be open at the end of each day.
- D. Mark traffic lane transitions from permanent lanes to construction zone patterns in accordance with the requirements for then normal posted speed limit and the approved Traffic Control Plans.
- E. The safe passage of bicycle traffic shall be included in Contractor’s traffic control plans.
- F. Accomplish construction in phases by detouring traffic from its normal patterns along the route as approved to form the site. Remove traffic control equipment and materials for one stage of construction prior to the installation of equipment and materials for the subsequent work zone area.
- G. All roadways and sidewalks shall be returned to unrestricted vehicle and pedestrian usage when construction is not under way per the work hours shown in Section 00810.

3.5 PEDESTRIAN TRAFFIC CONTROL

- A. Unless otherwise shown in the Drawings, and where sidewalks or designated pedestrian access exists, maintain and delineate a minimum of one 4-foot-wide pedestrian walkway along each public street at all times during construction. Maintain existing pedestrian accesses at intersections at all times. When existing crosswalks are blocked by construction activity, install signs directing pedestrian traffic to the nearest alternative crosswalk.

SECTION 01570 – TRAFFIC CONTROL

- B. Erect a fence or provide other means to preclude unauthorized entry to any open excavation during all nonworking hours on a 24-hour basis including weekends and holidays. Said fence shall be a minimum of 7 feet high around the entire excavation, consisting of a minimum of 9-gauge chain link fence fabric and shall be sturdy enough to prohibit toppling by children or adults. There shall be no openings under the wire large enough for any child to crawl through. Lock any gates if no adult is in attendance. Place warning signs spaced on 50-foot centers on the outside of the fence with the statement "DEEP HOLE DANGER."

3.6 ACCESS TO ADJACENT PROPERTIES

- A. Maintain reasonable access from public streets to all adjacent properties at all times during the Work. Prior to restricting normal access from public streets to adjacent properties, notify each resident, informing him or her of the nature of the access restriction, the approximate duration of the restriction, and the best alternate access route for that particular property.
- B. The pipeline route passes business areas with driveway access from streets impacted by the Work. To minimize access restrictions to these driveways, either backfill, compact, and provide temporary pavement or provide steel plates or bridging sufficient to support vehicular traffic across the trench in front of these driveways during nonworking hours. Single access driveways may be closed only during construction activity within the driveway areas. Driveways for properties with more than one access point may be closed for the duration of construction activity within the limits of the property served by the driveway.
- C. Maintain vehicle access to police and fire stations and schools at all times.

3.7 PERMANENT TRAFFIC CONTROL DEVICES

- A. Existing permanent traffic control signs and devices shall remain in effective operation unless a substitute operation is arranged for and approved under the traffic control plan. Traffic signal restoration work shall be in accordance with the referenced Standard Specifications and Technical Specifications referenced herein.
- B. Traffic control detection loops have not been shown in the Drawings. Completely replace traffic control detection loops which are cut, removed, or otherwise disturbed for pipeline construction to the original position or as directed by the appropriate Agency within 72-hours of damage. Perform all loop replacement work in conformance with the Standard Specifications and Technical Specifications referenced herein.
- C. Replace traffic signal conduits damaged to the nearest pull box, including new wire, back to the terminal, and/or back to the signal controller to the satisfaction of the appropriate Agency before proceeding to the next construction phase. Splicing is not permitted.

Report all such damage immediately to the appropriate Agency.

SECTION 01570 – TRAFFIC CONTROL

- D. Provide temporary restriping as required by the Owner, City of Carlsbad, and City of Encinitas as applicable. Remove any temporary painted striping required for traffic control during construction by wet sandblasting or other method approved the appropriate jurisdictional Agency. Temporary striping includes any striping required on any pavement replaced prior to the final surface course. Reinstall all removed or damaged permanent signing, striping, and markings in their original location, including but not limited to signage, crosswalks, limit lines, stop bars, lane striping and lettering, pavement arrows, and pavement legends. Replace any damaged or obliterated raised pavement markers in accordance with City of Encinitas and City of Carlsbad requirements.

Payment for the furnishing, placing, and removal of permanent and temporary striping and markings shall be included in the price for which Work is appurtenant and no additional payment will be made therefore.

END OF SECTION

SECTION 01700 – PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 GENERAL

- A. The Contractor shall thoroughly clean the project site, as described in Section 01710, prior to final acceptance of the Work by the Owner.
- B. The Contractor shall conduct Performance Tests for each element of the Work as described in the individual Sections. Where no performance test is specified, the Contractor shall demonstrate satisfactory performance for a period of two weeks prior to final acceptance.
- C. The Contractor shall establish dates for equipment testing and acceptance periods. The times shall be within the Contract time.

1.2 TECHNICAL MANUAL SUBMITTALS

- A. Technical manuals shall be submitted prior to closeout of the project.

1.3 FINAL SUBMITTALS

- A. The Contractor, prior to requesting final payment, shall obtain and submit the following items to the Engineer for transmittal to the Owner:
 - 1. Written guarantee, where required.
 - 2. Operating manuals and instructions.
 - 3. Maintenance stock items; spare parts, special tools.
 - 4. Completed record documents as described in Section 01300. Record drawings shall be submitted as electronic PDF files. All construction changes shall be drafted as electronic PDF files with text searchable redlines and approved by the Owner prior to project completion. Approved Record Drawings shall be scanned and submitted to the Owner.
 - 5. Releases from all parties who are entitled to claims against the subject project, property, or improvement pursuant to the provisions of law.

END OF SECTION

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SECTION 01710 – CLEANING

PART 1 - GENERAL

1.1 GENERAL

- A. The Contractor shall execute cleaning during progress of the Work, at completion of the Work, and as required by General Conditions.
- B. Requirements of Regulatory Agencies:
 - 1. In addition to the requirements herein, maintain the cleanliness of the Work and surrounding premises within the Work limits so as to comply with federal, state, and local fire and safety laws, ordinances, codes and regulations.
 - 2. Comply with all federal, state and local anti-pollution laws, ordinances, codes and regulations when disposing of waste materials, debris and rubbish.
 - 3. Contractor shall pay special attention to the City of Encinitas' and City of Carlsbad's Stormwater Management ordinances regarding discharge prohibitions, littering, and sweeping.
- C. Scheduling of Cleaning and Disposal Operations:
 - 1. Schedule all cleaning and disposal operations so that dust, wash water or other contaminants generated during such operations do not damage or mar painted or finished surfaces.
 - 2. Prevent accumulation of dust, dirt, debris, rubbish and waste materials on or within the Work or on the premises surrounding the Work.
- D. Waste Disposal:
 - 1. Dispose of all waste materials, surplus materials, debris and rubbish off the site.
 - 2. Do not burn or bury rubbish and waste materials on the site.
 - 3. Do not dispose of volatile or hazardous wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 - 4. Do not discharge wastes into streams or waterways.
- E. Cleaning Materials:
 - 1. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
 - 2. Use each type of cleaning material on only those surfaces recommended by the cleaning material manufacturer.
 - 3. Use only materials, which will not create hazards to health or property.

SECTION 01710 – CLEANING

F. During Construction:

1. Keep the Work and surrounding premises within work limits free of accumulations of dirt, dust, waste materials, debris and rubbish.
2. Keep dust generating areas wetted down.
3. Provide suitable containers for storage of waste materials, debris and rubbish until time of disposal.
4. Dispose of waste, debris and rubbish off site at legal disposal areas.

G. At Project Completion:

1. Remove and dispose of all excess or waste materials, debris, rubbish, and temporary facilities from the site, staging areas, structures and all facilities.
2. Repair pavement, roads, sod, and all other areas affected by construction operations and restore them to original condition or to minimum condition specified.
3. Remove spatter, grease, stains, fingerprints, dirt, dust, labels, tags, packing materials and other foreign items or substances from interior and exterior surfaces, equipment, signs and lettering.
4. Repair, patch and touch up chipped, scratched, dented or otherwise marred surfaces to match specified finish.
5. Remove paint, clean and restore all equipment and material nameplates, labels and other identification markings.
6. Pressure wash and remove remaining utility mark-outs and contractor delineations in the project area.
7. Clean all floors, slabs, pavements, and ground surfaces.
8. Maintain cleaning until acceptance of the Project by the Owner.

END OF SECTION

SECTION 02140 – DEWATERING

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This section includes materials, installation, maintenance, operation, and removal of temporary dewatering systems.
- B. The Contractor may encounter groundwater and shall perform site dewatering necessary to lower and control groundwater levels and hydrostatic pressures to allow excavation and construction to be performed under drained and stable conditions. Refer to Section 01150 and Appendix B for reference only.
- C. Dewatering operations shall be adequate to ensure the integrity of the finished project. The responsibility for conducting the dewatering operation in a manner which will protect the Work and adjacent structures and facilities rests solely with the Contractor. The cost of repairing any damage to adjacent structures and restoration of facilities shall be the sole responsibility of the Contractor.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Standard Specification Section 02200: Earthwork
- B. Standard Specification Section 02223: Trenching, Backfilling and Compacting

1.3 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. The Contractor shall obtain all required permits and approvals and comply with California Regional Water Quality Control Board General Waste Discharge Requirements for Groundwater Remediation and Dewatering Waste Discharges.
- B. The Contractor shall obtain all required permits and approvals and comply with requirements defined by the Leucadia Wastewater District (LWD) as appropriate.

1.4 CONTRACTOR SUBMITTALS

- A. The Contractor shall submit the following in accordance with Standard Specification Section 01300:
 - 1. Before starting excavation, submit a detailed Dewatering Plan, schedule, and description of the dewatering of excavations. The Dewatering Plan shall include: the proposed type of dewatering system; the arrangement, location, and depths of system components; a complete description of the equipment and instrumentation to be used with installation, operation and maintenance procedures; a description of the Contractor's means and methods for measuring groundwater levels and piezometric water levels; sampling schedule including locations, frequency, testing methods, and list of sampling constituents, and the methods and locations for disposal of dewatering effluent.

SECTION 02140 – DEWATERING

2. Before excavation Contractor shall comply with these additional requirements for dewatering that will involve the LWD:
 - a. Comply with LWD requirements.
 - b. Prior to sampling, coordinate with LWD to define the number and location(s) of sampling locations that will be acceptable to the agencies.
 - c. Provide laboratory analysis data along with a chain of custody form for representative sample(s) of groundwater taken from the selected sampling location(s).
 - d. Comply with required list of constituents to be tested for (including Total Dissolved Solids), approved by LWD. Search for current or historic contamination in the project area through GeoTracker (the link can be accessed through the County of San Diego's Department of Environmental Health, Site Assessment and Mitigation Program).
 - e. Submit and obtain approval for a Dewatering Plan. The plan shall describe the location, type, and size of dewatering devices and related equipment, the size and type of materials composing the collection system, the size and type of equipment to be used to retain and treat accumulated water, the proposed disposal locations, and the method for metered monitoring of the flow rate and volume.
 - f. Complete certified letter of indemnification for LWD and OMWD as a separate written agreement.
 - g. Include Encina Wastewater Authority as additional insureds.
 3. Before starting excavation, submit copies of well installation permits, as applicable.
 4. Before starting excavation, submit copies of its permit for dewatering discharges to the local sewer agency or Regional Water Quality Control Board permit for dewatering discharges to the environment, whichever is applicable.
 5. The Contractor shall submit copies of well destruction permits, as applicable.
- B. The Contractor shall submit a daily report that includes the following information:
1. Groundwater levels and piezometric water levels in observation wells (if any).
 2. Changes in elevation of settlement monitoring points to detect settlement in adjacent structures.
 3. The dewatering flow rate recorded at least hourly and the total volume discharged for the day.
 4. Water quality test results as required by the Regional Water Quality Control Board or local sewer agency, as applicable.

SECTION 02140 – DEWATERING

1.5 QUALITY ASSURANCE

- A. The proposed dewatering system shop drawings shall demonstrate, to the satisfaction of the Owner's Representative, that adequate personnel, materials and equipment are available for successful dewatering operations.
- B. Maintain adequate control to ensure that the stability of excavated or constructed slopes are not adversely affected by water, that erosion is controlled, and that flooding of excavations or damage to structures does not occur.
- C. Where critical structures or facilities exist immediately adjacent to areas of proposed dewatering, establish points for settlement monitoring and shall observe these points at frequent intervals to detect any settlement which may occur. The monitoring frequency shall be determined based on recommendations of the soils engineer or Owner, the nature of the critical structure or facility, and the distance from the excavation. The minimum frequency shall be three times per eight-hour work shift (beginning, middle and end of the work period).

PART 2 – PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Dewatering, where indicated, includes well points, sump pumps, temporary pipelines for water disposal, storage tanks, rock or gravel placement, observation wells and other means including standby pumping equipment maintained on the job site continuously.
- B. Provide piezometers for monitoring groundwater levels. Provide other instruments and measuring devices as required.

PART 3 – EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Comply with Regional Water Quality Control Board or local sewer agency requirements for any discharge of groundwater to the environment or sanitary sewer, whichever is applicable. Before starting dewatering operations, obtain authorization, as required, for the disposal of groundwater. Comply with all applicable sampling, testing, monitoring, and reporting requirements.
- B. Grade the site or otherwise divert runoff away from the excavation. Surface runoff shall be collected in shallow ditches around the perimeter of the excavation, drained to sumps, or drained by gravity away from the excavation.
- C. Install and maintain an adequate system to lower and control the groundwater to permit excavation, construction of structures, and placement of fill or backfill materials to be performed under drained and stable conditions.

SECTION 02140 – DEWATERING

- D. Sufficient dewatering equipment shall be installed to pre-drain the water-bearing strata below the bottom of foundations, drains, sewers and other subsurface structures or the excavation subgrade.
- E. The hydrostatic head in water-bearing strata below foundations, drains, sewers, pipelines and other subsurface structures or excavations shall be reduced to below the structure or excavation subgrade at all times.
- F. Place the system into operation prior to excavating below the groundwater level. The system shall be operated continuously or intermittently as may be required to sufficiently lower the groundwater levels to allow the construction of the Work. Continue the dewatering operations until construction of the improvements is completed and fill or backfill materials are placed and compacted.
- G. Dewater in order to provide a stable subgrade at proposed bottom of excavation. Provide and maintain means and devices to remove and dispose of all water entering the excavation during the period when concrete is being placed and during the hydration process, when pipe is being laid, and during backfill placement.
- H. Prevent the flotation of structures by maintaining a positive and continuous removal of water from locations which will not create an adverse hydraulic gradient beneath or adjacent to the structures.
- I. If foundation soils are disturbed or loosened by the upward seepage of water or an uncontrolled flow of water, the affected areas shall be excavated and replaced with drain rock at no additional cost to the Owner.
- J. If well points or wells are used, they shall be adequately spaced to provide the necessary dewatering and shall be sandpacked and/or other means shall be used to prevent pumping of fine sands or silts from the subsurface. Continuously monitor the dewatering operation for indications of subsurface soil migration and make necessary adjustments as warranted with notice to the Engineer.
- K. Water and debris shall be disposed of in a legal manner in compliance with permit requirements and SSPWC Subsection 306-3.3 without damage to adjacent property. No water shall be drained onto the Work under construction. Before disposal, water shall be filtered to remove sand and fine soil particles and treated in accordance with permit requirements.

3.2 DISCHARGES TO A SEWER

Discharges to a sewer are at the sole discretion of the jurisdictional agency. For dewatering approved to discharge to the sewer system by the LWD, the Contractor shall comply with these additional requirements:

- A. The peak groundwater discharge flow rate to the sewer system shall be limited to no more than 75 gpm.

SECTION 02140 – DEWATERING

- B. Groundwater discharge to the sewer system shall only be allowed following a minimum one-week dry weather period, unless otherwise agreed to in advance and in writing by the Owner and by LWD for each specific discharge period.
- C. Contractor shall provide full-time monitoring of the flow entering the sewer system using a flow meter that measures the rate of flow and total volume of water discharged to the sewer system.
- D. Accumulated water shall be treated prior to disposal as required by the approved Dewatering Plan. Contractor shall provide treatment facilities to remove sediment from the accumulated water prior to its discharge into the sanitary sewer system. Treatment for sediment removal shall be in accordance with Best Management Practices NS-2 in the CALTRANS Storm Water Quality Handbook.
- E. The Contractor shall sample and test accumulated water discharged into the sanitary sewer system upon initiation of the discharge and on a weekly basis thereafter while dewatering activities are underway. Samples shall be tested for TSS, TDS, pH, and other constituents per the approved Dewatering Plan. Constituents to be tested are at the sole discretion of the LWD.

END OF SECTION

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SECTION 02238 – ROCK REMOVAL

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes: Removal of rock during excavation and trenching by mechanical methods.

1.2 REFERENCES

- A. Associated General Contractors (AGS):
 - 1. Manual of Accident Prevention for Construction.
- B. Institute of Makers of Explosives (IME):
 - 1. Safety Library Publications.
- C. Occupational Safety and Health Administration (OSHA).

PART 2 - NOT USED

PART 3 - EXECUTION

3.1 ROCK REMOVAL BY MECHANICAL METHOD

- A. Classified rock excavation is defined as removal of solid rock, within the specified or indicated excavation or trench limits only, in ledges, bedded deposits, or unstratified masses which by actual demonstration cannot be reasonably excavated with a 235 Caterpillar track mounted hoe equipped with a standard 9-1/2 ft stick, general duty rippers and rock points, in good condition, or similar approved equipment. The term “rock excavation” shall be understood to indicate a method of removal and not a geological formation. Boulders larger than ½ cubic yard will be classified as rock, if systematic drilling and blasting are required, and are actually utilized, for their removal. The demonstration may be waived if, in the Engineer’s opinion, the material is obviously unrippable.
- B. Excavate for and remove rock by mechanical methods.
- C. Cut away rock at excavation bottom to form level bearing.
- D. Remove shaled layers to provide sound and unshattered base for foundations.
- E. In utility trenches, excavate to 6 inches below invert elevation of pipe and 24 inches wider than pipe diameter. At dedicated easements or rights of way, excavate 18 inches wider than pipe diameter. Excavations wider than 25” shall be approved by the District in advance.
- F. Remove excavated material unsuitable for fill or backfill from site.

SECTION 02238 – ROCK REMOVAL

- G. Correct unauthorized rock removal in accordance with backfilling and compaction requirements.

3.2 FIELD QUALITY CONTROL

- A. Visual inspection of bearing surfaces and cavities formed by removed rock.

3.3 ADJUSTING

- A. Correct unauthorized rock removal or overbreak in accordance with backfilling and compaction requirements.

END OF SECTION

SECTION 02743 – ASPHALT CONCRETE PAVING

PART 1 - GENERAL

1.1 DESCRIPTION

This Section describes the requirements for materials, testing and placement of aggregate base; asphalt concrete paving and overlays; slurry seal; seal coat for miscellaneous areas; pavement striping, markers and markings and all incidental work.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01300: Record Drawings and Submittals
- B. Section 01545: Protection of Work and Property
- C. Standard Specification Section 02223: Trenching, Backfilling, and Compacting

1.3 DEFINITIONS

Whenever the terms “Public Works Specifications”, “Standard Specifications” or “Greenbook” are used in this Section, the meaning shall be interpreted as Standard Specifications for Public Works Construction by APWA/AGC, The “Greenbook”, latest edition with Regional Supplement Amendments.

Whenever the term “State Standard Specifications” or “Caltrans Standard Specifications” are used in this Section, the meaning shall be interpreted as the Standard Specifications of the State of California, Department of Transportation, latest edition.

1.4 SUBMITTALS

- A. Submit shop drawings in accordance with Standard Specification Section 01300.
- B. For all paving and sealing work within City of Encinitas and City of Carlsbad public streets, submittals shall be subject to the written approval of the Cities through the project submittal process.
- C. Mix design of all bituminous mixtures (asphalt concrete, slurry seal, seal coat for miscellaneous areas).
- D. Submit report from a testing laboratory verifying that aggregate material is asbestos-free and conforms to the specified gradations and other physical characteristics specified herein. Submit test results a minimum of 20 working days prior to placement of aggregate base materials.
- E. Delivery tickets for each load of aggregates, aggregate base, asphalt concrete, slurry seal.
- F. For work in or adjacent to private driveways, describe the method of protection of existing pavements from damage by the Contractor’s activities.
- G. Comply with the submittal requirements contained in referenced specifications.

SECTION 02743 – ASPHALT CONCRETE PAVING

- H. At the pre-construction meeting, the Contractor shall submit Certificates of Compliance for all Aggregate Base, Asphalt Concrete mixtures, Slurry Seal (including Rubber Polymer Modified), Traffic Loop Wire and Sealant, and materials for pavement striping, markings and markers.
- I. Prior to the time of delivery of each shipment of any materials to be used in the project, the Contractor shall deliver to the Owner certified copies of all the test results as required by these specifications for those materials to be used (emulsified asphalt, mineral filler, aggregate, etc.). The test reports shall indicate the name of the materials supplier, type and grade of materials to be delivered, date and point of delivery, quantity to be delivered, delivery ticket number, purchase order number and the results of the specified tests. The test reports shall be signed by an authorized representative of the material testing agency and shall certify that the product delivered conforms to these specifications. In addition, the Owner will select three samples of the materials shipped for conformance testing. The testing for these samples shall be provided at no cost to the Contractor, except if the material samples fail any of the tests. In this case, the Contractor shall bear the cost of the testing of those failed samples. No material from that shipment shall be utilized or employed in the performance of the work until certified test reports and samples of the material have been furnished to, checked by and approved by the Owner's Representative. Cost of all testing shall be included in the bid item for the appurtenant item of work and no additional compensation will be made therefor.

1.5 TESTING FOR COMPACTION

- A. The Owner or its testing firm will provide testing for compaction as described herein.
- B. Determine the density of soil in place by the sand cone method, ASTM D1556.
- C. Determine laboratory moisture-density relations of soils by ASTM D1557.
- D. Determine the relative density of cohesionless soils by ASTM D4253 and D4254.
- E. Sample backfill materials by ASTM D75.
- F. "Relative compaction" is the ratio, expressed as a percentage, of the in-place dry density to the laboratory maximum dry density for soils and aggregate. "Relative compaction" of asphalt concrete is the ratio, expressed as a percentage, of the in-place density to the laboratory maximum density per ASTM D2041.
- G. Compaction shall be deemed to comply with the Specifications when no more than one test of any three consecutive tests falls below the specified relative compaction. The one test shall be no more than three percentage points below the specified compaction. The Contractor shall pay the costs of any retesting of work not conforming to the Specifications.

1.6 PAVEMENT CONSTRUCTION IN PUBLIC RIGHT OF WAY

The following requirements shall supplement the San Diego Regional Standards for pavement restoration and shall govern other requirements of this Section.

SECTION 02743 – ASPHALT CONCRETE PAVING

- A. Paving or sealing operations in public streets in the City of Encinitas and City of Carlsbad shall comply with the permit requirements of the City with jurisdiction.
- B. Paving of the trench excavations shall be in accordance with details provided on the approved Drawings and the jurisdictional agency.

1.7 PAVEMENT CONSTRUCTION IN PRIVATE STREETS AND DRIVEWAYS

Paving or sealing operations in private driveways shall conform to the details provided on the approved Drawings and as specified herein to match existing conditions in asphalt gradation and seal coat type.

PART 2 - PRODUCTS

2.1 AGGREGATE BASE

Aggregate base shall be Crushed Aggregate Base that conforms to Greenbook Section 200-2.2 or Class 2 Aggregate Base (not recycled base) per the gradation and quality requirements of Section 26-1.02A of the Caltrans Standard Specifications.

Recycled base (made of reclaimed asphalt concrete, Portland cement concrete, lean concrete base, cement treated base, etc.) shall not be used. Furthermore, crushed miscellaneous base as called out in Greenbook Section 200-2.4 shall not be used.

2.2 ASPHALT CONCRETE

A. GENERAL

- 1. Materials shall meet the requirements and approval of the City of Encinitas and City of Carlsbad, as appropriate.
- 2. Asphalt concrete for public streets, unless designated otherwise, shall conform to C1-PG 64-10 per Greenbook Section 203-6 and the additional requirements of this Section.
- 3. Where specified, Asphalt Concrete for public streets shall conform to the following per the requirements of this section:
 - a. C1-PG 64-28M per City of Encinitas standards.
 - b. PG 64-10 per City of Carlsbad standards. Refer to City of Carlsbad Standard Drawing G-28.
- 4. Asphalt concrete for private streets, driveways and parking lots shall conform to C2-PG 64-10 per Greenbook Section 203-6 per City of Encinitas standards.
- 5. Thickness of the new pavement shall be equal to the thickness of the existing pavement plus 1 inch for existing asphalt thickness less than 10-inches or as required by the City of Encinitas where approved trench moratorium waivers dictate special requirements. Thickness of the new pavement shall be equal to

SECTION 02743 – ASPHALT CONCRETE PAVING

the thickness of the existing pavement for existing asphalt equal to and greater than 10-inches or as required by the City of Encinitas where approved trench moratorium waivers dictate special requirements.

6. Control of Materials: Materials to be incorporated in the work shall be manufactured, handled and used in a satisfactory manner.
7. Job Mix Formula: The Contractor shall furnish the Owner's Representative with the Job Mix Formula (JMF) for the asphalt concrete no later than two weeks prior to placement of the material. The JMF shall indicate the percentage passing each specified sieve size and the percent asphalt to be used for each asphalt concrete mixture to be incorporated in the work. The JMF (gradation) with allowable tolerance for a single test shall be used for job control. Single test variation tolerance is shown below. In no event shall there be more than 2 percent passing the No. 200 sieve.

JOB MIX FORMULA GRADING TOLERANCE (SINGLE TEST)	
<u>Sieve Size</u>	<u>Percent</u>
No. 4 or larger	+6
No. 30	+5
No. 200	+2
Asphalt, % by weight of dry aggregate	+0.3

8. Samples: The Owner shall have the right to obtain samples of all such materials to be used in the work and to test such samples for the purpose of determining specification compliance. The Owner reserves the right to obtain said samples at the point of delivery and/or at the point of manufacture. The Owner shall also have the right to inspect sources of materials to be used for the work to determine acceptability of procedures used by the materials supplier.

B. MATERIALS

1. Only materials conforming to these specifications shall be incorporated in the work.
2. Asphalt: The asphalt to be mixed with the mineral aggregate shall be PG64-10 conforming to Greenbook Section 203-6 for all streets as specified on the Drawings.

The amount of liquid asphalt, by weight of dry aggregate, shall be within the range of percentages of the total mixed material as shown in Greenbook Table

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203-6.4.3 (A) for Class C1 grading, or Table 400-4.3 (C) for Type III Class C2 grading. The actual amount will be determined through a complete asphalt concrete mix design and laboratory testing performed on materials intended for use on the project.

The allowable tolerance in percentage of asphalt content from that percentage specified shall be +/- 0.3 percent.

The asphalt content of the asphalt mixture shall be determined by extraction tests in accordance with California Test 379 or ASTM D2172.

3. Aggregate: Aggregate for asphalt concrete shall conform to Greenbook Section 203-6.3.2 except as modified herein.

Coarse aggregate used in the production of all Hot Mix Asphalt (HMA), excluding RAP, must be mined only from a hard rock- blasted quarry. All coarse aggregates used in the production of Hot Mix Asphalt shall also have a minimum Durability Index (California Test 229) of 35.

Coarse aggregate is material retained on the No. 4 sieve. Fine aggregate is material passing the No. 4 sieve.

Blending sand shall be clean, hard and sound material either naturally occurring sand or crushed fines which will readily accept asphalt coating.

Tests shall be performed on the material retained on the No. 8 sieve from each bin and shall not be a combined or averaged result.

Each test specimen shall be prepared by hand shaking for 30 seconds, a single loading of the entire sample on a 12-inch diameter, No. 4 sieve nested on top of a 12-inch diameter, No. 8 sieve.

Where a coarse aggregate bin contains material which will pass a 3/8-inch sieve and be retained on a No. 8 sieve, the test specimen weight and wash water volume specified for 1/2-inch maximum will be used.

Where a coarse aggregate bin contains material which will pass the maximum size specified and be retained on a 3/8-inch sieve, the test specimen weight and volume of wash water specified for a 1-inch x No. 4 aggregate size will be used.

The Cleanness Value of the test sample from each of the bins shall be separately computed and reported.

4. Mineral Filler: Mineral filler shall conform to Greenbook Section 203-6.3.3. The amount of mineral filler to be used shall conform to the requirements of the combined aggregate grading. The method of adding the mineral filler shall be such that the aggregate is uniformly coated and the mineral filler is uniformly distributed without loss or waste within the material prior to adding the asphalt to the mixture.

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5. Anti-Strip Agents: When aggregate is found to be subject to stripping via prescribed test procedures, dry hydrated lime conforming to the requirements of ASTM C207, or Type N Portland Cement conforming to applicable requirements, or other approved anti-strip agents shall be added.
6. Combined Aggregates: The combined aggregates sampled after all processing, except the adding of asphalt and mineral filler, shall conform to the following requirements:
 - a. The ratio of the percentage of aggregate by weight passing the No. 30 sieve to that passing the No. 8 sieve shall not exceed 65 percent in all dense graded asphalt concrete mixes.
 - b. At least 80 percent by weight of the aggregate retained on the No. 8 sieve shall consist of particles which have at least one rough, angular surface produced by crushing.
7. Composition and Grading: The grading of the combined aggregates shall conform to Greenbook Section 203-6.4.3 for Class C1 (Type III C2 for Section 400-4.3) Asphalt Concrete.
8. Additional Requirements:

The aggregate and mix to be incorporated into the work must also meet the following requirements:

INDIVIDUAL TEST REQUIREMENTS	
<u>Test</u>	<u>Results</u>
Loss in L.A. Rattler, California Test 211 (after 500 revolutions)	45% max.
Sand Equivalent, California Test 217	50 min.
Stabilometer Value, California Test 366	35 min.
Swell, California Test 305	0.030" max.
Moisture Vapor Susceptibility, California Test 307	25 min.
Air Voids Content (mix)	3% - 5%
Index of Retained Strength, ASTM D1075	60% min.

2.3 TYPE C1-PG 64-28M MODIFIED ASPHALT CONCRETE

A. GENERAL

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Asphalt Concrete shall consist of Type C1-PG 64-28M as defined herein and shall be used in paving and overlays.

B. MATERIALS

1. Aggregate: Aggregate used in Type C1-PG 64-28M Asphalt Concrete shall conform to the requirements for aggregate specified in Paragraph 2.2 of this Section.
2. Asphalt Binder: Polymer modified asphalt binder shall be PG 64-28M and shall conform to the following:

<u>Property</u>	<u>Test Method</u>	<u>Min</u>	<u>Max</u>
Dynamic Shear, 64 °C, $G^*/\sin\lambda$, KPa	ASTM D7175 AASHTO T315	1.00	--
Viscosity at 135 °C, Pa-s	ASTM D4402 AASHTO T316	--	3
Flash Point COC, ° C	ASTM D92 AASHTO T 48	230	--
Solubility, wt. %	ASTM D2042 AASHTO T44	97.5	--
Max. Mass Loss, %		--	1.00

TESTS ON RTFO RESIDUE			
<u>Property</u>	<u>Test Method</u>	<u>Min</u>	<u>Max</u>
Dynamic Shear, 64 °C, $G^*/\sin\lambda$, KPa	ASTM D7175 AASHTO T315	2.20	--
Dynamic Shear at 64 C°, Max Phase Angle (δ), °	ASTM D7175 AASHTO T315	--	80
Elastic Recovery, 25 °C, %		75	--

The asphalt content of the asphalt mixture shall be determined by extraction tests in accordance with California Test 379 or ASTM D2172.

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TEST ON P.A.V. RESIDUE @ 100 °C			
<u>Property</u>	<u>Test Method</u>	<u>Min</u>	<u>Max</u>
Dynamic Shear, 22 °C, G*Sinλ, KPa	ASTM D7175 AASHTO T315	--	5,000
BBR Max S-Value, -18 °C, S, MPa	ASTM D 6648 AASHTO T313	--	300
Min m-Value, -18 °C	ASTM D6648 AASHTO T313	0.300	--

2.4 PAVEMENT REINFORCEMENT MEMBRANE

Pavement reinforcement membrane shall be per City of Encinitas and City of Carlsbad standards. Trupave, Glassgrid, or an approved equal.

2.5 SLURRY SEAL

Slurry seal shall be Rubber Polymer Modified Slurry (RPMS) as described in this Section.

2.6 EMULSION AGGREGATE SLURRY (EAS)

Not used

2.7 RUBBER POLYMER MODIFIED SLURRY (RPMS)

A. GENERAL

This work shall consist of preparation of existing surfaces to receive RPMS, mixing asphaltic emulsions, aggregate, set-control additives, specially produced and graded crumb rubber, and water and spreading the mixture on the pavement in accordance the Caltrans State Standard Specifications dated 2018, with revisions and with these specifications. State Standard Specifications shall supersede.

B. MATERIALS

Materials for RPMS immediately prior to mixing shall conform to the following requirements:

1. Asphaltic Emulsion. Asphaltic Emulsion shall be quick setting Type CQS-1h grade conforming to the requirements of these special provisions. Quick Setting CQS-1h Asphaltic Emulsions shall conform to the following requirements when tested in accordance with the specified test method:

<u>Test</u>		<u>Requirements</u>
Residue from Distillation	AASHTO T59 ASTM D244	60% minimum

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Penetration at 77°F (25°C)	AASHTO T49 ASTM D2397	40%-90%
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In addition, quick setting Type CQS-1h Asphaltic Emulsion shall test Positive for Particle Charge when tested in accordance with AASHTO T59. If the Particle Charge Test result is inconclusive the Asphaltic Emulsion shall meet a pH requirement of 6.7 minimum.

2. Aggregate. The mineral aggregate used shall be the type and grade specified for Type II RPMS surfacing. The aggregate shall be manufactured crushed stone such as granite, slag, limestone, chat, or other high quality aggregate, or combination thereof. Aggregate shall consist of rock dust except that 100 percent of any aggregate of combination of aggregates, larger than the No. 50 sieve size, used in the mix shall be obtained by crushing rock. The material shall be free from vegetable matter and other deleterious substances. All aggregate shall be free of caked lumps, and oversized particles.
3. Quality Tests. The percentage composition by weight of the aggregate shall conform to the following gradings when determined by California Test 202, modified by California Test 105 when there is a difference in specific gravity of 0.20 or more between blends of different aggregates.

TYPE II RPMS GRADATION		
<u>Sieve Size</u>	<u>Percent Passing</u>	<u>Stockpile Tolerance</u>
No. 3/8	100	5%
No. 4	90-100	5%
No. 8	65-90	5%
No. 16	45-70	5%
No. 30	30-50	5%
No. 50	18-36	4%
No. 100	10-24	3%
No. 200	5-15	2%

The job mix (target) gradation shall be within the gradation band for the Type II RPMS. After the target gradation has been submitted, the percent passing each sieve shall not vary by more than the stockpile tolerance.

The aggregate shall also conform to the following requirements:

<u>Test</u>	<u>California Test</u>	<u>Requirements</u>
Sand Equivalent	217	45 min.
Durability Index	229	55 min.

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The aggregate will be accepted at the job location or stockpile. The stockpile shall be accepted based on five gradation tests according to California Test 202, modified by California Test 105 when there is a difference in specific gravity of 0.2 or more between blends of different aggregates. If the average of the five tests is within the gradation tolerance, then the material will be accepted. If the test shows the material to be out of gradation tolerances, the Contractor shall be given the choice to either remove the material or blend other aggregates with the stockpile material to bring it into specifications. Materials used in blending must meet the quality test before blending and must be blended in a manner to produce consistent gradation.

When the results of either the Aggregate Grading or the Sand Equivalent test do not conform to the requirements specified, the aggregate shall be removed. No single aggregate grading or sand equivalent tests shall represent more than 300 tons or one day's production, whichever is smaller.

4. Water. Water shall be potable and of such quality that the asphalt will not separate from the emulsion before the slurry seal is in place in the work. If necessary for workability, a set-control agent that will not adversely affect the RPMS material may be used. Pre-wetting of streets will not be required unless streets are subject to high temperatures and/or dust.
5. Crumb Rubber. Crumb rubber shall be ambient granulated or ground from whole passenger and/or truck tires only. Uncuring or devulcanized rubber shall not be acceptable and shall not be used. Rubber tire buffing from either recapping or manufacturing processes shall not be used as a supplement to the crumb rubber mixture.

In order to remove steel and fabric, an initial separation stage which subjects the rubber to freezing temperatures may be used. The crumb rubber shall not be elongated or hair-like in shape and individual particles shall not be greater than 1/20 of an inch in length. The crumb rubber shall be free of contaminants including fiber, metal and mineral matter to the following tolerances:

- a. The fiber content shall be less than 0.30% by weight.
- b. The crumb rubber shall be free of metal particles. Metal imbedded in rubber particles shall not be allowed. The amount of mineral contaminants allowed shall not exceed 0.10% by weight.
- c. The crumb rubber shall be dry with a moisture content of less than 0.75%.

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CRUMB RUBBER CHEMICAL PROPERTIES	
<u>Property</u>	<u>Specification Limits</u>
Specific Gravity, ASTM D1817	1.15 +/- .05
Percent Carbon Black, ASTM D297	35.0 Maximum
Percent of Rubber Hydrocarbon, ASTM D297	55.0 Maximum
Percent Ash, ASTM D297	6.0 Maximum
Percent of Acetone Extract, ASTM D297	10.0 Maximum
Percent of Chloroform Extract, ASTM D297	3.0 Maximum
Percent Natural Rubber, ASTM D297	40 Minimum

CRUMB RUBBER GRADATION REQUIREMENTS (ASTM D1511 or C136)	
<u>Sieve Size</u>	<u>Percent Passing</u>
No. 30	100
No. 40	90-100
No. 50	75-85
No. 100	25-35
No. 200	0-10

6. Properties. The Polymer additive shall be SBR Latex or approved equal, which is added at a minimum of 2.0 percent by weight of the asphaltic emulsion.
7. Carbon Black. The carbon black solution shall be non-ionic in charge and liquid in form. The carbon black shall be compatible with the emulsion system, polymers and additives being used.

<u>Property</u>	<u>Tolerances</u>
Total Solids	40-44
% Black by Weight	35-37
Type Black	Medium Furnace Color
Type Dispersing	Non-ionic

8. Mineral Filler. Portland Cement, hydrated lime, limestone dust, fly ash or other approved filler meeting the requirements of ASTM D242 shall be used if required by the mix design and may be used to facilitate set times as needed. Any cement used shall be considered as part of the dry aggregate weight for mix design purposes.

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9. Additive. Additives may be used to accelerate or retard the break-set of the RPMS. The use of additives shall be in quantities specified in the mix design.
10. Laboratory Evaluation. Before work begins, the Contractor shall submit a mix design covering the specific materials to be used on the project. The design shall be performed by a laboratory that has at least two years' experience in designing RPMS. After the mix design has been approved, no substitution will be permitted unless approved by the Owner's Representative.
11. Mix Design. The proposed RPMS mix design shall verify compatibility of the aggregate, emulsion, mineral filler, set-control additive and rubber blend. Recommend tests and values are as follows:

<u>Test</u>	<u>Description</u>	<u>Specification</u>
ISSA T-106	Slurry Seal Consistency	Pass
ISSA TB-109	Excess Asphalt	50 grams per square foot maximum
ISSA TB-100 (Type II)	Wet Track Abrasion	60 grams per square foot maximum
ISSA TB-113	Mixing Time	Controllable to 150 seconds minimum
ISSA TB-114	Wet Stripping	Pass

The Mixing Time test shall be done at the highest temperatures expected during construction. The original lab report shall be signed by the laboratory that performed the mix design and shall show the results of tests on individual materials. The report shall clearly show the proportions of aggregate, mineral filler (minimum and maximum), water (minimum and maximum), additive(s) (usage), asphaltic emulsion and asphalt rubber blend based on the dry weight of the aggregate.

All of the component materials used in the mix design shall be representatives of the materials proposed by the Contractor to be used on the project. The percentage of each individual material required shall be shown in the laboratory report. Adjustments may be required during the construction, based on field conditions.

The component materials shall be within the following limits:

Residual Asphalt Type II	7.5%-13.5% Based on dry weight of aggregate
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Crumb Rubber	The crumb rubber will be added to the Rubberized Slurry mix at a rate of 5% by volume to the asphalt cement.
Polymer	Polymer Additive shall be added at 2% of finished emulsion.
Carbon Black	Carbon Black shall be added at 1.3% to 2% of the finished emulsion
Mineral Filler	0.5%-2.0% (if required by mix design). Based on dry weight of aggregate.
Additives	As needed.
Water	As needed to achieve proper mix consistency. (Total mix liquids should not exceed the loose aggregate voids).

C. PRODUCTION AND APPLICATION

1. Proportioning. Aggregates, asphaltic emulsion, water, polymers, additives, including set-control agent, if used, and crumb rubber shall be proportioned by volume utilizing the mix design approved by the Owner's Representative. If more than one kind of aggregate is used, the correct amount of each kind of aggregate to produce the required grading shall be proportioned separately, prior to the other materials of the mixture, in a manner that will result in a uniform and homogeneous blend.
2. The complete mixture, after addition of water and any set-control agent used, shall be such that the mixture has proper workability, and (a) will permit traffic flow, without pilot-car-assisted traffic slurry seal within one hour after placement (at 78°F) without the occurrence of bleeding separation or other distress, and (b) will prevent development of bleeding, excessive raveling, separation or other distress within 7 calendar days after placing the rubberized asphalt surfacing.
3. Spread rate for Type II RPMS shall be placed at 13.33 pounds per square yard based on dry aggregate weight.
4. Asphaltic emulsion shall be added at a rate within the following ranges of percent by weight of the dry aggregate. The exact weight will be determined by the mix design and the asphalt solids content of the asphaltic emulsion furnished.

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<u>Type of Aggregate</u>	<u>Asphaltic Emulsion, % of Dry Aggregate Wt.</u>
Type II	14-17

5. Pneumatic rolling is required on all streets receiving RPMS. Rolling will commence as soon as the RPMS has set sufficiently to prevent any material from adhering to tires. The RPMS surface shall be rolled by two to five coverages, or as directed by the Owner's Representative. Pneumatic rollers shall be operated at a minimum tire pressure of 60 psi.
6. Aggregate shall be proportioned by a belt feeder operated with an adjustable cutoff gate. The height of the gate opening shall be readily determinable. The emulsion shall be introduced into the mixer by a positive-displacement pump. Water shall be introduced into the mixer through an adjustable pugmill bar (**Pugmill process is acceptable for RPMS**). Water volume shall be displayed by an electric digital meter registering in gallons delivered.
7. The bitumen ratio, (pounds of asphalt per 100 pounds of dry aggregates), shall not vary more than 1.5 pounds of asphalt above or 0.6 pound asphalt below the amount designated by the mix design and approved by the Owner's Representative.
8. The aggregate belt feeder shall deliver aggregate to the pugmill mixed with such volumetric consistency that the deviation for any individual aggregate delivery rate check-run shall be within 2 percent of the mathematical average of 3 runs of at least 300 gallons each in duration.
9. Each Rubberized Slurry surfacing unit shall be designed to store and deliver the various required materials to a twin-shafted, multi-paddle pugmill in the following manner.
10. Each Rubberized Slurry surfacing unit shall be equipped with a computer controlled automatic sequencing system that initiates each material delivery at the precise moment necessary to ensure proper proportioning.
11. Each Rubberized Slurry surfacing unit shall be equipped with independent storage capabilities for the aggregate, emulsion, crumb rubber, polymer, set-control additives and the carbon black.
12. The polymer additive and the carbon black shall be delivered to the mixer in the relative proportions required by means of a common shaft, dual pump system. The polymer additive and the carbon black flow rates shall be independently adjustable by means of diaphragm valves and shall be sequenced through the computer controlled automatic sequencing system. The polymer additive and the carbon black shall be blended and mixed prior to their introduction into the pugmill. Introduction into the twin-shafted pugmill shall be done through an injection system, which delivers the blended material

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to the apex of each mixing shaft immediately prior to the introduction of the asphalt emulsion. The polymer additive and the carbon black delivery system shall each be equipped with digital electronic flow metering devices that can read in gallons per minute.

13. The crumb rubber delivery system shall be equipped with an air suspension unit designed to prevent clumping or bridging of the rubber material. The air discharges shall be sequenced to avoid over-suspension of the rubber. The rubber shall be delivered to the pugmill by a hydraulically driven auger and shall be initiated through the computer controlled auto-sequencing system.
14. The rubberized asphalt slurry surfacing shall be mixed in a continuous, twin shaft, multi-paddle pugmill mixer. The pugmill shall be equipped with a hydraulically controlled steel pugmill gate for positive discharge operations. No dripping slurry shall be allowed.
15. The emulsion shall be introduced into the mixer by a positive displacement pump. The emulsion storage shall be equipped with a device which will automatically shut down the power to the emulsion pump and aggregate belt feeder when the level of stored emulsion is lowered to within two inches of the suction line.
16. A temperature-indicating device shall be installed in the emulsion storage tank at the pump suction level.
17. The aggregate shall be proportioned using a belt feeder operated with an adjustable cutoff gate. The height of the gate opening shall be readily determinable.
18. The aggregate feeder shall be directly connected to the drive on the emulsion pump. The drive shaft of the aggregate feeder shall be equipped with an electronic digital belt. The belt delivering the aggregate to the pugmill shall be equipped with a device to monitor the depth of the aggregate being delivered to the pugmill. The device for monitoring depth of aggregate shall automatically shut down the power to the aggregate belt feeder whenever the depth of the aggregate is less than 70 percent of the target depth of flow. An additional device shall monitor movement of the aggregate belt by detecting revolutions of the belt feeder. The devices for monitoring no flow or belt movement, as the case may be, shall automatically shut down the power to the aggregate belt when the aggregate belt movement is interrupted.
19. To avoid shutdown caused by normal fluctuations in delivery rates, a delay of three seconds between sensing less than desirable storage levels of aggregate or emulsion shall be permitted.
20. Water delivery shall be adjusted through a diaphragm valve. Water flow rate shall be electronically displayed through a digital meter.
21. The mixer unit shall not be operated unless all electronic display and revolution counters are in good working condition and functioning and all metal guards

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are in place. All indicators required by these specifications shall be operational at all times.

22. The RPMS mixture shall be spread by means of a controlled spreader box. The spreader box shall be capable of spreading traffic lane width and shall have strips of flexible rubber belting or similar material on each side of the spreader box and in contact with the pavement to positively prevent loss of slurry from the ends of the box. All spreader boxes shall be equipped with reversible motor-driven augers when placing the RPMS. Rear flexible strike-off blades shall make close contact with the pavement, and shall be capable of being adjusted to the various crown shapes so as to apply a uniform surfacing coat. Flexible drags, to be attached to the rear of the spreader box, shall be provided as directed by the Owner's Representative. All drags and strike-off blades (rubbers) shall be cleaned daily if problems with cleanliness and longitudinal scouring occur. The spreader box shall be clean, free of all slurry and emulsion, at the start of each workday.

2.8 ASPHALT RUBBER CRACK SEALANT

A. GENERAL

Crack sealant shall be applied to all cracks in existing paving that are 1/4-inch in width or wider in areas to receive a paving overlay or slurry seal.

B. MATERIALS

1. The crack sealant shall consist of a mixture of paving grade asphalt and vulcanized granulated crumb rubber. The mixture shall contain not less than 25% granulated reclaimed rubber, by weight. Rubber gradation shall conform to the following requirements:

<u>Sieve Size</u>	<u>Percent Passing</u>
No. 8	100
No. 10	98-100
No. 30	--
No. 40	0-10

The sealant shall conform to the following requirements:

Cone Penetration, 77 °F, 0.1 mm, ASTM D5329	40 max.
Softening Point, °F, ASTM D36	175 min.
Resilience, 77 °F, % Rebound, ASTM D5329	30 min.

The sealant shall be capable of being melted and applied to cracks at temperatures below 400 °F. When heated, the material shall readily penetrate cracks 1/4-inch in width or wider.

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Modifiers may be used to facilitate blending.

2. Control of Materials: Each lot of sealant shipped to the job site shall be accompanied by a Certificate of Compliance as provided in Section 6-1.07 of the State Standard Specifications (2010 edition), and shall be accompanied by storage instructions, heating instructions, and caution instructions.
3. Accelerator or Retardant: The retardant shall be the type stated in the job mix formula and shall be approved by the Owner's Representative before use. The amount of accelerator to be included in the mixture shall be that amount necessary to ensure the applied crack seal can support vehicular traffic within four (4) hours after the last application.

2.9 PRIME COAT

All areas to be paved shall receive a prime coat of SC 250 liquid asphalt conforming to Greenbook Section 203-2 or as otherwise required by the City with jurisdiction.

2.10 TACK COAT

Tack coat shall consist of SS-1h emulsified asphalt per Greenbook Section 203-3.4.2 shall be applied in conformance with the applicable requirements of the Greenbook to all exposed asphalt surfaces and gutter front face or as otherwise required by the City with jurisdiction.

2.11 TRAFFIC STRIPING, PAVEMENT MARKINGS AND RAISED MARKERS

A. GENERAL

1. New Striping and Legends: Materials (paint and thermoplastic), equipment, mixing (paint), surface preparation, application and tolerances, shall conform to Sections 84-1 and 84-3 of the State of California, Department of Transportation's Standard Specifications (latest edition) except as modified herein.
2. Pavement markers shall conform to Section 85 of the State of California, Department of Transportation's Standard Specifications (2010 edition).
3. All details and dimensions for pavement markings shall conform to City approved stencils.
4. All details and dimensions for traffic striping shall conform to the least edition of the State of California, Department of Transportation's Traffic Design Manual and Maintenance Manual.
5. Contractor must obtain approval from the jurisdictional City's Traffic Engineer on the striping layout prior to applying and permanent striping.
6. All traffic stripes and pavement markings shall be reflectorized. The Contractor shall apply two coats on all traffic striping.

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7. The Contractor shall be responsible to mark and/or document the types and limits of existing striping, pavement markings and pavement markers in a manner adequate to ensure their replacement in original location, alignment, color size, and/or type. Control of alignment and layout shall be the responsibility of the Contractor and subject to approval by the Owner's Representative. Raised markings for fire hydrants shall be replaced in kind at all locations.

B. MATERIALS

1. Paint: Traffic line paint shall be rapid dry paint and shall contain reflective material conforming to Section 84-1 and 84-3 of the Caltrans Standard Specifications. Paint shall comply with all application of local air pollution control regulations.
2. Glass spheres for traffic paint shall conform to State Material Specifications 751-80-34.
3. Samples of traffic striping and pavement marking materials shall be submitted to the Owner's Representative at least two weeks prior to application.
4. Markers: Pavement marker height shall be 0.70-inch minimum. "Low profile" type markers will not be acceptable. Markers shall be of the type and colored to match the existing pavement markers.

PART 3 - EXECUTION

3.1 GENERAL

- A. Comply with the ordinances, directives, and regulations of the respective agencies having jurisdiction over the area of the work. Pavement removal and replacement shall be in accordance with Greenbook Section 302-5, these Specifications and the issued permit.
- B. Pavements shall be protected from damage by the Contractor's operations by the use of trench plates, protective mats, rubber-tired equipment, and/or reduced payloads for exported or imported materials. The Contractor shall submit the proposed method for the protection of pavements prior to mobilization onto the site, shall document the existing pavement conditions by video and inform the Owner of distressed pavement areas that exist prior to mobilization, and shall not commence excavation activities until the method of pavement protection is accepted, in writing, by the Owner. Acceptance by the Owner does not relieve the Contractor from the responsibility to implement measures to protect existing pavements from damage, and pavements that are damaged because of the Contractor's failure to implement reasonable measures for their protection, in the sole opinion of the Owner, shall be replaced by the Contractor at no additional expense to the Owner.

3.2 PAVEMENT REMOVAL

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- A. Initially cut asphalt concrete pavement with a pavement saw, hydrohammer, or pneumatic pavement cutter at the limits of the excavation and remove the pavement regardless of the thickness. After backfilling the excavation, saw cut asphalt concrete pavement to a minimum depth of 2 inches at a point not less than 12 inches outside the limits of the excavation or the previous pavement cut, whichever is greater, and remove the additional pavement.
- B. Saw cut concrete pavement, including cross gutters, curbs and gutters, sidewalks, and driveways, to a minimum depth of 1-1/2 inches and 12 inches beyond the edge of the excavation and remove the pavement. The concrete pavement may initially be cut at the limits of the excavation by other methods prior to removal and then saw cut after backfilling the excavation. If the saw cut falls within 3 feet of a concrete joint or pavement edge, remove the concrete to the joint or edge.
- C. Make arrangements for and dispose of the removed pavement.
- D. Pavement saw cuts shall be straight along both sides of trenches, parallel to the pipeline alignment, and provide clean, solid, vertical faces free from loose material. Saw cut and remove damaged or disturbed adjoining pavement. Final pavement saw cuts shall be parallel to the roadway centerline or lane striping or perpendicular to same.
- E. Removed pavements shall be taken to a local Class C or Class D Recycling Facility. The Contractor shall provide the Owner with a report that documents the place of disposal and the amount of recycled material that was diverted to the facility.

3.3 PREPARATION OF SUBGRADE

- A. Compact the top 12 inches of subgrade to 95 percent relative compaction. Remove all soft material disclosed by the compacting and replace with suitable material and recompact.
- B. The finished subgrade shall be within a tolerance of +/-0.08-foot and shall be smooth and free from irregularities and at the specified relative compaction. The subgrade shall be considered to extend over the full width of the base course.
- C. Where existing subgrade geofabric has been removed, replace in-kind per the manufacturer's recommendations.

3.4 PLACING AGGREGATE BASE

- A. Place aggregate base course to a thickness of 6 inches or to the standards of the agency having jurisdiction over the area of the work in accordance with Greenbook Section 301-2. Compact to 95 percent relative compaction.
- B. Apply water uniformly throughout the material and prior to placement and compaction to provide moisture for obtaining the specified compaction.

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- C. Compaction and rolling shall begin at the outer edges of the surfacing and continue toward the center. Compact each layer to the specified relative compaction before placing the next layer.

3.5 APPLYING PRIME COAT

Apply prime coat to the compacted surface of the aggregate base course per Greenbook Section 302-5.3.

3.6 APPLYING TACK COAT

Apply tack coat to all exposed asphalt or concrete surfaces, including gutter front face, to receive asphalt concrete pavement per Greenbook Section 302-5.4.

3.7 SURFACE PREPARATION OF AREAS TO RECEIVE PAVING OVERLAY OR SLURRY SEAL

- A. Prior to the placement of crack sealant, asphalt concrete pavement or slurry seal, the Contractor shall have a company or person who is licensed by the State of California in herbicide application apply herbicide to all cracks and lips of gutter which have vegetation in them. The herbicide shall consist of Roundup or approved equal with a color dye in it on all cracks and lips of gutter on streets to receive overlay or slurry seal. In addition, apply the approved herbicide along the entire stretch between the lip of gutter and pavement on all streets to receive overlay or slurry seal. The herbicide shall be applied in accordance with the manufacturer's recommendations and at least ten (10) working days prior to crack sealing.
- B. At least five (5) working days after application of the herbicide, the Contractor shall remove all dead vegetation from the cracks and between the lip of gutter and pavement of all streets.
- C. Existing pavement markers shall be removed from areas to receive slurry seal or paving overlays and disposed of.
- D. Crack sealant for overlay shall occur after the milling phase. Crack sealant for slurry seal shall be applied flushed to the prepared surface and shall not be raised.
- E. Cracks of 3/8-inch or greater in width shall be cleaned and sealed with a rubberized crack sealant conforming to the requirements of this Section. Cracks shall be cleaned to a minimum depth of 3/4-inches prior to the crack sealant application to provide an intact bonding surface which is free from all dust, moisture or other contaminants. Cracks shall be cleaned by blast-cleaning or by hand methods and then cleaned with high pressure air jets to remove all residue and foreign materials. Exposed surfaces shall be dry at the time the crack sealant is applied.
- F. Rubberized crack sealant shall be heated and placed in conformance with the manufacturer's written instructions. Joint sealant materials shall not be placed when the pavement surface temperature is below 50°F.

SECTION 02743 – ASPHALT CONCRETE PAVING

- G. The Contractor shall sweep and clean the existing pavement surface prior to application of the SS-1h tack coat for asphalt concrete overlay or prior to application of slurry seal.

3.8 PLACING ASPHALT CONCRETE PAVING

- A. Producing, hauling, placing, compacting, and finishing of asphalt concrete shall conform to Greenbook Section 302-5.
- B. Place asphalt concrete to a total thickness of 6 inches or 1 inch thicker than adjacent pavement section, whichever is greater or to the standards of the agency having jurisdiction over the area of the work and as further described herein.

In private streets parking lots or driveways, place asphalt concrete to a total thickness of 3 inches or 1 inch thicker than the adjacent pavement section, whichever is greater.

- C. New asphalt concrete shall be placed against existing asphalt concrete along neat, solid surfaces of pavement saw cuts. Placement of new asphalt concrete along a previous saw cut which has been roughened by cold milling or otherwise surface shall not be permitted.
- D. Compact until roller marks are eliminated and minimum relative compaction of 95 percent has been attained per ASTM D2041.
- E. Backfill, compaction, and the permanent paving, except for the final asphalt surface course, shall be complete at all times to a point not to exceed 420 feet behind pipelaying unless otherwise specified or approved by the Owner.
- F. After the base course of asphalt concrete pavement has been completed, place temporary striping in the same configuration as the existing permanent striping so that traffic can be returned to normal patterns. This striping shall be considered temporary and is the Contractor's responsibility to place and maintain. Paint applied shall not be "marking" or "survey" paint and shall be applied by a professional striping contractor per Section 2.11 and in accordance to City of Encinitas and City of Carlsbad standards. Temporary striping shall be placed as soon as possible, but no later than 12-hours after paving has been completed in the area where striping needs to be replaced, regardless of the day, at no additional cost to the Owner. If the day of temporary striping falls on a non-work day, the temporary striping shall be completed in accordance to direction from the City of Encinitas and City of Carlsbad traffic departments and subject to permit conditions. In no case, shall additional payment be entitled to the Contractor for complying with the temporary striping conditions issued by the City for completion of the Work.
- G. The final asphalt surface course shall be in accordance with jurisdictional City standards (City of Carlsbad or City of Encinitas) as reflected in the Contract Drawings Pavement Restoration Plan. A pavement reinforcement membrane shall be placed underneath the final asphalt surface course per the manufacturers' recommendations and in accordance with the City of Encinitas and City of Carlsbad standards. Do not place final surface course until all pipelines and appurtenances have been installed and tested within the roadway or as directed by the Owner's Representative to maintain traffic safety.

SECTION 02743 – ASPHALT CONCRETE PAVING

3.9 PLACING TYPE C1-PG 64-28M ASPHALT CONCRETE

- A. Not Used.
- B. Asphalt paving machines shall be furnished with a minimum of two screed operators and one machine operator.
- C. When the compacted thickness of any individual asphalt layer to be placed is 0.09 foot or less, the 3/8-inch maximum grading shall be used. When the compacted thickness being placed is between 0.09 foot and 0.17 foot, the 1/2-inch maximum, medium grading shall be used.
- D. Prior to spreading Type C1-PG64-28M asphalt concrete, SS-1h tack coat shall be furnished and applied uniformly to the pavement to be surfaced and to contact surfaces of all cold pavement joints, curbs, and gutters. If paving asphalt is furnished, it shall be applied at a temperature between 285°F and 350°F.
- E. Asphalt concrete shall be spread with a self-propelled spreader ready for compaction without further shaping, unless otherwise specified.
- F. The compaction after rolling shall be 95 percent of the density obtained with the California Kneading Compactor per California Test 304.

The field density of compacted asphalt concrete shall be determined by:

- 1. A properly calibrated nuclear asphalt testing device in the field, or
- 2. ASTM D1188 when slabs or cores are taken for laboratory testing. Zinc stearate may be substituted for paraffin.

In case of dispute, Method 2 above shall be used.

- G. At road connections and private drives, additional asphalt concrete surfacing material shall be placed and hand-raked, if necessary, and compacted to form smooth, tapered connections. The edges of asphalt concrete shall be feathered so as to provide a smooth transition on the shoulder areas and next to concrete gutters and cross-gutters.
- H. The completed surfacing shall be true to grade and cross sections, of uniform smoothness and texture, compacted firmly, and free from depressions, humps or irregularities.
- I. Shoulders or median borders adjacent to a lane being paved shall be surfaced prior to opening the lane to traffic.
- J. Asphalt concrete surfacing shall be placed on all existing surfacing, including curve widening, chain control lanes, turnouts, left turn pockets, and public and private road connections shown on the plans, unless otherwise directed by the Owner's Representative.

SECTION 02743 – ASPHALT CONCRETE PAVING

- K. Asphalt concrete surfacing shall be placed from edge of pavement to edge of pavement of the traveled way each work shift. At the end of each work shift, the ends of the asphalt concrete surfacing on all lanes and shoulders shall match. Additional asphalt concrete shall be placed along the transverse edge at the end of each lane between adjacent lanes, hand raked, and compacted to form temporary conforms. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.
- L. In the event placement of asphalt concrete dike is not completed within the time specified in this contract, the Owner may suspend or cease paving operations until such time as all required placement of asphalt concrete dike is completed to the satisfaction of the Owner's Representative.

3.10 PLACING RUBBER POLYMER MODIFIED SLURRY

- A. Producing, hauling, placing, and inspection of Rubber Polymer Modified Slurry shall conform to Caltrans State Standard Specifications dated 2018, with revisions.
- B. Contractor shall remove all thermoplastic markings or striping in conflict with the limits of Rubber Polymer Modified Slurry prior to application. Any markings or striping removed prior to the slurry application shall be replaced within the timeframe required by the City of Encinitas and City of Carlsbad at no additional cost.

3.11 APPLYING PAVEMENT STRIPING, MARKINGS AND RAISED MARKERS

- A. Two coats of striping paint shall be applied for all street striping. The first coat shall be applied a minimum of seven days after paving is complete. The second coat shall be applied seven days after the first coat is applied. The maximum thickness of the two coats combined shall not be greater than 18 mils when completely dried.
- B. All crosswalks, legends and stop bars shall be thermoplastic. **At each intersection the contractor shall be responsible for applying thermoplastic to all crosswalks in that intersection including those in the intersection which are on side streets that will not receive overlay.**
- C. Pavement marking shall commence a minimum of seven days after the overlay is complete. Any new pavement overlay must receive immediate temporary markings (i.e., temporary tabs, etc.) as directed by the Owner's Representative after any portion of the overlay work is completed. All temporary striping and/or markings shall be maintained by the Contractor until the permanent striping is done.
- D. The Contractor shall remove any temporary tabs remaining at the application of the second coat of paint.
- E. Pavement Markers: After the application of all pavement striping and markings, install markers on new paved surfaces and existing surfaces that were damaged by construction. Use markers that match the color or combination of colors of the existing markers within the area of work. Install markers along the alignment and match spacing of the existing.

SECTION 02743 – ASPHALT CONCRETE PAVING

- F. Hydrant Markers: Install a blue reflective marker opposite each new or relocated fire hydrant. Place the marker on the pavement and locate 6 inches off the centerline of the traffic striping or pavement markers and towards the hydrant. Where existing fire hydrants have been relocated or removed from service, dislodge the existing blue marker from the pavement and dispose.

3.12. TRAFFIC CONTROL

- A. Contractor shall be responsible for maintaining safe traffic operation through the work area. Traffic control shall conform to City of Encinitas and City of Carlsbad requirements.
- B. In addition to access restrictions required by the City of Encinitas and City of Carlsbad approved traffic control plans, the following restrictions shall also apply:
 - 1. Access to fire hydrants shall be maintained at all times.
 - 2. If it is necessary to restrict access to roadside properties, the Contractor shall first obtain written authorization from the Owner's Representative and the City of Encinitas/City of Carlsbad Engineer. Upon approval, Contractor shall notify affected property owners a minimum of 72 hours prior to the restriction. Access to all properties shall be restored after the work is completed or at the close of the working day, whichever is first. Restricted access shall not exceed 1 hour for work adjacent to businesses that are open and adjacent to residences at any time of day. This restricted access limit does not apply during night work adjacent to businesses that are closed.
 - 3. The Contractor shall exercise care to prevent public traffic from tracking or smearing freshly painted areas. The Owner's Representative shall have the option of requiring the Contractor to remove, by wet sandblast method, and repaint all tracked or smeared areas at Contractor's expense.

3.13. PAVING AND SLURRY LIMITS

- A. All base paving shall be flush with the adjacent pavement and not be left low for the final cap paving. A recessed trench plate at the end of the pipeline installation may be allowed with written permission from the City of Encinitas or City of Carlsbad.
- B. Contractor shall place slurry seal to the full width of the lane impacted by the final paving for the pipeline trench parallel to the lane, including the limits of final paving. For pipeline trenches perpendicular to the lane or greater than 15-degrees to the direction of the lane, place slurry seal one foot outside the limits of final paving.
- C. No measurement or payment shall be made for paving (base or final) or slurry seal that is not ordered by the Owner, or that extends beyond the limits shown or specified on the Drawings or Standard Drawings, or that is required to restore existing pavements damaged, or for not following the specified phasing of work thereby impacting active pavement moratoriums by the Contractor's operations to the condition existing prior to the start of construction.

SECTION 02743 – ASPHALT CONCRETE PAVING

END OF SECTION

SECTION 03020 – CONCRETE SIDEWALK, CURB, AND GUTTER

PART 1– GENERAL

1.01 SUMMARY

- A. Section includes: Concrete curbs, gutters, sidewalks, driveways, access ramps, and alley intersections where not covered by the City of Carlsbad Engineering Standards, City of Encinitas Engineering Design Manual, or Greenbook.

1.02 SYSTEM DESCRIPTION

- A. Performance requirements: Construct various types of concrete curb, gutter, sidewalk, driveways and alley intersections to dimensions and details indicated on the Drawings.

1.03 SUBMITTALS

- A. Product data: Submit data completely describing products and in accordance with Specification 01300 and OMWD Standard Specification Section 03000.
- B. Samples: Submit samples when requested and as per OMWD Standard Specification Section 03000.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Concrete: Class A, as specified in OMWD Standard Specification Section 03000 – General Concrete Construction.
- B. Curb finishing mortar: 1-part Portland cement to 2 parts sand.
- C. Form release material: Light oil or other releasing agent of type which does not discolor concrete or interfere with the application of finishing mortar to curb tops and faces.
- D. Joint materials:
 - 1. Expansion: As specified in OMWD Standard Specification Section 03000 – General Concrete Construction.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions
 - 1. Verify field conditions, including subgrade condition and interferences, before beginning construction.

SECTION 03020 – CONCRETE SIDEWALK, CURB, AND GUTTER

3.02 PREPARATION

A. Surface preparation:

1. Subgrade:

- a. Construct and compact true to grades and lines indicated on the Drawings and requirements as specified OMWD Standard Specification Section 02200 - Earthwork.
- b. Remove soft or unsuitable material to depth of not less than 6 inches below subgrade elevation and replace with satisfactory material.

2. Forms and subgrade: Water immediately in advance of placing concrete.

3.03 INSTALLATION

A. Special techniques:

1. Contractor's option:

- a. Construct concrete curbs and gutters by conventional use of forms, or by means of curb and gutter machine when acceptable to the Engineer.
- b. When use of machines designed specifically for work of this Section are accepted by the Engineer, results must be equal to or better than those produced by use of forms.
- c. Applicable requirements of construction that apply to use of forms also apply to use of machines.
- d. Discontinue use of machines when results are not satisfactory to the Engineer.

B. Forms:

1. Carefully set to line and grade and securely stake in position forms conforming to dimensions of items to be constructed.
2. Thoroughly clean prior to each use and coat with form releasing material.

C. Expansion and weakened-plane joints:

1. Expansion joints:

- a. Construct vertically, and at right angles to centerline of street and match joints in adjacent pavement or sidewalks.
- b. Constructed at radius points, driveways, alley entrances, and at adjoining structures.

SECTION 03020 – CONCRETE SIDEWALK, CURB, AND GUTTER

- c. Fill joints with expansion joint filler material.
- 2. Weakened-plane joints:
 - a. Construct as indicated on the Drawings or as determined by the Owners Representative.
 - b. Match joint locations and details in adjacent curbs, gutters, and sidewalks.
- D. Concrete:
 - 1. Placing:
 - a. Thoroughly spade concrete away from forms so that no rock pockets exist next to forms and so that no coarse aggregate will show when forms are removed.
 - 2. Compacting:
 - a. Compact by mechanical vibrators accepted by the Engineer.
 - b. Continue tamping or vibrating until mortar flushes to surface and coarse aggregate is below concrete surface.
 - 3. Form removal:
 - a. Front form faces: Do not remove before concrete has taken initial set and has sufficient strength to carry its own weight.
 - b. Gutter and rear forms: Do not remove until concrete has hardened sufficiently to 75% design strength to prevent damage to edges. Take special care to prevent damage. Any damage to curb and gutter will require replacement from joint to joint and shall be at no additional cost to the Owner.
 - 4. Finishing and curing: Comply with requirements as specified in OMWD Standard Specification Section 03000 – General Concrete Construction except as modified here:
 - a. As soon as curb face forms are stripped, apply finishing mortar to the top and face of curb and trowel to a smooth, even finish. Finish with fine haired broom in direction of work.
 - b. Where curb is installed without integral gutter, extend finish 2 inches below grade.
 - c. Edge concrete at expansion joints to 1/4 inch radius.

SECTION 03020 – CONCRETE SIDEWALK, CURB, AND GUTTER

- d. Flow lines of gutters shall be troweled smooth 4 inches out from curb face for integral curb and gutter and 4 inches on both sides of flowline for gutters without curbs.
- e. **Sidewalks and ramps: Broom finish.**

E. Backfilling:

- 1. Unless otherwise specified, backfill behind curbs, gutters, or sidewalks with soil native to area and to lines and grades indicated on the Drawings or as determined by the Owners Representative.

3.04 FIELD QUALITY CONTROL

A. Tests:

1. Curbs and gutters:

- a. Test face, top, back, and flow line with 10 foot straightedge or curve template longitudinally along surface.
- b. Correct deviations in excess of 1/4 inch.

2. Gutters:

- a. Frequency of testing: When required by the Engineer, where gutters have slope of 0.8 foot per 100 feet or less, or where unusual or special conditions cast doubt on capability of gutters to drain.
- b. Test method: Establish flow in length of gutter to be tested by supplying water from hydrant, tank truck, or other source.
- c. Required results:
 - 1) 1 hour after supply of water is shut off, inspect gutter for evidence of ponding or improper shape.
 - 2) In event water is found ponded in gutter to depth greater than 1/2 inch, or on adjacent asphalt pavement, correct defect or defects in manner acceptable to the Engineer without additional cost to the Contract.

- B. The District will employ and pay for independent concrete testing in accordance with Section 01410 and OMWD Standard Specification 03000.

SECTION 03020 – CONCRETE SIDEWALK, CURB, AND GUTTER

3.05 ADJUSTING

- A. Repair portions of concrete damaged while stripping forms or, when damage is severe, replace such work at no additional cost to the Contract. Evidence of repairs shall not be noticeable in the finished product.
- B. Remove and replace sections of work deficient in depth or not conforming to requirements indicated on the Drawings and specified in the Specifications at no additional cost to the Contract. Removal and replacement shall be the complete section between 2 joints.

END OF SECTION

Allison Ribachonek

From: Matthew Edgeworth <medgeworth@encinitasca.gov>
Sent: Tuesday, August 30, 2022 2:27 PM
To: Adam Hoch; Allison Ribachonek
Cc: Matthew Widelski
Subject: RE: OMWD - FY23 Pipelines Project, Meeting Request
Attachments: Form - Stormwater Intake Form & Standard SWQMP.pdf; UTILITY TRENCH BACKFILL AND RESURFACING STANDARD (002).pdf; Standard Conditions - ROW Construction.pdf; 08.02.22_COE Moratorium Street List.pdf; Reso 2019-95 Adopting Trench Moratorium Policy.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Adam and Allison,

Good talking to you this afternoon.

I have attached a few helpful documents: 1. Stormwater Intake Form, 2. City's Trench Backfill and Resurfacing Detail, 3. General ROW conditions for any permit the City issues, 4. Streets currently under moratorium, and 5. The City's Trench Cut Moratorium Policy .

Because this is considered a major trenching project the following conditions will also apply. If you have any questions please do not hesitate to reach out.

General

- 1) All work is subject to the Greenbook, San Diego Regional Standard Drawings and City of Encinitas Design Manual.
- 2) Contractor to provide copy of safety plan to the City Inspector prior to starting any work.
- 3) OMWD and its contractor are responsible for reviewing the attached moratorium list and shall coordinate with the City of Encinitas on any upcoming CIP projects to avoid any City project delays or conflicts.
- 4) A valid certificate of insurance is needed for the contractor and any subcontractors performing work within the City's right of way.
- 5) Proposed construction staging area shall be approved by the City Inspector and shown on the traffic control plan with proper advance warning signs/devices, security fencing, privacy tarp & staging area shall comply with all BMP requirements. No staging in the City ROW unless approved by the City Inspector and proper permitting has been issued.
- 6) OMWD, its contractors, and subcontractors are required to obtain right of entries for any work on private property as indicated on the plans and provide copies to the City Inspector at the pre-construction meeting.
- 7) Trench plates shall be recessed, pinned and welded on main arterial streets and on other streets subject to the discretion of the City Inspector.
- 8) The contractor shall be responsible for any monument, benchmark, or corner record which is disturbed or destroyed. Such shall be re-established and replaced by a registered civil engineer or licensed land surveyor.

Restoration

- 1) All trench work will be base paved and repaired during construction to the satisfaction of the City Inspector until final resurfacing is complete.
- 2) Provide a detailed, full project site map indicating the intent and type of final resurfacing to be proposed for each street prior to starting work. Final pavement restoration to be approved and accepted by the City Inspector for each street prior to acceptance of site map.

- 3) OMWD, its contractors and any subcontractors shall repair any damaged landscaping, concrete gutters, and sidewalks to City standards.
- 4) The replacement of any curb ramps shall be to ADA standards. The City Inspector reserves the right to reject such work if ADA compliance is not achieved.

Notification

- 1) Notify all residents & businesses affected by the work and/or traffic control a minimum of five (5) days in advance of the scheduled start date and provide copies of door hangers and mailed notices to the City Inspector one (1) week before the pre-construction meeting.
- 2) No parking signs are required to have the date of the work, the name of the contractor and/or agency and a phone number. Signs shall be placed a minimum of 72 hours in advance of any work.

Traffic Control

- 1) Should day work significantly impact traffic the City Inspector reserves the right to require night work or require a reduction in production work rate to facilitate moderate traffic and work activity.
- 2) For any full road closures or lane reductions on major roadways, the contractor is required to notify the City of Encinitas Fire Department prior to beginning any work. Notification shall be documented and sent to the City Inspector for record prior to implementation of any closure. All closures shall be previously permitted and coordinated.

Thank you,



Matthew Edgeworth

Engineer I

Engineering Department

505 South Vulcan Ave, Encinitas, CA 92024

(760) 633-2875 medgeworth@encinitasca.gov



Project Identification			
Project/Applicant Name:			
Permit/Application Number:		Date:	
Site Address:		APN:	
Scope of work/project description:			
<p align="center">Determination of Project Status and Requirements</p> <p>This form will identify permanent, post construction BMP requirements. Refer to City of Encinitas Stormwater BMP Design Manual for guidance.</p>			
Step 1: Is the project a "development project"? Development projects are defined as "construction, rehabilitation, redevelopment, or reconstruction of any public or private projects". See Section 1.3 and Table 1-2 of the manual for guidance. For example, interior remodels, roof replacements, and electrical and plumbing work are not development projects.		<input type="checkbox"/> Yes	Go to Step 2.
		<input type="checkbox"/> No	Stop. Permanent BMP requirements do not apply. No SWQMP will be required. Provide discussion below.
If "No", provide discussion / justification explaining why the project is <u>not</u> a "development project":			
Step 2: Complete questions below for Project Type Determination. The project is (select one): <input type="checkbox"/> New Development <input type="checkbox"/> Redevelopment			
The total proposed, newly created and/or replaced impervious area is: _____ ft ²			
Is the project in any of the following categories, (a) through (f) below?			
Yes <input type="checkbox"/>	No <input type="checkbox"/>	(a)	New development projects or redevelopment projects that create and/or replaced 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	(b)	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	(c)	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812).



Stormwater Intake Form for All Developments
and Standard / Basic Project SWQMP

			<p>(ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater.</p> <p>(iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.</p> <p>(iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.</p>
<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	(d)	<p>New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharge directly to an Environmentally Sensitive Area (ESA). "Discharge directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands).</p> <p><u>Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and SDRWQCB; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and SDRWQCB; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. See manual Section 1.4.2 for additional guidance.</u></p>
<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	(e)	<p>New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses:</p> <p>(i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.</p> <p>(ii) Retail gasoline outlets. This category includes retail gasoline outlets that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic of 100 or more vehicles per day.</p>
<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	(f)	<p>New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction.</p> <p><i>Note: See BMP manual for exclusions specific to this category.</i></p>
<p>Does the project meet the definition of one or more of the PDP categories (a) through (f) listed above?</p> <p><input type="checkbox"/> Yes – The project is a <u>Priority Development Project</u>, the applicant shall provide PDP Post Construction BMPs and provide a PDP SWQMP. <i>Stop here and complete PDP SWQMP.</i></p> <p><input type="checkbox"/> No – Does the project propose <u>500 SF</u> or more of new and/or replaced impervious surface area?</p> <p><input type="checkbox"/> Yes – The project is a <u>Standard Project</u>, the applicant shall implement Structural Post Construction BMPs, site design, and source control BMPs. <i>Complete Step 3, 4, & 5.</i></p> <p><input type="checkbox"/> No – The project is a <u>Basic Project</u>, the applicant shall implement site design and source control measures. <i>Complete Step 3 & 4.</i></p>			



Stormwater Intake Form for All Developments
and Standard / Basic Project SWQMP

Step 3: Source Control BMP Checklist – All “Development Projects” Must Complete

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the storm drain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SC-2 Storm Drain Stenciling or Signage	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)			
<input type="checkbox"/> Onsite storm drain inlets	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Interior floor drains and elevator shaft sump pumps drain to sewer	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Interior parking garages drain to sewer	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Need for future indoor & structural pest control	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Landscape/outdoor pesticide use	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Pools, spas, ponds, decorative fountains, and other water features	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Food service	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Refuse/Trash areas must be covered	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Industrial processes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Outdoor storage of equipment or materials must be covered	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Vehicle and equipment cleaning	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Vehicle/equipment repair and maintenance	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Fuel dispensing areas	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Loading docks	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Fire sprinkler test water	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Miscellaneous drain or wash water	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<input type="checkbox"/> Plazas, sidewalks, and parking lots	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A



Stormwater Intake Form for All Developments
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Discussion / justification if SC-1 through SC-6 not implemented. Justification must be provided for ALL "No" answers shown above.

Step 4: Site Design BMP Checklist – All “Development Projects” Must Complete

All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SD-2 Conserve Natural Areas, Soils, and Vegetation	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SD-3 Minimize Impervious Area	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SD-4 Minimize Soil Compaction	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SD-5 Impervious Area Dispersion - Directly Connected Impervious Areas (e.g. roof downspouts connected to street) are not allowed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SD-6 Runoff Collection	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SD-7 Landscaping with Native or Drought Tolerant Species	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
SD-8 Harvesting and Using Precipitation	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

Discussion / justification if SD-1 through SD-8 not implemented. Justification must be provided for ALL "No" answers shown above.



Stormwater Intake Form for All Developments
and Standard / Basic Project SWQMP

Step 5: Standard Project BMP Sizing for ≥ 500 sf New/Replaced Impervious Surface Areas

Projects that create and/or remove and replace 500sf or greater of impervious surface collectively over the entire project site shall provide natural biofiltration and/or bioretention BMPs. The applicant may use the Design Capture Volume method (attach calculations hereon; see Appendix B of BMP Design Manual), or may utilize the following calculation:

$$\text{MINIMUM EFFECTIVE BMP AREA} = 0.04 \times \text{Total new and/or removed and replaced impervious surfaces}$$

Describe the selected Structural BMP Design including type, location, size, etc. below:

Project Owner's Certification:

1. I hereby acknowledge that my project is subject to the stormwater quality regulations of the City of Encinitas and certify that my project will provide satisfactory stormwater quality measures both during the construction process and afterwards.

2. If my project is designated as a Priority or a Standard Project, I further acknowledge my understanding that the permanent stormwater treatment features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

3. I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

- ☐ By checking this box, I hereby certify that I understand and will adhere to Items 1, 2, and 3 as outlined above.

Owner Name/Company

Date

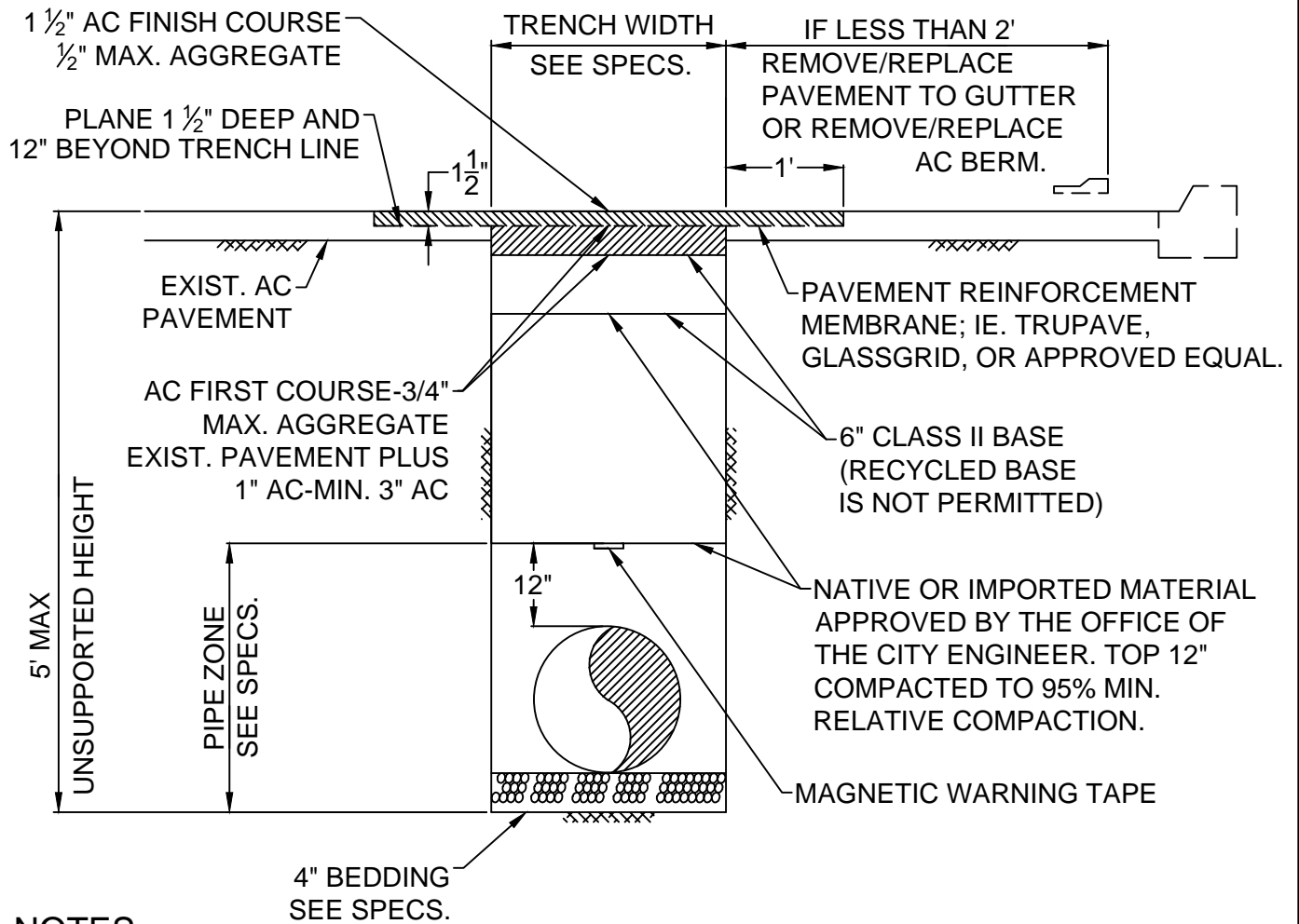
Agent's Certification:

- ☐ By checking this box, I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas and that I have reviewed the information contained in this form and verified that it is both complete and correct.

Agent Name

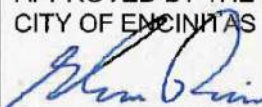
Date

Working Capacity of Agent (architect, engineer)



NOTES

1. FOR DEPTHS UP TO 5', NO TRENCH SUPPORT IS REQUIRED UNLESS WET, UNSTABLE OR RUNNING SOIL IS ENCOUNTERED. FOR DEPTHS EXCEEDING 5 FEET, SHORING OR SOLID SHEATHING IS REQUIRED. WHERE WET, UNSTABLE OR RUNNING SOIL IS ENCOUNTERED, SOLID SHEATHING IS REQUIRED.
2. EXISTING A.C. SHALL BE CUT AND REMOVED IN SUCH MANNER SO AS NOT TO TEAR, BULGE OR DISPLACE ADJACENT PAVEMENT. EDGED SHALL BE CLEAN AND VERTICAL, ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO STREET CENTERLINE, WHEN PRACTICAL.
3. FINISH COURSE OF AC RESURFACING SHALL BE LAID DOWN USING A SELF PROPELLED SPREADER BOX, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
4. CHIP OR SLURRY SEALING SHALL BE APPLIED AS REQUIRED BY AGENCY.
5. PETROMAT IS NOT AN ALLOWED PAVEMENT REINFORCEMENT MEMBRANE.

APPROVED BY THE CITY OF ENCINITAS	
	DATE 5/31/13
CITY ENGINEER	
DRAWING NUMBER	

CITY OF ENCINITAS STANDARD DRAWING

UTILITY TRENCH BACKFILL AND
RESURFACING STANDARD

REV	BY	APPR	DATE
1	SN		6/27/13



RIGHT-OF-WAY CONSTRUCTION PERMIT STANDARD CONDITIONS

1. No access or work shall be performed within the City right-of-way without the full knowledge of the assigned City Inspector who shall be given not less than 48 hours advance notice of the initiation of permitted use at (760) 633-2796 or 633-2797, or as stated on the permit.
2. At least 48 hours prior to starting work, **Underground Service Alert (USA)** shall be notified for location of underground utilities at 1-800-422-4133. The proposed dig area must be marked in white paint prior to contacting (USA).
3. All work covered by this permit shall be performed by a contractor possessing a valid California contractor's license of the appropriate class.
4. All traffic control within the construction area shall be subject to an approved traffic control plan and shall be flagged and barricaded to the satisfaction of the City Inspector in compliance with the "Work Area Traffic Control Handbook", latest edition published by Building News, Inc. In the event that the Inspector determines proper traffic control is not in place, all work shall cease and permittee authorizes the City Engineer or a duly authorized representative to order, on the rental basis, such traffic control devices as shall be necessary and proper to protect the public safety and further agrees to pay any and all costs and charges that the City may incur in providing said traffic control.
5. Applicant agrees that it shall be his responsibility to provide the contractor, subcontractor, or any other agent responsible for construction of permitted works within the City right-of-way, with a copy of the permit including these standard conditions and a complete set of approved plans. The permit, plans and Work Area Traffic Control Handbook shall be available at the permit site whenever work is in progress.
6. Permitted works shall be constructed in accordance with the City specifications and approved plans, subject to inspection and approval by the City Engineer or a duly authorized representative. Certification for all materials and work, including compaction tests, shall be furnished by the applicant upon request by the City Inspector. Payment for any compaction testing shall be by the permittee. Certification shall be made by a certified testing agency or firm acceptable to the City.
7. No work within the public right-of-way is permitted on Saturdays, Sundays, or holidays. Any deviation from the work schedule presented in these conditions must receive prior, written approval of the City Engineer or a duly authorized representative. Any questions regarding days City Hall is closed, call (760) 633-2770.
8. No work on any public roadway, excluding prime arterials and major roads, shall be started before 7:30 A.M. or continue after 5:00 P.M. on weekdays.
9. No work shall begin before 9:00 A.M. or continue after 3:00 P.M. on prime arterials and other major roads, unless authorized on the permit by the City Engineer. All work on prime arterials and other major roads, all as shown on the Circulation Element of the City's General Plan, will require a traffic control plan acceptable to the City Traffic Engineer whose office can be contacted at (760) 633-2704.
10. The roadway shall be clean and free of all obstructions and completely open to traffic at the end of each working day. (No later than 3:00 P.M. on major roads, defined herein.)
11. Two-way traffic shall be maintained at all times. Minimum travel lane width for motor vehicles shall be 12 feet. If street width prevents maintaining two-way traffic, permittee and City Engineer shall agree on an adequate traffic control plan prior to starting work, which shall include the use of a full-time flagman.
12. All excavations in existing pavement shall be saw cut to neat lines and AC replacement shall be made to the satisfaction of the City Engineer or a duly authorized representative.
13. Open trench must be backfilled and capped with at least 2" of cold mix asphalt or metal plated according to City specifications during non-working hours. Metal plates are required to have cold mix asphalt ramps on all (4) sides and must be maintained. Refer to the City's Standard Drawing.
14. Native material may be used upon approval of the City Engineer or a duly authorized representative. Refer to the City's Standard Drawing for Trench Backfill and Resurfacing, Appendix 2.4 of the Engineering Design Manual.
15. Tunneling beneath curb and gutter is not permitted, unless otherwise authorized by the City Engineer. Curb, gutter, and sidewalk requiring removal shall be replaced joint to joint for a neat appearance.
16. Two sack sand-cement slurry mix shall be required as backfill on all lateral excavations within prime arterials, major roads and collectors as well as all locations where the inspector deems the native material to be unacceptable for use as backfill.
17. Care shall be exercised to prevent water, soil and debris from depositing in gutters, streets and storm drains. No washing out of mixers or concrete pumps will be allowed on City streets. Violations will be referred for NPDES enforcement and penalties.
18. Any roadway striping damaged or removed during the operations of this permit shall be matched and replaced by the applicant using the latest edition of State Department of Transportation specifications for paint, all to the satisfaction of the City Engineer or a duly authorized representative. Thermoplastic legends and crosswalk markings shall be replaced with thermoplastic, not paint, to the satisfaction of the City Engineer.
19. All concrete work shall be transit mixed and conform to the Standard Specifications for Public Works Construction, Latest Edition, Section 201, and be approved by the City Engineer or a duly authorized representative.
20. Trenching for installations across any intersecting roadway open to traffic shall be progressive. Not more than half of the width of a traveled roadway shall be disturbed at one time and the remaining width shall be kept open to traffic by bridging or backfilling.
21. Where street dimensions and State Department of Health Services regulations allow, all pipes and conduits laid parallel to the roadway shall be placed at least five (5) feet from the edge of the pavement or graded traveled roadway, unless otherwise

authorized in writing by the City Engineer. The shallowest portion of any pipeline or other facility shall be installed not less than thirty (30) inches below the roadway surface.

21(a). Where street dimensions and State Department of Health Services regulations allow, all pipes and conduits laid parallel to existing utilities shall maintain a minimum separation of three (3) feet measured from the nearest edge of the facility. Any deviation from this requirement is not allowed unless approved by the City Engineer or a duly authorized representative.

22. All excavated material shall be cast away from the improved portion of the highway. After the work has been completed, all excess material, including trench spoils, shall be removed from the right-of-way. The roadway shall be left in neat and orderly condition.
23. All roadside drainage ditches shall be restored to true grades and the intake and outlet ends at all culverts shall be left free from all excess materials and debris.
24. All approaches to private driveways and intersecting roads and streets shall be kept open to traffic at all times, unless otherwise approved by the City Engineer.
25. Clay and earth which adhere to the paved surface of the roadway shall be removed by hand scraping, washing and sweeping, or by any other method which will leave a clean non-skid surface without impairing, damaging, or loosening the surface.
26. Permittee shall comply with any and all directives issued by the City Engineer or a duly authorized representative in order to prevent dust or other materials from becoming a nuisance or annoyance.
27. Temporary patching of trench is required on lateral cuts in surfaced streets immediately after backfilling. After completion of the refilling and compacting of the backfill material in the excavation, all as specified in the Standard Drawing dated September 30, 1996, and the removal of obstruction(s), the permittee shall promptly replace with temporary or permanent patching material, or repair any portion of the highway surface removed or damaged by the excavation, obstruction, or construction operations, all to the satisfaction of the City Engineer, and as specified elsewhere herein. The City Engineer may, at his option, elect to do the surfacing or repairing himself; in such case, the permittee shall bear the cost of such work. Temporary patching material may be left in place for up to 30 days, but must be continually maintained.
28. Where the pavement, except Portland Concrete Cement pavement, or other type of surface has been removed by others, the permittee shall replace it with a standard repair of four (4) inches AC over approved backfill or repair section shall be one (1) inch AC greater than existing structural section, whichever is greater. Refer to the most current Standard Drawing. Repairs to PCC pavement shall be made pursuant to the specifications of the assigned Engineering Inspector.
29. If, after the refilling of an excavation, the permittee fails or refuses to resurface or repair that portion of the surface of the roadway damaged by him, or if the City Engineer has elected to do such resurfacing or repairing, the City Engineer shall cause the repair to occur; and the permittee shall be charged with the cost thereof computed by the City Engineer.
30. When shoring is required, an engineered detail drawing will be required for approval by the City Engineer. All OSHA regulations shall be met.
31. All directional bores shall be subject to approval of the method in the field by the assigned Engineering Inspector, acting as the duly authorized agent of the City Engineer. A thorough examination of the subsurface conditions is a prerequisite. The applicant shall identify the bore method on the permit application either as auger, hammer, hydraulic, etc., and show the bore pits. Grouting and intermediate bore pits may be required.
32. All subsurface utilities shall be accurately shown on the applicant's site plan for those excavations in excess of 250 linear feet, traversing signalized intersections, crossing interconnect wires, or otherwise where the City Engineer has a special concern.
33. Pavement cuts in streets rehabilitated or newly constructed within the past two years shall be categorically denied.
34. This permit may be immediately revoked for reasons in the best interest of the City, for violation of permit conditions, or for the creation of a nuisance, all upon notice given by the City Engineer or a authorized representative. In the event of such revocation, applicant shall immediately cease all operations and restore City right-of-way as directed by the City Engineer or a duly authorized representative. After notification, City may take full possession of the area. Applicant shall pay to the City any and all costs involved, in the event the City has to restore City property or remove any items installed by the applicant.
35. This permit may become void in the event the use permitted is not started within sixty (60) calendar days from the date of issuance or in the event the permitted use is abandoned for a period exceeding sixty (60) calendar days after construction has begun. In such event, it shall be necessary to obtain a new permit and pay additional fees. Upon commencement of work, all operations, including cleanup and restoration of City right-of-way, shall be completed within the time limit specified by the permit.
36. The permittee guarantees to save, indemnify and hold harmless the City of Encinitas and all its agents, officers, employees and officials against all liabilities, judgments, costs and expenses, which may in any manner or form arise in consequence of the issue of this permit or any work performed in consequence thereof.
37. The permittee guarantees all work constructed, installed and effected under this permit for a period of one year from the date of final inspection. Any repairs required during the guarantee period shall be made at the expense of the permittee. At the option of the City Engineer, repair work may be performed by either the permittee or the City.
38. Permittee has read, understands and agrees to comply with all construction permit provisions and standard conditions.

By checking this box I agree to the conditions set forth in this document.

Name: _____ **Date:** _____

City of Encinitas
Trenching Moratorium Street List
SEAL COAT/SLURRY SEAL - 3 YEARS, OVERLAY - 5 YEARS

FY 2018-19 AC OVERLAY STREET LIST (UNDER A TRENCHING MORATORIUM UNTIL AUGUST 26, 2025)

ITEM	STREET	FROM	TO	TREATMENT
1	SOUTH COAST HWY 101	ENCINITAS BLVD / B STREET	D STREET	2" AC OVERLAY
2	WOTAN DR	SANTA FE DR	MELBA RD	2" AC OVERLAY
3	RANCHO SANTA FE RD	400' NORTH OF ENCINITAS BLVD	7TH ST	2" AC OVERLAY (IN-LANE), FOG SHOULDERS
4	VILLAGE PARK WAY	ENCINITAS BLVD	PARKDALE LN (INCLUDES INTERSECTION)	2" AC OVERLAY
5	PARKDALE LN	VILLAGE RUN EAST	VILLAGE PARK WAY	2" AC OVERLAY
6	BUMANN RD	FORTUNA RANCH RD	WILDFLOWER DR	2" AC OVERLAY

FY 2019-20 PAVEMENT REHABILITATION OVERLAY AND SLURRY PROJECT (NOC FILED ON AUGUST 11, 2021)

SLURRY SEAL STREETS - UNDER MORATORIUM UNTIL AUGUST 11, 2024
OVERLAY STREETS - UNDER MORATORIUM UNTIL AUGUST 11, 2026

ITEM	STREET	FROM	TO	TREATMENT
1	ANDREW AVE	SHERIDAN ROAD	EOLUS AVE	DIAMOND GRIND PCC
2	ARJUNA COURT	NE CUL-DE-SAC	VILLAGE RUN EAST	TYPE II SLURRY SEAL
3	AVENIDA LA POSTA	RANCHO SANTA FE RD	VILLAGE VIEW RD	2" AC OVERLAY
4	BIRCHVIEW DRIVE	IVY GLEN DR	NORTH END	TYPE II SLURRY SEAL
5	CALIBAN COURT	CALIBAN DRIVE	SOUTH CUL-DE-SAC	TYPE II SLURRY SEAL
6	CIRCA DE TIERRA	VAL SERENO	N.E CUL-DE-SAC	1.5" AC OVERLAY
7	CLARK AVENUE	LEUCADIA BL	PUEBLA ST	TYPE II SLURRY SEAL
8	DEL RIEGO AVENUE	LEUCADIA BLVD	PUEBLA STREET	2" AC OVERLAY
9	DEL RIO AVENUE	LEUCADIA BLVD	PUEBLA STREET	2" AC OVERLAY
10	DELAGE COURT	OAKBRANCH DRIVE	EAST CUL-DE-SAC	TYPE II SLURRY SEAL
11	DELAGE DRIVE	PEGASO STREET	OAKBRANCH DRIVE	TYPE II SLURRY SEAL
12	EASTWOOD LANE	NW CUL-DE-SAC	VILLAGE RUN EAST	TYPE II SLURRY SEAL
13	ELMVIEW DRIVE	WALNUT CREEK DRIVE	PEACHWOOD DRIVE	TYPE II SLURRY SEAL
14	ELVA COURT	OAKBRANCH DRIVE	EAST CUL-DE-SAC	TYPE II SLURRY SEAL
15	ELVA TERRACE	NW CUL-DE-SAC	OAKBRANCH DRIVE	TYPE II SLURRY SEAL
16	FREDA LANE	BIRMINGHAM DRIVE	SEA VILLAGE DRIVE	2" AC OVERLAY
17	GARDENA COURT	WEST CUL-DE-SAC	GARDENA ROAD	TYPE II SLURRY SEAL
18	GARDENA ROAD	SANTA FE DRIVE	NORTH END	2" AC OVERLAY
19	GATEPOST ROAD	WEST CUL-DE-SAC	VILLAGE RUN	TYPE II SLURRY SEAL
20	IVYGLEN DRIVE	BIRCHVIEW DRIVE	ELMVIEW DRIVE	TYPE II SLURRY SEAL
21	JERRILYNN PLACE	CERRO STREET	SOUTH CUL-DE-SAC	1.5" AC OVERLAY
22	LA MIRADA AVENUE	LEUCADIA BLVD	PUEBLA STREET	2" AC OVERLAY
23	OLIVENHAIN ROAD	AMARGOSA	EAST CITY LIMIT	2" AC OVERLAY
24	OXFORD AVENUE	CHESTERFIELD DRIVE	SOUTH END	TYPE II SLURRY SEAL
25	OXFORD PLACE	DUBLIN DR	SOUTH END	1.5" AC OVERLAY
26	PASEO DE LAS FLORES	QUAIL GARDENS DRIVE	PRIVATE ROAD LIMIT	TYPE II SLURRY SEAL
27	PEACHWOOD DRIVE	WEST END	ELMVIEW DRIVE	TYPE II SLURRY SEAL
28	PEGASO STREET	DELAGE DRIVE	OAKBRANCH DRIVE	TYPE II SLURRY SEAL
29	PINEBRANCH DRIVE	ELMVIEW DRIVE	EL CAMINO REAL	TYPE II SLURRY SEAL
30	PUEBLA STREET	CLARK AVENUE	SAXONY ROAD	2" AC OVERLAY

ITEM	STREET	FROM	TO	TREATMENT
31	ROSETA STREET	WEST END	NEPTUNE AVE	2" AC OVERLAY
32	STONEBROOK LANE	WEST CUL-DE-SAC	VILLAGE RUN EAST	TYPE II SLURRY SEAL
33	SUMMERHILL DRIVE	WILLOWSRING DRIVE	WEST CUL-DE-SAC	TYPE II SLURRY SEAL
34	SUMMERSONG COURT	NORTH CUL-DE-SAC	SUMMERHILL DRIVE	TYPE II SLURRY SEAL
35	SUMMERSONG LANE	VILLAGE CENTER DRIVE	SUMMERHILL DRIVE	TYPE II SLURRY SEAL
36	SYCAMOREVIEW DRIVE	PEACHWOOD DRIVE	SOUTHWEST END	TYPE II SLURRY SEAL
37	VAL SERENO DRIVE	EL CAMINO DEL NORTE	VIA DE CABALLO	1.5" AC OVERLAY
38	VIA DE CABALLO	WEST CUL-DE-SAC	EAST CUL-DE-SAC	1.5" AC OVERLAY
39	VILLAGE CENTER DRIVE	SUMMERHILL DR	WILLOWSRING DR	TYPE II SLURRY SEAL
40	WALNUTCREEK DRIVE	ELMVIEW DRIVE	EAST END	TYPE II SLURRY SEAL
41	WILLOWVIEW COURT	BIRCHVIEW DR	EAST CUL-DE-SAC	TYPE II SLURRY SEAL
42	WINSOME PLACE	MOUNTAIN VISTA DR	SOUTH CUL-DE-SAC	TYPE II SLURRY SEAL
43	WOODSHADOW LANE	VILLAGE RUN EAST	SOUTH CUL-DE-SAC	TYPE II SLURRY SEAL

FY 2020-2021 PAVEMENT REHABILITATION OVERLAY AND SLURRY PROJECT (NOC FILED ON NOVEMBER 17, 2021)

SLURRY SEAL STREETS - UNDER MORATORIUM UNTIL NOVEMBER 17, 2024

OVERLAY STREETS - UNDER MORATORIUM UNTIL NOVEMBER 17, 2026

ITEM	STREET	FROM	TO	TREATMENT
1	ASPENWOOD LANE	COTTAGE GROVE DRIVE	SOUTH CUL-DE-SAC	1.5" AC OVERLAY
2	AVENIDA ESTEBAN	AVENIDA LA POSTA	NORTH CUL-DE-SAC	TYPE II SLURRY SEAL
3	AVENIDA JOAQUIN	WEST CUL-DE-SAC	AVENIDA ESTEBAN	TYPE II SLURRY SEAL
4	BRIGHTON AVE	OXFORD AVENUE	ROSSINI DRIVE	2" AC OVERLAY
5	CALIBAN DRIVE	VILLAGE RUN WEST	GARDENDALE ROAD	1.5" AC OVERLAY
6	COTTAGE GROVE DRIVE	VILLAGE GREEN ROAD	VILLAGE RUN EAST	1.5" AC OVERLAY
7	COTTAGE GROVE LANE	COTTAGE GROVE DRIVE	SOUTH CUL-DE-SAC	1.5" AC OVERLAY
8	DEERFIELD ROAD	VILLAGE RUN WEST	VILLAGE GREEN ROAD	TYPE II SLURRY SEAL
9	GARDENDALE ROAD	MOUNTAIN VISTA DRIVE	SOUTH CUL-DE-SAC	1.5" AC OVERLAY
10	GREENTREE ROAD	VILLAGE RUN WEST	NORTHEAST CUL-DE-SAC	TYPE II SLURRY SEAL
11	HILLCREST DRIVE	VULCAN AVENUE	EOLUS AVENUE	DIAMOND GRIND PCC & 1.5" AC OVERLAY
12	KILKENNY DRIVE	MONTGOMERY DRIVE	OXFORD AVENUE	1.5" AC OVERLAY
13	LANDQUIST DRIVE	CERRO STREET	TAEGAN LANE	1.5" AC OVERLAY
14	LEUCADIA SCENIC CT	ANDREW AVENUE	NORTHEAST CUL-DE-SAC	1.5" AC OVERLAY
15	MELBA ROAD	BONITA DRIVE	BALOUR DRIVE	2" AC OVERLAY
16	MONTGOMERY AVENUE	DUBLIN DRIVE	100' NORTH OF CUL-DE-SAC	1.5" AC OVERLAY
17	OLD MILL COURT	OLD MILL ROAD	SOUTH CUL-DE-SAC	1.5" AC OVERLAY
18	OLD MILL ROAD	VILLAGE RUN WEST	VILLAGE GREEN ROAD	1.5" AC OVERLAY
19	OLIVENHAIN ROAD	EL CAMINO REAL	AMARGOSA DRIVE	2" AC OVERLAY
20	OLIVE CREST DRIVE	RANCHO SANTA FE DRIVE	SOUTH CUL-DE-SAC	1.5" AC OVERLAY
21	PARK CREST DRIVE	DEAN DRIVE	SOUTH CUL-DE-SAC	1.5" AC OVERLAY
22	QUAIL GARDENS DRIVE	LEUCADIA BLVD	ENCINITAS BLVD	2" AC OVERLAY & TYPE II SLURRY SEAL
23	RED BARN ROAD	VILLAGE RUN WEST	NORTHWEST CUL-DE-SAC	TYPE II SLURRY SEAL

ITEM	STREET	FROM	TO	TREATMENT
24	ROSSINI DRIVE	BRIGHTON AVENUE	NORTH END	2" AC OVERLAY
25	SHERIDAN ROAD	LA COSTA AVENUE	SOUTH CUL-DE-SAC	TYPE II SLURRY SEAL
26	TAEGAN LANE	CERRO STREET	EAST END	1.5" AC OVERLAY
27	VERDI AVENUE	SAN ELIJO AVENUE	SUMMIT AVENUE	2" AC OVERLAY
28	VIA MOLENA	EL CAMINO REAL	VIA CANTEBRIA	2" AC OVERLAY
29	WILLOWSRING COURT	WILLOWSRING DRIVE	EAST CUL-DE-SAC	TYPE II SLURRY SEAL

FY 2021-2022 PAVEMENT REHABILITATION OVERLAY AND SLURRY PROJECT (PRE-CONSTRUCTION)

ITEM	STREET	FROM	TO	TREATMENT
BASE BID				
1	AVENIDA DE LAS LILAS	WILLOWSRING DRIVE	CAMINO DE LAS FLORES	AC OVERLAY
2	BEECHTREE DRIVE	ENCINITAS BLVD	CREST DRIVE	AC OVERLAY
3	BIRMINGHAM DRIVE	FREDA LANE	LAKE DRIVE	SLURRY SEAL
4	BRIGHTON AVENUE	OXFORD AVENUE	ROSSINI DRIVE	SLURRY SEAL
5	CREST DRIVE	SANTA FE DRIVE	MELBA ROAD	SLURRY SEAL
6	DOUBLE LL RANCH ROAD (PRIVATE)	LONE JACK ROAD	WEST END	SLURRY SEAL
7	EAST D STREET	VULCAN AVENUE	CORNISH DRIVE	SLURRY SEAL
8	EAST I STREET	VULCAN AVENUE	CORNISH DRIVE	SLURRY SEAL
9	FIFTH STREET	SYLVIA STREET	SOUTH CUL-DE-SAC	SLURRY SEAL
10	FLORITA STREET	LA MESA AVENUE	MELROSE AVENUE	SLURRY SEAL
11	GOLDEN ROAD	MELBA ROAD	REGAL ROAD	AC OVERLAY
12	LAKE DRIVE	BIRMINGHAM DRIVE	200 FT SOUTH OF LAKE DRIVE	AC OVERLAY
13	LIVERPOOL DRIVE	CAMBRIDGE AVENUE	MACKINNON AVENUE	SLURRY SEAL
14	LOLITA STREET	LA MESA AVENUE	LA VETA AVENUE	SLURRY SEAL
15	MEADOWMIST COURT	MEADOWMIST LANE	EAST CUL-DE-SAC	SLURRY SEAL
16	MEADOWMIST LANE	COLE RANCH ROAD	SOUTH CUL-DE-SAC	SLURRY SEAL
17	MONTGOMERY AVENUE	200 FT NORTH OF SOUTH CUL-DE-SAC	SOUTH CUL-DE-SAC	SLURRY SEAL
18	OXFORD AVENUE	STAFFORD AVENUE	BIRMINGHAM DRIVE	SLURRY SEAL
19	RANCHO SANTA FE DRIVE	300 FT NORTH OF ENCINITAS BLVD	ENCINITAS BLVD	AC OVERLAY
20	ROSSINI DRIVE	BRIGHTON AVENUE	NORTH END	SLURRY SEAL
21	SOUTH COAST HIGHWAY 101	D STREET	F STREET	AC OVERLAY
22	STRATFORD DRIVE	D STREET	REQUEZA STREET	SLURRY SEAL
23	SUMMER HOLLY LANE	OLIVE CREST DRIVE	SOUTH CUL-DE-SAC	AC OVERLAY
24	WALES DRIVE	LAKE DRIVE	VIA TIEMPO	SLURRY SEAL
25	WEST E STREET	SECOND STREET	SOUTH COAST HIGHWAY 101	AC OVERLAY
26	WEST F STREET	FOURTH STREET	THIRD STREET	SLURRY SEAL
ADDITIVE ALTERNATE 1 (PENDING AWARD)				
27	MANCHESTER AVENUE	ENCINITAS BLVD	COLONY TERRACE	AC OVERLAY

MISCELLANEOUS CIP PROJECTS (TRENCHING MORATORIUM DATE - BASED ON PROJECT'S NOTICE OF COMPLETION)

ITEM	STREET	FROM	TO	TREATMENT
1	SOUTH COAST HIGHWAY 101 (UNDER MORATORIUM UNTIL OCT 14, 2023)	CHESTERFIELD DR	SOLANA BEACH BORDER	TYPE II SLURRY SEAL

ITEM	STREET	FROM	TO	TREATMENT
2	MORNING SUN DRIVE (UNDER MORATORIUM UNTIL APRIL 28, 2026)	100' SOUTH OF RANCHO SANTA FE DRIVE	SOUTH CUL-DE-SAC	2.5" AC OVERLAY
3	NORTH EL CAMINO REAL (UNDER MORATORIUM UNTIL MARCH 23, 2025)	GARDEN VIEW RD	OLIVENHAIN RD	TYPE II SLURRY SEAL
4	NORTH EL CAMINO REAL (UNDER MORATORIUM UNTIL MARCH 23, 2027)	ENCINITAS BLVD	GARDEN VIEW RD	2" AC OVERLAY
5	SANTA FE DRIVE (CALTRANS PROJECT)	REGAL RD	GARDENA RD	TYPE II SLURRY SEAL
6	NORTH COAST HIGHWAY 101 (CITY'S LEUCADIA STREETSCAPE PROJECT) - IN CONSTRUCTION	A ST	BASIL ST	2" AC OVERLAY
7	NORTH COAST HIGHWAY 101 (CITY'S LEUCADIA STREETSCAPE SAFETY AND MOBILITY PROJECT) - PRECONSTRUCTION	BASIL ST	LA COSTA AVE	TYPE II SLURRY SEAL
8	LONE JACK ROAD (OLIVENHAIN TRUNK SEWER PROJECT PHASE 1) (UNDER MORATORIUM UNTIL OCTOBER 27, 2026)	STRATFORD KNOLL	CRYSTAL RIDGE RD	2" AC OVERLAY
9	EL CAMINO DEL NORTE (OLIVENHAIN TRUNK SEWER PROJECT PHASE 1) (UNDER MORATORIUM UNTIL OCTOBER 27, 2026)	300' EAST OF WINDMILL RANCH RD	300' WEST OF ESCONDIDO CREEK	2" AC OVERLAY

DEVELOPMENT AND UTILITY PROJECTS (TRENCHING MORATORIUM DATE - BASED ON PROJECT/PERMIT CLOSEOUT)

ITEM	STREET	FROM	TO	TREATMENT
1	LAKE DRIVE 14626-EX/PROW-013718-2020 (UNDER MORATORIUM UNTIL APRIL 23, 2026)	1820 LAKE DRIVE	1910 LAKE DRIVE	2" AC OVERLAY
2	WOODLAKE DRIVE AND LAKE DRIVE (UNDER MORATORIUM UNTIL SEPTEMBER 1, 2026)	NB LANE ON LAKE DRIVE BETWEEN 1461 AND 1405. CURB TO CURB ON LAKE DRIVE BETWEEN 1405 AND 1386. WB LANE ON WOODLAKE DRIVE BETWEEN LAKE DRIVE AND 60 FT WEST OF CAMINITO SEPTIMO.		2" AC OVERLAY
3	VULCAN AVE - NB LANE ONLY PROW-013624-2020 (UNDER MORATORIUM UNTIL SEPTEMBER 13, 2026)	LEUCADIA BLVD	500' SOUTH OF GLAUCUS ST	2" AC OVERLAY
4	ENCINITAS BLVD - OMWD PROJECT (UNDER MORATORIUM UNTIL MARCH 31, 2025)	DRIVEWAY 50 FT WEST OF McCain LANE	RANCHO SANTA FE ROAD	TYPE II SLURRY SEAL

ITEM	STREET	FROM	TO	TREATMENT
FY 2022-2023 PAVEMENT REHABILITATION OVERLAY AND SLURRY PROJECT (IN DESIGN)				
ITEM	STREET	FROM	TO	PRELIMINARY TREATMENT (SUBJECT TO CHANGE)
1	8TH STREET	RANCHO SANTA FE ROAD	COLE RANCH ROAD	OVERLAY
2	APPLERIDGE DRIVE	CERRO STREET	JUNIPERHILL DRIVE	OVERLAY
3	AVOCADO STREET	NEPTUNE AVENUE	NORTH COAST HIGHWAY 101	OVERLAY
4	BUTTERCUP ROAD	LOTUS BLOSSOM STREET	WANDERING ROAD	OVERLAY
5	CORNISH DRIVE	SANTA FE DRIVE	SAN ELIJO AVENUE	OVERLAY
6	DEWITT AVENUE	I STREET	J STREET	OVERLAY
7	EAST H STREET	VULCAN AVENUE	CORNISH DRIVE	OVERLAY
8	FOURTH STREET	A STREET	B STREET	OVERLAY
9	HAYDN DRIVE	LISZT AVENUE	MONTGOMERY AVENUE	OVERLAY
10	JUNIPERHILL DRIVE	OAKBRANCH DRIVE	HOLLYRIDGE DRIVE	OVERLAY
11	LISZT AVENUE	HAYDN DRIVE	WESTMINSTER DRIVE	OVERLAY
12	LOTUS BLOSSOM STREET	BUTTERCUP ROAD	GARDEN VIEW ROAD	OVERLAY
13	MCNEILL AVENUE	VULCAN AVENUE	CORNISH DRIVE	OVERLAY
14	NORTH VULCAN AVENUE	SUNSET DRIVE	LEUCADIA BOULEVARD	OVERLAY
15	OAKBRANCH DRIVE	CERRO STREET	HOLLYRIDGE DRIVE	OVERLAY
16	ORANGE BLOSSOM WAY	LOTUS BLOSSOM STREET	BUTTERCUP ROAD	OVERLAY
17	PLUMTREE DRIVE	WEST CDS	APPLERIDGE DRIVE	OVERLAY
18	SOUTH RANCHO SANTA FE ROAD	MANCHESTER AVENUE	COUNTY BRIDGE	OVERLAY
19	SOUTH VULCAN AVENUE	ENCINITAS BOULEVARD	E STREET	OVERLAY
20	VIA CANTEBRIA	ENCINITAS BOULEVARD	NORTH OF FORREST BLUFF	OVERLAY
21	CALLE ANACAPA	NORTHWEST CDS	CAMINO DEL RANCHO	SLURRY SEAL
22	CALLE REGAL	REQUEZA STREET	SOUTH CDS	SLURRY SEAL
23	CALLE SAN CLEMENTE	CALLE SANTA CRUZ	NORTH CDS	SLURRY SEAL
24	CALLE SAN MIGUEL	CALLE SANTA CATALINA	WEST CDS	SLURRY SEAL
25	CALLE SANTA CANTALINA	CALLE SAN MIGUEL	RANCHO SANTA FE ROAD	SLURRY SEAL
26	CALLE SANTA CRUZ	CAMINO DEL RANCHO	CALLE SAN CLEMENTE	SLURRY SEAL
27	CAMINO DEL RANCHO	WEST CDS	CALLE ANACAPA	SLURRY SEAL
28	CREST DRIVE	BIRMINGHAM DRIVE	SOUTH END	SLURRY SEAL
29	DAPHNE STREET	NEPTUNE AVENUE	NORTH COAST HWY 101	SLURRY SEAL
30	FIFTH STREET	SYLVIA STREET	A STREET	SLURRY SEAL
31	FOURTH STREET	WEST H STREET	WEST F STREET	SLURRY SEAL
32	GENIE LANE	NORTHWEST CDS	FREDA LANE	SLURRY SEAL
33	HOLLYRIDGE DRIVE	NORTHWEST CDS	MAPLELEAF COURT	SLURRY SEAL
34	HURSTDALE AVENUE	WEST CDS	FREDA LANE	SLURRY SEAL
35	JASPER STREET	NEPTUNE AVENUE	NORTH COAST HWY 101	SLURRY SEAL
36	MANCHESTER AVENUE	CALTRANS RIGHT-OF-WAY	EL CAMINO REAL	SLURRY SEAL
37	MAPLELEAF COURT	WEST CDS	HOLLYRIDGE DRIVE	SLURRY SEAL
38	NARDO ROAD	MELBA ROAD	SANTA FE DRIVE	SLURRY SEAL
39	PIEDRAS ORO CALLE	REQUEZA STREET	SOUTH CDS	SLURRY SEAL
40	REQUEZA STREET	SOUTH VULCAN AVENUE	WEST OF I-5 BRIDGE	SLURRY SEAL
41	SAN ELIJO AVENUE	BIRMINGHAM DRIVE	CHESTERFIELD DRIVE	SLURRY SEAL
42	SECOND STREET	I STREET	K STREET	SLURRY SEAL
43	SOUTH COAST HIGHWAY 101	F STREET	K STREET	SLURRY SEAL
44	SYLVIA STREET	NEPTUNE AVENUE	THIRD STREET	SLURRY SEAL
45	UNION STREET	ORPHEUS AVENUE	OCEAN VIEW AVENUE	SLURRY SEAL

ITEM	STREET	FROM	TO	TREATMENT
46	WEST H STREET	FOURTH STREET	THIRD STREET	SLURRY SEAL
47	WESTLAKE STREET	ENCINITAS BOULEVARD	REQUEZA STREET	SLURRY SEAL

RESOLUTION 2019-95

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ENCINITAS ADOPTING A TRENCH MORATORIUM POLICY

WHEREAS, on October 28, 2009, the City Council of the City of Encinitas approved Resolution Number 2009-40 creating a Trenching Moratorium that restricted work from being performed on a paved street for 2 years with no restrictions on cutting newly slurried streets; and

WHEREAS, in the last several years Council has committed roughly \$3 million per year to rehabilitate the road system and desires to protect this substantial investment by protecting the integrity of City streets by limiting the activities of developers and utility companies that would damage newly paved and resurfaced streets; and

WHEREAS, to ensure sustainable roads and extend the pavement life throughout the City, a trench cut moratorium policy is justified.

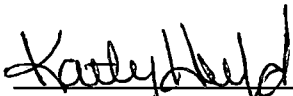
NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Encinitas that the Trench Cut Moratorium Policy as contained in Exhibit A to this resolution are herewith adopted.

PASSED, APPROVED, AND ADOPTED this 18th day of December 2019 by the City Council of the City of Encinitas, State of California.



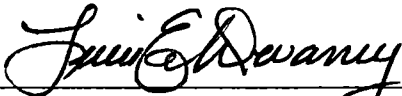
Catherine S. Blakespear, Mayor

ATTEST:



Kathy Hollywood, City Clerk

APPROVED AS TO FORM:



Leslie E. Devaney, City Attorney

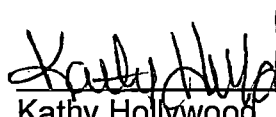
CERTIFICATION: I, Kathy Hollywood, City Clerk of the City of Encinitas, California, do hereby certify under penalty of perjury that the foregoing Resolution was duly adopted at a regular meeting of the City Council on the 18th day of December 2019 by the following vote:

AYES: Blakespear, Hinze, Hubbard, Kranz, Mosca

NAYS: None

ABSENT: None

ABSTAIN: None



Kathy Hollywood, City Clerk

Exhibit A

TRENCH CUT MORATORIUM POLICY

BACKGROUND

The City of Encinitas (City) previously adopted Resolution Number 2009-40, implementing a trench cut moratorium to limit developers, utility companies, and City crews from damaging newly paved or resurfaced streets.

Many studies have indicated that a utility cut damages an area of pavement larger than the actual area of the excavation. In line with the State of California and other cities, the City of Encinitas requires anyone who cuts into the pavement of a public road to reconstruct the street from curb to curb for the full extent of the pavement cut. The City also requires all trench cuts to be T-cuts, with a wider pavement replacement width than trench width, to reduce the negative impacts of the trench cut. In addition, Chapter 12.16 of the Municipal Code allows the Director of Public Works to require the person repaving the excavation to apply a seal coat at any time within two years of the time of repaving.

PURPOSE

A trench cut moratorium is justified to reduce pavement degradation and extend the life and structure of the pavement.

PROCEDURES

1. Trench Cut Moratorium

- 3-year moratorium for pavement cuts on streets receiving a seal coat, such as a slurry seal or chip seal.
 - 5-year moratorium for pavement cuts on newly constructed and reconstructed streets and for streets receiving overlays and treatments one-inch thick or greater.
-
- The moratorium shall be in force during the construction period for projects that include seal coats, or new street construction or street reconstruction, and the moratorium period will begin upon the filing of the Notice of Completion for the construction project including the affected streets.
 - For streets that receive a seal coat, the moratorium shall begin to be enforced when the streets are sealed, and the timed moratorium period will begin upon the filing of the Notice of Completion.
 - For newly constructed or reconstructed streets, the moratorium shall begin to be enforced when the streets are given the final pavement cap, and the timed moratorium period will begin upon the filing of the Notice of Completion.

2. Trench Repair Requirements for Streets under Moratorium - If need for trenching is justified and a waiver is approved by the City Engineer, the City shall require resurfacing at least the length of excavation from curb to curb or from curb line to the raised median.

- Lateral trenches (perpendicular to the curb) - Extend T-cut grind and overlay limits to 10 feet beyond each side of the trench and over the entire lane that is impacted (regardless of street classification).
- Longitudinal trenches (parallel to the curb - If the asphalt depth is four inches or deeper, grind two inches minimum and place two inches minimum overlay over the entire lane or lanes (curb to curb or curb to median curb) that are impacted (regardless of street classification). If the existing asphalt depth is less than four inches, grind the full depth of asphalt and replace asphalt in-kind (minimum two inches) over the entire lane or lanes (curb to curb or curb to median curb) that are impacted (regardless of street classification).
- If the existing AC depth is greater than 4-inches, grind 2 inches minimum and place 2 inches minimum overlay over the entire lane that is impacted (regardless of street classification) curb to curb.
- If the existing AC depth is less than 4-inches, the entire lane will need to be resurfaced to meet the City's minimum structural section of 4-inches of AC over 6-inches of Class II Base.
- Use Current City of Encinitas Standard Drawing.

3. Excavations of streets not under the Utility Trench Moratorium

- Use City of Encinitas Standard Drawing.

4. Proposed Waivers - The City Engineer may grant a waiver if one or more of the following conditions are present:

- a) A bona fide emergency exists that endangers the health and safety or property of the citizenry and requires an excavation in order to remediate the emergency.
- b) New service to a specific location cannot be provided either through existing conduit, where trenchless technology is impractical due to soil conditions, proximity of facilities or economically impractical, and the public utility demonstrates to the City Engineer's satisfaction that the service cannot be provided from another location.
- c) The installation or relocation of facilities by a non-government owned public utility is both required by the City, County, State or Federal Government and not required as a result of an underground utility district.
- d) Only a non-linear excavation or exploratory excavation will be made.
- e) Where geological conditions prohibit boring.
- f) Where there is a lack of working space for bore pits at each end of the street crossing bore.

- g) An open trench is required to expose existing distribution facilities in street to terminate or establish service lines, or to provide emergency repair of existing underground facilities.
- h) Existing facilities in the street conflict with the proposed bore.
- i) Joint trench use is required and if within 200 feet of an open sewer or water trench, consideration will be given to an open trench.
- j) Unusual circumstances are present and the City Engineer finds that the public interest is best served by allowing such a cut.

IMPLEMENTATION

Streets that are constructed or rehabilitated and have received a Notice of Completion (NOC) on or after the Effective Date of this revision will be subject to all provisions of this policy.

Streets that have received a NOC prior to the Effective Date will be subject to the requirements of the previous moratorium policy adopted by Resolution 2009-40.



RIGHT OF WAY PERMIT APPLICATION E-11

Development Services

Land Development Engineering

1635 Faraday Avenue

442-339-2750

www.carlsbadca.gov

landdev@carlsbadca.gov

JOB ADDRESS/LOCATION: _____

NEAREST CROSS STREET: _____ ASSESSOR PARCEL NO.: _____

ASSOCIATED PROJECT NO.: _____ DRAWING NO.(if applicable): _____

DESCRIPTION OF WORK: _____

PROPOSED START DATE: _____ ESTIMATED COMPLETION DATE: _____

CONTRACTOR (Permittee)

NAME (Print or Type): _____

CONTACT PERSON: _____

MAILING ADDRESS: _____ CITY, STATE: _____

EMAIL ADDRESS: _____ PHONE NUMBER: _____

24 HOUR EMERGENCY TELEPHONE: _____

STATE CONTRACTOR'S LICENSE NUMBER: _____

STATE CONTRACTOR'S LICENSE TYPE: _____

CITY OF CARLSBAD BUSINESS LICENSE NUMBER: _____

By its signature below, permittee agrees to indemnify, hold harmless, and defend the City of Carlsbad or its officers or employees from all claims, damage or liability to persons or property arising from or caused by an activity or work done pursuant to this permit unless the damage or liability was caused by the sole active negligence of the city or its officers or employees. This agreement is a condition of the issuance of a right-of-way permit.

SIGNATURE

DATE

The same name must appear on this application, the Cash Security Agreement and the request for refund as the permittee.

CITY USE ONLY

PERMIT NO.:

ENTERED INTO COMPUTER BY:

TCP APPROVED BY:

DATE:

INSURANCE RATING:

EXP. DATE:

DATE STAMP

APPLICATION RECEIVED



RIGHT OF WAY PERMIT SUBMITTAL CHECKLIST E-11A

Development Services

Land Development Engineering
1635 Faraday Avenue
442-339-2750
www.carlsbadca.gov
LandDev@Carlsbadca.gov

THIS SECTION TO BE COMPLETED BY CITY PERSONNEL

City Project No. _____ City Project Name _____

City Planchecker _____

Submit all items via PDF to landdev@carlsbadca.gov. When permit is approved, an invoice will be sent to applicant via email with instructions for online payment.

- _____ 1. Completed application form
- _____ 2. Certificate of Insurance (per city specifications)
- _____ 3. Traffic Control Plan (per city specifications) (One PDF and one copy of plans at 11" x 17")
- _____ 4. Site plan/construction drawings (One PDF and one copy of plans at 11" x 17" required if trenching is proposed, unless trenching is already approved by the city under a separate plan or permit)
- _____ 5. Right of Way Permit fee or Completion of Improvement Plancheck letter
- _____ 6. All items required to process an encroachment agreement as shown on the attached submittal checklist (required for construction of private facilities within public right-of-way, place, or easement only)

COMMENTS: _____

SUBMITTAL COMPLETE. CHECKED BY: _____ **DATE:** _____



RIGHT OF WAY PERMIT REQUIREMENT SPECIFICATIONS E-11B

Development Services
Land Development Engineering
1635 Faraday Avenue
442-339-2750
www.carlsbadca.gov

Permit will not be issued until all required information has been provided and traffic control plan approved. Incomplete applications will be returned to the applicant.

1. RIGHT OF WAY PERMIT APPLICATION

To be completed and signed by contractor doing the work. The contractor is the Permittee and is ultimately responsible for all work done that affects the right-of-way.

2. CONTRACTOR'S STATE LICENSE NUMBER AND CLASS (TYPE)

- General Engineering Contractor "A" License - may do any type of engineering work in the city right-of-way.
- General Building Contractor "B" License - may do any type of work in city right-of-way when the work is associated with the construction of an adjacent building structure.
- Concrete "C-8" License - may do any concrete work in city right-of-way.
- Earthwork and Paving "C-12" License - may do earthwork or paving work in city right-of-way.
- Paving and Highway Improvement "C-32" License - may do any type of engineering work in city right-of-way.
- Pipeline "C-34" License - may do any pipeline type of work in city right-of-way.

3. CITY OF CARLSBAD BUSINESS LICENSE NUMBER

Contractor must provide valid city business license number. If none, make application with City of Carlsbad Finance Department and include a copy of the receipt with the right-of-way permit application.

4. CERTIFICATE OF INSURANCE

Contractor shall provide a certificate of insurance for personal injury and property damage liability in the amount of at least \$2,000,000 (two million) per incident. Certificates providing less than one month's liability insurance coverage will not be accepted. Certificate must specifically name the City of Carlsbad as "Additional Insured", as well as "Certificate Holder." **Naming the city as additional insured requires an endorsement to the policy and is an additional sheet. The policy number must be on the endorsement.**

Insurance shall be placed with an insurer that is an admitted carrier in the State of California with a rating in the most recent Best's Key Rating guide of at least A:VII, **OR** with a surplus line insurer on the State of California's List of Approved Surplus Line Insurers (LASLI) with a rating in the latest Best's Key Rating of at least A:X. Or, an alien non-admitted insurer listed by the National Association Insurer listed by the National Association of Insurance commissioners (NAIC) latest Quarterly Listing of Alien Insurers report.

The right-of-way permit, when issued, will be valid for six months or until liability insurance has expired, whichever comes first. It is the responsibility of the CONTRACTOR to notify the city of any insurance policy changes or extensions



RIGHT OF WAY PERMIT CHECKLIST FOR INSURANCE SUBMITTALS E-11C

Development Services
Land Development Engineering
1635 Faraday Avenue
442-339-2750
www.carlsbadca.gov
landdev@carlsbadca.gov

The Carlsbad Municipal Code requires that the applicant (1) provide proof of liability insurance and (2) name the City of Carlsbad as additional insured on the policy.

Proof of insurance is in the form of a certificate of insurance. Naming the city as additional insured requires an endorsement to the policy. The endorsement is a requirement of insurance companies, and is an additional sheet. The policy number must be on the endorsement.

The checklist below is provided to help you comply with these two requirements.*

CERTIFICATE OF INSURANCE FOR GENERAL LIABILITY

- ☐ \$2 million per occurrence for bodily injury, personal injury and property damage. Insurance shall apply separately to the project/location or it shall be twice the occurrence limit
- ☐ Date(s) of the permit work falls within the "policy effective" and "policy expiration" dates
- ☐ Named insured must be consistent with permittee information on the permit application
- ☐ Description of operations must list project/location
- ☐ Certificate holder address:

City of Carlsbad
Land Development Engineering
1635 Faraday Avenue
Carlsbad, CA 92008

ENDORSEMENT

- ☐ "The City, its officials, employees and volunteers are listed as additional insured with respect to general liability arising out of work or operations performed by or on behalf of the Contractor."

The endorsement is a requirement of insurance companies, and is an additional sheet. The policy number must be listed on the endorsement.

* THE INSURANCE MUST BE IN A FORM ACCEPTABLE TO THE CITY AND THIS CHECKLIST IS NOT AN ALL INCLUSIVE LIST OF THE CITY'S REQUIREMENTS.



RIGHT OF WAY PERMIT CHECKLIST FOR CONSTRUCTION PLAN E-11D

Development Services
Land Development Engineering
1635 Faraday Avenue
442-339-2750
www.carlsbadca.gov
landdev@carlsbadca.gov

This checklist is for items to be provided (if applicable) on the construction/site plan for right-of-way permits.

- ☐ Vicinity map
- ☐ Street names
- ☐ Curb face to ROW/PL dimension
- ☐ Curb and gutter location
- ☐ Legend or callouts for all symbols and hatching
- ☐ Limits of street pavement
- ☐ Right-of-way (ROW) boundary / property line (PL)
- ☐ Sidewalk and location dimension
- ☐ Location of existing improvements (within ROW), such as driveway approaches, drain inlets and outlets, retaining walls, street lights, vaults, utilities, etc.
- ☐ Edge of street pavement to ROW/PL dimension (if no curb exists)
- ☐ Location of existing striping
- ☐ Location of survey monuments
- ☐ Location of proposed trenching along with dimension of trench width (*Please note that only public water, sewer and storm drain facilities are allowed within the street pavement area. Other utilities can cross a street but are not allowed to run along the street length. Private utility facilities other than SDG&E, AT&T and Spectrum require Engineering Manager approval and special encroachment agreements for use of the right-of-way*)
- ☐ Location of proposed work/facilities (vaults, pedestals, cabinets, etc.), scaled with dimensions/specs
*proposed facilities require approval from the Engineering Manager
- ☐ Photo simulation of any above ground facilities (with all scaled dimensions shown on simulation)
- ☐ Location of proposed jacking pits, scaled and dimensioned
- ☐ Reference to City standard trench repair detail. Detail shall be drawn or attached as part of plan set.
See engineering standards at:
<https://www.carlsbadca.gov/home/showpublisheddocument/334/637425982512500000>
- ☐ Notes on plan detailing removal and replacement of improvements and landscaping (note that full concrete panels shall be replaced- joint to joint)
- ☐ Note on plan detailing re-striping of pavement markings
- ☐ Note on plan indicating that any deviations from the plan are not allowed unless approved by the Engineering Manager
- ☐ Note on plan indicating all removal of landscape shall be replaced in accordance with the City of Carlsbad's Landscape Manual unless otherwise approved by the Engineering Manager

**GEOTECHNICAL EVALUATION
VILLAGE PARK RECYCLED
WATER PROJECT
ENCINITAS, CALIFORNIA**

PREPARED FOR:

Infrastructure Engineering Corporation
14271 Danielson Street
Poway, California 92064

PREPARED BY:

Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
5710 Ruffin Road
San Diego, California 92123

April 25, 2014
Project No. 107686001

April 25, 2014
Project No. 107686001


Mr. Anders Egense
Infrastructure Engineering Corporation
14271 Danielson Street
Poway, California 92064

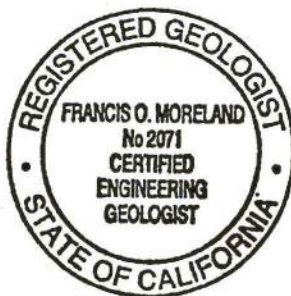
Subject: Geotechnical Evaluation
Village Park Recycled Water Project
Encinitas, California


Dear Mr. Egense:

In accordance with your authorization, we have performed a geotechnical evaluation for the proposed Village Park Recycled Water project in Encinitas, California. This report presents our geotechnical findings, conclusions, and recommendations regarding the proposed project. Our report was prepared in accordance with our proposal dated September 13, 2013. We appreciate the opportunity to be of service on this project.


Sincerely,
NINYO & MOORE


Francis O. Moreland, PG, CEG
Senior Geologist




Emil Rudolph, PE, GE
Principal Engineer




Gregory T. Farrand, PG, CEG
Principal Geologist

NMM/FOM/ER/GTF/gg

Distribution: (1) Addressee (via e-mail)

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1. INTRODUCTION

In accordance with your request and our proposal dated September 13, 2013, we have performed a limited geotechnical evaluation for the proposed Village Park Recycled Water project located in the south-central portion of Encinitas, California (Figure 1). This report presents our findings and conclusions regarding the geotechnical conditions along the subject alignment and our preliminary recommendations for the design and construction of this project.

2. SCOPE OF SERVICES

Ninyo & Moore's scope of services for this project included review of pertinent background data, performance of a geologic reconnaissance, and engineering analysis with regard to the proposed project. Specifically, we performed the following tasks:

- Reviewing background information including available geotechnical reports, topographic maps, geologic data, fault maps, aerial photographs, and a provided alignment figure.
- Coordinating and mobilizing for a geotechnical reconnaissance to observe the existing site conditions and to mark-out the boring location for utility clearance by Underground Service Alert (USA).
- Performing a subsurface exploration program consisting of excavating, logging, and sampling of one exploratory boring.
- Performing geotechnical laboratory testing on selected soil samples to evaluate geotechnical design parameters.
- Performing geotechnical analysis of the data obtained from our site reconnaissance, subsurface exploration, and laboratory testing.
- Preparing this report presenting our findings, conclusions, and recommendations regarding the geotechnical design and construction of the project.

3. PROJECT AND SITE DESCRIPTION

We understand the project will include a new pump station, 12-inch diameter water pipeline roughly 8,000 feet in length, new 8-inch diameter water pipeline roughly 4,000 feet in length, and various new 6-inch diameter water pipeline roughly 19,700 feet in length (Figure 1). The new

pump station will be located on the 16-inch pipeline, on a commercial property approximately 500 feet west of El Camino Real. The pump station will be a prefabricated package pump station installed behind an existing retaining wall north of the site. Entry to the pump station lower level will necessitate removal and reconstruction of a portion of the wall.

The project alignment is depicted on Figure 2. The new 12-inch pipeline extends north on Balour Drive from Oakcrest Park Drive, East on Encinitas Boulevard, and north on Via Cantebria to the "Wiegand Tank". From the existing Wiegand Tank, the pipeline extends east along a utility easement to El Camino Real, north to Mountain Vista Drive, and eastward along Mountain Vista Drive to Village Park Way. The new 8-inch pipeline trends east on Mountain Vista Drive from Village Park Way to Countrywood Lane, then south to Countryhaven Lane, then east on Countryhaven Lane ending at Glen Arbor Drive. New 6-inch pipelines will be constructed along portions of Avenida La Posta and Avenida Esteban, Rambling and Overland Roads, Village Green Road, Village Run, and Clear Valley Road, Misty Circle, Winsome Place, Shady Lane, Glen Arbor Drive, and Willowspring Drive. Elevations along the alignments range from a low of approximately 170 feet above mean sea level (MSL) at El Camino Real to a high of approximately 350 feet MSL at Balour Drive. Vegetation is generally limited to grass, weeds, brush and trees along the utility easement between Via Cantebria and El Camino Real.

4. FIELD EXPLORATION AND LABORATORY TESTING

Our subsurface exploration was conducted on March 25, 2014 and consisted of drilling, logging, and sampling one boring. The boring was drilled above the existing retaining wall to a depth of approximately 18.8 feet below existing grades with a truck mounted, hollow stem auger drill rig. Soil samples were obtained at intervals from the boring. The samples were then transported to our in-house geotechnical laboratory for testing. The approximate location of the exploratory boring is shown on Figure 2. The log of the boring is included in Appendix A.

Laboratory testing of representative soil samples included in-situ dry density and moisture content, gradation, direct shear strength, and soil corrosivity. The results of the in-situ dry density and moisture content tests are presented on the boring log in Appendix A. The results of the other laboratory tests are presented in Appendix B.

5. GEOLOGY AND SUBSURFACE CONDITIONS

Our findings regarding regional and site geology and groundwater conditions at the project site are provided in the following sections.

5.1. Regional and Geologic Setting

The project area is situated in the Peninsular Ranges Geomorphic Province. This geomorphic province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin south to the southern tip of Baja California (Norris and Webb, 1990). The province varies in width from approximately 30 to 100 miles. In general, the province consists of rugged mountains underlain by Jurassic metavolcanic and metasedimentary rocks, and Cretaceous igneous rocks of the Southern California Batholith. The portion of the province in San Diego County that includes the project area consists generally of Quaternary and Tertiary age sedimentary rock.

The Peninsular Ranges Province is traversed by a group of sub-parallel faults and fault zones trending roughly northwest. Several of these faults, which are shown on Figure 3, are considered active faults. The Elsinore, San Jacinto, and San Andreas faults are active fault systems located northeast of the project area and the Rose Canyon, Coronado Bank, San Diego Trough, and San Clemente faults are active faults located west of the project area. The Rose Canyon Fault Zone, the nearest active fault system, has been mapped approximately 4 miles west of the project site. Major tectonic activity associated with these faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement. Further discussion of faulting relative to the site is provided in the Faulting and Seismicity and Seismic Hazards section of this report.

5.2. Site Geology

Geologic units encountered during our reconnaissance and subsurface evaluation include fill, alluvium, very old paralic deposits, and Torrey Sandstone. Generalized descriptions of the earth units encountered are provided in the subsequent sections. Additional descriptions of the subsurface units are provided on the boring log in Appendix A. A geologic map of the region is presented on Figure 4.

5.2.1. Fill

Although not mapped, fill associated with roadway and building construction is present at various locations along the proposed pipeline alignment. Fill was encountered in our exploratory boring B-1 at the pump station site from the ground surface and extended to a depth of approximately 3 feet. As encountered, the fill consists of reddish brown, moist, medium dense, silty sand. Along other portions of the pipeline alignment, these materials are generally likely to be on the order of 5 to 10 feet deep. The fill may be deeper than 10 feet beneath El Camino Real and the adjacent area. We expect that the fill materials were derived from the surrounding sedimentary materials, and consist of clayey to silty sand, some of which may contain cobbles.

5.2.2. Alluvium

Unconsolidated alluvial deposits (designated Q_{ya}) have been mapped in the valley bottom beneath El Camino Real and adjacent areas. Alluvium was encountered in our exploratory boring B-1 beneath the fill and extended to a depth of approximately 13 feet. As encountered, the alluvium consists of reddish brown and brown, moist to wet, loose to medium dense, silty and clayey sand with scattered gravel. Along other portions of the alignment, portions of this alluvium are likely to have been removed and replaced with compacted fill to near the groundwater elevation during construction of El Camino Real and some adjacent commercial developments in the valley bottom. However, loose, wet sand and clay is anticipated in this unit.

5.2.3. Very Old Paralic Deposits

Very old paralic deposits (designated Q_{vop}) have been mapped and observed on the mesa tops west and east of El Camino Real along the proposed pipeline alignment. This geologic unit is a marine terrace deposit. As observed, the very old paralic deposits generally consisted of medium dense to dense, clayey to silty sand with some gravel and cobbles. Strongly cemented zones are commonly encountered within this unit.

5.2.4. Torrey Sandstone

Materials of the Eocene-age Torrey Sandstone (designated T_1) have been mapped and observed along the lower elevations of the pipeline alignment. Torrey Sandstone was encountered in our exploratory Boring B1 at a depth of approximately 13 feet and extended to the depth explored. As encountered, the Torrey Sandstone generally consisted of moist, weakly cemented, silty fine- to medium-grained, sandstone. Strongly cemented zones are sometimes encountered within materials of the Torrey Sandstone.

5.3. Groundwater

Surface groundwater seepage was not observed during our reconnaissance of the proposed pipeline alignment, nor during our subsurface exploration. However, based on nearby well data (Geotracker, 2014), we anticipate that groundwater is relatively shallow (approximately 10 feet) beneath El Camino Real and adjacent properties where the pipeline alignment crosses. Seepage conditions should also be anticipated where the trenching crosses existing drainages and underground utility trenches. Fluctuations in the groundwater level may occur due to variations in ground surface topography, subsurface geologic conditions and structure, rainfall, irrigation, and other factors.

6. GEOLOGIC HAZARDS

In general, hazards associated with seismic activity include ground surface rupture, strong ground motion, liquefaction, and landslides. These considerations are discussed in the following sections.

6.1. Faulting and Seismicity

The project area is considered to be seismically active. Based on our review of the referenced geologic maps and stereoscopic aerial photographs, as well as our geologic field reconnaissance, the subject site is not underlain by known active or potentially active faults (i.e., faults that exhibit evidence of ground displacement in the last 11,000 years and 2,000,000 years, respectively). Major known active faults in the region consist generally of en-echelon, northwest-striking, right-lateral, strike-slip faults. These include the Rose Canyon, Coronado Bank, San Diego Trough, and San Clemente faults, located to the west of the site, and the Elsinore, San Jacinto and San Andreas faults, located to the east of the site. The locations of these faults are shown on Figure 3.

The closest known active fault is the Rose Canyon fault, which can generate an earthquake magnitude of up to 7.2 (California Geological Survey [CGS], 2003). It is located approximately 4 miles west of the project site.

6.1.1. Ground Surface Rupture

Based on our review of the referenced literature and our site reconnaissance, no active faults are known to cross the project site or pipeline alignments. Therefore, the potential for ground rupture due to faulting at the site is unlikely. However, lurching or cracking of the ground surface as a result of nearby seismic events is possible.

6.1.2. Strong Ground Motions

The 2013 California Building Code (CBC) recommends that the design of structures be based on the horizontal peak ground acceleration having a 1 percent probability of exceedance in 50 years, which is defined as the Maximum Considered Earthquake (MCE). The statistical return period for Peak Ground Acceleration (PGA_{MCE}) is approximately 4,975 years. The probabilistic PGA_{MCE} for the site was calculated as 0.47 using the United States Geological Survey web-based ground motion calculator (USGS, 2013). The mapped and design PGA were estimated to be 0.47g and 0.31g, respectively, using the USGS (2013) calculator and the American Society of Civil Engineers (ASCE) 7-10 Standard.

6.1.3. Liquefaction and Seismically Induced Settlement

Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by a relatively shallow groundwater table are susceptible to liquefaction. Younger alluvial deposits, which may underlie the pipeline beneath El Camino Real and Mountain Vista Drive, may be susceptible to liquefaction.

6.2. Landsliding

Based on our review of geotechnical reports, published geologic literature, and aerial photographs, no landslides or related features underlie or are adjacent to the subject alignment.

7. CONCLUSIONS

Based on our review of the referenced background data and the results of our subsurface exploration, it is our opinion that construction of the proposed pipeline and pump station is feasible from a geotechnical standpoint provided that the recommendations of this report are incorporated into the preliminary design of the project. Geotechnical considerations include the following:

- Groundwater should be anticipated at a shallow depth during construction in the vicinity of El Camino Real and Mountain Vista Drive. The contractor should be prepared to take appropriate measures to address the presence of shallow groundwater during construction. Wet trench spoils should be anticipated, which will need special handling before use as backfill. Dewatering measures may be needed.
- In the vicinity of where the pipeline alignment crosses alluvium, the alignment may be susceptible to liquefaction and differential settlement during a major nearby seismic event.
- No active faults are reported underlying or adjacent to the site. The active Rose Canyon fault has been mapped approximately 4 miles west of the site.
- On-site excavations will encounter variations in excavation characteristics such as caving in loose, alluvial soils and difficult excavations in formational materials.
- Based on the laboratory test results and Caltrans criteria, the pump station on site soils are considered corrosive.

8. RECOMMENDATIONS

The following sections include our geotechnical recommendations for the design of the proposed project. These recommendations are based on our evaluation of the site geotechnical conditions and our understanding of the planned construction. We recommend that a subsurface evaluation be performed along alignments to confirm the assumptions from which our recommendations were developed and to provide subsurface information for bidders.

8.1. Earthwork

In general, earthwork should be performed in accordance with the recommendations presented in this report. Ninyo & Moore should be contacted for questions regarding the recommendations or guidelines presented herein.

8.1.1. Site Preparation

Prior to excavation, the project site should be cleared of existing pavement, abandoned utilities (if present), and stripped of rubble, debris, vegetation, any loose, wet, or otherwise unstable soils, as well as surface soils containing organic material. Materials generated from the clearing operations should be removed from the site and disposed of at a legal dumpsite away from the project area.

8.1.2. Excavation Characteristics

Our evaluation of the excavation characteristics of the on-site materials at the subject site is based on the results of our site reconnaissance, background review, and our experience with similar materials. In our opinion, the on-site materials are generally expected to be rippable with heavy-duty trenching equipment. Strongly cemented zones and concretions are anticipated when excavating in materials of the very old paralic deposits and Torrey Sandstone. Excavations will entail the use of heavy ripping or rock breakers. Additionally, caving conditions may be encountered in the existing loose alluvium and fill.

8.1.3. Materials for Backfill

On-site soils with an organic content of less than 3 percent by volume (or 1 percent by weight) are suitable for use as back fill. Trash or construction debris should be selectively removed prior to use as fill. Soils classified as clay (CL and CH) should not be used as backfill. Utility trench backfill material should not contain rocks or lumps over 3 inches in largest dimension and not more than 30 percent larger than 3/4 inch. Larger chunks or cobbles, if generated during excavation, may be broken into acceptably sized pieces or disposed of off site. Imported material should be granular with a low expansion potential (ASTM International [ASTM] Test Method D 4829 of 50 or less). Import material should also have low corrosion potential (chloride content less than 500 parts per million [ppm], and soluble sulfate content of less than 0.1 percent). Materials for use as backfill should be evaluated by the geotechnical consultant's representative prior to filling or importing.

8.1.4. Compacted Backfill

Prior to the placement of pipelines and backfill, the contractor should request an evaluation of the exposed trench bottom by Ninyo & Moore. Unless otherwise recommended, the exposed trench bottom should then be bedded with granular backfill. After pipe placement, the pipe should be shaded with granular material to 1 foot above the top of pipe. Trench backfill should be placed above the shading material and compacted to 90 percent relative compaction as evaluated by the ASTM D 1557. For proposed pavement areas, the subgrade should be scarified to a depth of approximately 8 inches, moisture conditioned to near optimum moisture content, and compacted to 95 percent of its Proctor density as evaluated by ASTM D 1557. The evaluation of compaction by Ninyo & Moore should not be considered to preclude any requirements for observation or approval by governing agencies. It is the contractor's responsibility to notify Ninyo & Moore and the appropriate governing agency when project areas are ready for observation, and to provide reasonable time for that review.

Fill materials should be moisture conditioned to near their optimum moisture content prior to placement. The optimum moisture content will vary with material type and other factors. Moisture conditioning of fill soils should be generally consistent within the soil mass.

8.1.5. Temporary Excavations, Braced Excavations and Shoring

We recommend that trenches and excavations be designed and constructed in accordance with Occupational Safety and Health Administration (OSHA) regulations. These regulations provide trench sloping and shoring design parameters for trenches up to 20 feet deep based on the soil types encountered. Trenches over 20 feet deep should be designed by the Contractor's engineer based on site-specific geotechnical analyses. For planning purposes, we recommend that the following OSHA soil classifications be used:

<i>Fill and Alluvium</i>	<i>Type C</i>
<i>Very Old Paralic Deposits and Torrey Sandstone</i>	<i>Type B</i>

Upon making the excavations, the soil classifications and excavation performance should be evaluated in the field by the contractor in accordance with OSHA regulations.

Temporary excavations should be constructed in accordance with OSHA recommendations. For trenches or other excavations, OSHA requirements regarding personnel safety should be met by using appropriate shoring (including trench boxes) or by laying back the slopes no steeper than 1.5:1 (horizontal to vertical) in fill and alluvium, and 1:1 in very old paralic deposits and Torrey Sandstone materials. Temporary excavations that encounter seepage may need shoring or may be stabilized by placing sandbags or gravel along the base of the seepage zone. Excavations encountering seepage should be evaluated on a case-by-case basis. As an alternative to laying back the side walls, the excavations may be shored or braced. Temporary earth retaining systems will be subjected to lateral loads resulting from earth pressures. Once details are known, we should be consulted to provide earth pressure diagrams for design of shoring systems for trench excavations.

The contractor should retain a qualified and experienced engineer to design the shoring system, evaluate the adequacy of these parameters and provide modifications for the design. We recommend that the contractor take appropriate measures to protect workers. OSHA requirements pertaining to worker safety should be observed.

8.1.6. Excavation Bottom Stability

In general, we anticipate that the bottom of the excavations will be stable and should provide suitable support to the proposed improvements. However, excavations that are close to or below the water table or that encounter seepage may be unstable. In general, unstable bottom conditions may be mitigated by overexcavating the excavation bottom to suitable depths and replacing with compacted fill or gravel wrapped in filter fabric. Recommendations for stabilizing excavation bottoms should be based on evaluation in the field by Ninyo & Moore at the time of construction.

8.2. Lateral Pressures for Thrust Blocks

Thrust restraint for buried pipelines and lateral pressures for jacking may be achieved by transferring the thrust force to the soil outside the pipe through a thrust block. Thrust blocks may be designed using the lateral passive earth pressures presented on Figure 5. Thrust blocks should be backfilled with granular backfill material, compacted as outlined in this report.

8.3. Trench Backfill

A portion of the soils at the site should be suitable after processing for reuse as backfill provided they are free of organic material, contaminated material, clay lumps, debris, and rocks more than 3 inches in diameter. Rocks more than 3/4 inches in diameter should not exceed 30 percent of the backfill by weight.

Backfill should be moisture conditioned to near the optimum moisture content, placed, and compacted to 90 percent of its Proctor density as evaluated by ASTM D 1557. Wet soils, where encountered, should be moisture conditioned to near their optimum prior to their placement as backfill. Backfill lift thickness will be dependent upon the type of compaction

equipment utilized. Backfill should generally be placed in lifts not exceeding 8 inches in loose thickness. Pavement subgrade and aggregate base, should be compacted to 95 percent of their Proctor density. Special care should be exercised to avoid damaging the pipes during compaction of the backfill.

8.3.1. Pipe Bedding and Pipe Zone Backfill

We recommend that pipes be supported on 6 inches or more of granular bedding material such as sand with a Sand Equivalent (SE) value of 30 or more. Bedding material should be placed around the pipe and 12 inches or more above the top of the pipe in accordance with the recent edition of the Standard Specifications for Public Works Construction ("Greenbook"). Silts and clays should not be used as pipe bedding and pipe zone backfill. We do not recommend the use of crushed rock as pipe zone backfill unless it is wrapped in filter fabric. It has been our experience that the voids within a crushed rock material are sufficiently large to allow fines to migrate into the voids, thereby creating the potential for sinkholes and depressions to develop at the ground surface.

Special care should be taken not to allow voids beneath and around the pipe. Compaction of the bedding material and backfill should proceed up both sides of the pipe.

8.3.2. Modulus of Soil Reaction (E')

The modulus of soil reaction (E') is used to characterize the stiffness of soil backfill placed at the sides of buried flexible pipes for the purpose of evaluating deflection caused by the weight of the backfill over the pipe. A soil reaction modulus of 1,000 pounds per square inch (psi) may be used for excavation depths less than 5 feet and 1,400 psi may be used for excavation depths of more than 5 feet, backfilled with granular soil compacted to 90 percent based on ASTM D 1557.

8.4. Construction Dewatering

Shallow groundwater is anticipated in the vicinity of the El Camino Real. Dewatering measures during excavation operations (if necessary) should be prepared by the contractor. Considerations for construction dewatering should include anticipated drawdown, volume of pumping, potential for settlement, and groundwater discharge. Disposal of groundwater should be performed in accordance with guidelines of the Regional Water Quality Control Board (RWQCB).

8.5. Seismic Design Considerations

The proposed improvements should be designed in accordance with the requirements of governing jurisdictions and applicable building codes. Table 1 presents the seismic design parameters for the site, in accordance with CBC (2013) guidelines and adjusted MCE spectral response acceleration parameters (United States Geological Survey [USGS], 2013).

Table 1 – Seismic Design Parameters

Parameter	Value
Site Class	D
Site Coefficient, F_a	1.06
Site Coefficient, F_v	1.58
Mapped Short Period Spectral Acceleration, S_s	1.10g
Mapped One-Second Period Spectral Acceleration, S_1	0.42g
Short Period Spectral Acceleration Adjusted For Site Class, S_{MS}	1.17g
One-Second Period Spectral Acceleration Adjusted For Site Class, S_{M1}	0.67g
Design Short Period Spectral Acceleration, S_{DS}	0.78g
Design One-Second Period Spectral Acceleration, S_{D1}	0.45g

8.6. Foundations

The proposed pump station and retaining wall may be supported on foundations bearing on compacted fill materials or Torrey Sandstone. Foundations should be designed in accordance with structural considerations and the following recommendations. In addition, requirements of the appropriate governing jurisdictions and applicable building codes should be considered in the design of the structures.

8.6.1. Shallow Footings

We anticipate that the pump station and retaining wall may be supported on conventional spread footings. Spread footings bearing on compacted fill soils prepared in accordance with this report or Torrey Sandstone, may be designed using a net allowable bearing capacity of 2,500 pounds per square foot (psf). This allowable value is based on a factor of safety of roughly three. Conventional spread footings should be embedded 18 inches below finish grade. Continuous footings should be 15 inches or more in width and isolated footings should be 24 inches or more in width. The spread footings should be reinforced in accordance with the recommendations of the structural engineer.

For footings bearing on compacted fill or Torrey Sandstone we recommend using a coefficient of friction of 0.35 between soil and concrete. The footings may be designed using a passive resistance of 350 psf per foot of depth up to a value of 3,500 psf. The allowable lateral resistance can be taken as the sum of the frictional resistance and passive resistance, provided the passive resistance does not exceed one-half of the total allowable resistance. The passive resistance may be increased by one-third when considering loads of short duration, such as wind or seismic forces.

Trenches should not be excavated adjacent to spread footings. If trenches are to be excavated near a footing, the bottom of the trench should be located above a 2:1 plane projected downward from the bottom of the footing. Utility lines that cross beneath footings should be encased in lean concrete below the footing.

8.6.2. Settlement

Total settlement of foundations designed and constructed as recommended herein is estimated to be on the order of 1 inch. Differential settlement is estimated to be 1/2 inch over a horizontal span of 20 feet should be expected.

8.7. Retaining Walls

Based on our understanding of the project, a portion of the existing retaining wall at the pump station site may be replaced. For the design of retaining walls, earth pressure may be evaluated using the parameters presented in Figure 6. These pressures assume low-expansive, granular backfill. Wall backfill should be moisture conditioned and compacted to a relative compaction of 90 percent at a moisture content near the optimum as evaluated by ASTM D 1557. A drain should be provided behind the wall as shown on Figure 7. The drain should be connected to an appropriate outlet.

8.8. Pavement Reconstruction

Trench excavations in existing pavement areas may involve replacement of pavements at the completion of work. In general, pavement repair should conform to the material thicknesses and compaction requirements of the adjacent pavement section. Subgrade and aggregate base materials should be compacted to 95 percent relative compaction as evaluated by ASTM D 1557. Asphalt concrete (AC) should be compacted to 95 percent relative compaction as evaluated by ASTM D1561 (Hveem density). Actual pavement reconstruction should conform to the requirements of the city/agency of jurisdiction.

8.9. Corrosivity

Laboratory testing was performed on a representative sample of near-surface soil to evaluate soil pH, electrical resistivity, water-soluble chloride content, and water-soluble sulfate content. The soil pH and electrical resistivity tests were performed in general accordance with CT 643. Chloride content tests were performed in general accordance with CT 422. Sulfate testing was performed in general accordance with CT 417. The laboratory test results are presented in Appendix B.

The pH of the tested sample was 7.0. The electrical resistivity of the tested sample was approximately 870 ohm-centimeters. The chloride content of the tested sample was approximately 520 ppm. The sulfate content of the tested sample was approximately 0.117 percent by weight (i.e., 1,170 ppm). Based on the laboratory test results, ACI 318, and Caltrans (2012) corrosion criteria, the project site would be classified as corrosive, which is defined as having earth mate-

rials with an electrical resistivity of less than 1,000 ohm-centimeters, more than 500 ppm chlorides, more than 0.10 percent sulfates (i.e., 1,000 ppm), or a pH of 5.5 or less.

8.10. Concrete Placement

Concrete in contact with soil or water that contains high concentrations of soluble sulfates can be subject to chemical deterioration. Laboratory testing indicated a sulfate content of approximately 0.117 percent for the tested sample, which is considered to represent a moderate potential for sulfate attack (ACI, 318). Due to the potential for variability of soils, we recommend using Type II/V cement for concrete structures in contact with soil, and a water-to-cement ratio of no more than 0.45.

8.11. Drainage

Roof, pad, and slope drainage should be designed such that runoff water is conveyed away from slopes and structures to suitable discharge areas by nonerodible devices (e.g., gutters, downspouts, concrete swales, etc.). Positive drainage adjacent to structures should be established and maintained. Positive drainage may be accomplished by providing drainage away from the foundations of the structure at a gradient of 2 percent or steeper for a distance of 5 feet or more outside the building perimeter, and further maintained by a graded swale leading to an appropriate outlet, in accordance with the recommendations of the project civil engineer and/or landscape architect.

Surface drainage on the site should be provided so that water is not permitted to pond. A gradient of 2 percent or steeper should be maintained over the pad area and drainage patterns should be established to convey and remove water from the site to appropriate outlets.

Care should be taken by the contractor during final grading to preserve any berms, drainage terraces, interceptor swales or other drainage devices of a permanent nature on or adjacent to the property. Drainage patterns established at the time of final grading should be maintained for the life of the project. The property owner and the maintenance personnel should be made aware that altering drainage patterns might be detrimental to slope stability and foundation performance.

8.12. Pre-Construction Conference

We recommend that a pre-construction meeting be held prior to commencement of grading. The owner or his representative, the agency representatives, the architect, the civil engineer, Ninyo & Moore, and the contractor should be in attendance to discuss the plans, the project, and the proposed construction schedule.

8.13. Plan Review and Construction Observation

The conclusions and recommendations presented in this report are based on analysis of observed conditions. If conditions are found to vary from those described in this report, Ninyo & Moore should be notified, and additional recommendations will be provided upon request. Ninyo & Moore should review the final project drawings and specifications prior to the commencement of construction. Ninyo & Moore should perform the needed observation and testing services during construction operations.

The recommendations provided in this report are based on the assumption that Ninyo & Moore will provide additional geotechnical evaluations during final design of the project and geotechnical observation and testing services during construction. In the event that it is decided not to utilize the services of Ninyo & Moore during construction, we request that the selected consultant provide the client with a letter (with a copy to Ninyo & Moore) indicating that they fully understand Ninyo & Moore's recommendations, and that they are in full agreement with the design parameters and recommendations contained in this report. Construction of proposed improvements should be performed by qualified subcontractors utilizing appropriate techniques and construction materials.

9. LIMITATIONS

The field evaluation and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no

evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified, and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no controls.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

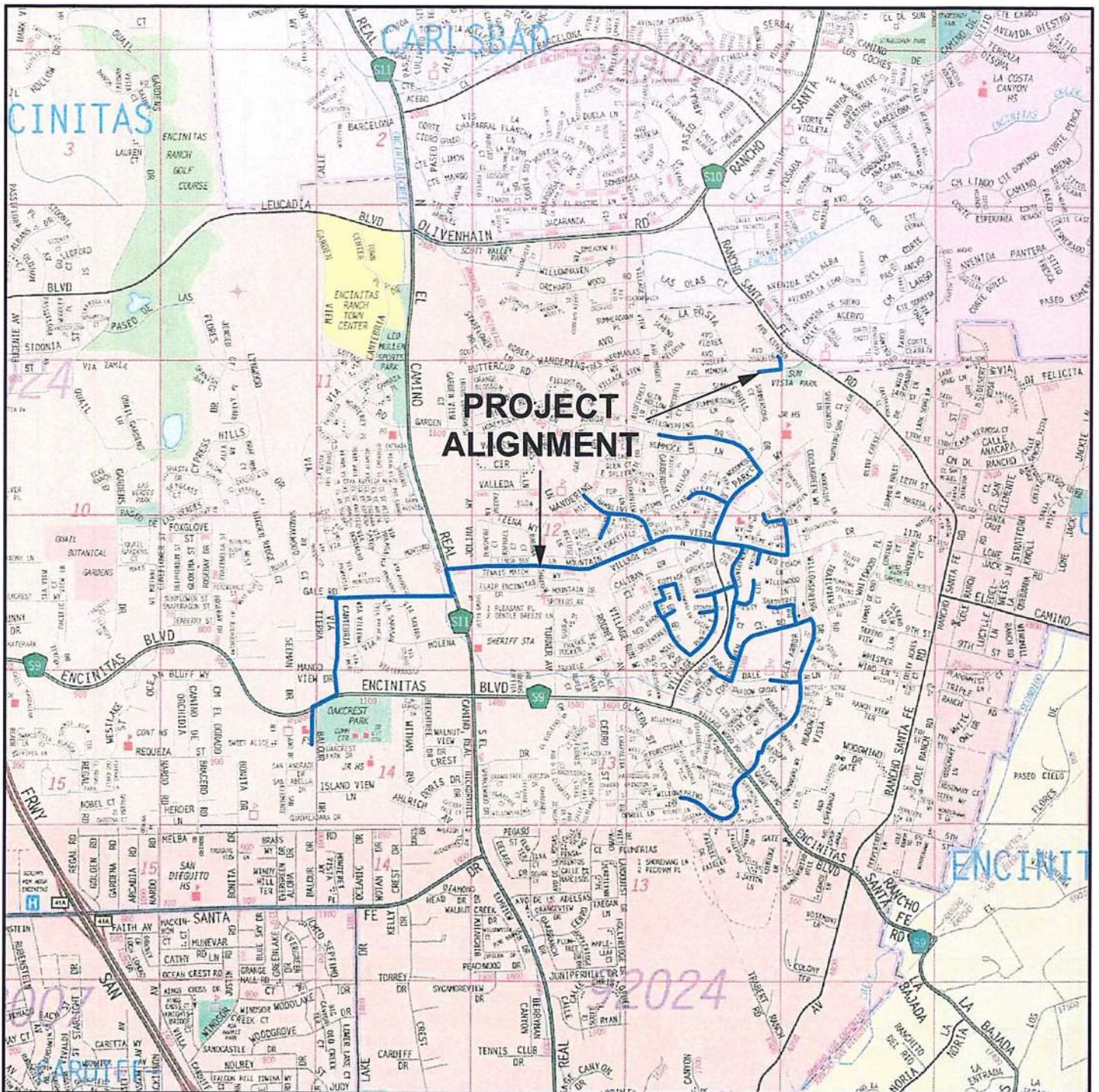
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United States Geological Survey, 1997, Encinitas Quadrangle, California, San Diego County, 7.5-Minute Series (Topographic): Scale 1:24,000.

United States Geological Survey, 2014, Seismic Design Maps Application,
<http://earthquake.usgs.gov/designmaps/us/application.php>: accessed March 27.

AERIAL PHOTOGRAPHS				
Source	Date	Flight	Numbers	Scale
United States Department of Agriculture	4-11-53	AXN-8M	76 and 77	1:20,000



SOURCES: 2008 THOMAS GUIDE FOR SAN DIEGO COUNTY, STREET GUIDE AND DIRECTORY; MAP © RAND MCNALLY, R.L.07-S-129.



MAP INDEX

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE



Ninyo & Moore

PROJECT LOCATION

FIGURE

PROJECT NO.

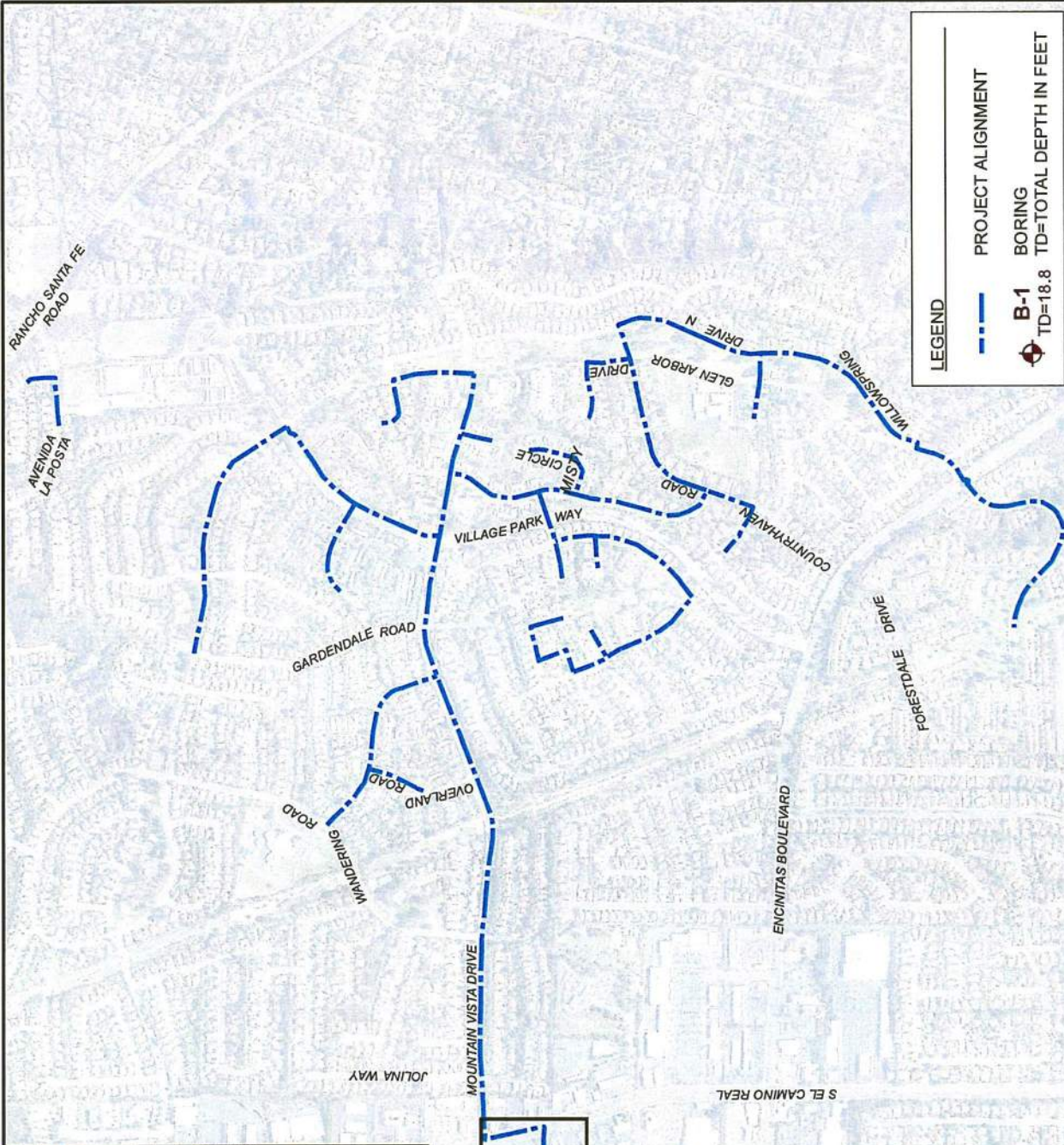
DATE

VILLAGE PARK RECYCLED WATER PROJECT
ENCINITAS, CALIFORNIA

107686001

4/14

1

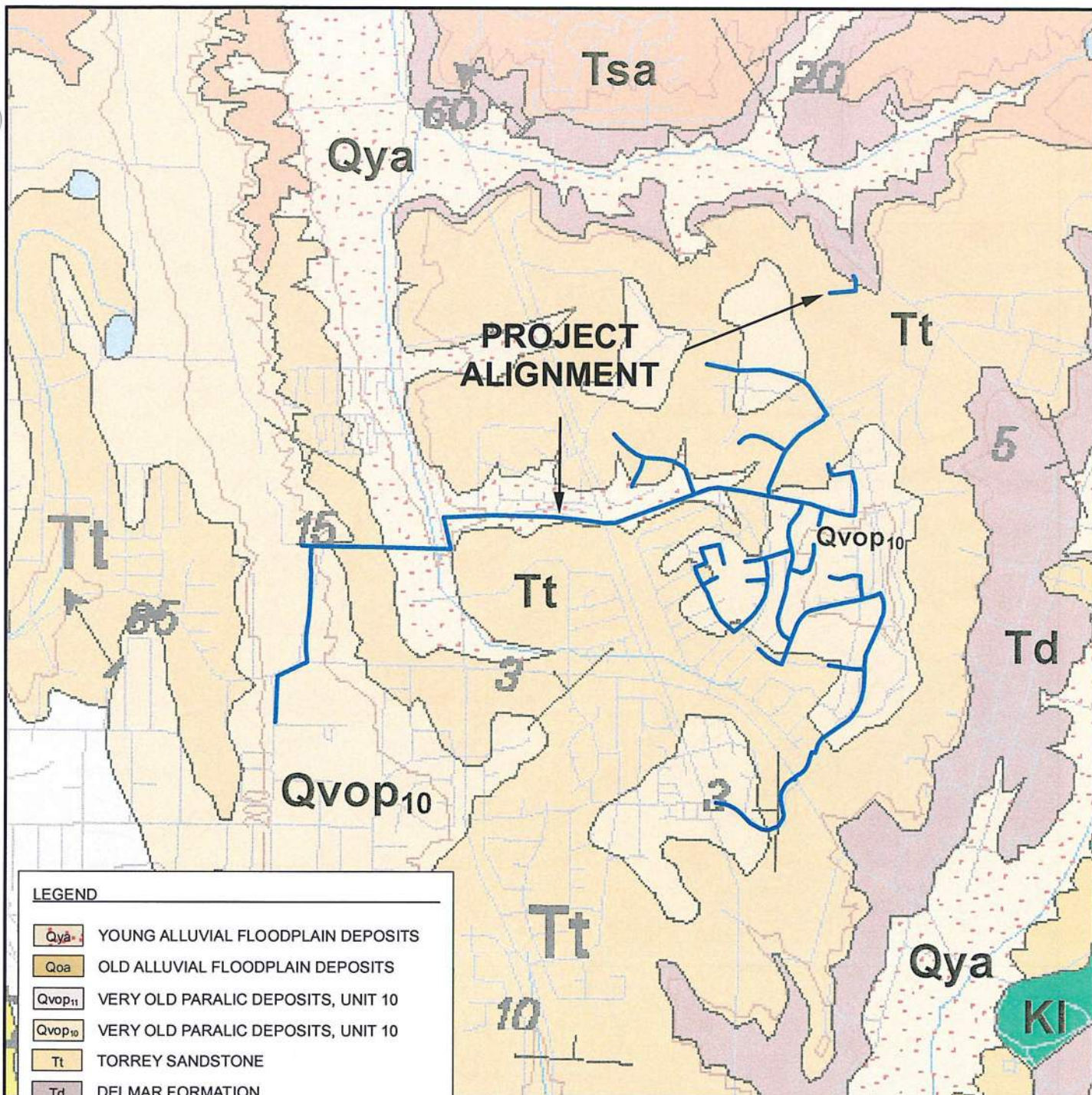


SOURCES: ALIGNMENT - INFRASTRUCTURE ENGINEERING CORPORATION, DATE UNKNOWN; GOOGLE EARTH, 2014

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

<div>SCALE IN FEET</div> <div><div></div><div>01,2002,400</div></div>		<div><i>Ninyo & Moore</i></div>		<div>PROJECT ALIGNMENT</div>		<div>FIGURE</div>		
		<div>PROJECT NO.</div>		<div>DATE</div>		<div>VILLAGE PARK RECYCLED WATER PROJECT ENCINITAS, CALIFORNIA</div>		<div>2</div>
		<div>107686001</div>		<div>4/1'</div>				





LEGEND

- Qya YOUNG ALLUVIAL FLOODPLAIN DEPOSITS
- Qoa OLD ALLUVIAL FLOODPLAIN DEPOSITS
- Qvop₁₁ VERY OLD PARALIC DEPOSITS, UNIT 10
- Qvop₁₀ VERY OLD PARALIC DEPOSITS, UNIT 10
- Tt TORREY SANDSTONE
- Td DELMAR FORMATION
- Tsa SANTIAGO FORMATION
- KI LUSARDI FORMATION

85
▲ ANTICLINE—DASHED WHERE INFERRED. SOLID ARROW INDICATES DIRECTION OF AXIAL PLUNGE

80
└─ STRIKE AND DIP OF BEDS, INCLINED

SOURCE: KENNEDY, M.P., AND TAN, S.S., 2005, GEOLOGIC MAP OF THE OCEANSIDE 30' X 60' QUADRANGLE, CALIFORNIA

SCALE IN FEET
0 2,000 4,000



NOTES: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE

Ninyo & Moore

GEOLOGY

FIGURE

PROJECT NO.

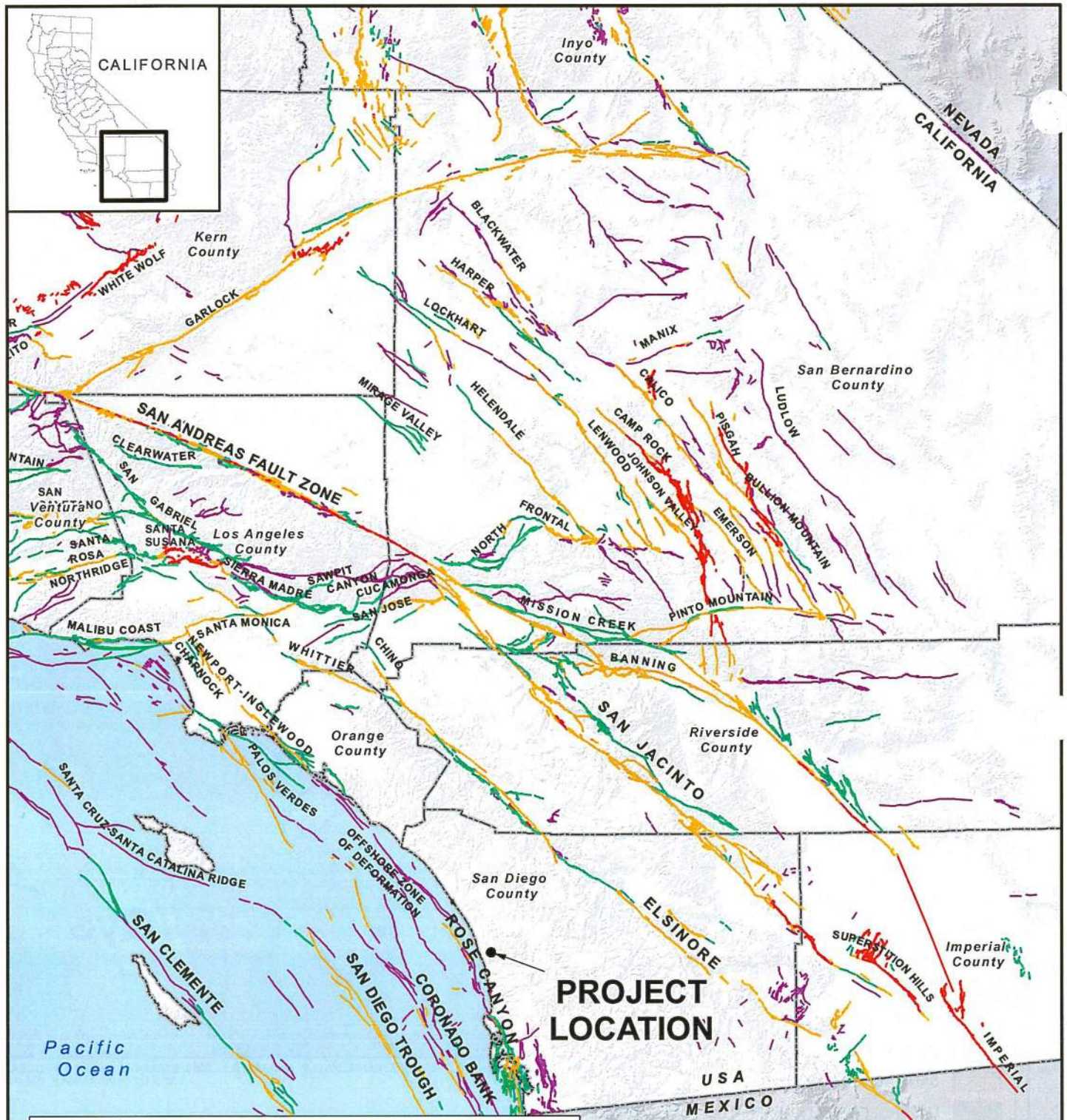
DATE

VILLAGE PARK RECYCLED WATER PROJECT
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3



LEGEND

CALIFORNIA FAULT ACTIVITY

- | | |
|---|---|
| — HISTORICALLY ACTIVE | — QUATERNARY (POTENTIALLY ACTIVE) |
| — HOLOCENE ACTIVE | --- STATE/COUNTY BOUNDARY |
| — LATE QUATERNARY (POTENTIALLY ACTIVE) | |

SOURCE: U.S. GEOLOGICAL SURVEY AND CALIFORNIA GEOLOGICAL SURVEY, 2006, QUATERNARY FAULT AND FOLD DATABASE FOR THE UNITED STATES.



NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

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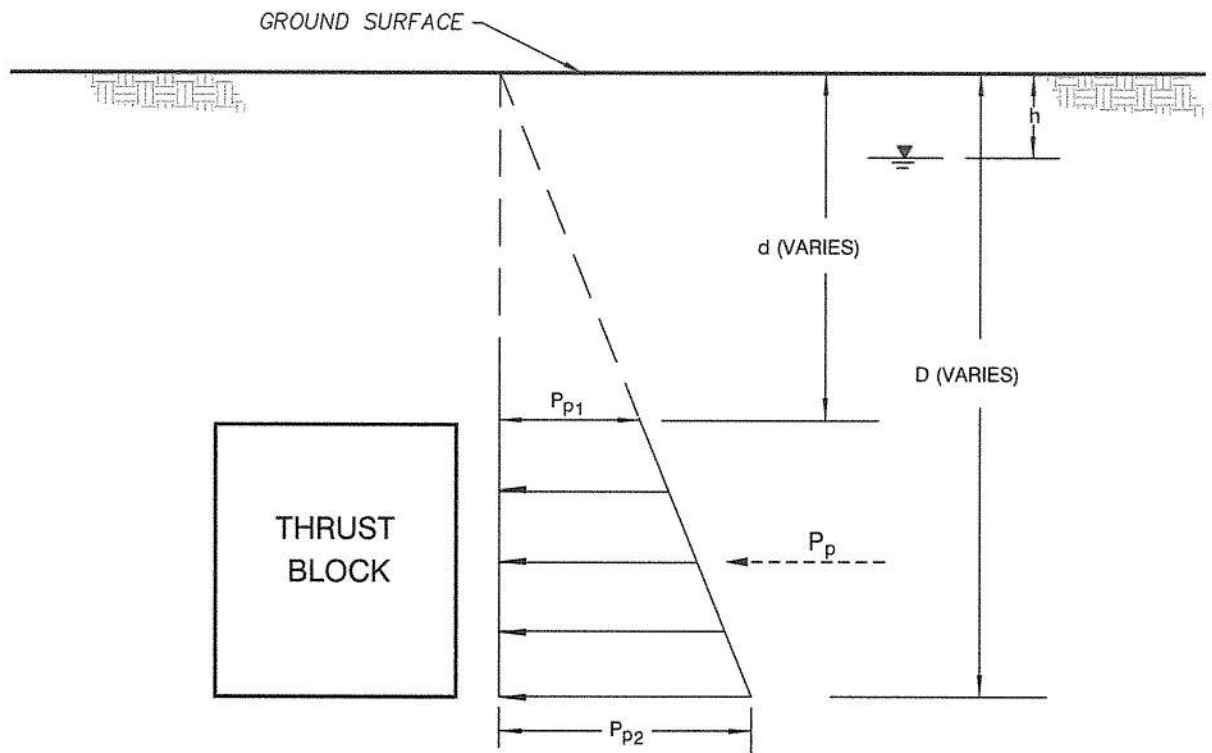
FAULT LOCATIONS

FIGURE

PROJECT NO.	DATE
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VILLAGE PARK RECYCLED WATER PROJECT
ENCINITAS, CALIFORNIA

4



NOTES:

1. GROUNDWATER BELOW BLOCK

$$P_p = 175 (D^2 - d^2) \text{ lb/ft}$$
2. GROUNDWATER ABOVE BLOCK

$$P_p = 1.5 (D - d) [124.8h + 57.6 (D + d)] \text{ lb/ft}$$
3. ASSUMES BACKFILL IS GRANULAR MATERIAL
4. ASSUMES THRUST BLOCK IS ADJACENT TO COMPETENT MATERIAL
5. D, d AND h ARE IN FEET
6. GROUNDWATER TABLE

NOT TO SCALE

Ninyo & Moore

THRUST BLOCK LATERAL EARTH PRESSURE DIAGRAM

FIGURE

PROJECT NO.

DATE

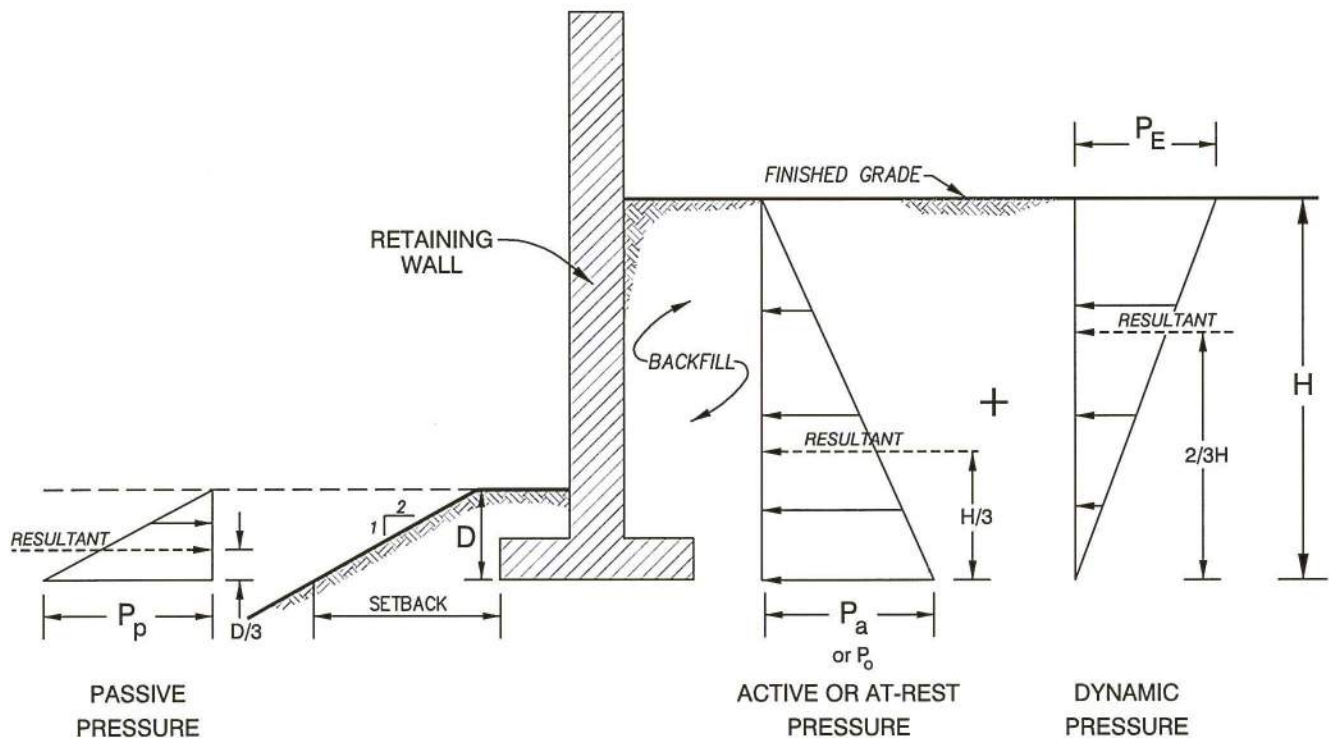
107686001

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VILLAGE PARK RECYCLED WATER PROJECT
ENCINITAS, CALIFORNIA

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5_107686001_d-tb.dwg



NOTES:

1. ASSUMES NO HYDROSTATIC PRESSURE BUILD-UP BEHIND THE RETAINING WALL
2. STRUCTURAL, GRANULAR BACKFILL MATERIALS SHOULD BE USED FOR RETAINING WALL
3. DRAINS AS RECOMMENDED IN THE RETAINING WALL DRAINAGE DETAIL SHOULD BE INSTALLED BEHIND THE RETAINING WALL
4. DYNAMIC LATERAL EARTH PRESSURE IS BASED ON A PEAK GROUND ACCELERATION OF 0.31g
5. SURCHARGE PRESSURES CAUSED BY VEHICLES OR NEARBY STRUCTURES ARE NOT INCLUDED
6. H AND D ARE IN FEET
7. SETBACK SHOULD BE IN ACCORDANCE WITH CBC (2013)

RECOMMENDED GEOTECHNICAL DESIGN PARAMETERS

Lateral Earth Pressure	Equivalent Fluid Pressure (lb/ft ² /ft) ⁽¹⁾	
	Level Backfill with Granular Soils ⁽²⁾	2H:1V Sloping Backfill with Granular Soils ⁽²⁾
P_a	37	57
P_o	56	82
P_E	12	36
P_p	Level Ground	2H:1V Descending Ground
	350	150

NOT TO SCALE

Ningo & Moore

PROJECT NO.

107686001

DATE

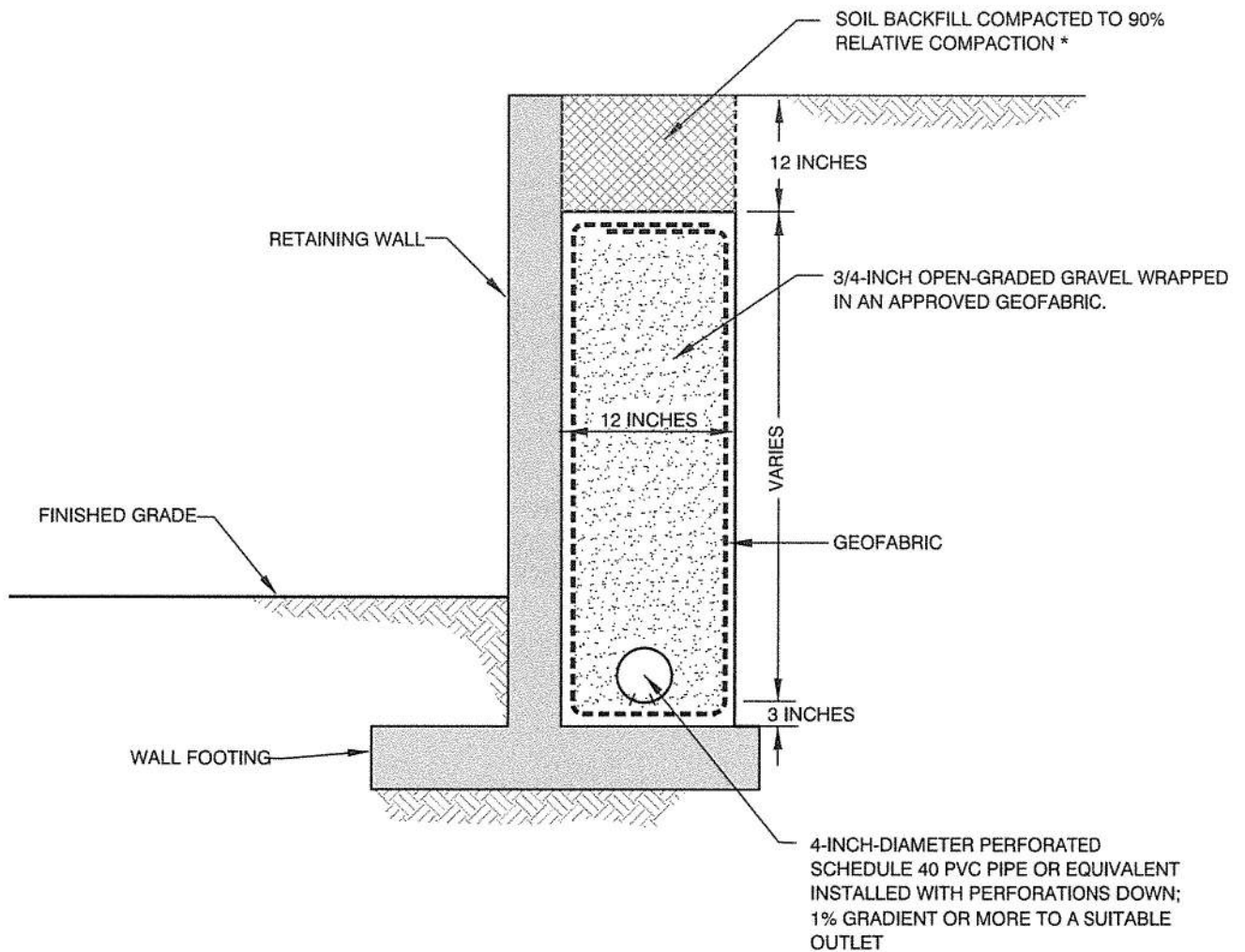
4/14

LATERAL EARTH PRESSURES FOR RETAINING WALLS

VILLAGE PARK RECYCLED WATER PROJECT
ENCINITAS, CALIFORNIA

FIGURE

6



*BASED ON ASTM D1557

NOT TO SCALE

NOTE: AS AN ALTERNATIVE, AN APPROVED GEOCOMPOSITE DRAIN SYSTEM MAY BE USED.

Ninyo & Moore

RETAINING WALL DRAINAGE DETAIL

FIGURE

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VILLAGE PARK RECYCLED WATER PROJECT
ENCINITAS, CALIFORNIA

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7_107686001_d-rw.dwg

APPENDIX A

BORING LOG

Field Procedure for the Collection of Disturbed Samples

Disturbed soil samples were obtained in the field using the following methods.

Bulk Samples

Bulk samples of representative earth materials were obtained from the cuttings of the exploratory borings. The samples were bagged and transported to the laboratory for testing.

Field Procedure for the Collection of Relatively Undisturbed Samples

Relatively undisturbed soil samples were obtained in the field using a modified split-barrel drive sampler. The sampler, with an external diameter of 3.0 inches, was lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a 140-pound hammer, in general accordance with ASTM D 3550. The driving weight was permitted to fall freely. The approximate length of the fall, the weight of the hammer, and the number of blows per foot of driving are presented on the boring logs as an index to the relative resistance of the materials sampled. The samples were removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

BORING LOG EXPLANATION SHEET

DEPTH (feet)	Bulk Driven	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
0								Bulk sample.
								Modified split-barrel drive sampler.
								2-inch inner diameter split-barrel drive sampler.
								No recovery with modified split-barrel drive sampler, or 2-inch inner diameter split-barrel drive sampler.
								Sample retained by others.
5								Standard Penetration Test (SPT).
								No recovery with a SPT.
			XX/XX					Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.
								No recovery with Shelby tube sampler.
								Continuous Push Sample.
								Seepage.
								Groundwater encountered during drilling.
								Groundwater measured after drilling.
							SM	<u>MAJOR MATERIAL TYPE (SOIL):</u> Solid line denotes unit change.
							CL	Dashed line denotes material change.
15								Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Shear Bedding Surface
								The total depth line is a solid line that is drawn at the bottom of the boring.
20								

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BORING LOG















Explanation of Boring Log Symbols

PROJECT NO.

DATE

FIGURE

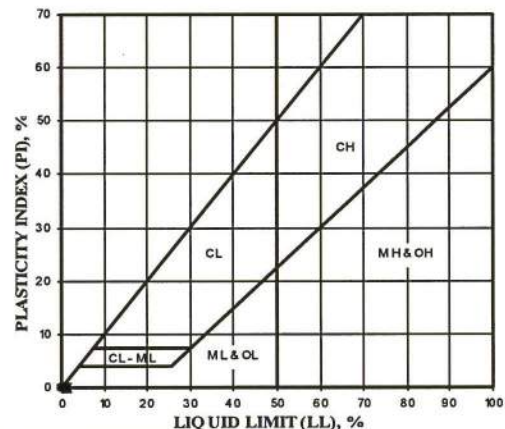
U.S.C.S. METHOD OF SOIL CLASSIFICATION

MAJOR DIVISIONS		SYMBOL		TYPICAL NAMES	
COARSE-GRAINED SOILS (More than 1/2 of soil > No. 200 Sieve Size)	GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size)		GW	Well graded gravels or gravel-sand mixtures, little or no fines	
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines	
			GM	Silty gravels, gravel-sand-silt mixtures	
			GC	Clayey gravels, gravel-sand-clay mixtures	
	SANDS (More than 1/2 of coarse fraction < No. 4 sieve size)		SW	Well graded sands or gravelly sands, little or no fines	
			SP	Poorly graded sands or gravelly sands, little or no fines	
			SM	Silty sands, sand-silt mixtures	
			SC	Clayey sands, sand-clay mixtures	
FINE-GRAINED SOILS (More than 1/2 of soil < No. 200 sieve size)	SILTS & CLAYS Liquid Limit <50		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
			OL	Organic silts and organic silty clays of low plasticity	
	SILTS & CLAYS Liquid Limit >50		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
			CH	Inorganic clays of high plasticity, fat clays	
			OH	Organic clays of medium to high plasticity, organic silty clays, organic silts	
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils	

GRAIN SIZE CHART

CLASSIFICATION	RANGE OF GRAIN	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS	Above 12"	Above 305
COBBLES	12" to 3"	306 to 76.2
GRAVEL	3" to No. 4	76.2 to 4.76
Coarse	3" to 3/4"	76.2 to 19.1
Fine	3/4" to No. 4	19.1 to 4.76
SAND	No. 4 to No. 200	4.76 to 0.075
Coarse	No. 4 to No. 10	4.76 to 2.00
Medium	No. 10 to No. 40	2.00 to 0.420
Fine	No. 40 to No. 200	0.420 to 0.075
SILT & CLAY	Below No. 200	Below 0.075

PLASTICITY CHART



Ninyo & Moore

U.S.C.S. METHOD OF SOIL CLASSIFICATION

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>3/25/14</u> BORING NO. <u>B-1</u> GROUND ELEVATION <u>185' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>8" Diameter Hollow Stem Auger (Scott's Drilling)</u> DRIVE WEIGHT <u>140 lbs. (Cathead)</u> DROP <u>30"</u> SAMPLED BY <u>NMM</u> LOGGED BY <u>NMM</u> REVIEWED BY <u>FOM</u> DESCRIPTION/INTERPRETATION
	Bulk	Driven						
0							SM	<u>FILL:</u> Brown and reddish brown, moist, medium dense, silty fine to medium SAND.
26			26	6.1	103.3		SM	<u>ALLUVIUM:</u> Reddish brown, moist, medium dense, silty fine to medium SAND; scattered gravel. Slow drilling on gravel and cobbles.
10			19	17.8	105.1		SC	Brown to yellowish brown, moist to wet, loose to medium dense, clayey medium SAND.
50/4"								<u>TORREY SANDSTONE:</u> Light yellowish brown, moist, cemented, silty fine to medium grained SANDSTONE; iron oxide staining.
50/4"								
20								Total Depth = 18.8 feet. Groundwater not encountered during drilling. Backfilled shortly after drilling on 3/25/14. <u>Note:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
30								
40								

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BORING LOG

VILLAGE PARK RECYCLED WATER PROJECT
ENCINITAS, CALIFORNIA

PROJECT NO.
107686001

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FIGURE
A-1

APPENDIX B

LABORATORY TESTING

Classification

Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488. Soil classifications are indicated on the logs of the exploratory borings in Appendix A.

In-Place Moisture and Density Tests

The moisture content and dry density of relatively undisturbed samples obtained from the exploratory borings were evaluated in general accordance with ASTM D 2937. The test results are presented on the logs of the exploratory borings in Appendix A.

Gradation Analysis

Gradation analysis tests were performed on a selected representative soil sample in general accordance with ASTM D 422. The grain-size distribution curve is shown on Figure B-1. The test results were utilized in evaluating the soil classifications in accordance with the USCS.

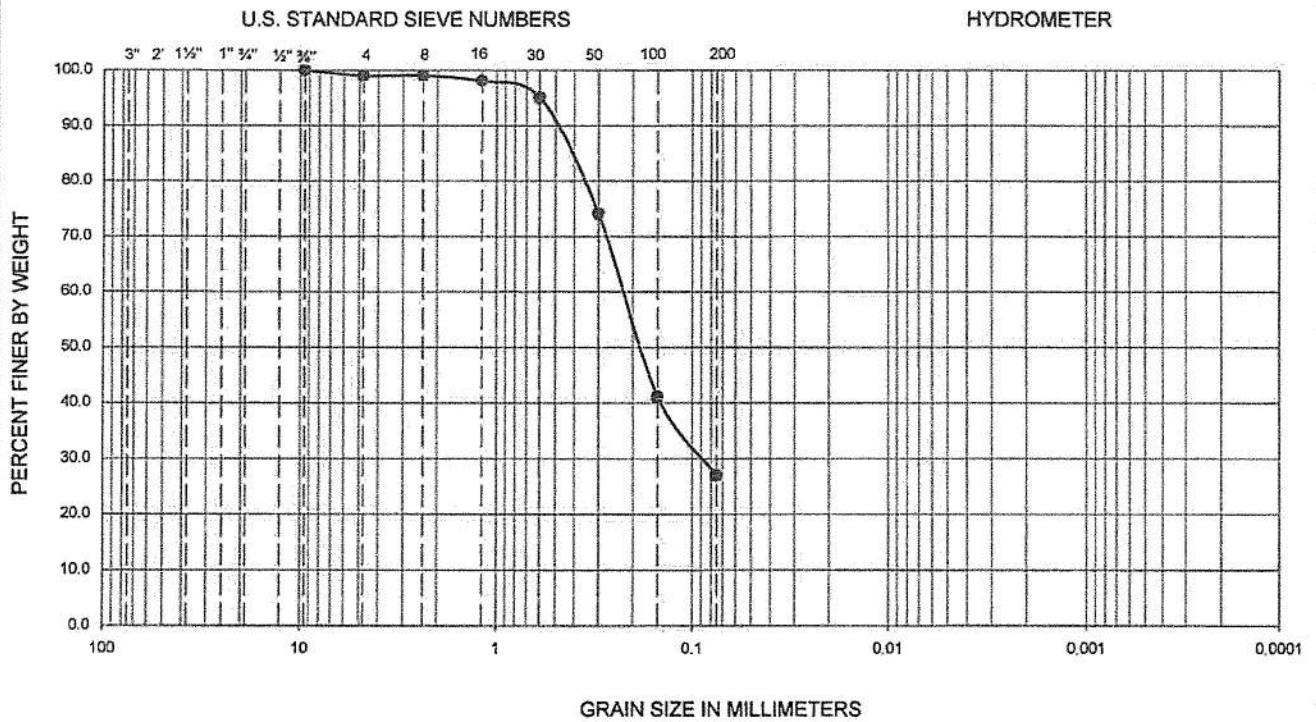
Direct Shear Tests

One direct shear test was performed on a sample in general accordance with ASTM D 3080 to evaluate the shear strength characteristics of the selected material. The sample was inundated during shearing to represent adverse field conditions. The test results are shown on Figure B-2.

Soil Corrosivity Tests

Soil pH, and electrical resistivity tests were performed on a representative sample in general accordance with CT 643. The chloride content of the selected sample was evaluated in general accordance with CT 422. The sulfate content of the selected sample was evaluated in general accordance with CT 417. The test results are presented on Figure B-3.

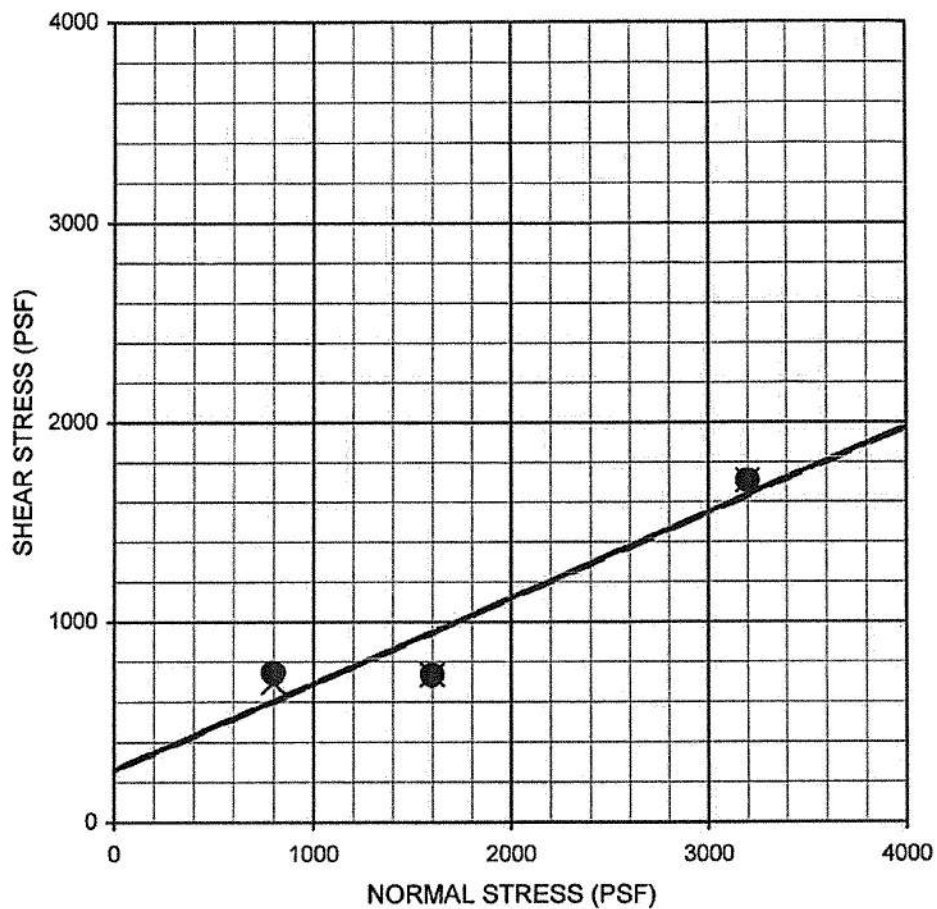
GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	USCS
●	B-1	9.0-13.0	--	--	--	--	--	--	--	--	27	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore		GRADATION TEST RESULTS	FIGURE B-1
PROJECT NO.	DATE	VILLAGE PARK RECYCLED WATER PROJECT ENCINITAS, CALIFORNIA	
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Description	Symbol	Sample Location	Depth (ft)	Shear Strength	Cohesion, c (psf)	Friction Angle, ϕ (degrees)	Soil Type
Clayey SAND	—●—	B-1	10.0-11.5	Peak	260	23	SC
Clayey SAND	- - X - -	B-1	10.0-11.5	Ultimate	250	23	SC

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 3080

Ninyo & Moore		DIRECT SHEAR TEST RESULTS		FIGURE
PROJECT NO.	DATE	VILLAGE PARK RECYCLED WATER PROJECT ENCINITAS, CALIFORNIA		B-2
107686001	4/14			

SAMPLE LOCATION	SAMPLE DEPTH (FT)	pH ¹	RESISTIVITY ¹ (Ohm-cm)	SULFATE CONTENT ²		CHLORIDE CONTENT ³ (ppm)
				(ppm)	(%)	
B-1	9.0-13.0	7.0	870	1,170	0.117	520

¹ PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 643

² PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 417

³ PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 422

<i>Ninyo & Moore</i>		CORROSIVITY TEST RESULTS	FIGURE B-3
PROJECT NO.	DATE	VILLAGE PARK RECYCLED WATER PROJECT ENCINITAS, CALIFORNIA	
107686001	4/14		

April 14, 2023

PREPARED BY:



UTILITY SURVEYORS, INC.

AIRX Project #: X230037

Project Name: Potholing Proposal - RW Pipeline Extension Project

Utility Locating and Potholing Area:
Calle Barcelona, Village Park Way, Village Run E and N Willowspring Dr
San Diego, CA

POTHOLING REPORT





TABLE OF CONTENTS

1. Description of Pothole Procedures and Site-Specific Details
2. Pothole Project Map(s)
3. Pothole Location Map(s)
4. Pothole Tabulation Report
5. Pothole Data Sheet(s)
6. Manhole Dip Data Sheet(s)
7. Permit(s)



Description of Pothole Procedures and Site Specific Details



DESCRIPTION OF POTHOLE PROCEDURES

AIRX Utility Surveyors performs a full range of specialized engineering services including Underground Utility Location and Vacuum Excavation (to verify depth and alignment of underground utilities).

Underground Utility Location employs sophisticated electronic locating devices to trace the route of an underground utility; then the route is marked on the surface with marking paint in paved areas, or with 60 penny nails and feathers in unpaved areas.

Vacuum excavation employs a vacuum truck in conjunction with high-pressure air or water to excavate material and expose an underground utility. A 10 to 12-inch diameter hole is first cored or chiseled through the pavement so that the vacuum hose and high-pressure air or water hose can be inserted.

Utilities found during potholing are located on the surface by placing two reference points (typically 36" apart) on either side of the pothole along the centerline (or edge) of the utility, using paving nails or 60 penny nails as appropriate. Depth measurements (to the nearest ½ inch) are taken midway between the two reference points. Utility alignment, depth, and other data is marked with pink paint (on pavement), or on wood lath (unpaved areas).

SITE SPECIFIC DETAILS

AIRX was contracted by Hoch Consulting to perform utility locating and potholing services on Calle Barcelona, Village Park Way, Village Run E and N Willowspring Dr in San Diego, California. A total of 11 potholes were excavated, and 2 manholes were dipped and inspected to establish conflicts and connection points on a variety of utilities. The results of the data are contained in the attached spreadsheet and data sheets.

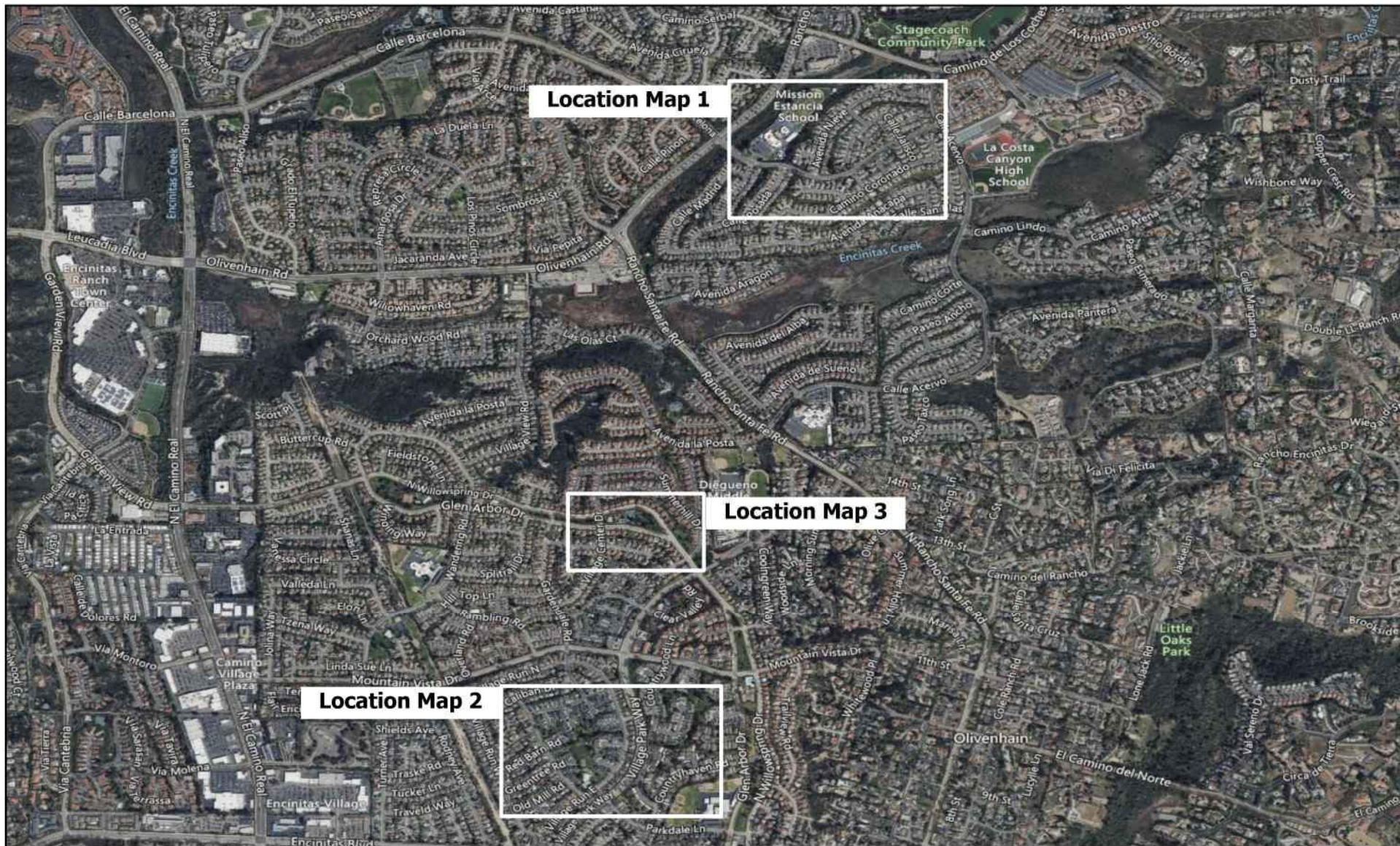
In preparation of these excavations, AIRX marked out the dig locations and called in for USA (Underground Service Alert). All traffic control plans and permits were drawn and applied for by AIRX and all traffic control was set up by AIRX.

All the excavations and discovery went without any incident. Any changes and adjustments are mentioned in the Pothole Tabulation Report and the Pothole Data Sheets. All the results were annotated on the ground and in this report. It is AIRX's recommendation that all pothole locations and the active mark out should be surveyed to aid in the adjustment of utilities on the final plan and profile.

At each pothole location, the utility alignment was marked with pink paint, as well as paving nails or feathers. AIRX used potable water acquired offsite for excavation and all water and material vacuumed was disposed of off-site. No water was allowed to flow into storm drains or natural drainages. The potholes were covered with clean backfill material and compacted to 95% density in 3" lifts. The pavement was patched with Aquaphalt. Field work of the original potholes was performed between April 3, 2023, and April 11, 2023.



Pothole Project Map(s)



Location Map 1

Location Map 3

Location Map 2

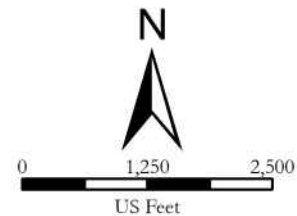


Potholing Proposal- RW Pipeline Extension Project

Pothole Project Map 1

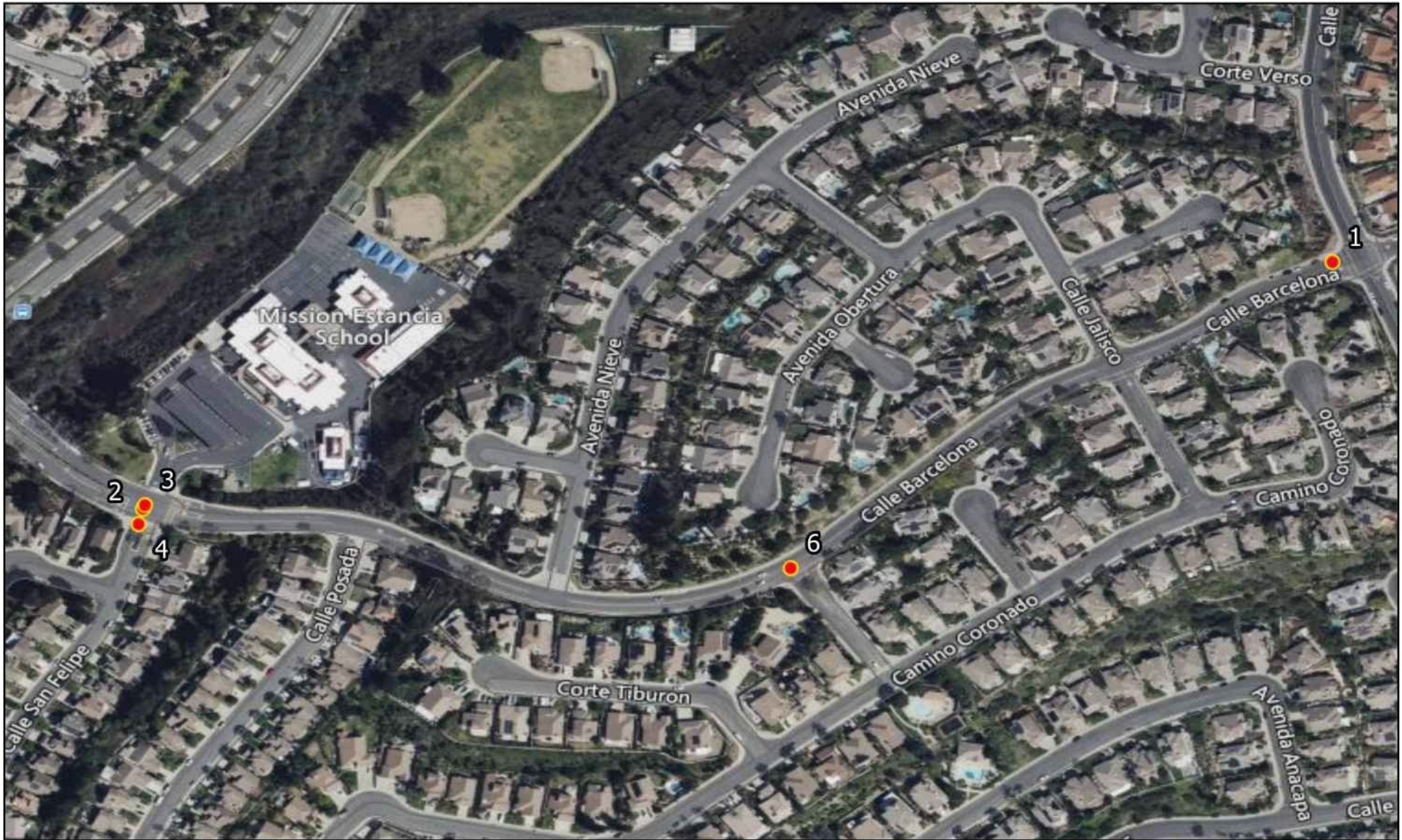
X230037

Coordinate System: GCS WGS 1984





Pothole Location Map(s)



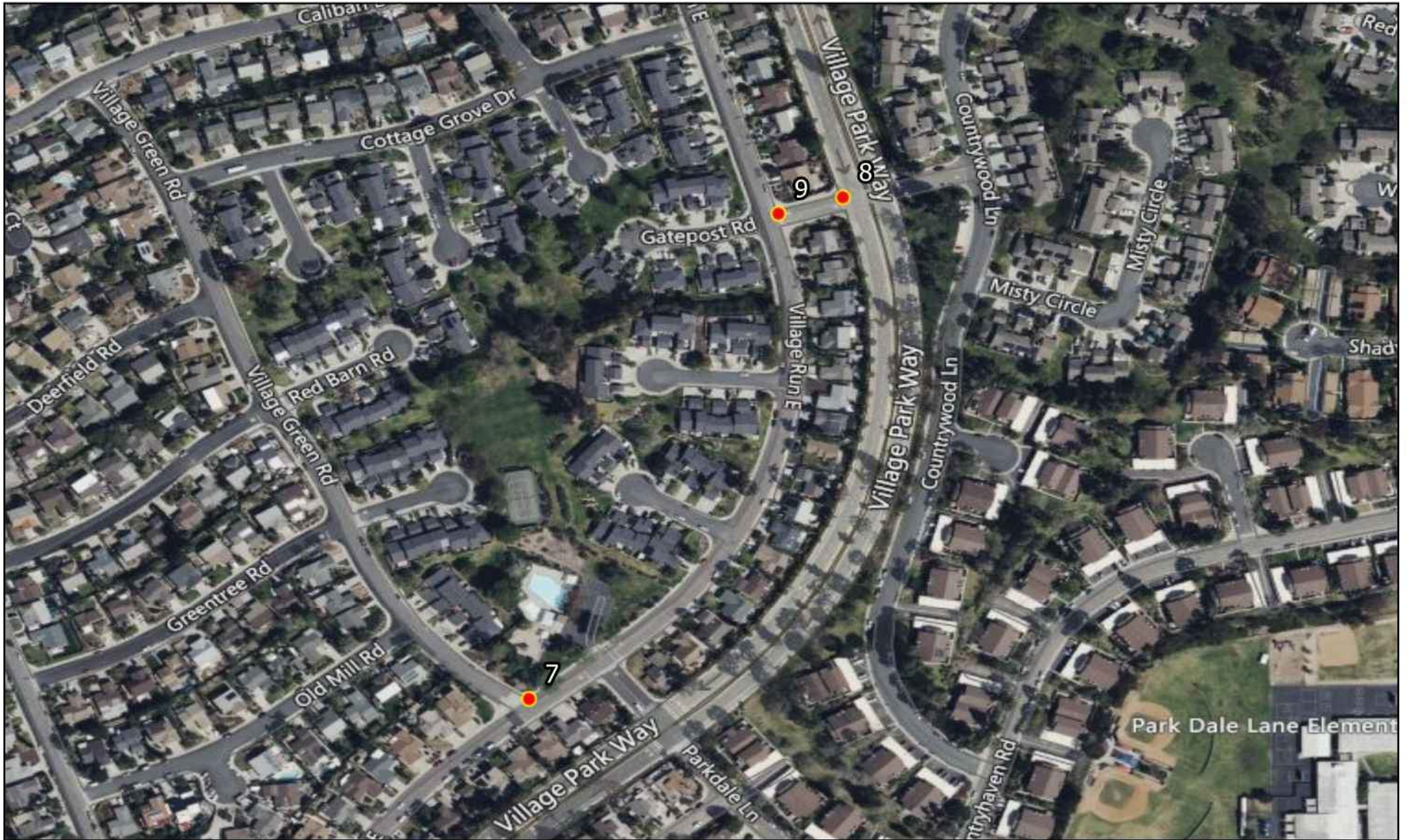
Potholing Proposal- RW Pipeline Extension Project

Pothole Location Map 1

X230037

Coordinate System: GCS WGS 1984



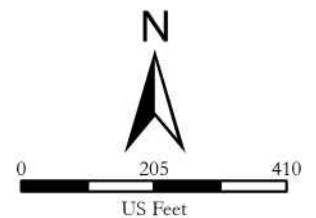


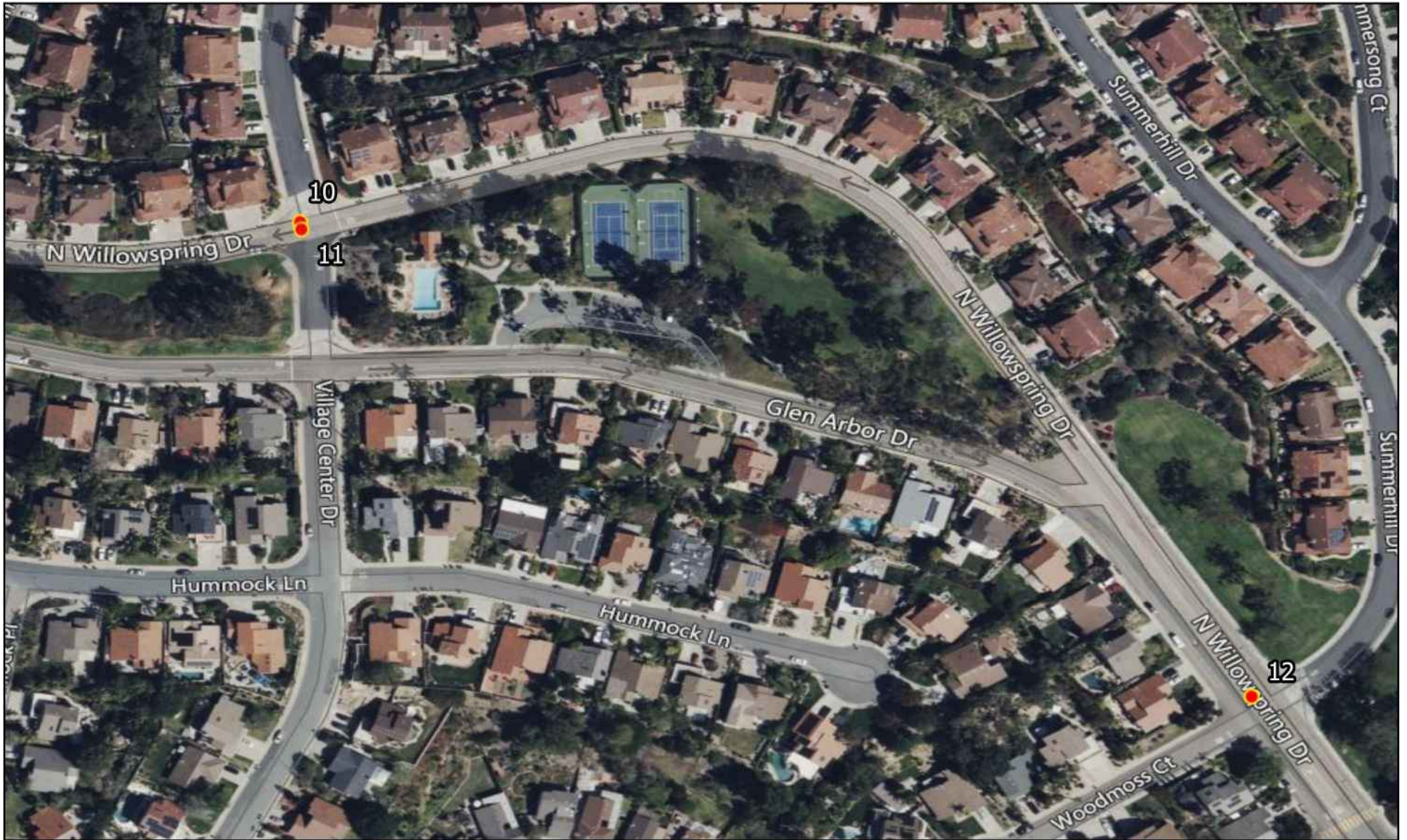
Potholing Proposal- RW Pipeline Extension Project

Pothole Location Map 2

X230037

Coordinate System: GCS WGS 1984



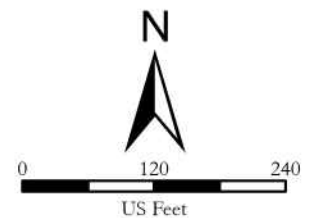


Potholing Proposal- RW Pipeline Extension Project

Pothole Location Map 3

X230037

Coordinate System: GCS WGS 1984





Pothole Tabulation Report



POTHOLE TABULATION REPORT: Potholing Proposal - RW Pipeline Extension Project

Pothole Number	Date	Street	Pavement Thickness	Utility Type	Utility Size & Material	Soil Type	Depth-Ground to Top of Utility	Depth-Ground to Top of Package/ Encasement	Depth-Ground to Bottom of Package/ Encasement	Total Depth Excavated	Utility Orientation	Pothole Project Area Map #	Pothole Location Map #	Description & Location	Notes
1	04/03/2023	Calle Barcelona	Asphalt - 6.0" Concrete - N/A Base - N/A Total - 6.0"	Storm Drain	16.0" Concrete	Subgrade	75.0" T/P	N/A	N/A	75.0"	NNW/SSE	1	1	Pothole 1 is located in the SW-bound lane of Calle Barcelona. Please refer to Location Map 1 for the approximate location of Pothole 1.	
2	04/10/2023	Intersection of Calle Barcelona & Calle San Felipe	Asphalt - 5.0" Concrete - N/A Base - N/A Total - 5.0"	Water	10.0" ACP	Native Clay	52.0" T/P	N/A	N/A	54.0"	WNW/ESE	1	1	Pothole 2 is located in the intersection of Calle Barcelona and Calle San Felipe. Please refer to Location Map 1 for the approximate location of Pothole 2.	
3	04/10/2023	Intersection of Calle Barcelona & Calle San Felipe	Asphalt - 6.0" Concrete - N/A Base - N/A Total - 6.0"	Sanitary Sewer	8.0" PVC	Native Clay	79.0" T/P	N/A	N/A	79.0"	WNW/ESE	1	1	Pothole 3 is located in the intersection of Calle Barcelona and Calle San Felipe. Please refer to Location Map 1 for the approximate location of Pothole 3.	
4	04/11/2023	Intersection of Calle Barcelona & Vía San Clemente	Asphalt - 6.0" Concrete - N/A Base - N/A Total - 6.0"	Gas Electric	3.0" Plastic PVC Package	Sand, Native Clay	31.0" T/P N/A	N/A 38.0" T/Pkg	N/A N/A	45.0"	NW/SE NW/SE	1	1	Pothole 4 is located in the intersection of Calle Barcelona and Vía San Clemente. Please refer to Location Map 1 for the approximate location of Pothole 4.	Utilities from Pothole 5 were found in this pothole. Tracer wire was present.
6	04/10/2023	Intersection of Calle Barcelona & Vía San Clemente	Asphalt - 5.0" Concrete - N/A Base - 6.0" Total - 11.0"	Water	10.0" ACP	Subgrade, Native Clay	50.0" T/P	N/A	N/A	52.0"	NE/SW	1	1	Pothole 6 is located in the intersection of Calle Barcelona and Vía San Clemente. Please refer to Location Map 1 for the approximate location of Pothole 6.	
7	04/06/2023	Intersection of Village Green Rd & Village Run E	Asphalt - 5.0" Concrete - N/A Base - N/A Total - 5.0"	Water	8.0" ACP	Native Clay	45.0" T/P	N/A	N/A	50.0"	NW/SE	1	2	Pothole 7 is located in the intersection of Village Green Rd and Village Run E. Please refer to Location Map 2 for the approximate location of Pothole 7.	
8	04/06/2023	Intersection of Gatepost Rd & Village Park Way	Asphalt - 6.0" Concrete - N/A Base - N/A Total - 6.0"	Electric AT&T	3.0" PVC 14.0" Multi Concrete Duct	Clay	46.0" T/P N/A	N/A 46.0" T/MCD	N/A N/A	70.0"	NNW/SSE NNW/SSE	1	2	Pothole 8 is located in the intersection of Gatepost Rd and Village Park Way. Please refer to Location Map 2 for the approximate location of Pothole 8.	
9	04/06/2023	Intersection of Gatepost Rd & Village Run E	Asphalt - N/A Concrete - 4.0" Base - N/A Total - 4.0"	Gas Electric Unknown	1.0" Steel 4.0" PVC Package Slurry Encasement	Clay	45.0" T/P N/A N/A	N/A 66.0" T/Pkg 44.0" T/Enc	N/A N/A N/A	75.0"	NNW/SSE NNW/SSE NNW/SSE	1	2	Pothole 9 is located in the intersection of Gatepost Rd and Village Run E. Please refer to Location Map 2 for the approximate location of Pothole 9.	
10	04/07/2023	In the intersection of N Willowspring Dr & Village Center Dr	Asphalt - 5.0" Concrete - N/A Base - N/A Total - 5.0"	Water	10.0" ACP	Sand	50.0" T/P	N/A	N/A	51.0"	WSW/ENE	1	3	Pothole 10 is located in the intersection of N Willowspring Dr and Village Center Dr. Please refer to Location Map 3 for the approximate location of Pothole 10.	
11	04/07/2023	Intersection of N Willowspring Dr & Village Center Dr	Asphalt - 6.0" Concrete - N/A Base - N/A Total - 6.0"	Sanitary Sewer	8.0" PVC	Sand	89.0" T/P	N/A	N/A	90.0"	WSW/ENE	1	3	Pothole 11 is located in the intersection of N Willowspring Dr and Village Center Dr. Please refer to Location Map 3 for the approximate location of Pothole 11.	
12	04/07/2023	Intersection of N Willowspring Dr & Woodmoss Ct/Summerhill Dr	Asphalt - 6.0" Concrete - N/A Base - N/A Total - 6.0"	Sanitary Sewer	8.0" PVC	Sand	101.0" T/P	N/A	N/A	110.0"	NNW/SSE	1	3	Pothole 12 is located in the intersection of N Willowspring Dr and Woodmoss Ct/Summer Hill Dr. Please refer to Location Map 3 for the approximate location of Pothole 12.	



Pothole Data Sheet(s)



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	1
DATE EXCAVATED:	04/03/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Storm Drain	16.0" Concrete	75.0" T/P	N/A	N/A	NNW/SSE
2						
3						
4						

TOTAL DEPTH EXCAVATED: 75.0"

PAVEMENT THICKNESS: ASPHALT: 6.0" CONCRETE: N/A BASE: N/A

STANDBY REQUIRED: N/A

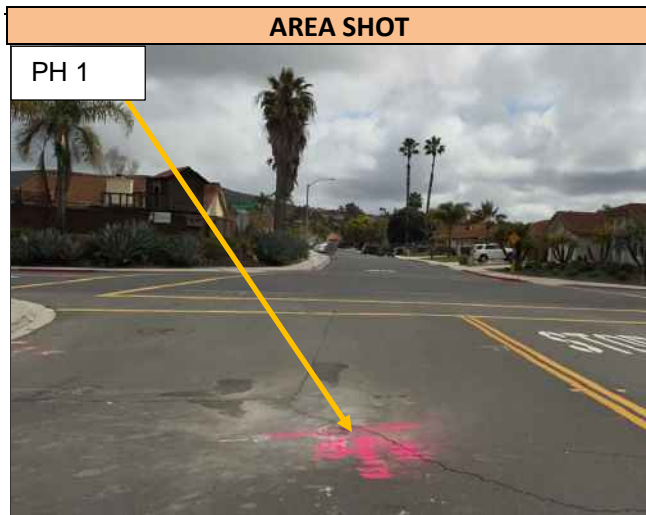
IMMEDIATE SURFACE REPAIR: Cold Mix

PERMANENT SURFACE REPAIR: Cold Mix

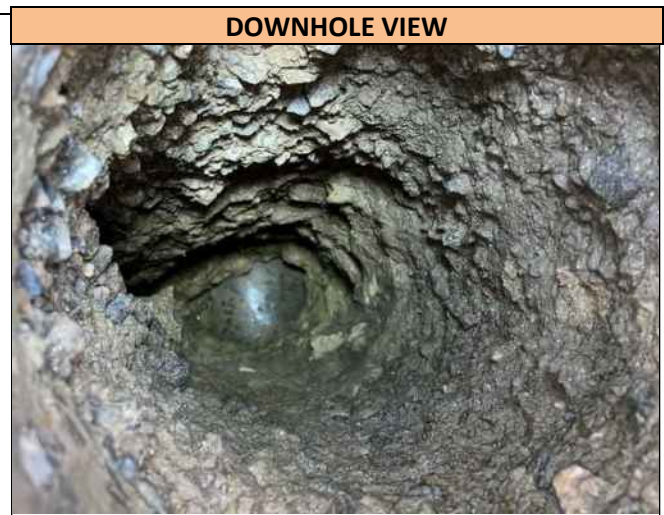
UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Subgrade
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Subgrade

COMMENT:

Excavated 75 inches deep, and 30 inches wide.



Pothole 1 is located in the SW-bound lane of Calle Barcelona. Please refer to Location Map 1 for the approximate location of Pothole 1. The photo above was taken in front of Pothole 1 facing NE.



A downhole view of the 16.0 inch wide Concrete Storm Drain utility found in Pothole 1, at the depth of 75.0 inches T/P. Utility runs in a NNW/SSE direction at the Pothole location and was found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	2
DATE EXCAVATED:	04/10/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Water	10.0" ACP	52.0" T/P	N/A	N/A	WNW/ESE
2						
3						
4						

TOTAL DEPTH EXCAVATED: 54.0"

PAVEMENT THICKNESS: ASPHALT: 5.0" CONCRETE: N/A BASE: N/A

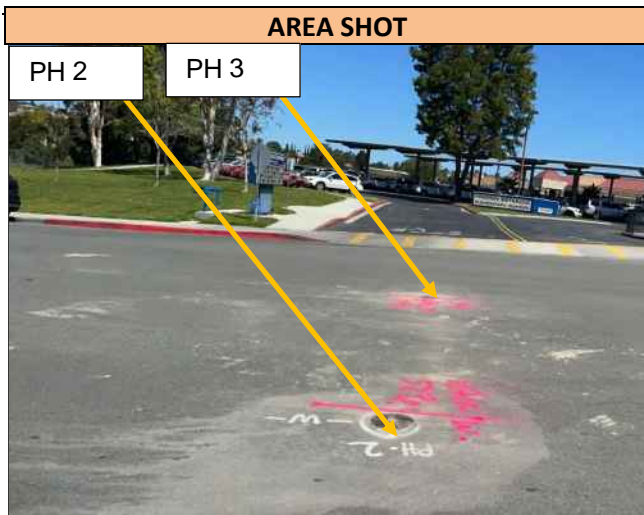
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Cold Mix

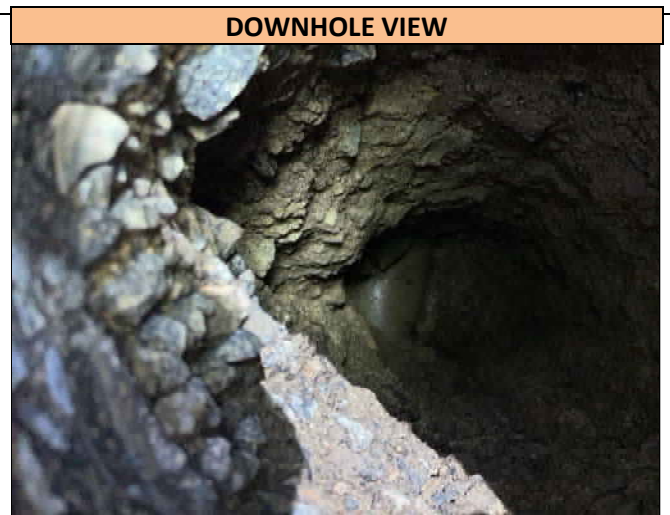
PERMANENT SURFACE REPAIR: Cold Mix

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Native Clay
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Native Clay

COMMENT:



Pothole 2 is located in the intersection of Calle Barcelona and Calle San Felipe. Please refer to Location Map 1 for the approximate location of Pothole 2. The photo above was taken in front of Pothole 2 and Pothole 3 facing NNE.



A downhole view of the 10.0 inch wide ACP Water utility found in Pothole 2, at the depth of 52.0 inches T/P. Utility runs in a WNW/ESE direction at the Pothole location and was found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	3
DATE EXCAVATED:	04/10/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Sanitary Sewer	8.0" PVC	79.0" T/P	N/A	N/A	WNW/ESE
2						
3						
4						

TOTAL DEPTH EXCAVATED: 79.0"

PAVEMENT THICKNESS: ASPHALT: 6.0" CONCRETE: N/A BASE: N/A

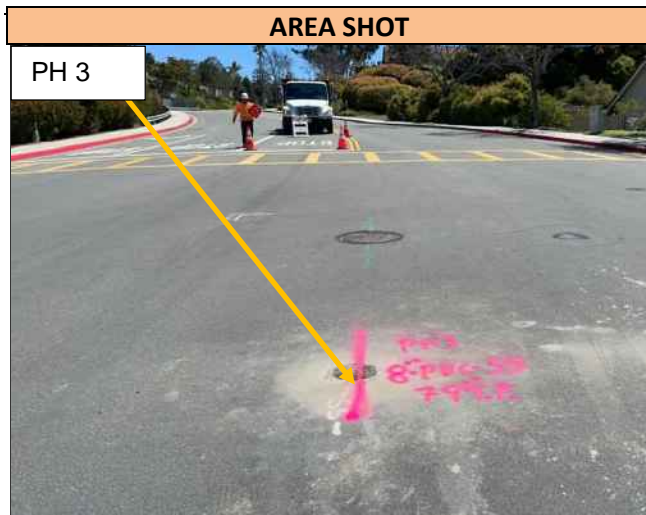
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Cold Mix

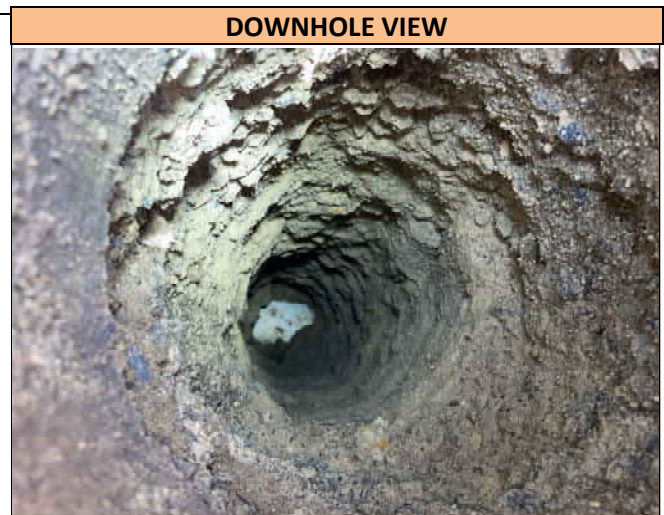
PERMANENT SURFACE REPAIR: Cold Mix

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Sand
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Native Clay

COMMENT:



Pothole 3 is located in the intersection of Calle Barcelona and Calle San Felipe. Please refer to Location Map 1 for the approximate location of Pothole 3. The photo above was taken in front of Pothole 3 facing ESE.



A downhole view of the 8.0 inch wide PVC Sanitary Sewer utility found in Pothole 3, at the depth of 79.0 inches T/P. Utility runs in a WNW/ESE direction at the Pothole location and was found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	4
DATE EXCAVATED:	04/11/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Gas	3.0" Plastic	31.0" T/P	N/A	N/A	WNW/ESE
2	Electric	PVC Package	N/A	38.0" T/Pkg	N/A	WNW/ESE
3						
4						

TOTAL DEPTH EXCAVATED: 45.0"

PAVEMENT THICKNESS: ASPHALT: 6.0" CONCRETE: N/A BASE: N/A

STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Cold Mix

PERMANENT SURFACE REPAIR: Cold Mix

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	Yes
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Sand
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Sand, Native Clay

COMMENT:

Utilities from Pothole 5 were found in this pothole.

AREA SHOT



Pothole 4 is located at the intersection of Calle Barcelona and Calle San Felipe. Please refer to Location Map 1 for the approximate location of Pothole 4. The photo above was taken in front of Pothole 4 facing WNW.

DOWNHOLE VIEW



A downhole view of the utilities found in Pothole 4 and their orientation at the pothole location: 3.0 inch Plastic Gas utility at the depth of 31.0 inches T/P and runs in a WNW/ESE direction; a PVC Package housing Electric utilities found at the depth of 38.0 inches T/Pkg and running in a WNW/ESE direction. Utilities were found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	6
DATE EXCAVATED:	04/10/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Water	10.0" ACP	50.0" T/P	N/A	N/A	NE/SW
2						
3						
4						

TOTAL DEPTH EXCAVATED: 52.0"

PAVEMENT THICKNESS: ASPHALT: 5.0" CONCRETE: N/A BASE: 7.0"

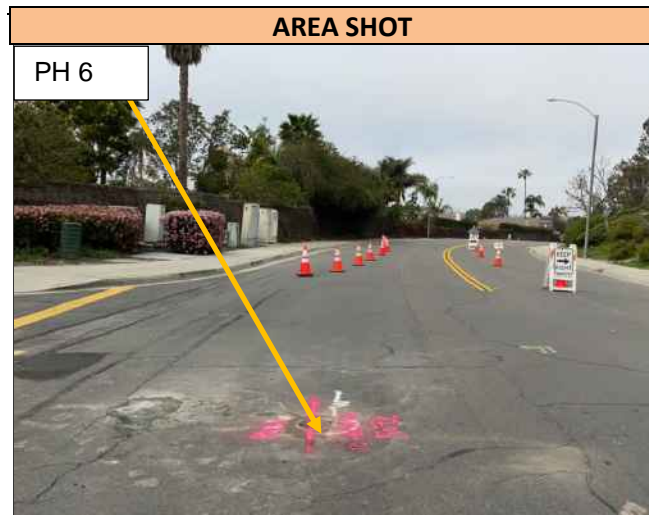
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Cold Mix

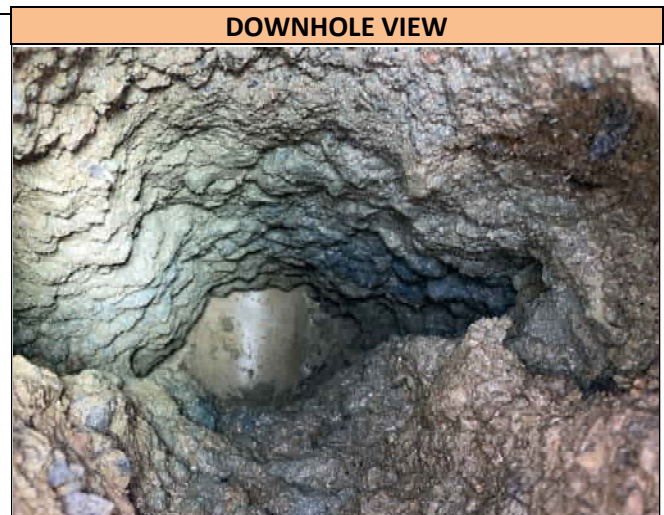
PERMANENT SURFACE REPAIR: Cold Mix

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Native Clay
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Subgrade, Native Clay

COMMENT:



Pothole 6 is located in the intersection of Calle Barcelona and Via San Clemente. Please refer to Location Map 1 for the approximate location of Pothole 6. The photo above was taken in front of Pothole 6 facing SW.



A downhole view of the 10.0 inch wide ACP Water utility found in Pothole 6, at the depth of 50.0 inches T/P. Utility runs in a NE/SW direction at the Pothole location and was found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	7
DATE EXCAVATED:	04/06/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Water	8.0" ACP	45.0" T/P	N/A	N/A	NW/SE
2						
3						
4						

TOTAL DEPTH EXCAVATED: 50.0"

PAVEMENT THICKNESS: ASPHALT: 5.0" CONCRETE: N/A BASE: N/A

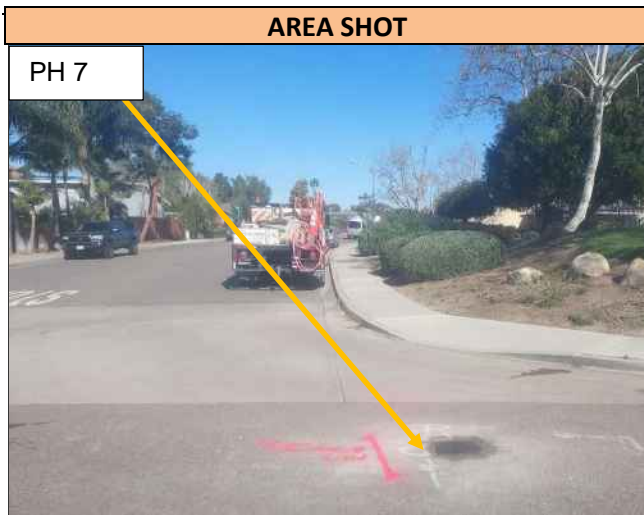
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Aquaphalt

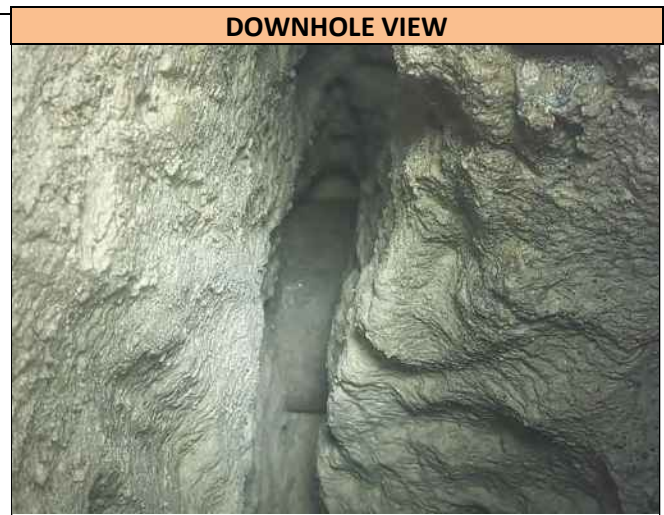
PERMANENT SURFACE REPAIR: Aquaphalt

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Native Clay
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Native Clay

COMMENT:



Pothole 7 is located in the intersection of Village Green Rd and Village Run E. Please refer to Location Map 2 for the approximate location of Pothole 7. The photo above was taken in front of Pothole 7 facing NW.



A downhole view of the 8.0 inch wide ACP Water utility found in Pothole 7, at the depth of 45.0 inches T/P. Utility runs in a NW/SE direction at the Pothole location and was found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	8
DATE EXCAVATED:	04/06/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Electric	3.0" PVC	46.0" T/P	N/A	N/A	NNW/SSE
2	AT&T	14.0" Multi Concrete Duct	N/A	46.0" T/MCD	N/A	NNW/SSE
3						
4						

TOTAL DEPTH EXCAVATED: 70.0"

PAVEMENT THICKNESS: ASPHALT: 6.0" CONCRETE: N/A BASE: N/A

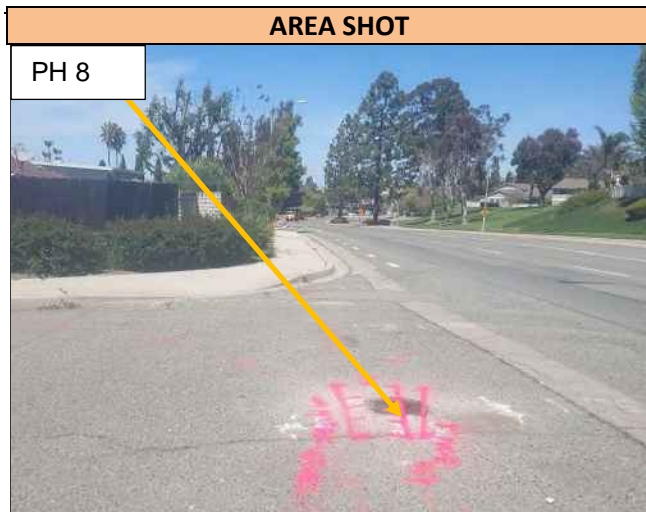
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Aquaphalt

PERMANENT SURFACE REPAIR: Aquaphalt

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Clay
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Clay

COMMENT:



Pothole 8 is located in the intersection of Gatepost Rd and Village Park Way. Please refer to Location Map 2 for the approximate location of Pothole 8. The photo above was taken in front of Pothole 8 facing NNW.



A downhole view of the utilities found in Pothole 8 and their orientation at the pothole location: 3.0 inch PVC Electric utility at the depth of 46.0 inches T/P and runs in a NNW/SSE direction; and 14.0 inch Multi Concrete Duct AT&T utility at the depth of 46.0 inches T/MCD and runs in a NNW/SSE direction. Utilities were found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	9
DATE EXCAVATED:	04/06/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Gas	1.0" Steel	45.0" T/P	N/A	N/A	NNW/SSE
2	Electric	(4) 4.0" PVC Package	N/A	66.0" T/Pkg	N/A	NNW/SSE
3	Unknown	Slurry Encasement	N/A	44.0" T/Enc	N/A	NNW/SSE
4						

TOTAL DEPTH EXCAVATED: 75.0"

PAVEMENT THICKNESS: ASPHALT: N/A CONCRETE: 4.0" BASE: N/A

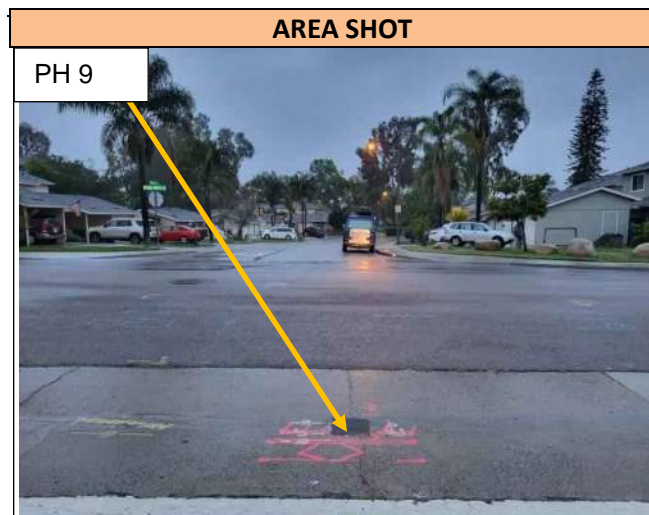
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Aquaphalt

PERMANENT SURFACE REPAIR: Aquaphalt

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Clay
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Clay

COMMENT:



Pothole 9 is located in the intersection of Gatepost Dr and Village Run E. Please refer to Location Map 2 for the approximate location of Pothole 9. The photo above was taken in front of Pothole 9 facing WSW.



A downhole view of the utilities found in Pothole 9 and their orientation at the pothole location: A 1.0 inch Steel Gas utility at the depth of 45.0 inches T/P and runs in a NNW/SSE direction; four 4.0 inch PVC Package housing Electric utilities at the depth of 66.0 inches T/Pkg running in a NNW/SSE direction; and a Slurry Encasement housing Unknown utilities at the depth of 44.0 inches T/Enc running in a NNW/SSE direction. Utilities were found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	10
DATE EXCAVATED:	04/07/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Water	10.0" ACP	50.0" T/P	N/A	N/A	WSW/ENE
2						
3						
4						

TOTAL DEPTH EXCAVATED: 51.0"

PAVEMENT THICKNESS: ASPHALT: 5.0" CONCRETE: N/A BASE: N/A

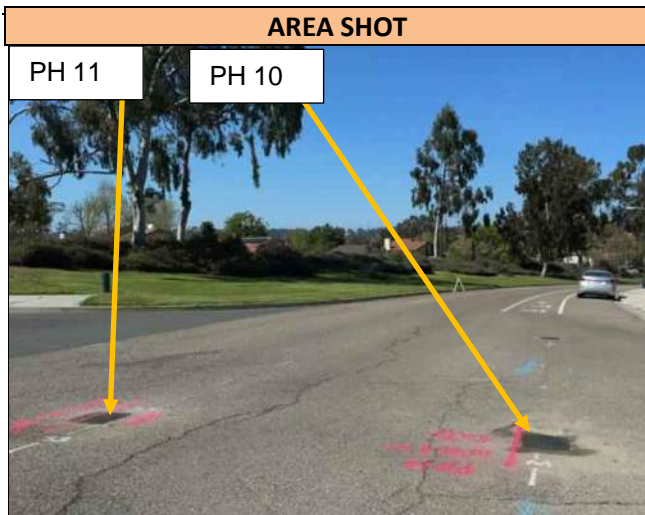
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Aquaphalt

PERMANENT SURFACE REPAIR: Aquaphalt

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Sand
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Sand

COMMENT:



Pothole 10 is located in the intersection of N Willowspring Dr and Village Center Dr. Please refer to Location Map 3 for the approximate location of Pothole 10. The photo above was taken in front of Pothole 10 and Pothole 11 facing WSW.



A downhole view of the 10.0 inch wide ACP Water utility found in Pothole 10, at the depth of 50.0 inches T/P. Utility runs in a WSW/ENE direction at the Pothole location and was found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	11
DATE EXCAVATED:	04/07/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Sanitary Sewer	8.0" PVC	89.0" T/P	N/A	N/A	WSW/ENE
2						
3						
4						

TOTAL DEPTH EXCAVATED: 90.0"

PAVEMENT THICKNESS: ASPHALT: 6.0" CONCRETE: N/A BASE: N/A

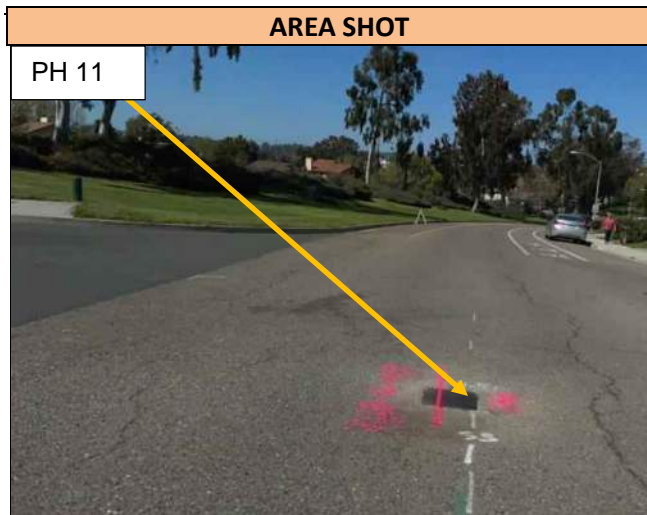
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Aquaphalt

PERMANENT SURFACE REPAIR: Aquaphalt

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Sand
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Sand

COMMENT:



Pothole 11 is located in the intersection of N Willowspring Dr and Village Center Dr. Please refer to Location Map 3 for the approximate location of Pothole 11. The photo above was taken in front of Pothole 11 facing WSW.



A downhole view of the 8.0 inch wide PVC Sanitary Sewer utility found in Pothole 11, at the depth of 89.0 inches T/P. Utility runs in a WSW/ENE direction at the Pothole location and was found directly on markout.



UTILITY SURVEYORS, INC.

RECORD OF TEST HOLE DATA

AIRX JOB NO:	X230037
TEST HOLE NO:	12
DATE EXCAVATED:	04/07/2023

	UTILITY TYPE	SIZE & MATERIAL	UTILITY DEPTH	ENCASEMENT/ PACKAGE TOP	ENCASEMENT/ PACKAGE BOTTOM	UTILITY DIRECTION
1	Sanitary Sewer	8.0" PVC	101.0" T/P	N/A	N/A	NNW/SSE
2						
3						
4						

TOTAL DEPTH EXCAVATED: 110.0"

PAVEMENT THICKNESS: ASPHALT: 6.0" CONCRETE: N/A BASE: N/A

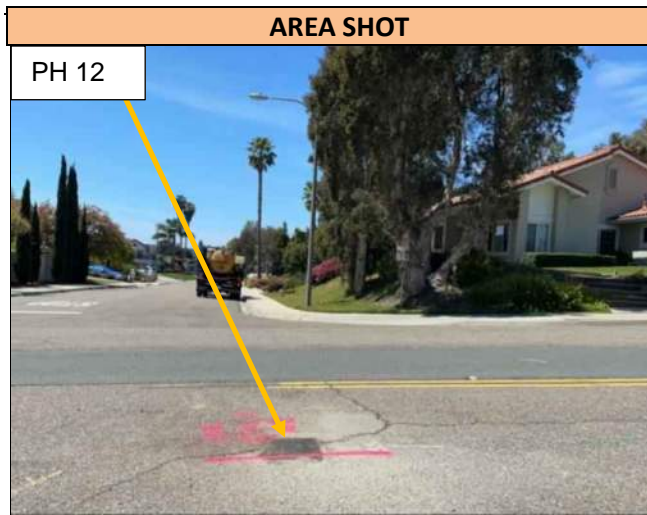
STANDBY REQUIRED: N/A

IMMEDIATE SURFACE REPAIR: Aquaphalt

PERMANENT SURFACE REPAIR: Aquaphalt

UTILITY MARKED BY USA:	Yes	TRACER WIRE FOUND:	No
MARKOUT LOCATION CORRECT:	Yes	PIPE COVER MATERIAL:	Sand
UTILITY SHOWN ON PLAN:	Yes	OVERBURDEN MATERIAL:	Sand

COMMENT:



Pothole 12 is located in the intersection of N Willowspring Dr and Woodmoss Ct/Summerhill Dr. Please refer to Location Map 3 for the approximate location of Pothole 12. The photo above was taken in front of Pothole 12 facing SW.



A downhole view of the 8.0 inch wide PVC Sanitary Sewer utility found in Pothole 12, at the depth of 101.0 inches T/P. Utility runs in a NNW/SSE direction at the Pothole location and was found directly on markout.



Manhole Dip Data Sheet(s)



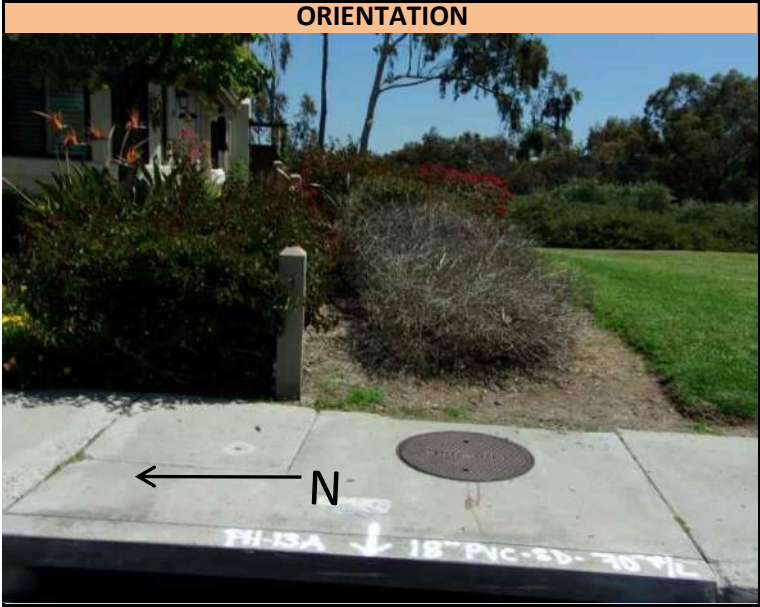
DIP DATA SHEET

Crew Members:	Gabe Mercado
Job Name:	Potholing Proposal- RW Pipeline Extensioin Project
Location (Street Name):	Summerhill Drive
Flagger:	N/A

AIR X Job #:	X230037
Date:	4/11/2023
DIP #	13A

Service Type (Sanitary, Storm, Gas, Water, Electric, Etc):	Storm Drain
Barrel Type & Diameter:	18" PVC

	MEASURE DOWN / FLOWLINE	COMMENTS
A MH 1	70" FL	E→W
B		
C		
D		
F		
G		





DIP DATA SHEET

Crew Members: Gabe Mercado

Job Name: Potholing Proposal- RW Pipeline Extensioin Project

Location (Street Name): Summerhill Drive

Flagger: N/A

AIRX Job #: X230037

Date: 4/11/2023

DIP # 13B

Service Type (Sanitary,
Storm, Gas, Water, Electric,
Etc): Storm Drain

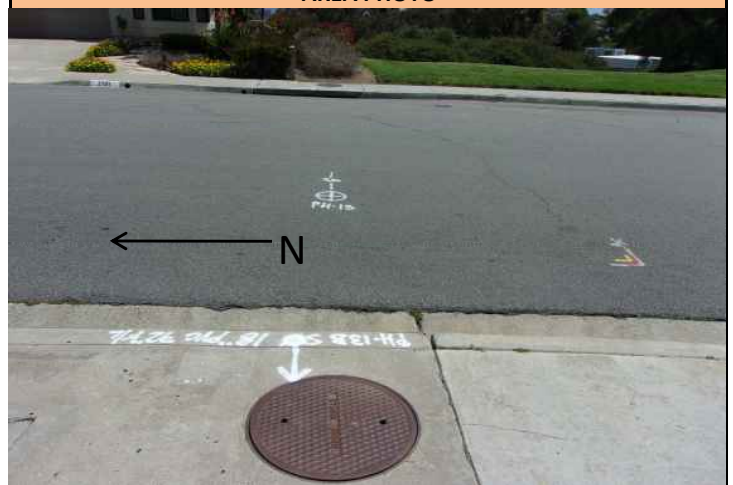
Barrel Type & Diameter: 18" PVC

	MEASURE DOWN / FLOWLINE	COMMENTS
A MH 1	72" FL	E→W
B		
C		
D		
F		
G		

ORIENTATION



AREA PHOTO



DOWNHOLE VIEW





Permit(s)

INVOICE (00066620)
FOR CITY OF ENCINITAS

BILLING CONTACT

Clinton Boogaard

785 E Mission Rd, 100

San Marcos, Ca 92069



INVOICE NUMBER	INVOICE DATE	INVOICE DUE DATE	INVOICE STATUS	INVOICE DESCRIPTION
00066620	02/24/2023	03/26/2023	Due	NONE

REFERENCE NUMBER	FEE NAME	TOTAL
PROW-024225-2023	Eng PROW Construction Major	\$1,112.00
	Eng Traffic Control	\$338.00
	Eng Traffic Control	\$338.00
	Eng Traffic Control	\$338.00
	Eng Traffic Control	\$338.00
202 Village Run E Encinitas, CA 92024		SUB TOTAL \$2,464.00

REMITTANCE INFORMATION
City of Encinitas 505 S. Vulcan Ave Encinitas, CA 92024

TOTAL **\$2,464.00**



City of Encinitas

Order Number: 48349

Monday, March 6, 2023

- Your payment was successfully processed.

Invoice #	Item Description	Quantity	Unit Price	Total Price
00066620	NONE	1	\$2,464.00	\$2,464.00
			Item Total:	\$2,464.00
			Order Total:	\$2,464.00

Continue to site (<https://portal.encinitasca.gov/CustomerSelfService#/paymentsuccess?invoiceNumber=48349>)



City of
ENCINITAS

Development Services Department
505 S. Vulcan Avenue, Encinitas, CA 92024
(760) 633-2706 developmenteng@encinitasca.gov

PROW-024225-2023

CONSTRUCTION PERMIT

Type: PUBLIC RIGHT-OF-WAY Work Class: CONSTRUCTION

This permit is not transferable from person to person or place to place

LOCATION: 202 Village Run E

ISSUED: 03/10/2023

EXPIRES: 10/24/2023

Description of Work: Approx. 7 12"x12" Potholes to locate existing underground utilities (Olivenhain MWD Project #D800019). Contractor to maintain traffic control per approved traffic control plan at all times. Trench repair per City of Encinitas trench backfill and resurfacing standards. Prior to starting any work arrange for pre construction meeting by calling (760) 633-2781 at least 72 hours in advance.

* All referenced conditions attached to this permit apply.

A pre-construction meeting is required prior to commencement of any work under this permit.

Contact engineering inspector at least 48 hours prior to commencement of work to schedule a pre-construction meeting. Additional inspections may be scheduled in a similar fashion during the course of construction. Please note that issuance of this permit implies consent of the property owner to allow entry onto subject property by the City or its consultants for the purpose of inspection under this permit.

FEE SUMMARY:

Fee Name:	Eng Traffic Control	Fee Amount:	\$338.00
	Eng Traffic Control		\$338.00
	Eng Traffic Control		\$338.00
	Eng Traffic Control		\$338.00
	Eng PROW Construction Major		\$1,112.00
		TOTAL:	\$2,464.00

APPLICANT

Clinton Boogaard
785 E Mission Rd 100
San Marcos, CA 92069
CSS Email: cboogaard@airxus.com

CONTRACTOR

Clinton Boogaard
785 E Mission Rd 100
San Marcos, CA 92069
Email: cboogaard@airxus.com

PROPERTY OWNER

Clinton Boogaard
785 E Mission Rd 100
San Marcos, CA 92069

CONSTRUCTION PERMIT STANDARD CONDITIONS

Work covered by an Engineering permit shall commence within 90 days of permit issuance or the permit shall become invalid.

Engineering permits expire following 90 days of inactivity on the work covered by the permit; refer to Municipal Code Section 23.24.240 for further information. Permits may expire earlier due to contractor insurance expirations or other City requirements

* This permit is issued to authorize construction within the public Right-of-Way or easement and is limited to the scope of work above/below. The contractor and subcontractors shall maintain \$1M General Commercial Liability insurance at all times. This permit, the approved project plans, and any other applicable documents shall be available onsite for presentation to City officials, inspectors, and other concerns parties. Contractor to arrange for a pre-construction meeting with the assigned Engineering Inspector at least 48 hour prior to the planned start of work. A separate Traffic Control Permit may be required for any work impacting the traveled way of a street.

RIGHT-OF-WAY CONSTRUCTION PERMIT

STANDARD CONDITIONS

1. No access or work shall be performed within the City right-of-way without the full knowledge of the assigned City Inspector who shall be given not less than 48 hours advance notice of the initiation of permitted use at (760) 633-2796 or 633-2797, or as stated on the permit.
2. At least 48 hours prior to starting work, **Underground Service Alert (USA)** shall be notified for location of underground utilities at 1-800-422-4133. The proposed dig area must be marked in white paint prior to contacting (USA).
3. All work covered by this permit shall be performed by a contractor possessing a valid California contractor's license of the appropriate class.
4. All traffic control within the construction area shall be subject to an approved traffic control plan and shall be flagged and barricaded to the satisfaction of the City Inspector in compliance with the "Work Area Traffic Control Handbook", latest edition published by Building News, Inc. In the event that the Inspector determines proper traffic control is not in place, all work shall cease and permittee authorizes the City Engineer or a duly authorized representative to order, on the rental basis, such traffic control devices as shall be necessary and proper to protect the public safety and further agrees to pay any and all costs and charges that the City may incur in providing said traffic control.
5. Applicant agrees that it shall be his responsibility to provide the contractor, subcontractor, or any other agent responsible for construction of permitted works within the City right-of-way, with a copy of the permit including these standard conditions and a complete set of approved plans. The permit, plans and Work Area Traffic Control Handbook shall be available at the permit site whenever work is in progress.
6. Permitted works shall be constructed in accordance with the City specifications and approved plans, subject to inspection and approval by the City Engineer or a duly authorized representative. Certification for all materials and work, including compaction tests, shall be furnished by the applicant upon request by the City Inspector. Payment for any compaction testing shall be by the permittee. Certification shall be made by a certified testing agency or firm acceptable to the City.
7. No work within the public right-of-way is permitted on Saturdays, Sundays, or holidays. Any deviation from the work schedule presented in these conditions must receive prior, written approval of the City Engineer or a duly authorized representative. Any questions regarding days City Hall is closed, call (760) 633-2770.
8. No work on any public roadway, excluding prime arterials and major roads, shall be started before 7:30 A.M. or continue after 5:00 P.M. on weekdays.
9. No work shall begin before 9:00 A.M. or continue after 3:00 P.M. on prime arterials and other major roads, unless authorized on the permit by the City Engineer. All work on prime arterials and other major roads, all as shown on the Circulation Element of the City's General Plan, will require a traffic control plan acceptable to the City Traffic Engineer whose office can be contacted at (760) 633-2704.
10. The roadway shall be clean and free of all obstructions and completely open to traffic at the end of each working day. (No later than 3:00 P.M. on major roads, defined herein.)
11. Two-way traffic shall be maintained at all times. Minimum travel lane width for motor vehicles shall be 12 feet. If street width prevents maintaining two-way traffic, permittee and City Engineer shall agree on an adequate traffic control plan prior to starting work, which shall include the use of a full-time flagman.
12. All excavations in existing pavement shall be saw cut to neat lines and AC replacement shall be made to the satisfaction of the City Engineer or a duly authorized representative.
13. Open trench must be backfilled and capped with at least 2" of cold mix asphalt or metal plated according to City specifications during non-working hours. Metal plates are required to have cold mix asphalt ramps on all (4) sides and must be maintained. Refer to the City's Standard Drawing.
14. Native material may be used upon approval of the City Engineer or a duly authorized representative. Refer to the City's Standard Drawing for Trench Backfill and Resurfacing, Appendix 2.4 of the Engineering Design Manual.
15. Tunneling beneath curb and gutter is not permitted, unless otherwise authorized by the City Engineer. Curb, gutter, and sidewalk requiring removal shall be replaced joint to joint for a neat appearance.
16. Two sack sand-cement slurry mix shall be required as backfill on all lateral excavations within prime arterials, major roads and collectors as well as all locations where the inspector deems the native material to be unacceptable for use as backfill.
17. Care shall be exercised to prevent water, soil and debris from depositing in gutters, streets and storm drains. No washing out of mixers or concrete pumps will be allowed on City streets. Violations will be referred for NPDES enforcement and penalties.
18. Any roadway striping damaged or removed during the operations of this permit shall be matched and replaced by the applicant using the latest edition of State Department of Transportation specifications for paint, all to the satisfaction of the City Engineer or a duly authorized representative. Thermoplastic legends and crosswalk markings shall be replaced with thermoplastic, not paint, to the satisfaction of the City Engineer.
19. All concrete work shall be transit mixed and conform to the Standard Specifications for Public Works Construction, Latest Edition, Section 201, and be approved by the City Engineer or a duly authorized representative.
20. Trenching for installations across any intersecting roadway open to traffic shall be progressive. Not more than half of the

otherwise authorized in writing by the City Engineer. The shallowest portion of any pipeline or other facility shall be installed not less than thirty (30) inches below the roadway surface.

21(a). Where street dimensions and State Department of Health Services regulations allow, all pipes and conduits laid parallel to existing utilities shall maintain a minimum separation of three (3) feet measured from the nearest edge of the facility. Any deviation from this requirement is not allowed unless approved by the City Engineer or a duly authorized representative.

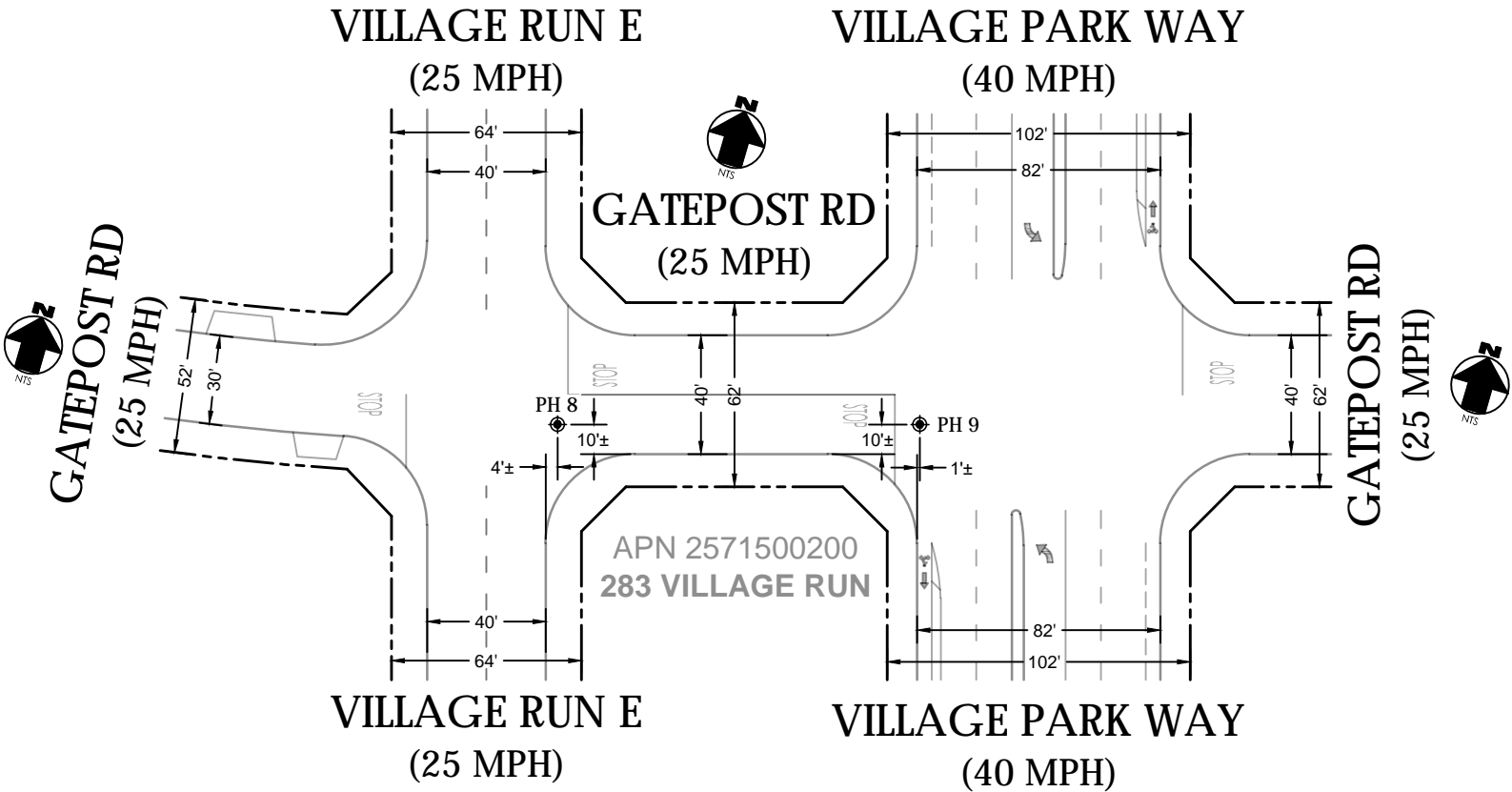
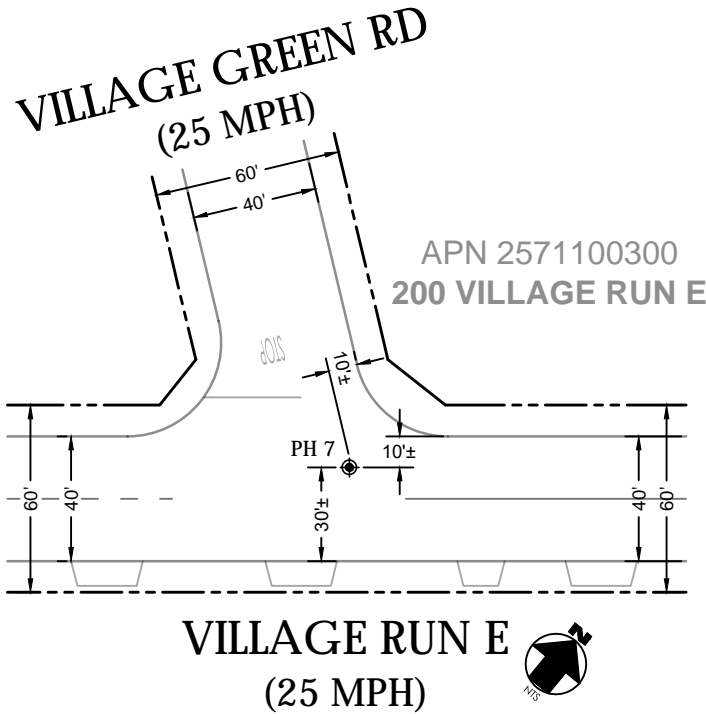
22. All excavated material shall be cast away from the improved portion of the highway. After the work has been completed, all excess material, including trench spoils, shall be removed from the right-of-way. The roadway shall be left in neat and orderly condition.
23. All roadside drainage ditches shall be restored to true grades and the intake and outlet ends at all culverts shall be left free from all excess materials and debris.
24. All approaches to private driveways and intersecting roads and streets shall be kept open to traffic at all times, unless otherwise approved by the City Engineer.
25. Clay and earth which adhere to the paved surface of the roadway shall be removed by hand scraping, washing and sweeping, or by any other method which will leave a clean non-skid surface without impairing, damaging, or loosening the surface.
26. Permittee shall comply with any and all directives issued by the City Engineer or a duly authorized representative in order to prevent dust or other materials from becoming a nuisance or annoyance.
27. Temporary patching of trench is required on lateral cuts in surfaced streets immediately after backfilling. After completion of the refilling and compacting of the backfill material in the excavation, all as specified in the Standard Drawing dated September 30, 1996, and the removal of obstruction(s), the permittee shall promptly replace with temporary or permanent patching material, or repair any portion of the highway surface removed or damaged by the excavation, obstruction, or construction operations, all to the satisfaction of the City Engineer, and as specified elsewhere herein. The City Engineer may, at his option, elect to do the surfacing or repairing himself; in such case, the permittee shall bear the cost of such work. Temporary patching material may be left in place for up to 30 days, but must be continually maintained.
28. Where the pavement, except Portland Concrete Cement pavement, or other type of surface has been removed by others, the permittee shall replace it with a standard repair of four (4) inches AC over approved backfill or repair section shall be one (1) inch AC greater than existing structural section, whichever is greater. Refer to the most current Standard Drawing. Repairs to PCC pavement shall be made pursuant to the specifications of the assigned Engineering Inspector.
29. If, after the refilling of an excavation, the permittee fails or refuses to resurface or repair that portion of the surface of the roadway damaged by him, or if the City Engineer has elected to do such resurfacing or repairing, the City Engineer shall cause the repair to occur; and the permittee shall be charged with the cost thereof computed by the City Engineer.
30. When shoring is required, an engineered detail drawing will be required for approval by the City Engineer. All OSHA regulations shall be met.
31. All directional bores shall be subject to approval of the method in the field by the assigned Engineering Inspector, acting as the duly authorized agent of the City Engineer. A thorough examination of the subsurface conditions is a prerequisite. The applicant shall identify the bore method on the permit application either as auger, hammer, hydraulic, etc., and show the bore pits. Grouting and intermediate bore pits may be required.
32. All subsurface utilities shall be accurately shown on the applicant's site plan for those excavations in excess of 250 linear feet, traversing signalized intersections, crossing interconnect wires, or otherwise where the City Engineer has a special concern.
33. Pavement cuts in streets rehabilitated or newly constructed within the past two years shall be categorically denied.
34. This permit may be immediately revoked for reasons in the best interest of the City, for violation of permit conditions, or for the creation of a nuisance, all upon notice given by the City Engineer or a authorized representative. In the event of such revocation, applicant shall immediately cease all operations and restore City right-of-way as directed by the City Engineer or a duly authorized representative. After notification, City may take full possession of the area. Applicant shall pay to the City any and all costs involved, in the event the City has to restore City property or remove any items installed by the applicant.
35. This permit may become void in the event the use permitted is not started within sixty (60) calendar days from the date of issuance or in the event the permitted use is abandoned for a period exceeding sixty (60) calendar days after construction has begun. In such event, it shall be necessary to obtain a new permit and pay additional fees. Upon commencement of work, all operations, including cleanup and restoration of City right-of-way, shall be completed within the time limit specified by the permit.
36. The permittee guarantees to save, indemnify and hold harmless the City of Encinitas and all its agents, officers, employees and officials against all liabilities, judgments, costs and expenses, which may in any manner or form arise in consequence of the issue of this permit or any work performed in consequence thereof.
37. The permittee guarantees all work constructed, installed and effected under this permit for a period of one year from the date of final inspection. Any repairs required during the guarantee period shall be made at the expense of the permittee. At the option of the City Engineer, repair work may be performed by either the permittee or the City.
38. Permittee has read, understands and agrees to comply with all construction permit provisions and standard conditions.

Site Plan:

Site 2:

LEGEND

 APPROXIMATE POTHOLE LOCATION



APPROVED
3/10/2023 , jschade
ENGINEERING DIVISION



JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 2)	
AIRX JOB#: X230037	THOMAS GRID#: 1147-H6
TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas
NOTES: OMWD Project No. D800019	PERMIT #: PROW-024225-2023

DATE: 2/27/2023

DESIGNED:
Otman Mouden

SHEET 1 OF 2

GENERAL NOTES

1.

The contractor is responsible for promptly restoring the road back to satisfactory condition which includes, but is not limited to, paving, striping, markings, signing, and loop detection.
2.

The Agency reserves the right to observe these traffic control plans in operation and to make changes as field conditions warrant.
3.

Trenches shall be back-filled or steel-plated during non-work hours. Steel plates shall have an asphaltic ramp on all edges, or recessed and flush with road surface, securely supported so they won't rock and a sign posted near the plates identifying the contractors name and 24-hour emergency telephone number. All dirt, dust, and debris shall be removed from the street at the end of each day and at the end of the job with all USA markouts. The street shall be kept in a driveable condition at all times.
4.

Any work that creates an undue safety risk or that creates severe congestion may be shut down by the agency.
5.

A copy of all traffic requirements and traffic control plans issued by the Agency must be kept on the job site.
6.

Approval of this plan does not constitute an official Permit. Contact the Agency for information on obtaining a permit.
7.

All travel lanes will typically be a minimum of 12 feet wide, 14 feet if adjacent to closed bike lanes, unless otherwise specifically approved by the Agency.
8.

Flashing arrow boards as required by the Agency.
9.

Warning (W) series signs used in work zones shall be Black on an Orange background.
10.

Cones and pylons shall have white reflectorized sleeves when placed along the centerline or along the outside shoulder.
11.

If parking is allowed in the advance warning area, advance warning signs shall be mounted on high-level devices.
12.

All conflicting signs shall be covered.
13.

The contractor shall post tow-away/no parking signs at least seventy-two (72) hours in advance, with the day of the week, date and work hours noted, and shall bag parking meters (where applicable).*
14.

Place W20-1 and G20-2 signs on all side streets within the construction zone and per TCP-4 as field conditions permit.
15.

Flaggers shall be illuminated at night per the most current CA MUTCD.
16.

All traffic control devices shall conform with the most current CA MUTCD requirements regarding minimum retro-reflectivity, minimum size, minimum mounting heights, and usage. Larger devices sizes may be specified by the Agency.
17.

Traffic control signs shall not be modified in the field with duct tape, electrical tape, or any other non-approved method.
18.

The Contractor shall be responsible for identifying the locations of schools that will be affected in the area of the

- impending work. Due to peak volumes of pedestrian and vehicular traffic associated with schools, the Contractor may be required to delay the start of construction operations until after school is in session and complete construction operations before school is out of session.
19.

Existing stop signs that conflict with temporary traffic control may be bagged, covered and removed by the Contractor per the Agency. Signs that are removed shall be handled with care so that they may be later re-installed or returned to the Agency in good condition as directed by the Agency.
20.

Contractor shall notify all affected emergency services at least one (1) week in advance.
21.

For signalized intersections, the Contractor shall coordinate with Agency to determine how to operate the signal.

WORKING HOURS
9:00AM - 3:30PM

SIGN LEGEND

LANE CLOSED

C30(CA)

BIKE LANE CLOSED

C30(BK)

END ROAD WORK

G20-2

W1-4(R/L)

NARROW LANE

C12(CA)

KEEP RIGHT

R4-7A

W11-1

SHARE THE ROAD

W16-1

ROAD WORK AHEAD

W20-1

OPEN TRENCH

C27(CA)

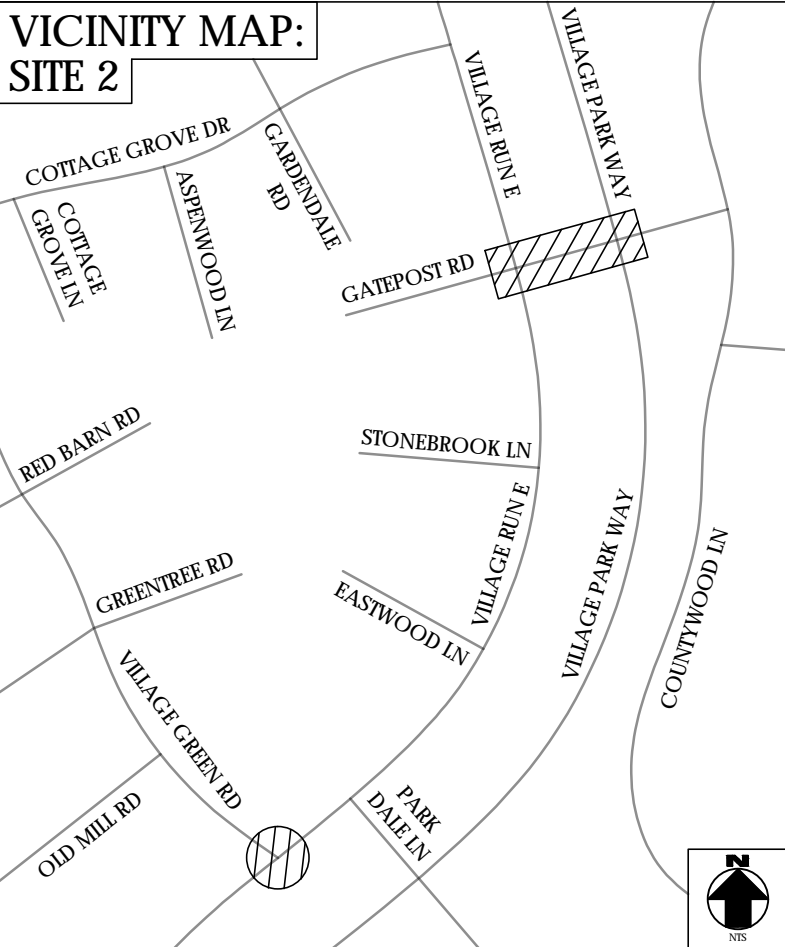
BIKE LANE CLOSED AHEAD

W20-5(BK)

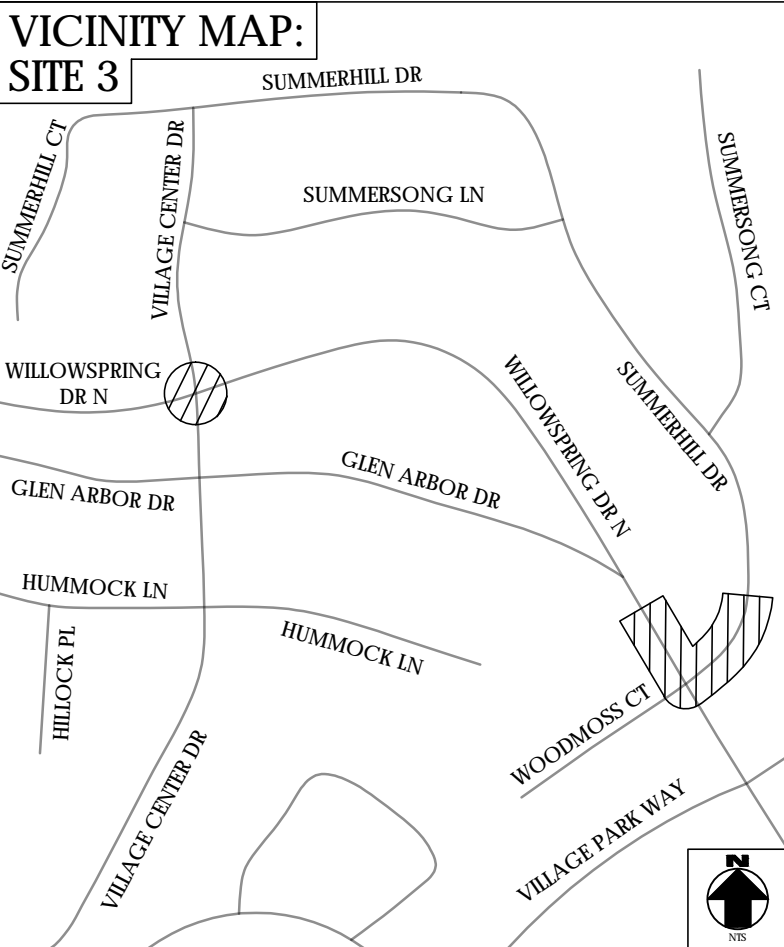
SHOULDER WORK

W21-5

VICINITY MAP:
SITE 2



VICINITY MAP:
SITE 3



APPROACH SPEED (MPH)	MINIMUM DISTANCE (FEET) BETWEEN SIGNS AND FROM LAST SIGN TO TAPER	MINIMUM TAPER LENGTHS (L) (FEET) FOR 12-FOOT LANE			BUFFER LENGTH (FEET)
		L	1/2L	1/3L	
25	100	125	65	45	155
30	250	180	90	60	200
35	250	245	125	85	250
40	350	320	160	110	305
45	500	540	270	180	360
50	500	600	300	200	425
55+	1000	660	330	220	495

APPROVED
03/09/2023 , ahekm
TRAFFIC DIVISION

LEGEND

TRAFFIC CONE / DELINEATOR

TRAFFIC CONTROL SIGN

TRAFFIC CONTROL BARRICADE

APPROXIMATE POTHOLE LOCATION

FLAGGER

SIGNALIZED INTERSECTION

FAS - FLASHING ARROW SIGN

WORK ZONE

BUS STOP

TAPER	MAX CONE SPACING	
	TANGENT	CONFLICT
25	50	12
30	60	15
35	70	17
40	80	20
45	90	22
50	100	25
50	110	27

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Sites 2 & 3)

AIRX JOB#: X230037

TYPE OF WORK: Potholing

NOTES: OMWD Project No. D800019

THOMAS GRID#: 1147-H5, H6

DRAWN FOR: City of Encinitas

PERMIT #: PROW-024225-2023

DATE: 2/27/2023

DESIGNED:
Otman Mouden

SHEET 1 OF 5

JENN HARRIS

President & CEO

785 E Mission Rd, Unit 100

San Marcos, CA 92069

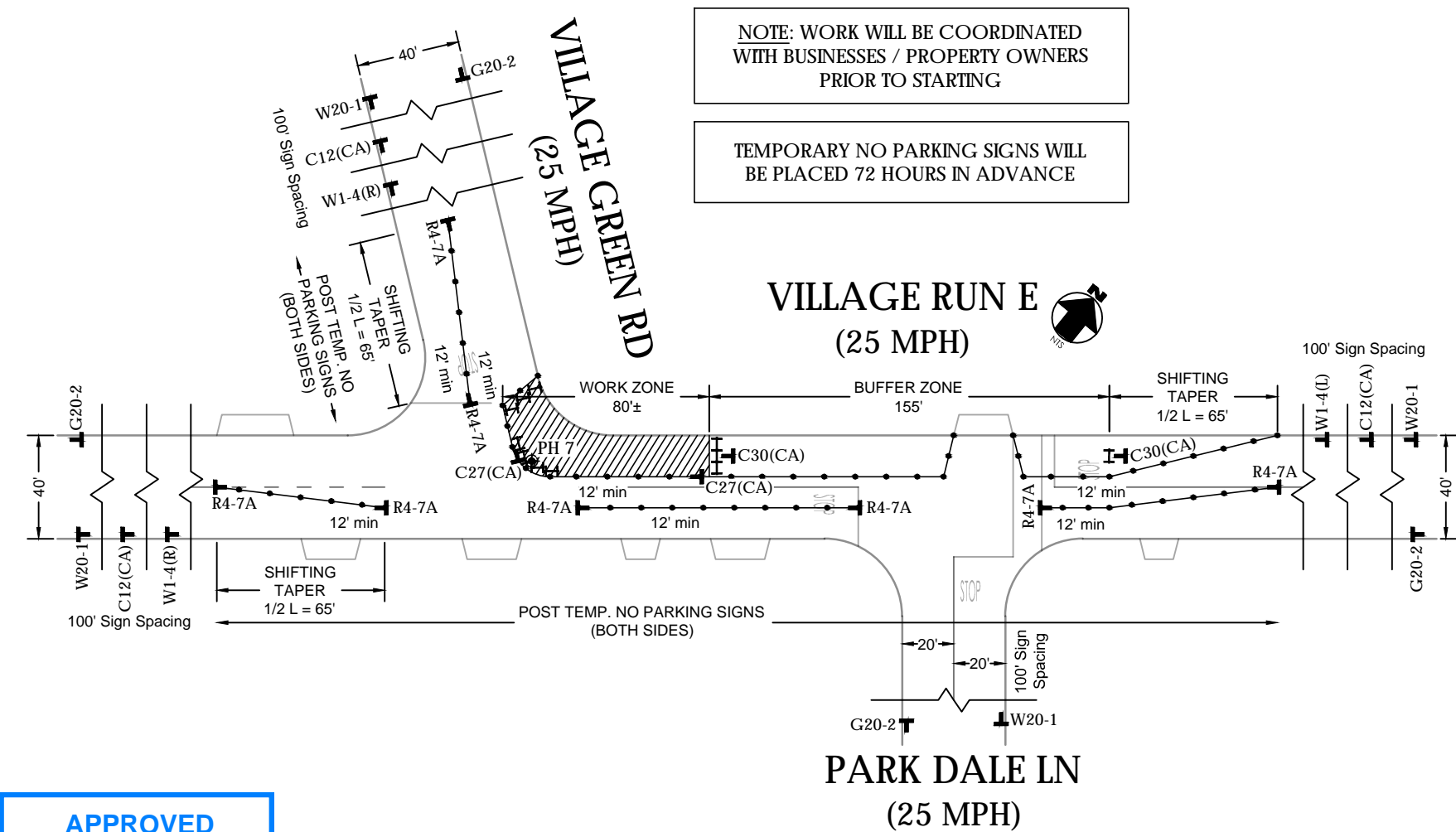
619-710-3124

jharris@airxus.com

www.airxutility.com

Pothole 7:

WORKING HOURS
9:00AM - 3:30PM



APPROVED

03/09/2023 , ahekmat

TRAFFIC DIVISION



JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 2)	
AIRX JOB#: X230037	THOMAS GRID#: 1147-H6
TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas
NOTES: OMWD Project No. D800019	PERMIT #: PROW-024225-2023

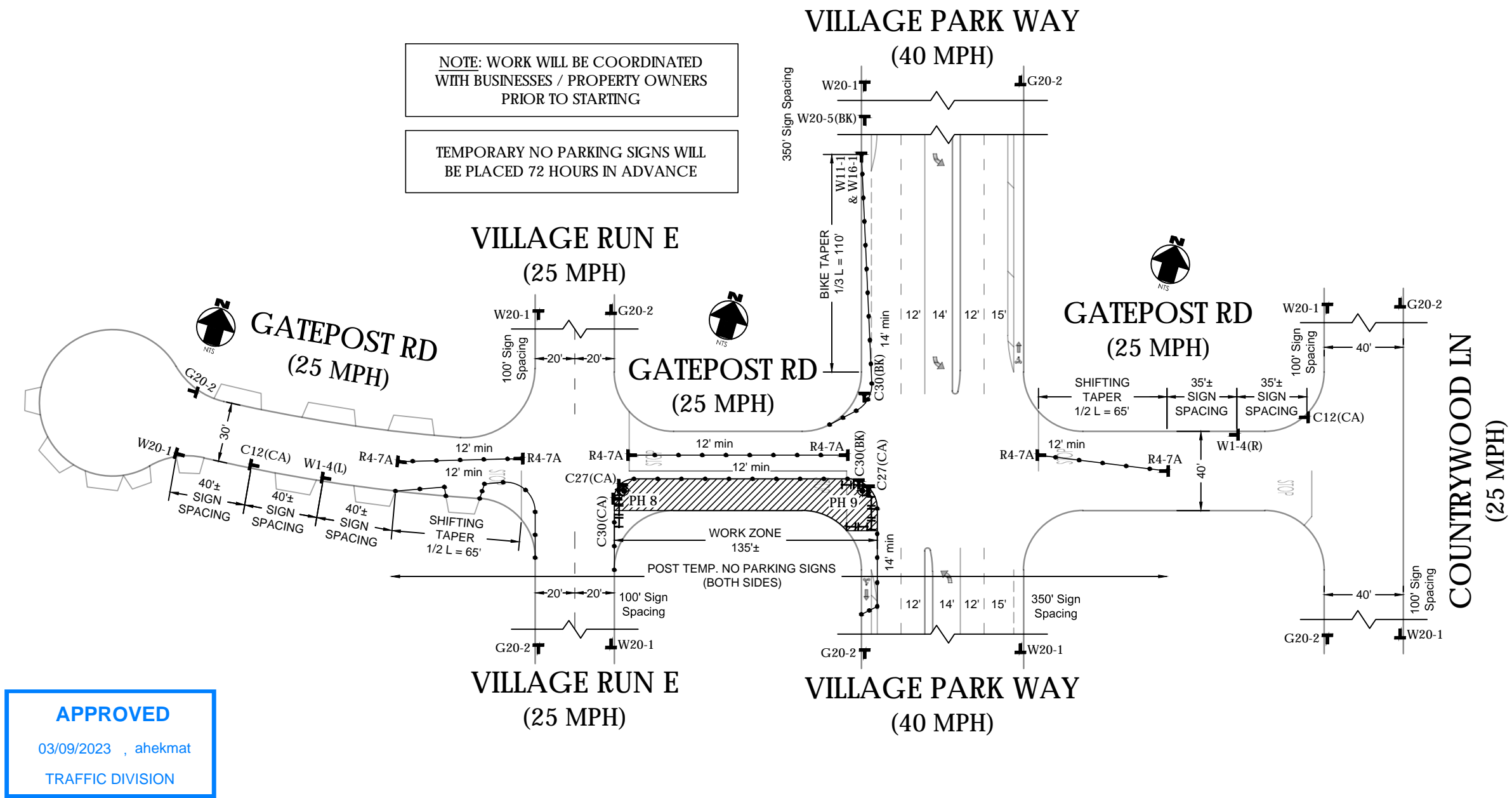
DATE: 2/27/2023

DESIGNED:
Otman Mouden

SHEET 2 OF 5

Potholes 8 & 9:

WORKING HOURS
9:00AM - 3:30PM



PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 2)

AIRX JOB#: X230037

TYPE OF WORK: Potholing

NOTES: OMWD Project No. D800019

THOMAS GRID#: 1147-H6

DRAWN FOR: City of Encinitas

PERMIT #: PROW-024225-2023

DATE: 2/27/2023

DESIGNED:
Otman Mouden

SHEET 3 OF 5

AIRX

JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

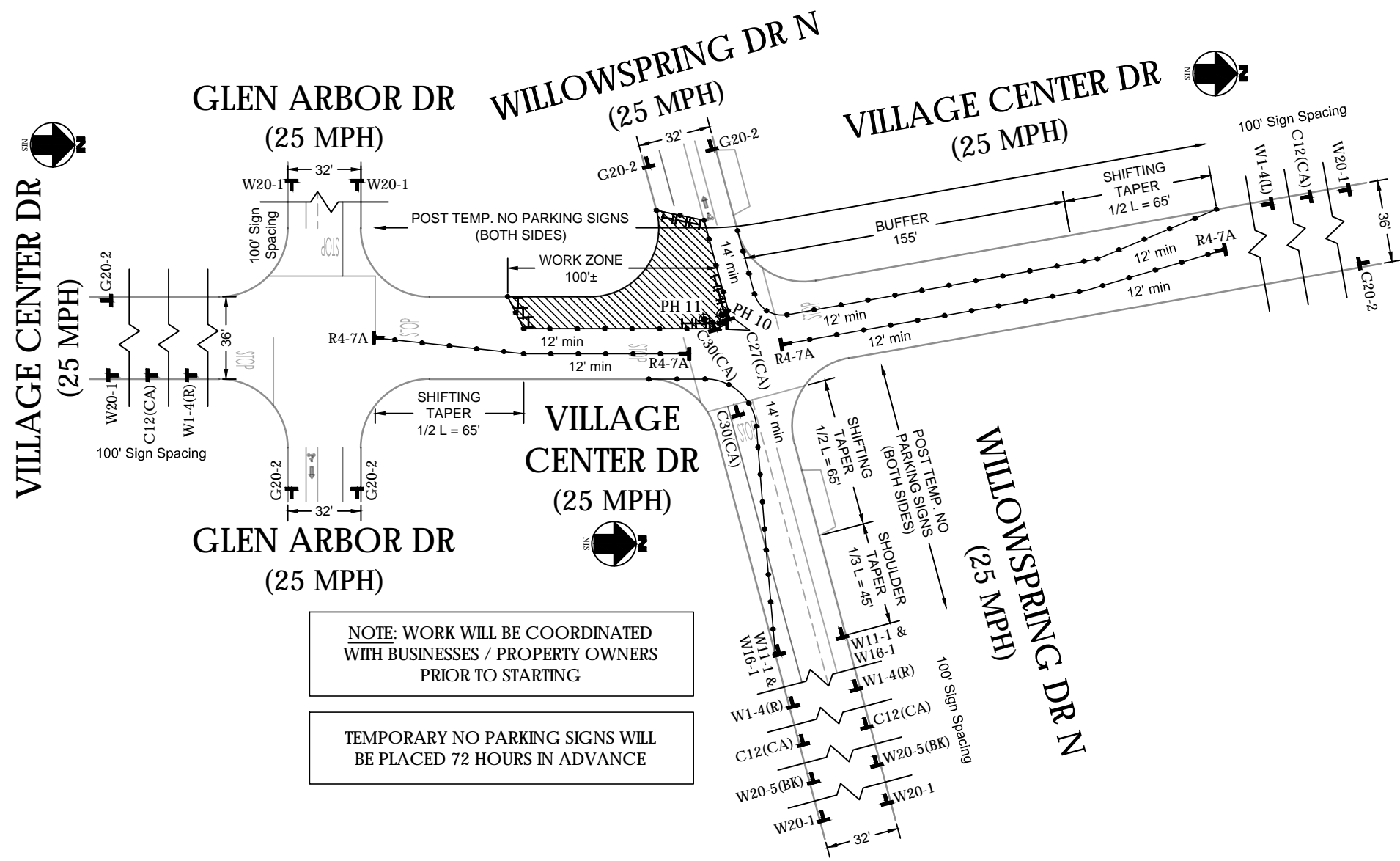
619-710-3124

jharris@airxus.com

www.airxutility.com

Potholes 10 & 11:

WORKING HOURS
9:00AM - 3:30PM



APPROVED
03/09/2023 , ahekm
TRAFFIC DIVISION



JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

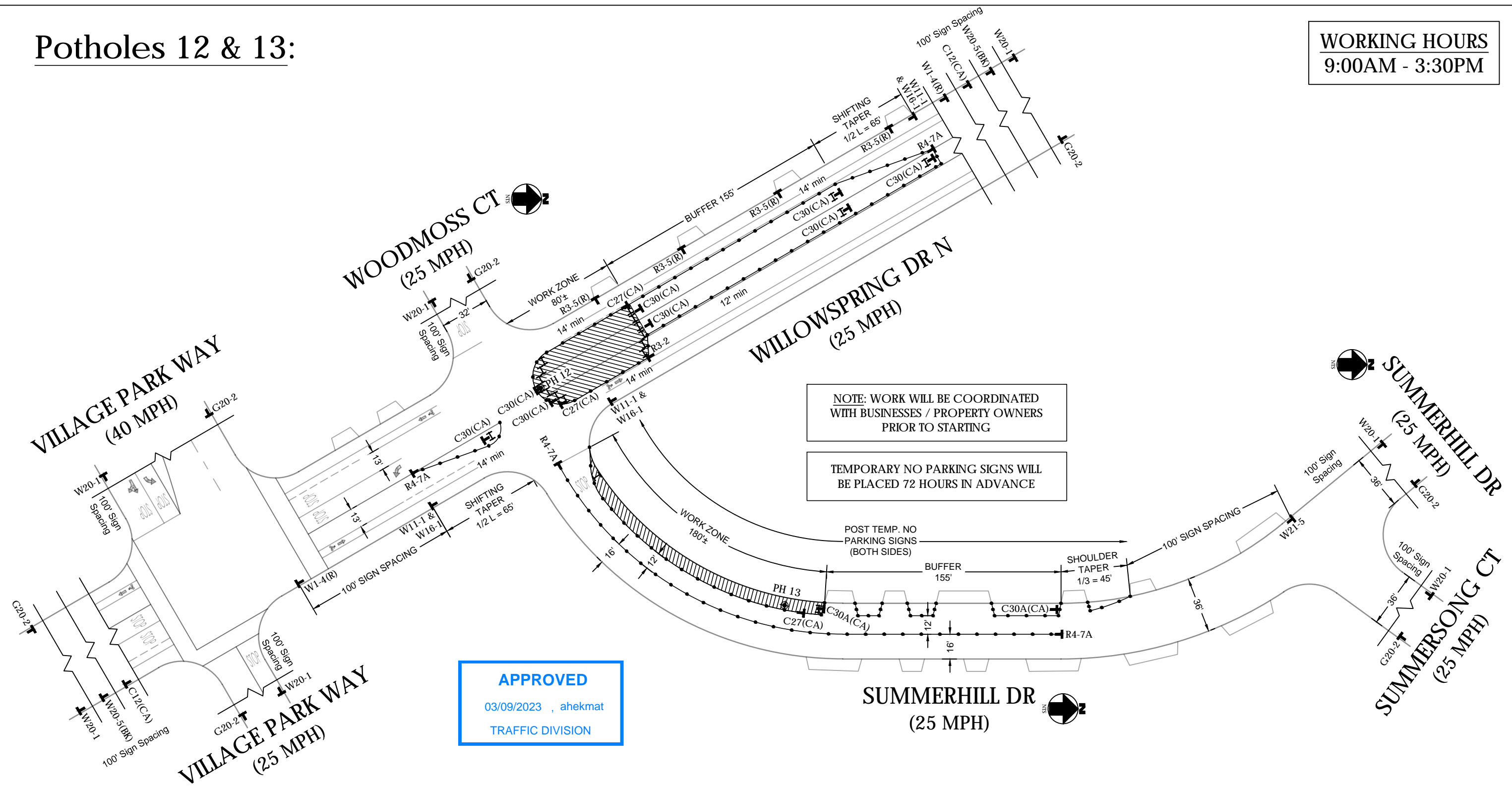
www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 3)	
AIRX JOB#: X230037	THOMAS GRID#: 1147-H5
TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas
NOTES: OMWD Project No. D800019	

DATE: 2/8/2023
DESIGNED BY: Otman Mouden
SHEET 4 OF 5

Potholes 12 & 13:

WORKING HOURS
9:00AM - 3:30PM





JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 3)	
AIRX JOB#: X230037	THOMAS GRID#: 1147-H5
TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas
NOTES: OMWD Project No. D800019	

DATE: 2/8/2023
DESIGNED BY: Otman Mouden
SHEET 5 OF 5



Right of Way Permit

Engineering Inspection Request Line (760) 438-3891

PERMIT #:

ROW2023-0112

DATE:

February 23, 2023

PERMIT TYPE:

LDE-Right of Way

SUB TYPE:

Limited

STATUS:

Issued - Active

PARCEL #:

ROW TYPE:

Minor

APPLIED:

02/14/2023

LOT #:

PROJECT #:

ISSUED:

02/23/2023

DWG #:

EXPIRATION:

09/05/2023

PLAN #:

INSPECTOR:

Scott Workman

SITE ADDRESS

LOCATION: CALLE BARCELONA BETWEEN RANCHO SANTA FE RD AND CALLE ACERO. CROSS: SAN FELIP

PROJECT:

DESCRIPTION: POTHOLING TO LOCATE EXSITING UG UTILITIES PRIOR TO RECYCLED WATER LINE
EXTENSION/INSTALL BY OMWD. [OMWD D800019]

APPLICANT:

AIRX UTILITY SURVEYORS INC
CLINTON BOOGAARD

CONTRACTOR:

AIRX UTILITY SURVEYORS INC
2534 E EL NORTE PKWY, # STE C
ESCONDIDO, CA 92027-1290
(760) 480-2347

PROPERTY OWNER:

FEE DESCRIPTION	TOTAL FEES	PAID AMOUNT	BALANCE DUE
ROW PERMIT – MINOR – CONSTRUCTION	\$451.00	\$451.00	\$0.00
TOTAL PERMIT FEE	\$451.00	\$451.00	\$0.00

This fee statement is subject to change as outlined in the Carlsbad Municipal Code.

This permit may be revoked by the City Engineer if it is deemed that inadequate progress is being made towards the completion of the work or if the work does not meet City Standards. The applicant may be billed for the cost of any of any corrective work that the City must perform.

Permit Release: _____ Date Released: _____ Cash Deposit: _____

YOU MUST CALL UNDERGROUND SERVICE ALERT (1-800-422-4133) TWO WORKING DAYS PRIOR TO WORK.

UNDERGROUND SERVICE ALERT NO. _____. THIS PERMIT IS INVALID WITHOUT THIS NUMBER IF ANY
EXCAVATION OR BORING IS DONE.



To: Permittee **ROW2023-0112**

From: Construction Management & Inspection

NO WORK CAN BEGIN UNTIL YOU HAVE A PRECONSTRUCTION MEETING WITH YOUR INSPECTOR

PRECONSTRUCTION MEETING: An Inspector will contact the permittee and arrange the preconstruction meeting. The permit will be issued at the end of the preconstruction meeting. Again, *no work can take place until after the preconstruction meeting.*

AFTER the Pre-construction Meeting, the following will apply:

All inspection requests will be made by either calling the 24 hour engineering inspection request line at 760-438-3891, emailing the request to CMI@carlsbadca.gov or scanning the QR code at the bottom right corner of this form.

Inspection requests, regardless of their method of transmission, must be received by 2:00 p.m. the business day prior to the requested inspection. Requests made after 2:00 p.m. will be scheduled for two business days later.

Failure to give the following information will result in a cancellation of your inspection request:

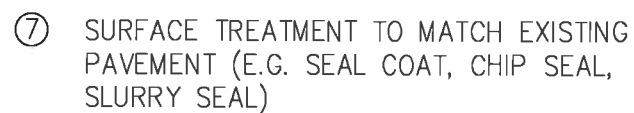
1. ROW Permit #
2. Type of Inspection
3. Date(s) of Inspection
4. Caller's name, company and phone number
5. Inspector's name


The Inspection Division's office hours are 7:00am — 4:00pm, Monday through Friday, excluding holidays. You may speak with your inspector by calling 442-339-2780 during this time or if the inspector is in the field, you may leave a voice mail message and they will return your call during office hours.

If work doesn't begin within 6 months, the permit will expire and will not be extended; a new permit application will be required.

Thank you for your cooperation.






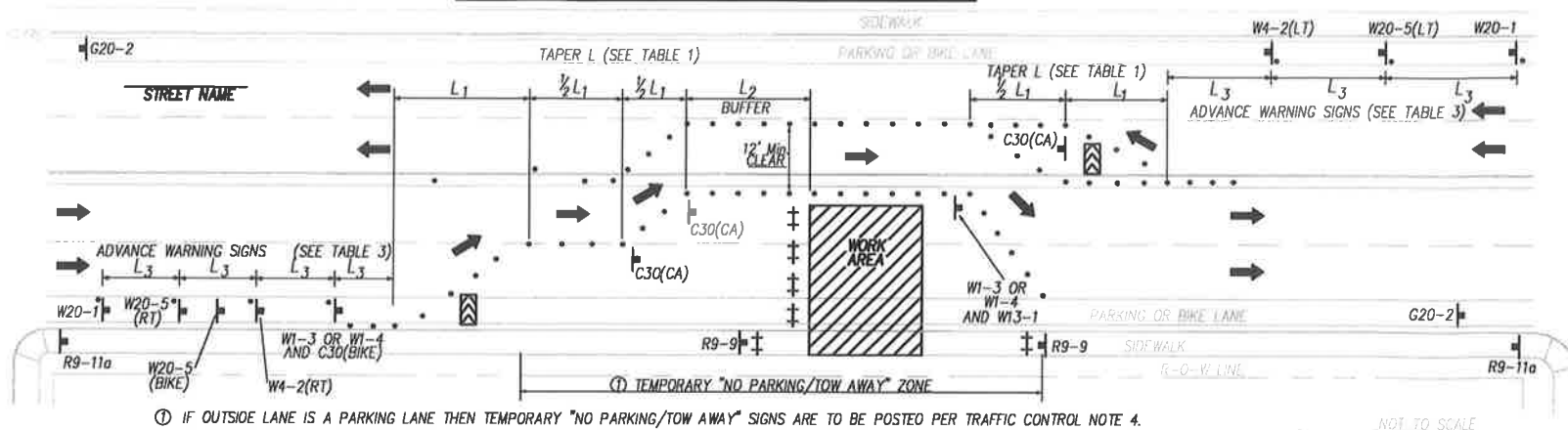
REV.	APPROVED	DATE	CITY OF CARLSBAD	 CITY ENGINEER	4/29/2022 DATE
			EXPLORATORY UTILITY POTHOLE		
			BACKFILL AND RESURFACING		
			(DIAM ≤ 8 IN.)	SUPPLEMENTAL	GS-29
				STANDARD NO.	

NOTES:

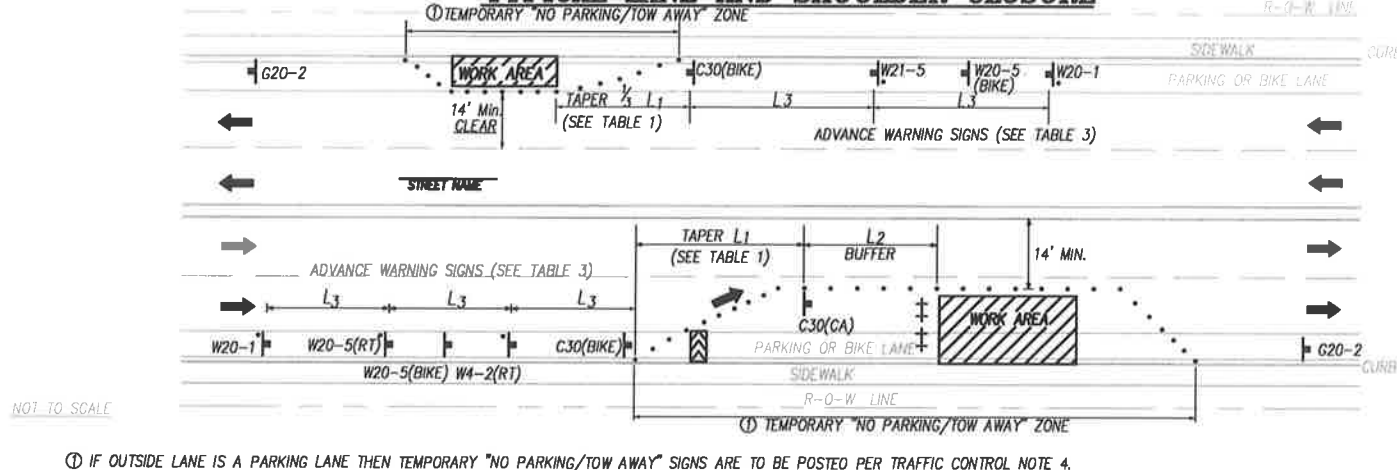
- 1. A TACK COAT OF ASPHALTIC EMULSION OR PAVING ASPHALT SHALL BE APPLIED TO EXISTING A.C. OR P.C.C. CONTACT SURFACES PRIOR TO RESURFACING PER SSPWC SECTION 302-5.
- 2. ASPHALT CONCRETE RESURFACING – BASE COURSE:
 - a. MINIMUM TOTAL A.C. THICKNESS SHALL BE ONE INCH GREATER THAN EXISTING
 - b. AC SHALL BE B-PG 64-10 OR III B2-PG 64-10 OR III B3-PG 64-10 FOR BASE COURSE. IF APPROVED BY THE CITY ENGINEER, 1/2" AC MIXES INCLUDING C1-PG 64-10, C2-PG 64-10, III-C2-PG 64-10 AC MIXES ALSO MAY BE USED FOR BASE COURSE. III C3 AC MIX SHALL NOT BE USED FOR BASE COURSE. PG 70-10 OR MODIFIED ASPHALT BINDER MAY ALSO BE USED WITH ANY OF THE AC MIXES IF APPROVED BY THE CITY ENGINEER.
 - c. BASE COURSE SHALL BE LAID DOWN WITH SELF PROPELLED PAVING MACHINE AND COMPACTED PER SSPWC SECTION 302-5a.
- 3. ASPHALT CONCRETE RESURFACING (FINISH COURSE)
 - a. PROVIDE 3 INCH DEEP GRIND AND A.C. FINISH COURSE C2-PG64-10 OR III-C2-PG64-10 OR III-C3-PG 64-10. PG 70-10 OR MODIFIED ASPHALT BINDER MAY ALSO BE USED WITH ANY OF THE AC MIXES IF APPROVED BY THE CITY ENGINEER.
 - b. FINISH COURSE FOR RESURFACING SHALL BE LAID DOWN USING A SELF-PROPELLED PAVING MACHINE AND COMPACTED.
 - c. SMOOTHNESS AND COMPACTION OF RESURFACING SHALL MEET THE REQUIREMENTS OF SEC 302-5 SSPWC EXCEPT THAT THE SMOOTHNESS SHALL BE DETERMINED OVER THE LENGTH AND WIDTH OF PAVED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS.
- 4.SURFACE TREATMENT TO MATCH EXISTING PAVEMENT SURFACE (SLURRY, CHIP SEAL, ETC.)
- 5.SLOUGHING OF TRENCH UNDER PAVEMENT SHALL BE CAUSE FOR REQUIRING ADDITIONAL PAVEMENT AND BASE.
- 6.MULTIPLE TRENCHES ON THE SAME STREET SEGMENT WILL REQUIRE FULL WIDTH MILL AND OVERLAY TO A DEPTH OF 2 INCHES MINIMUM. MULTIPLE TRENCHES INCLUDES MAIN LINE TRENCH WITH LATERAL TRENCHES OR PARALLEL TRENCHES ON THE SAME STREET SEGMENT.
- 7.ASPHALT CONCRETE FINISH COURSE MATERIAL SHALL MATCH EXISTING SURFACE ASPHALT CONCRETE MATERIAL. IF EXISTING STREET IS SURFACED WITH MODIFIED AC, THEN THE FINAL FINISH COURSE SHALL ALSO BE WITH THE SIMILAR MODIFIED AC. CONVENTIONAL AC MATERIAL MAY BE USED IN THE FINAL FINISH COURSE WITH MINIMUM TOTAL AC THICKNESS ONE INCH GREATER THAN THE EXISTING AC FINISH COURSE IF REQUESTED AND APPROVED BY THE CITY ENGINEER.

REV.	APPROVED	DATE	CITY OF CARLSBAD	
			NOTES FOR ASPHALT CONCRETE	 4/29/2022
			TRENCH RESURFACING	CITY ENGINEER DATE
				SUPPLEMENTAL STANDARD NO. GS-28

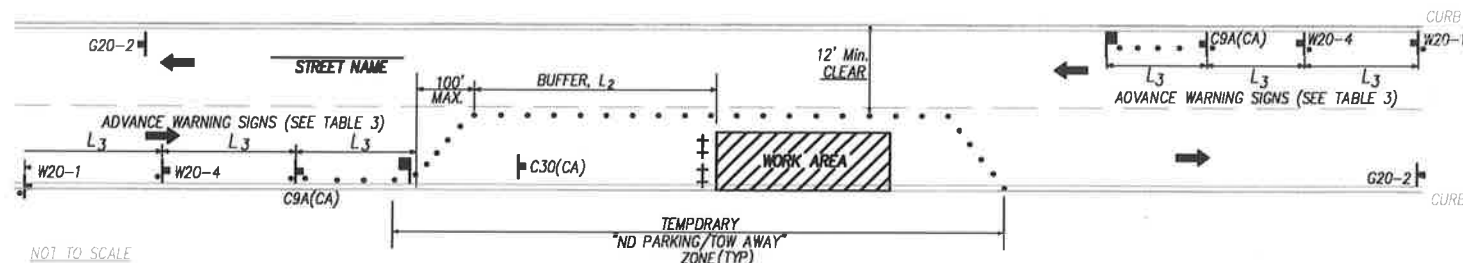
TYPICAL CLOSING OF HALF ROADWAY



TYPICAL LANE AND SHOULDER CLOSURE



TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



TYPICAL SIDEWALK CLOSURE



LEGEND

- ➔ DIRECTION OF TRAVEL
- ⊥ PORTABLE SIGN
- TRAFFIC CONE/DELINEATOR
- ⊕ TRAFFIC BARREL
- ⊕ TYPE II BARRICADE
- ⊕ FLAGGER
- Y FLAG TREE
- ⊕ FLASHING ARROW SIGN
- ⊕ PORTABLE FLASHING BEACON (SEE SIGNAGE NOTE #3)
- ⊕ K-RAIL (TYPE 50 CONCRETE BARRIER)
- ⊕ CHANGEABLE MESSAGE SIGN

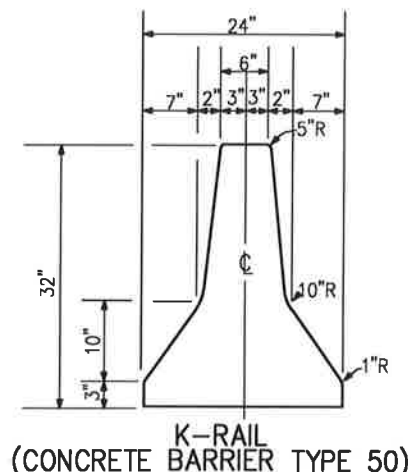


TABLE 1: TAPER LENGTHS, L₁

APPROACH SPEED (M.P.H.)	MINIMUM TAPER LENGTH L ₁	MINIMUM NUMBER OF CONES FOR TAPER	MAXIMUM SPACING OF CONES ALONG TAPER (FEET) ±	MAXIMUM SPACING OF CONES ALONG TANGENT (FEET) ±
25	125	6	25	50
30	180	7	30	60
35	245	8	35	70
40	320	9	40	80
45	540	13	45	90
50	600	13	50	100
55	660	13	55	110
60	720	13	60	120

* BASED ON 12 FDDT WIDE LANE. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

TABLE 3: SIGN SPACING, L₃

APPROACH SPEED (M.P.H.)	MINIMUM DISTANCE BETWEEN SIGNS*	FROM LAST SIGN TO TAPER
LESS THAN 25	100'	100'
25 TO 40	350'	350'
GREATER THAN 40	500'	500'

* EXACT SPACING MAY VARY DUE TO FIELD CONDITIONS

TABLE 2: BUFFER SPACE, L₂

APPROACH SPEED (M.P.H.)	LONGITUDINAL BUFFER SPACE L ₂ (FEET) ±*
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570

* SEE MUTCD TABLE 6E-101 FOR SUSTAINED DOWNGRADES STEEPER THAN 3% AND LONGER THAN 1 MILE.

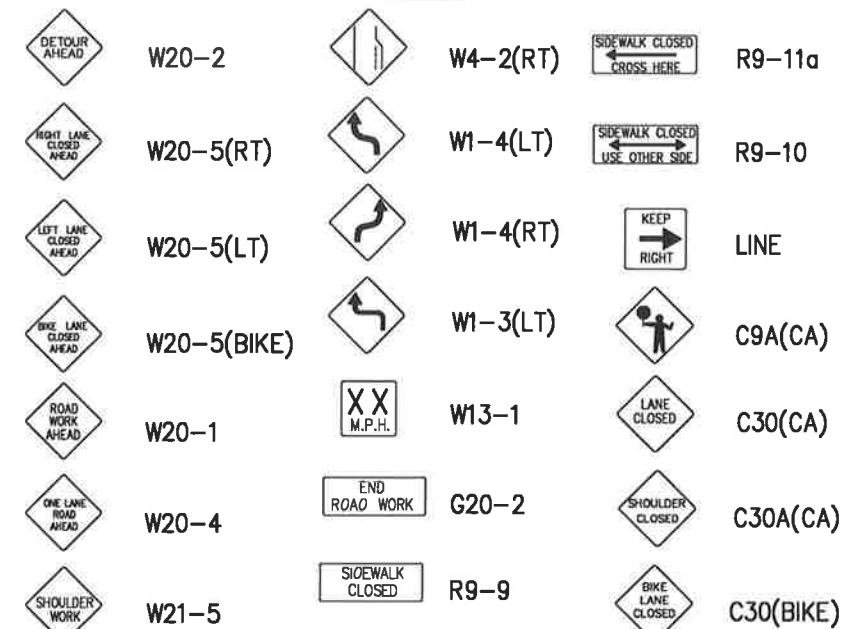
TRAFFIC CONTROL NOTES

- WORK HOURS TO BE RESTRICTED TO 8:30am TO 3:30pm UNLESS APPROVED OTHERWISE.
- PEDESTRIAN CONTROLS WILL BE PROVIDED AS SHOWN.
- PEDESTRIANS SHALL BE PROTECTED FROM ENTERING THE EXCAVATION BY PHYSICAL BARRIERS DESIGNED, INSTALLED, AND MAINTAINED TO THE SATISFACTION OF THE CITY ENGINEER.
- TEMPORARY "NO PARKING/TOW AWAY" SIGNS STATING THE DATE AND TIME OF PROHIBITION WILL BE POSTED 72 HOURS PRIOR TO COMMENCING WORK. CALL CARLSBAD POLICE DISPATCH AT (760)931-2197 TO VALIDATE POSTING.
- ACCESS WILL BE MAINTAINED TO ALL DRIVEWAYS UNLESS OTHER ARRANGEMENTS ARE MADE.
- TRENCHES MUST BE BACKFILLED OR PLATED DURING NON-WORKING HOURS UNLESS K-RAIL BARRIERS ARE PROVIDED. K-RAIL IS APPROVED ONLY WHEN SPECIFICALLY SHOWN ON THE APPROVED TRAFFIC CONTROL PLAN. PLATES SHALL HAVE CLEATS AND COLD MIX AT THE EDGES AS APPROVED BY THE CITY INSPECTOR.
- STRIPING WILL BE REPLACED BY THE CONTRACTOR WITHIN 24 HOURS, IF REMOVED OR DAMAGED.
- WORK THAT DISTURBS NORMAL TRAFFIC SIGNAL TIMING OPERATIONS SHALL BE COORDINATED WITH THE CITY OF CARLSBAD. CONTACT STREETS DIVISION AT (760) 434-2937 72 HOURS PRIOR TO COMMENCING WORK.
- TRAFFIC SIGNALS SHALL REMAIN FULLY ACTUATED AT ALL TIMES, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER OR HIS REPRESENTATIVE. IF TRAFFIC SIGNAL LOOP DETECTORS ARE RENDERED INOPERATIVE BY THE PROPOSED WORK, VIDEO DETECTION SHALL BE USED TO PROVIDE ACTUATION.
- FLAGGERS SHALL BE EQUIPPED WITH A WHITE HARD HAT, AN ORANGE VEST, AND A "STOP/SLOW" PADDLE ON A 5 FOOT STAFF.
- ALL TRAFFIC CONTROL DEVICES MUST BE MAINTAINED 24 HOURS A DAY, 7 DAYS PER WEEK, BY THE CONTRACTOR.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST VERSION).
- TRAFFIC CONTROL PLAN SUBMITTALS ARE REQUIRED FOR EACH PHASE OF THE WORK IN THE DETAIL, FORMAT, AND QUALITY ILLUSTRATED ON THIS SHEET.
- ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM VIEW OR COVERED WHEN NOT IN USE.
- THE CITY ENGINEER OR HIS REPRESENTATIVE HAS THE AUTHORITY TO INITIATE FIELD CHANGES TO INSURE PUBLIC SAFETY.
- ALL WORK AFFECTING BUS STOPS SHALL BE COORDINATED WITH NORTH COUNTY TRANSIT DISTRICT. CONTRACTOR SHALL CALL NCTD AT (760) 967-2828 AT LEAST 72 HOURS IN ADVANCE OF STARTING WORK.
- CHANGEABLE MESSAGE SIGNS SHALL BE USED IN ADVANCE OF TRAFFIC CONTROL ON MAJOR AND PRIME ARTERIALS, UNLESS OTHERWISE APPROVED. THESE SIGNS SHALL BE SHOWN ON THE TRAFFIC CONTROL PLAN.

SIGNAGE NOTES

- AT LEAST ONE PERSON SHALL BE ASSIGNED TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON ALL NIGHT LANE CLOSURES.
- ALL WARNING SIGNS FOR NIGHT LANE CLOSURES SHALL BE ILLUMINATED OR REFLECTORIZED AS SPECIFIED IN THE SPECIFICATIONS.
- ALL ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES OF ALL MAJOR AND PRIME ARTERIALS. FLASHING BEACONS SHALL BE USED DURING NIGHT LANE CLOSURES.
- A G20-2 "END ROAD WORK" SIGN SHALL BE PLACED AT THE END OF THE LANE CLOSURE UNLESS THE END OF THE WORK AREA IS OBVIOUS, OR ENDS WITHIN A LARGER PROJECT LIMITS.
- ALL CONES USED FOR NIGHT LANE CLOSURES SHALL BE ILLUMINATED TRAFFIC CONES OR FITTED WITH 13" REFLECTIVE SLEEVES.
- FLASHING ARROW SIGNS SHALL BE USED PER THE CALIFORNIA MUTCD. SILENT TYPE SHALL BE USED IN RESIDENTIAL AREAS.
- THE MAXIMUM SPACING BETWEEN CONES IN A TAPER OR A TANGENT SHALL BE APPROXIMATELY AS SHOWN IN TABLE 1.
- ADDITIONAL ADVANCE FLAGGERS SHALL BE REQUIRED WHEN TRAFFIC QUEUES DEVELOP. FLAGGER STATIONS FOR WORK AT NIGHT SHALL BE ILLUMINATED AS NOTED IN SECTION 6G.20 OF THE MUTCD.
- PLACE C30 (CA) "LANE CLOSED" SIGN AT 500'-1000' INTERVALS THROUGHOUT EXTENDED WORK AREAS.
- ALL REQUIRED SIGNS THAT ARE TO BE LEFT IN PLACE OVER A WEEKEND OR HOLIDAY SHALL BE POST MOUNTED.
- CONSTRUCTION AREA TRAFFIC CONTROL DEVICES SHALL MEET THE PROVISIONS OF SECTION 12 OF THE MOST RECENT EDITION OF THE CALTRANS STANDARD SPECIFICATIONS.

SIGNS



CITY OF CARLSBAD
APPROVED

for TRAFFIC DIVISION

DATE

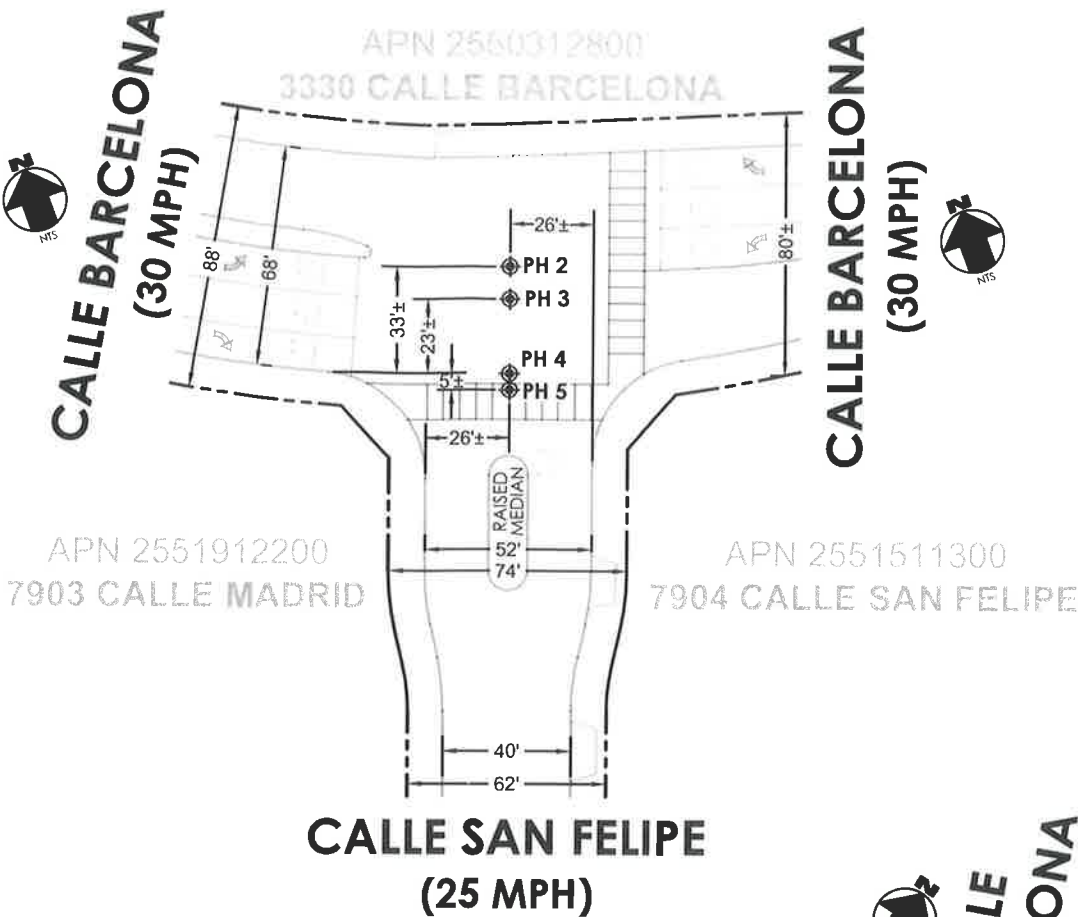
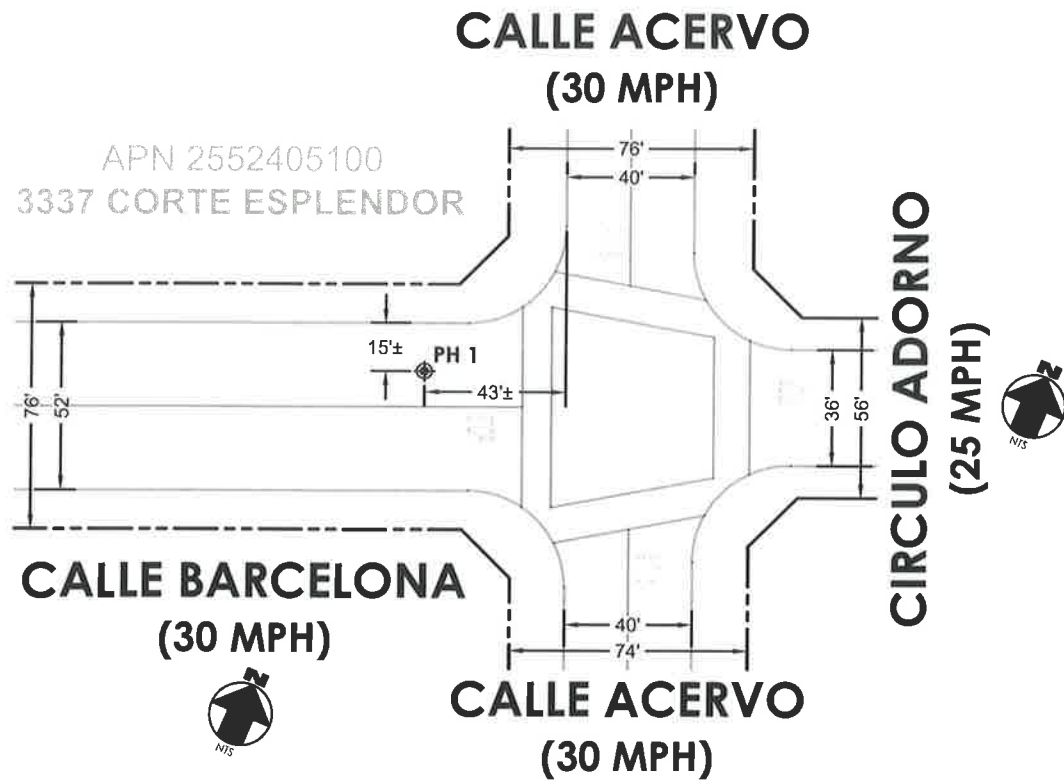
SHEET	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS
ROW2023-0112		
APPROVED		
EXPIRES DATE		
DWN BY:	PROJECT NO.	DRAWING NO.
CHKD BY:		
RYWD BY:		

Site Plan:

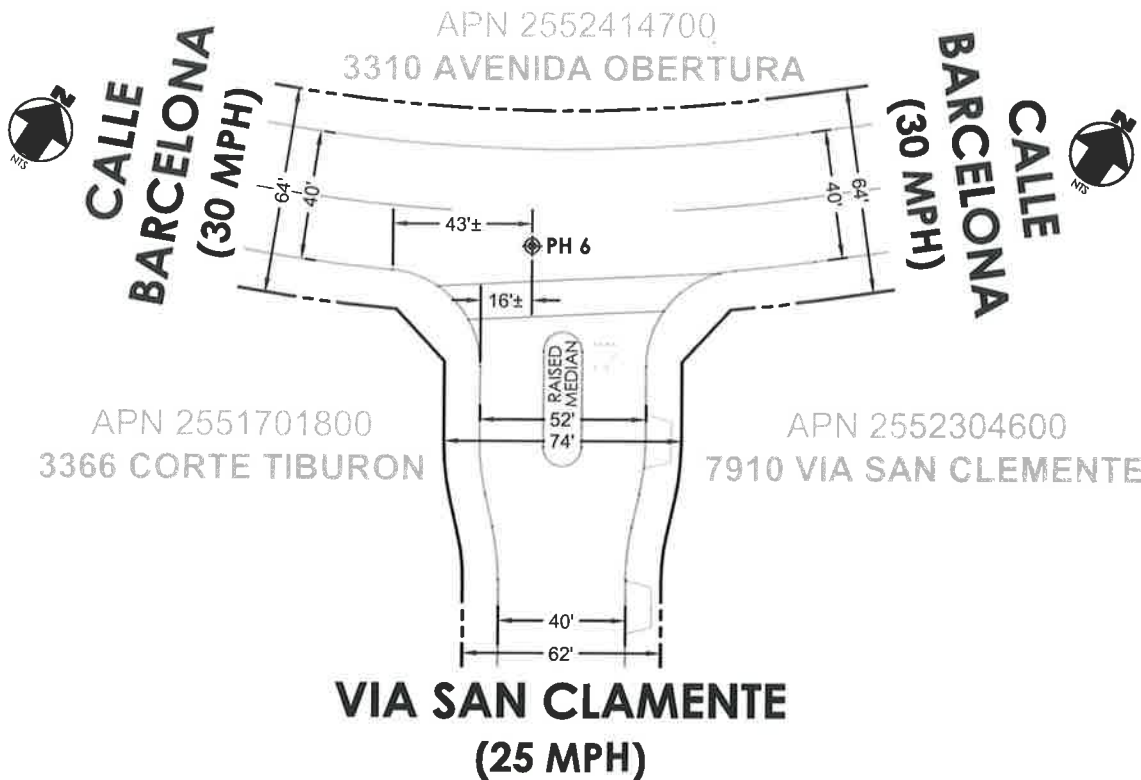
ROW2023-0112

LEGEND

 APPROXIMATE POTHOLE LOCATION



POTHOLING MUST
ADHERE TO GS-28
AND GS-29 ATTACHED



JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069
619-710-3124
jharris@airxus.com
www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 1)

AIRX JOB#: X230037

TYPE OF WORK: Potholing

NOTES: OMWD Project No. D800019

THOMAS GRID#: 1147-J3

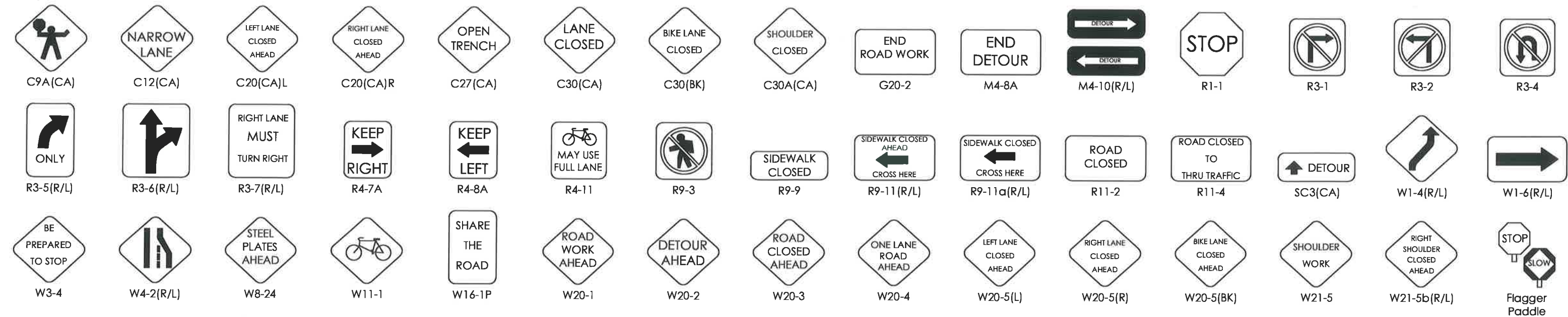
DRAWN FOR: City of Carlsbad

DATE: 1/31/2023

DESIGNED BY:
Otman Mouden

SHEET 1 OF 1

SIGN LEGEND

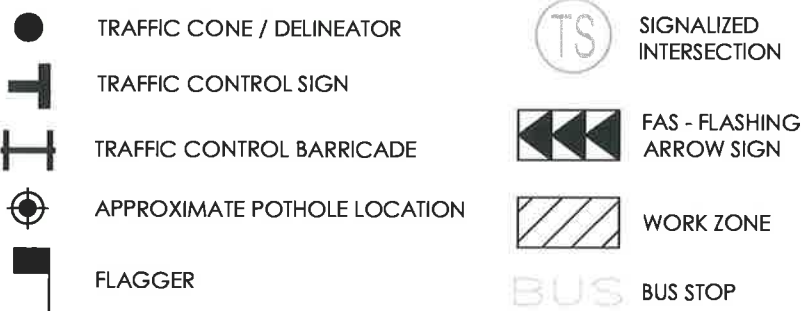


WATCH - Work Area Traffic Control Handbook / California MUTCD

Minimum Recommended Channelizing Device and Sign Spacing

LEGEND

APPROACH SPEED (MPH)	MINIMUM DISTANCE (FEET) BETWEEN SIGNS AND FROM LAST SIGN TO TAPER	MINIMUM TAPER LENGTHS (L) (FEET) FOR 12-FOOT LANE			BUFFER LENGTH (FEET)	MAX CONE SPACING		
		L	1/2L	1/3L		TAPER	TANGENT	CONFLICT
25	100	125	63	42	158	25	50	12
30	250	180	90	60	205	30	60	15
35	250	245	123	82	257	35	70	17
40	250	320	160	107	315	40	80	20
45	350	540	270	180	378	45	90	22
50	350	600	300	200	446	50	100	25
55	500	660	330	220	520	50	100	25



ROW2023-0112



JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 1)

AIRX JOB#: X230037

THOMAS GRID#: 1147-J3

TYPE OF WORK: Potholing

DRAWN FOR: City of Carlsbad

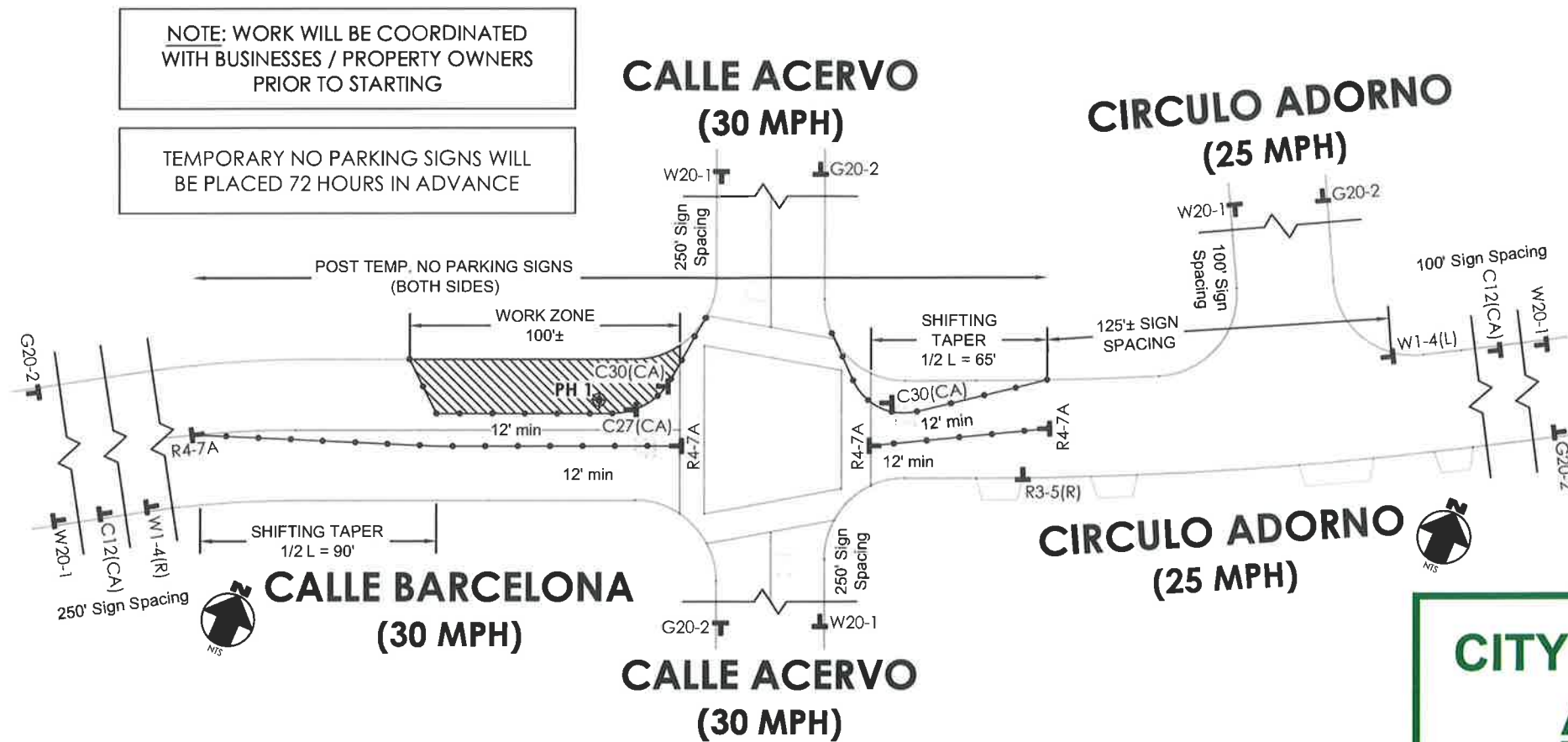
NOTES: OMWD Project No. D800019

DATE: 1/27/2023

DESIGNED BY:
Otman Mouden

SHEET 1 OF 5

Pothole 1:



**CITY OF CARLSBAD
APPROVED**

Lindy Phau

02/21/2023

FOR TRAFFIC DIVISION

DATE _____

WORK HOURS 8:30 AM TO 3:30PM

THE CITY TRAFFIC ENGINEER OR HIS REPRESENTATIVE HAS THE
AUTHORITY TO INITIATE FIELD CHANGES TO INSURE PUBLIC SAFETY.



JENN HARRIS
President & CEO

 **785 E Mission Rd, Unit 100**
San Marcos, CA 92069

 619-710-3124

 jharris@airxus.com

 www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 1)

AIRX JOB#: X230037

THOMAS GRID#: 1147-J3

TYPE OF WORK: Potholing

DRAWN FOR: City of Carlsbad

NOTES: OMWD Project No. D800019

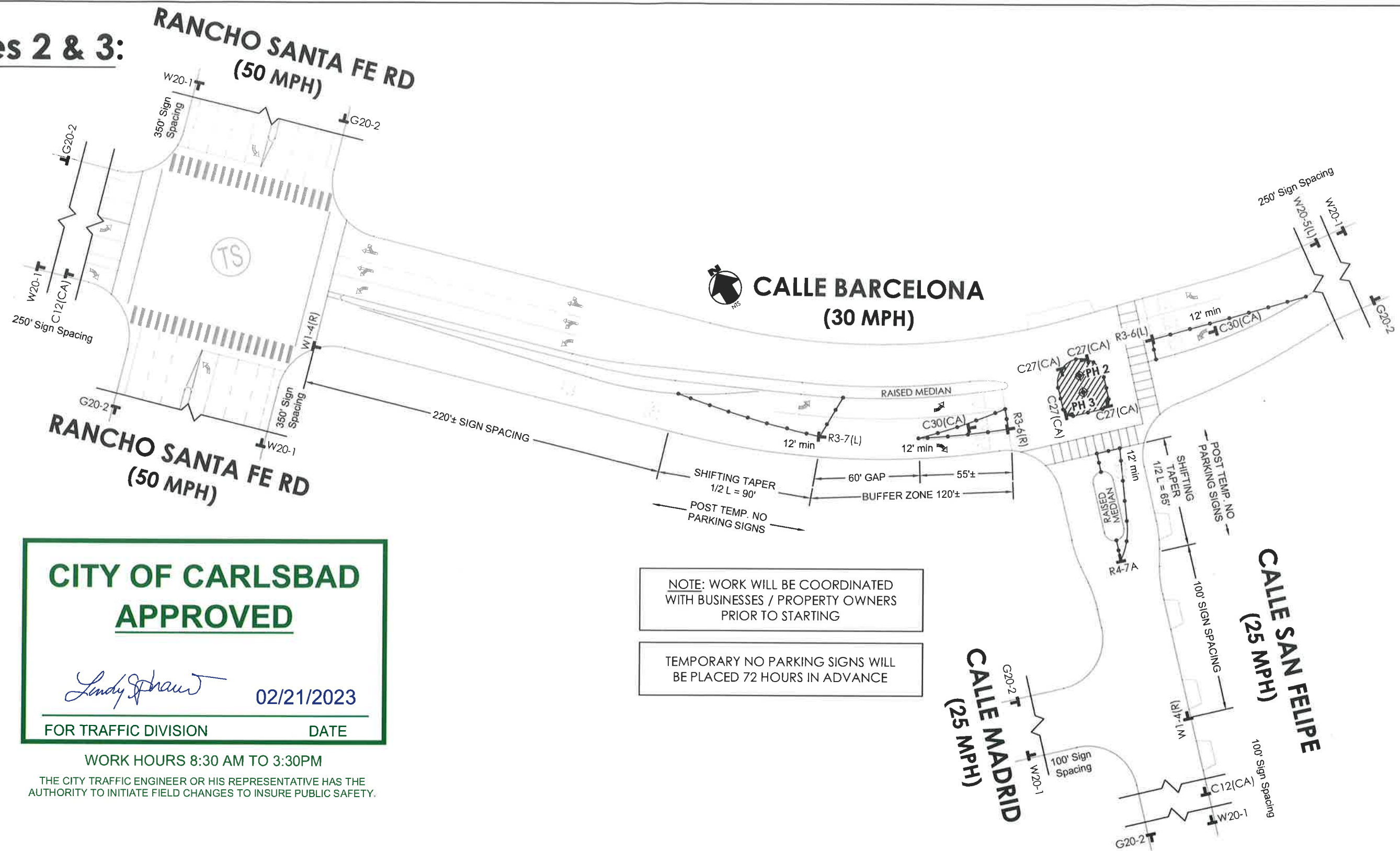
DATE: 1/27/2023

DESIGNED BY:

Otman Mouden

SHEET 2 OF 5

Potholes 2 & 3:



CITY OF CARLSBAD
APPROVED



02/21/2023

FOR TRAFFIC DIVISION DATE

WORK HOURS 8:30 AM TO 3:30PM
THE CITY TRAFFIC ENGINEER OR HIS REPRESENTATIVE HAS THE
AUTHORITY TO INITIATE FIELD CHANGES TO INSURE PUBLIC SAFETY.



JENN HARRIS
President & CEO

 785 E Mission Rd, Unit 100
San Marcos, CA 92069

 619-710-3124

 jharris@airxus.com

 www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 1)	
AIRX JOB#: X230037	THOMAS GRID#: 1147-J3
TYPE OF WORK: Potholing	DRAWN FOR: City of Carlsbad
NOTES: OMWD Project No. D800019	

DATE: 1/27/2023
DESIGNED BY: Otman Mouden
SHEET 3 OF 5

Potholes 4 & 5:

FLAGGERS TO ASSIST PEDESTRIANS THROUGH WORK AREA.

CITY OF CARLSBAD
APPROVED

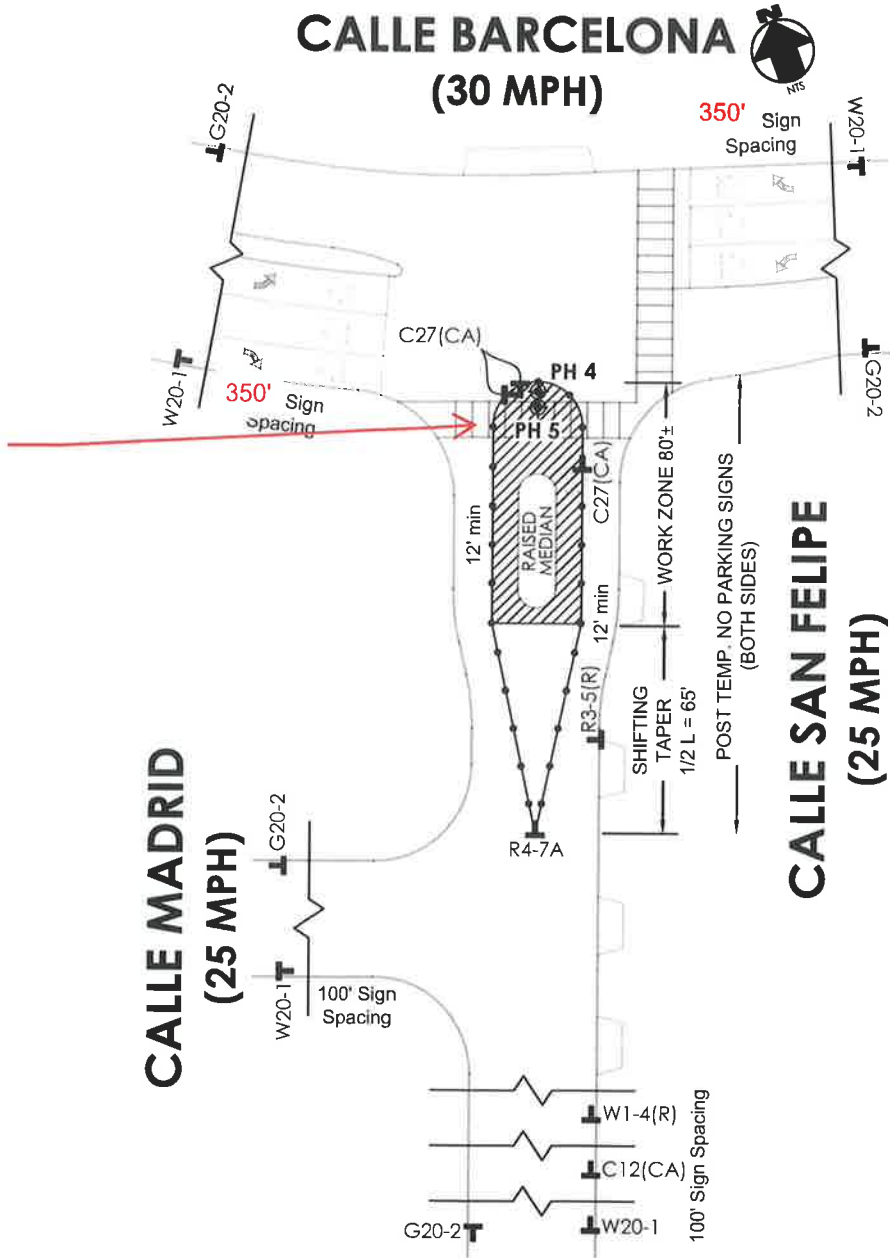


02/21/2023

FOR TRAFFIC DIVISION DATE

WORK HOURS 8:30 AM TO 3:30PM

THE CITY TRAFFIC ENGINEER OR HIS REPRESENTATIVE HAS THE AUTHORITY TO INITIATE FIELD CHANGES TO INSURE PUBLIC SAFETY.



- NOTE: WORK WILL BE COORDINATED WITH BUSINESSES / PROPERTY OWNERS PRIOR TO STARTING
- TEMPORARY NO PARKING SIGNS WILL BE PLACED 72 HOURS IN ADVANCE



JENN HARRIS

President & CEO

785 E Mission Rd, Unit 100

San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 1)

AIRX JOB#: X230037

THOMAS GRID#: 1147-J3

TYPE OF WORK: Potholing

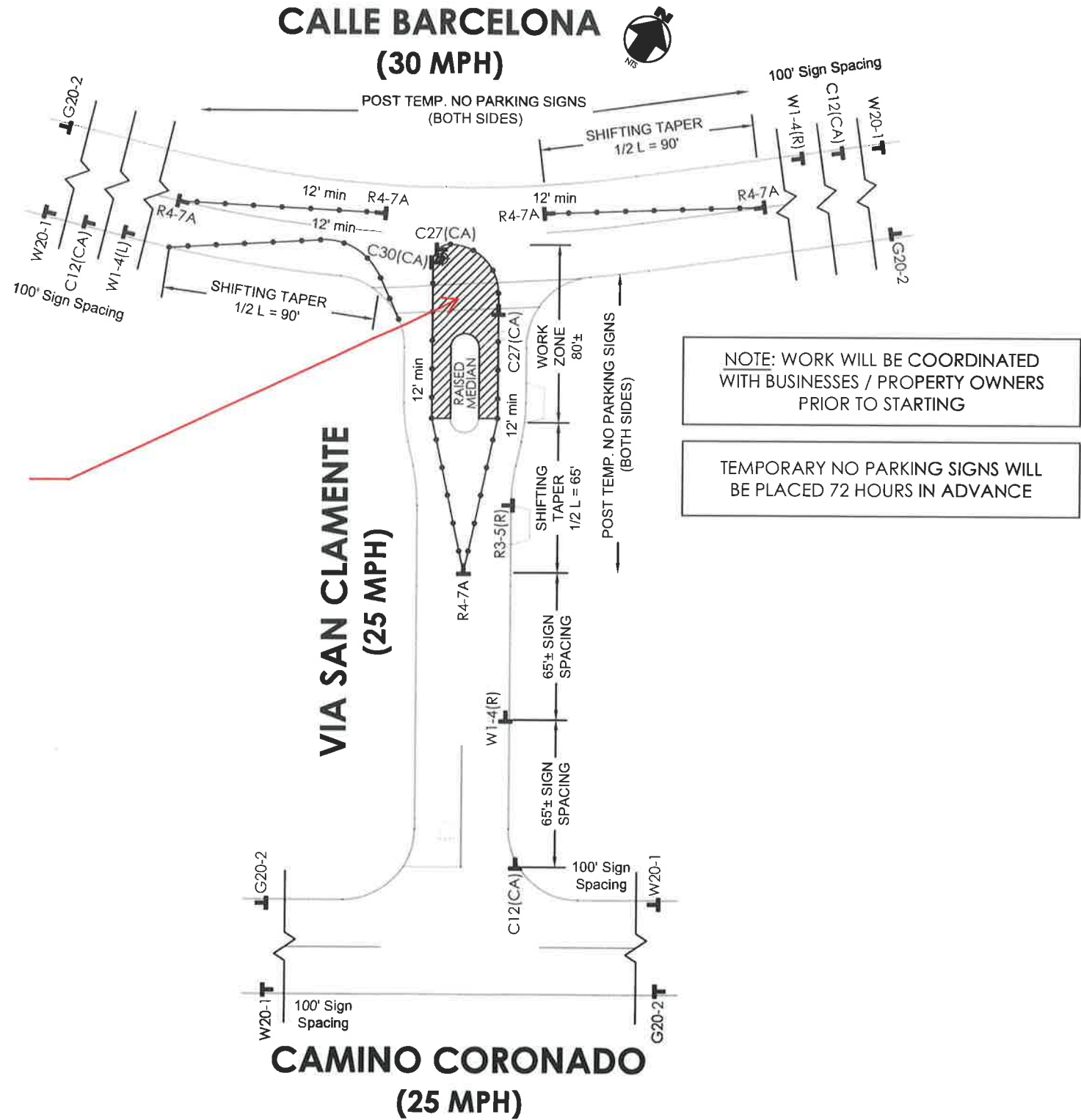
DRAWN FOR: City of Carlsbad

NOTES: OMWD Project No. D800019

DATE: 1/27/2023

DESIGNED BY:
Otman Mouden

Pothole 6:



CITY OF CARLSBAD
APPROVED

Lindy J. Harris 02/21/2023

FOR TRAFFIC DIVISION DATE

WORK HOURS 8:30 AM TO 3:30PM

THE CITY TRAFFIC ENGINEER OR HIS REPRESENTATIVE HAS THE AUTHORITY TO INITIATE FIELD CHANGES TO INSURE PUBLIC SAFETY.

AIRX

JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 1)

AIRX JOB#: X230037

TYPE OF WORK: Potholing

NOTES: OMWD Project No. D800019

THOMAS GRID#: 1147-J3

DRAWN FOR: City of Carlsbad

DATE: 1/27/2023

DESIGNED BY:
Otman Mouden

SHEET 5 OF 5

GENERAL NOTES

1.

The contractor is responsible for promptly restoring the road back to satisfactory condition which includes, but is not limited to, paving, striping, markings, signing, and loop detection.
2.

The Agency reserves the right to observe these traffic control plans in operation and to make changes as field conditions warrant.
3.

Trenches shall be back-filled or steel-plated during non-work hours. Steel plates shall have an asphaltic ramp on all edges, or recessed and flush with road surface, securely supported so they won't rock and a sign posted near the plates identifying the contractors name and 24-hour emergency telephone number. All dirt, dust, and debris shall be removed from the street at the end of each day and at the end of the job with all USA markouts. The street shall be kept in a driveable condition at all times.
4.

Any work that creates an undue safety risk or that creates severe congestion may be shut down by the agency.
5.

A copy of all traffic requirements and traffic control plans issued by the Agency must be kept on the job site.
6.

Approval of this plan does not constitute an official Permit. Contact the Agency for information on obtaining a permit.
7.

All travel lanes will typically be a minimum of 12 feet wide, 14 feet if adjacent to closed bike lanes, unless otherwise specifically approved by the Agency.
8.

Flashing arrow boards as required by the Agency.
9.

Warning (W) series signs used in work zones shall be Black on an Orange background.
10.

Cones and pylons shall have white reflectorized sleeves when placed along the centerline or along the outside shoulder.
11.

If parking is allowed in the advance warning area, advance warning signs shall be mounted on high-level devices.
12.

All conflicting signs shall be covered.
13.

The contractor shall post tow-away/no parking signs at least seventy-two (72) hours in advance, with the day of the week, date and work hours noted, and shall bag parking meters (where applicable).*
14.

Place W20-1 and G20-2 signs on all side streets within the construction zone and per TCP-4 as field conditions permit.
15.

Flaggers shall be illuminated at night per the most current CA MUTCD.
16.

All traffic control devices shall conform with the most current CA MUTCD requirements regarding minimum retro-reflectivity, minimum size, minimum mounting heights, and usage. Larger devices sizes may be specified by the Agency.
17.

Traffic control signs shall not be modified in the field with duct tape, electrical tape, or any other non-approved method.
18.

The Contractor shall be responsible for identifying the locations of schools that will be affected in the area of the

- impending work. Due to peak volumes of pedestrian and vehicular traffic associated with schools, the Contractor may be required to delay the start of construction operations until after school is in session and complete construction operations before school is out of session.
19.

Existing stop signs that conflict with temporary traffic control may be bagged, covered and removed by the Contractor per the Agency. Signs that are removed shall be handled with care so that they may be later re-installed or returned to the Agency in good condition as directed by the Agency.
20.

Contractor shall notify all affected emergency services at least one (1) week in advance.
21.

For signalized intersections, the Contractor shall coordinate with Agency to determine how to operate the signal.

WORKING HOURS
9:00AM - 3:30PM

SIGN LEGEND

LANE CLOSED

C30(CA)

BIKE LANE CLOSED

C30(BK)

END ROAD WORK

G20-2

W1-4(R/L)

NARROW LANE

C12(CA)

KEEP RIGHT

R4-7A

W11-1

SHARE THE ROAD

W16-1

ROAD WORK AHEAD

W20-1

OPEN TRENCH

C27(CA)

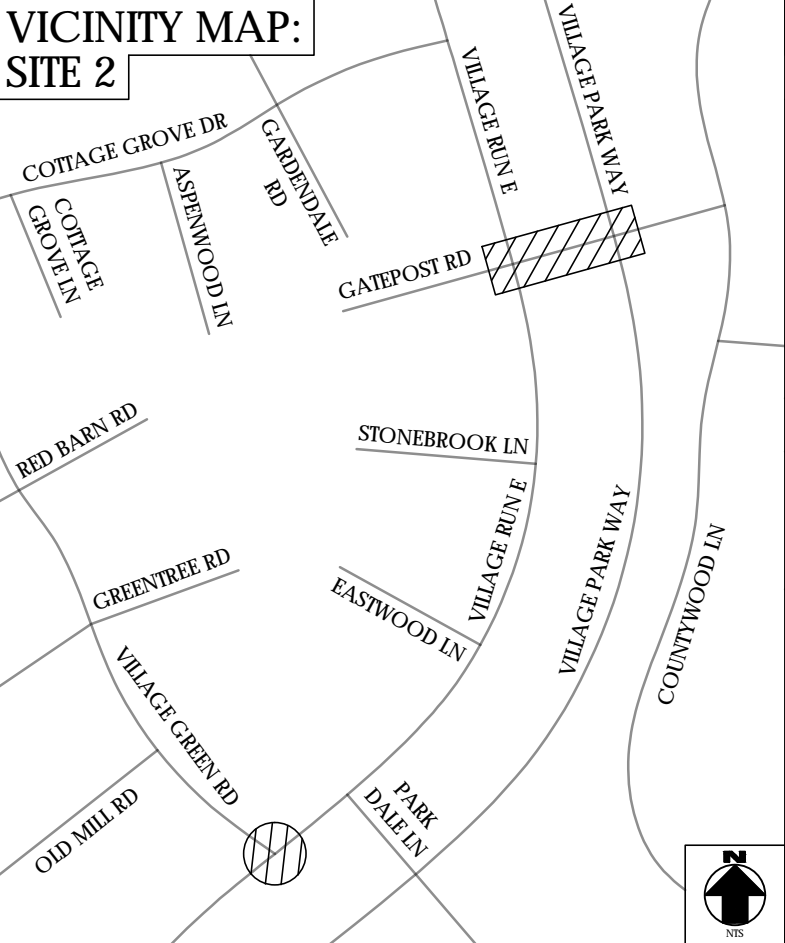
BIKE LANE CLOSED AHEAD

W20-5(BK)

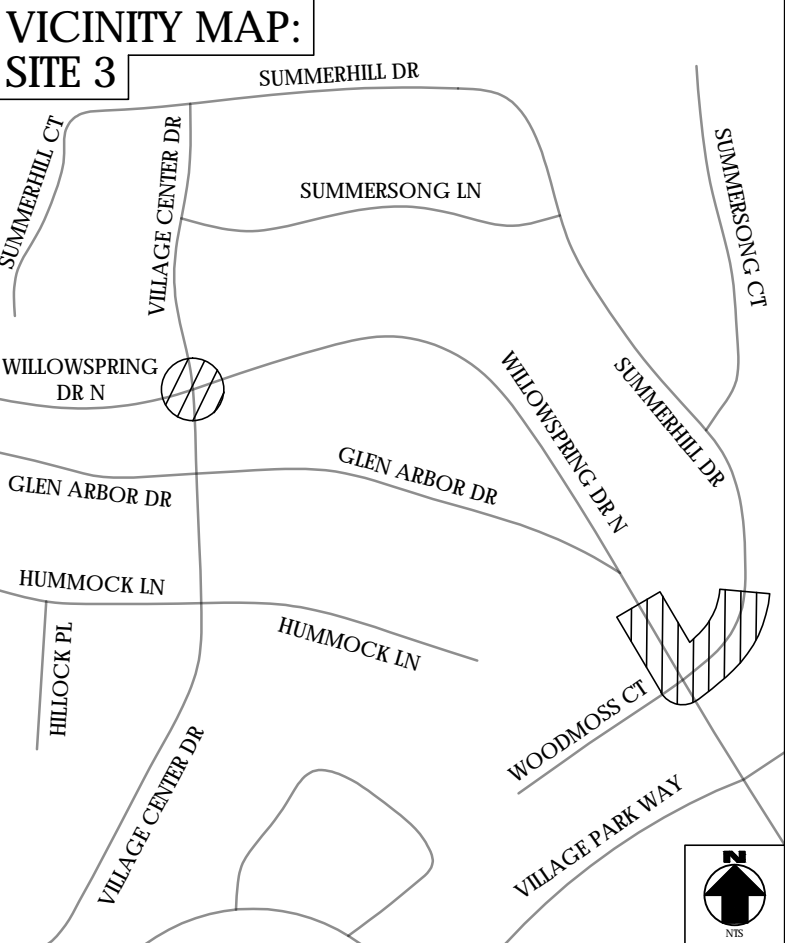
SHOULDER WORK

W21-5

VICINITY MAP:
SITE 2



VICINITY MAP:
SITE 3



MAX CONE SPACING		
TAPER	TANGENT	CONFLICT
25	50	12
30	60	15
35	70	17
40	80	20
45	90	22
50	100	25
50	110	27

APPROACH SPEED (MPH)	MINIMUM DISTANCE (FEET) BETWEEN SIGNS AND FROM LAST SIGN TO TAPER	MINIMUM TAPER LENGTHS (L) (FEET) FOR 12-FOOT LANE			BUFFER LENGTH (FEET)
		L	1/2L	1/3L	
25	100	125	65	45	155
30	250	180	90	60	200
35	250	245	125	85	250
40	350	320	160	110	305
45	500	540	270	180	360
50	500	600	300	200	425
55+	1000	660	330	220	495

APPROVED

03/09/2023 , ahekm

TRAFFIC DIVISION

●

TRAFFIC CONE / DELINEATOR

⊥

TRAFFIC CONTROL SIGN

⊥

TRAFFIC CONTROL BARRICADE

⊙

APPROXIMATE POTHOLE LOCATION

■

FLAGGER

TS

SIGNALIZED INTERSECTION

◀▶

FAS - FLASHING ARROW SIGN

▨

WORK ZONE

BUS

BUS STOP

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Sites 2 & 3)

AIRX JOB#: X230037

TYPE OF WORK: Potholing

NOTES: OMWD Project No. D800019

THOMAS GRID#: 1147-H5, H6

DRAWN FOR: City of Encinitas

PERMIT #: PROW-024225-2023

DATE: 2/27/2023

DESIGNED:
Otman Mouden

SHEET 1 OF 5

AIRX

JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

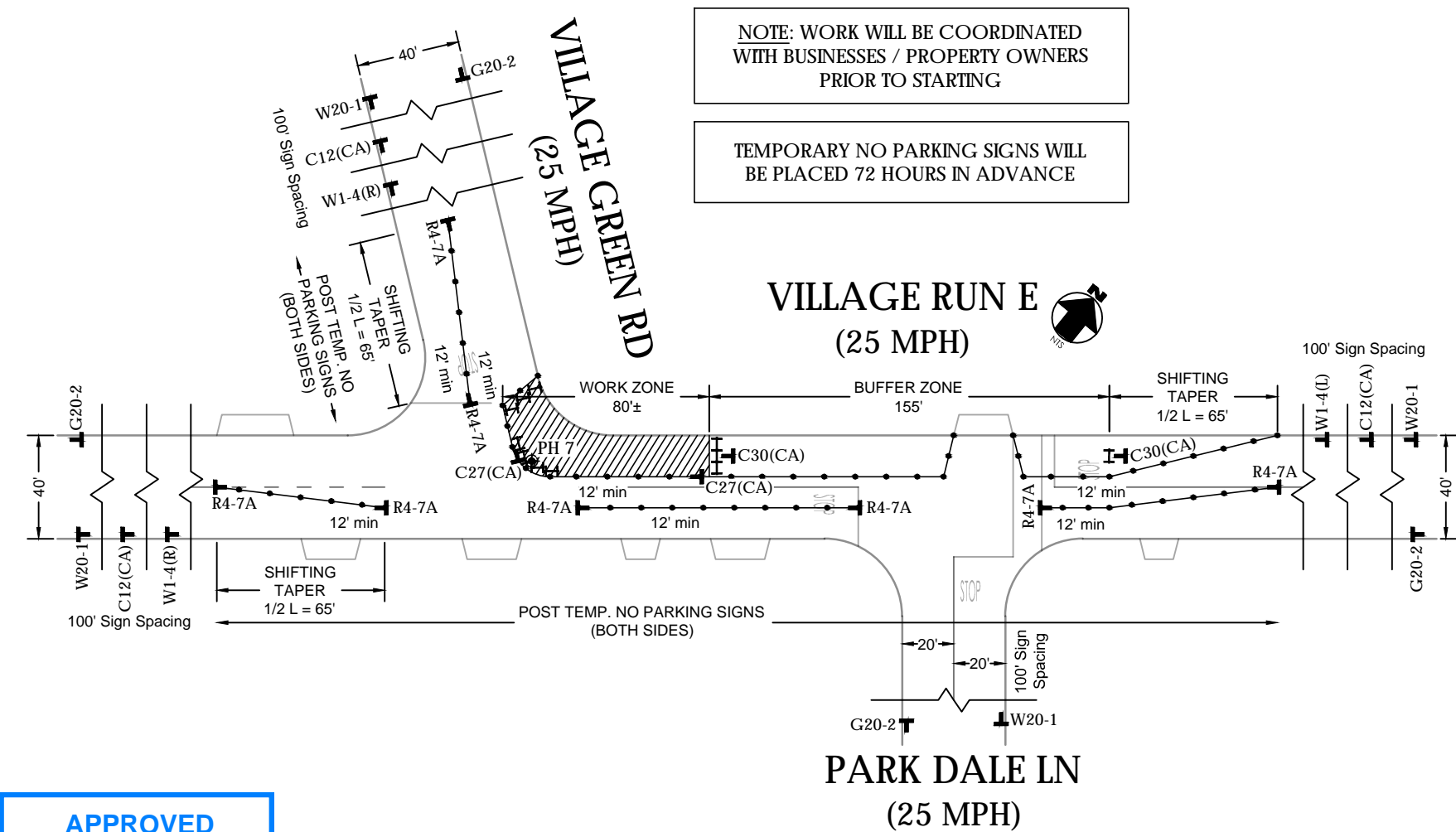
619-710-3124

jharris@airxus.com

www.airxutility.com

Pothole 7:

WORKING HOURS
9:00AM - 3:30PM



APPROVED

03/09/2023 , ahekmat

TRAFFIC DIVISION



JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 2)	
AIRX JOB#: X230037	THOMAS GRID#: 1147-H6
TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas
NOTES: OMWD Project No. D800019	PERMIT #: PROW-024225-2023

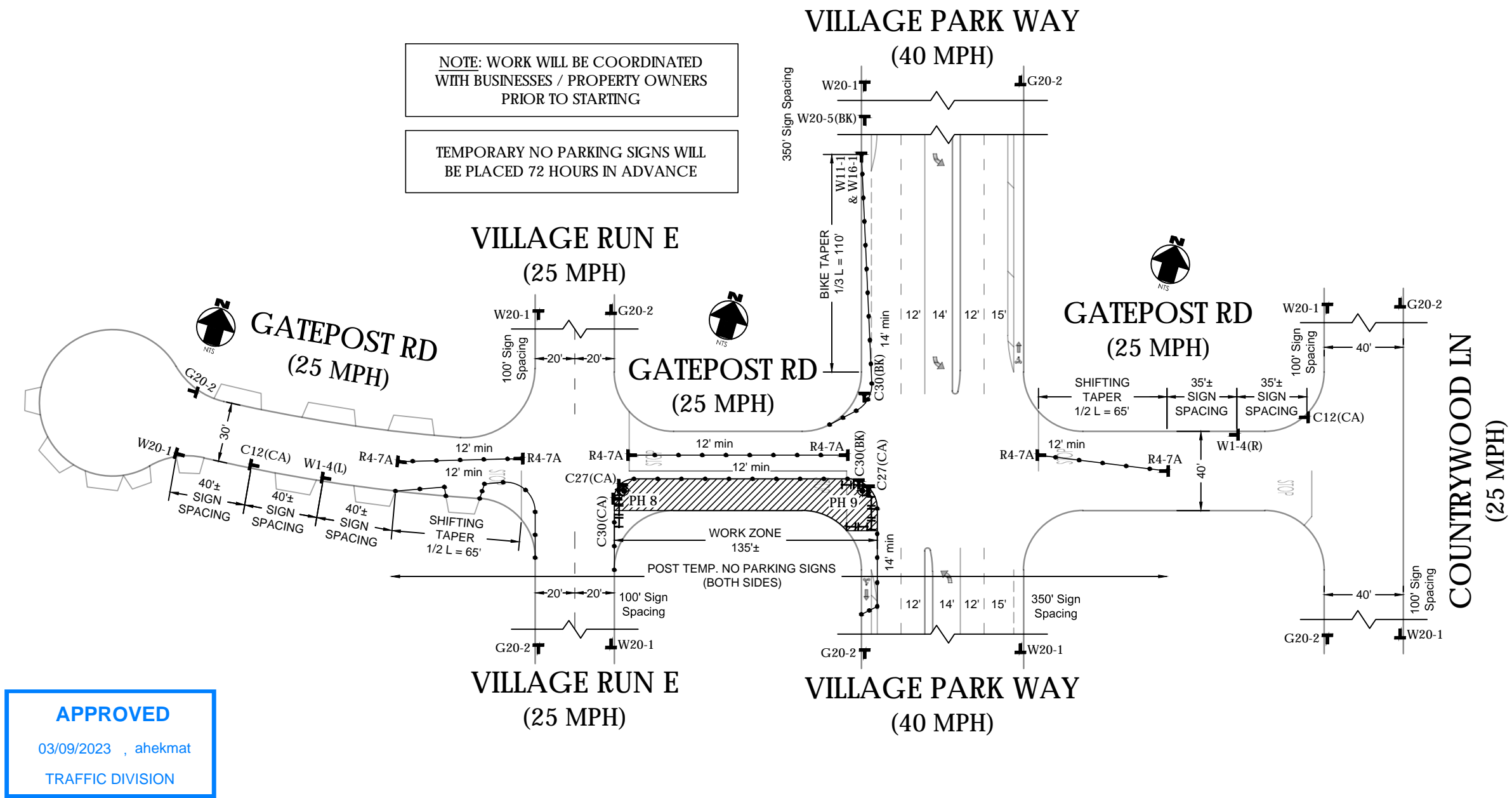
DATE: 2/27/2023






DESIGNED:
Otman Mouden

SHEET 2 OF 5

Potholes 8 & 9:

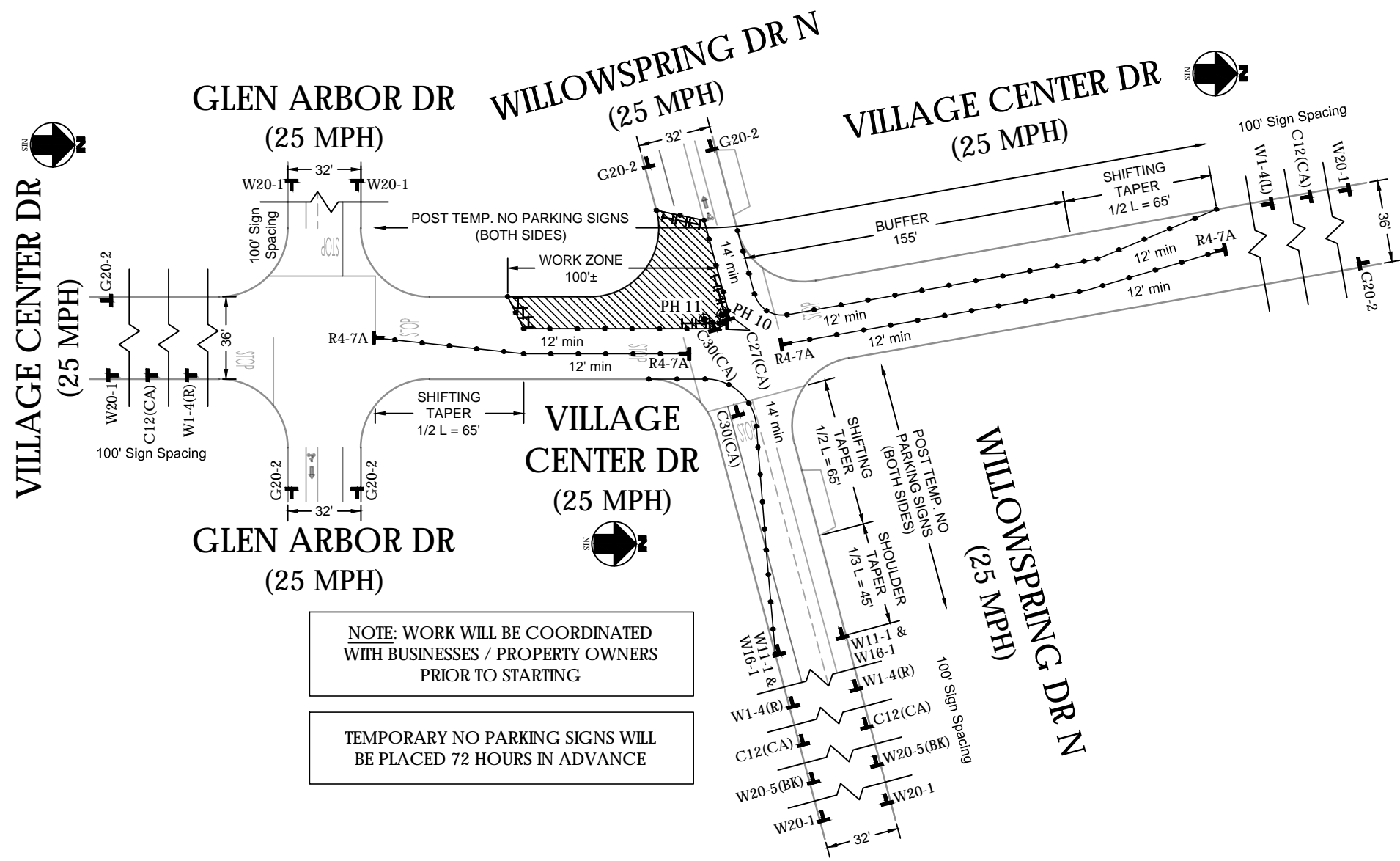
WORKING HOURS
9:00AM - 3:30PM



 <div>JENN HARRIS President & CEO</div> <div> 785 E Mission Rd, Unit 100 San Marcos, CA 92069</div> <div> 619-710-3124</div> <div> jharris@airxus.com</div> <div> www.airxutility.com</div>	PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 2)		DATE: 2/27/2023 DESIGNED: Otman Mouden
	AIRX JOB#: X230037	THOMAS GRID#: 1147-H6	
	TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas	SHEET 3 OF 5
	NOTES: OMWD Project No. D800019	PERMIT #: PROW-024225-2023	

Potholes 10 & 11:

WORKING HOURS
9:00AM - 3:30PM



APPROVED
03/09/2023 , ahekm
TRAFFIC DIVISION



JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

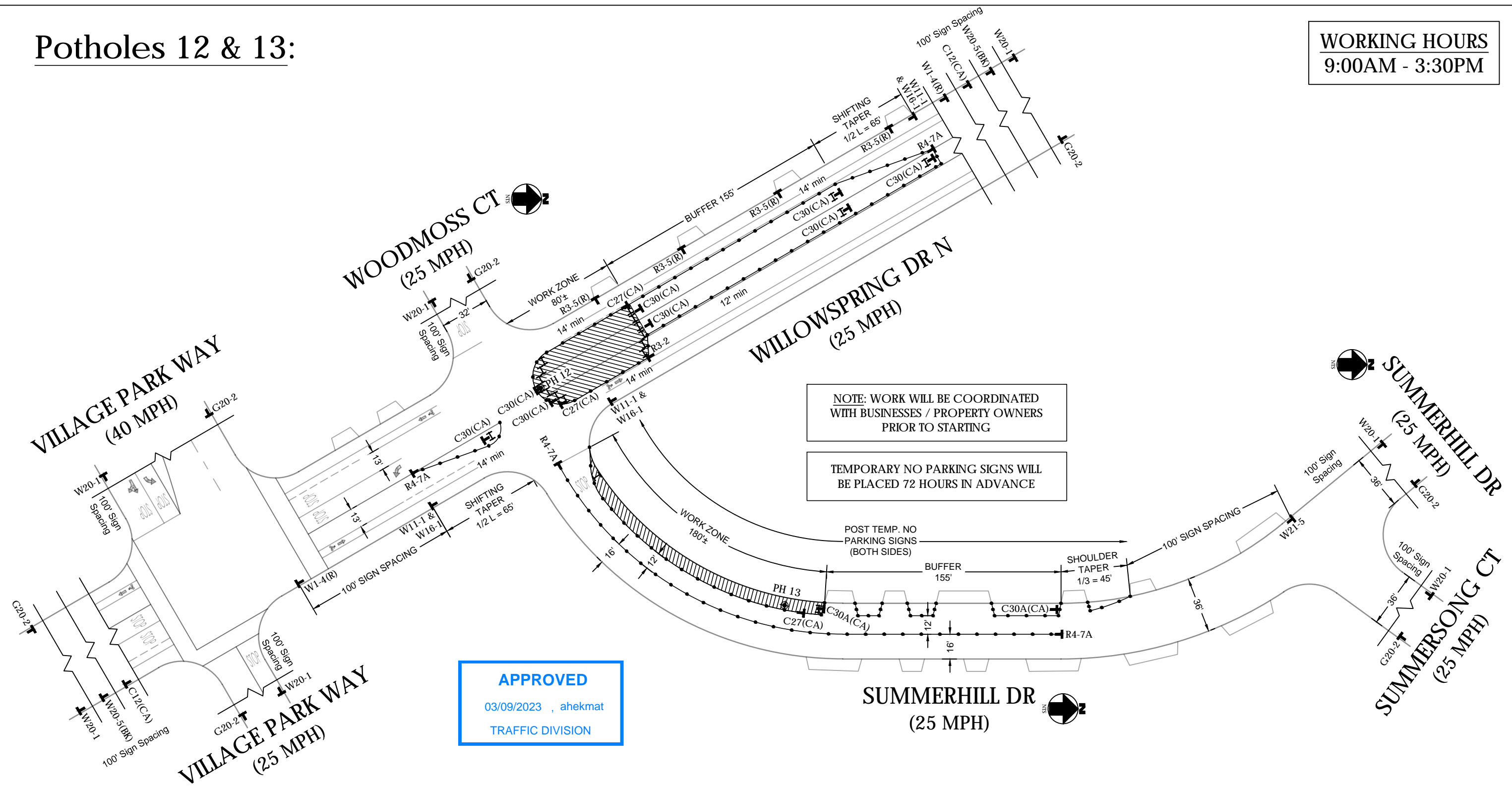
www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 3)	
AIRX JOB#: X230037	THOMAS GRID#: 1147-H5
TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas
NOTES: OMWD Project No. D800019	

DATE: 2/8/2023
DESIGNED BY: Otman Mouden
SHEET 4 OF 5

Potholes 12 & 13:

WORKING HOURS
9:00AM - 3:30PM





JENN HARRIS
President & CEO

785 E Mission Rd, Unit 100
San Marcos, CA 92069

619-710-3124

jharris@airxus.com

www.airxutility.com

PROJECT NAME: FY2023 Recycled Water Pipeline Extension (Site 3)	
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TYPE OF WORK: Potholing	DRAWN FOR: City of Encinitas
NOTES: OMWD Project No. D800019	

DATE: 2/8/2023
DESIGNED BY: Otman Mouden
SHEET 5 OF 5

RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK & SUMMERHILL CONCEPTUAL TRAFFIC CONTROL PLANS

CONCEPTUAL TRAFFIC CONTROL NOTE

TRAFFIC CONTROL PLANS ARE PROVIDED AS A CONCEPT FOR CONSIDERATION BY THE CONTRACTOR. HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPMENT AND APPROVAL OF FULL TRAFFIC CONTROL PLANS BY THE AGENCIES OF JURISDICTION DURING THE RIGHT OF WAY AND ENCROACHMENT PERMIT PROCESSES. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO PREPARE PLANS AND EXECUTE TRAFFIC CONTROL IN CONFORMANCE WITH THE JURISDICTIONAL AGENCY REQUIREMENTS.

TRAFFIC CONTROL NOTES

- WORK HOURS TO BE RESTRICTED TO 8:30AM TO 3:30PM UNLESS APPROVED OTHERWISE WITH THE AGENCY OF JURISDICTION. ADDITIONAL RESTRICTIONS TO WORK HOURS ARE DESCRIBED IN THE SPECIAL PROVISIONS.
- PEDESTRIAN CONTROLS WILL BE PROVIDED AS SHOWN.
- PEDESTRIANS SHALL BE PROTECTED FROM ENTERING THE EXCAVATION BY PHYSICAL BARRIERS DESIGNED, INSTALLED, AND MAINTAINED TO THE SATISFACTION OF THE CITY ENGINEER.
- TEMPORARY "NO PARKING/TOW AWAY" SIGNS STATING THE DATE AND TIME OF PROHIBITION WILL BE POSTED 72 HOURS PRIOR TO COMMENCING WORK. CALL CARLSBAD POLICE DISPATCH AT (760)931-2197 OR ENCINITAS (SD COUNTY SHERIFF) DISPATCH AT (858) 565-5200 TO VALIDATE POSTING.
- ACCESS WILL BE MAINTAINED TO ALL DRIVEWAYS UNLESS OTHER ARRANGEMENTS ARE MADE.
- TRENCHES MUST BE BACKFILLED OR PLATED DURING NON-WORKING HOURS UNLESS K-RAIL BARRIERS ARE PROVIDED. K-RAIL IS APPROVED ONLY WHEN SPECIFICALLY SHOWN ON THE APPROVED TRAFFIC CONTROL PLAN. PLATES SHALL HAVE CLEATS AND COLD MIX AT THE EDGES AS APPROVED BY THE CITY INSPECTOR.
- EXISTING STRIPING, CROSSWALKS, LEGENDS AND/OR PAVEMENT MARKERS SHALL BE REPLACED BY THE CONTRACTOR WITHIN 24 HOURS, IF REMOVED OR DAMAGED.
- WORK THAT DISTURBS NORMAL TRAFFIC SIGNAL TIMING OPERATIONS SHALL BE COORDINATED WITH THE CITIES OF CARLSBAD OR ENCINITAS, 72 HOURS PRIOR TO COMMENCING WORK.
- TRAFFIC SIGNALS SHALL REMAIN FULLY ACTUATED AT ALL TIMES, UNLESS OTHERWISE APPROVED BY THE CITY TRAFFIC ENGINEER OR HIS REPRESENTATIVE. IF TRAFFIC SIGNAL LOOP DETECTORS ARE RENDERED INOPERATIVE BY THE PROPOSED WORK, VIDEO DETECTION SHALL BE USED TO PROVIDE ACTUATION.
- FLAGGERS SHALL BE EQUIPPED WITH A WHITE HARD HAT, AN ORANGE VEST, AND A "STOP/SLOW" PADDLE ON A 5 FOOT STAFF.
- ALL TRAFFIC CONTROL DEVICES MUST BE MAINTAINED 24 HOURS A DAY, 7 DAYS PER WEEK, BY THE CONTRACTOR.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CALIFORNIA MUTCD, LATEST EDITION).
- TRAFFIC CONTROL PLAN SUBMITTALS ARE REQUIRED FOR EACH PHASE OF THE WORK IN THE DETAIL, FORMAT, AND QUALITY ILLUSTRATED ON THIS SHEET.
- ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM VIEW OR COVERED WHEN NOT IN USE.
- THE CITIES TRAFFIC ENGINEERS OR THEIR REPRESENTATIVE HAS THE AUTHORITY TO INITIATE FIELD CHANGES TO INSURE PUBLIC SAFETY.
- ALL WORK AFFECTING BUS STOPS SHALL BE COORDINATED WITH NORTH COUNTY TRANSIT DISTRICT. CONTRACTOR SHALL CALL NCTD AT (760) 967-2828 AT LEAST 72 HOURS IN ADVANCE OF STARTING WORK.
- CHANGEABLE MESSAGE SIGNS SHALL BE USED IN ADVANCE OF TRAFFIC CONTROL ON MAJOR AND PRIME ARTERIALS, UNLESS OTHERWISE APPROVED. THESE SIGNS SHALL BE SHOWN ON THE TRAFFIC CONTROL PLAN.

SIGNAGE NOTES

- AT LEAST ONE PERSON SHALL BE ASSIGNED TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON ALL NIGHT LANE CLOSURES.
- ALL WARNING SIGNS FOR NIGHT LANE CLOSURES SHALL BE ILLUMINATED OR REFLECTORIZED AS SPECIFIED IN THE SPECIFICATIONS.
- ALL ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES OF ALL MAJOR AND PRIME ARTERIALS. FLASHING BEACONS SHALL BE USED DURING NIGHT LANE CLOSURES.
- A G20-2 "END ROAD WORK" SIGN SHALL BE PLACED AT THE END OF THE LANE CLOSURE UNLESS THE END OF THE WORK AREA IS OBVIOUS, OR ENDS WITHIN A LARGER PROJECT LIMITS.
- ALL CONES USED FOR NIGHT LANE CLOSURES SHALL BE ILLUMINATED TRAFFIC CONES OR FITTED WITH 13" REFLECTIVE SLEEVES.
- FLASHING ARROW SIGNS SHALL BE USED PER THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CALIFORNIA MUTCD, LATEST EDITION). SILENT TYPE SHALL BE USED IN RESIDENTIAL AREAS.
- THE MAXIMUM SPACING BETWEEN CONES IN A TAPER OR A TANGENT SHALL BE APPROXIMATELY AS SHOWN IN TABLE 1.
- ADDITIONAL ADVANCE FLAGGERS SHALL BE REQUIRED WHEN TRAFFIC QUEUES DEVELOP. FLAGGER STATIONS FOR WORK AT NIGHT SHALL BE ILLUMINATED AS NOTED IN SECTION 6G.20 OF THE MUTCD.
- PLACE C30 (CA) "LANE CLOSED" SIGN AT 500'-1000' INTERVALS THROUGHOUT EXTENDED WORK AREAS.
- ALL REQUIRED SIGNS THAT ARE TO BE LEFT IN PLACE OVER A WEEKEND OR HOLIDAY SHALL BE POST MOUNTED USING SQUARE PERFORATED STEEL TUBING WITH BREAKAWAY BASE PER SDRSD M-45.
- CONSTRUCTION AREA TRAFFIC CONTROL DEVICES SHALL MEET THE PROVISIONS OF SECTION 12 OF THE MOST RECENT EDITION OF THE CALTRANS STANDARD SPECIFICATIONS.

TABLE 1: TAPER LENGTHS, L₁

APPROACH SPEED (M.P.H.)	MINIMUM TAPER LENGTH L ₁ *	MINIMUM NUMBER OF CONES FOR TAPER *	MAXIMUM SPACING OF CONES ALONG TAPER (FEET) ±	MAXIMUM SPACING OF CONES ALONG TANGENT (FEET) ±
25	125	6	25	50
30	180	7	30	60
35	245	8	35	70
40	320	9	40	80
45	540	13	45	90
50	600	13	50	100
55	660	13	55	110
60	720	13	60	120

* BASED ON 12 FOOT WIDE LANE. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

TABLE 2: BUFFER SPACE, L₂

APPROACH SPEED (M.P.H.)	LONGITUDINAL BUFFER SPACE L ₂ (FEET) ± *
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570

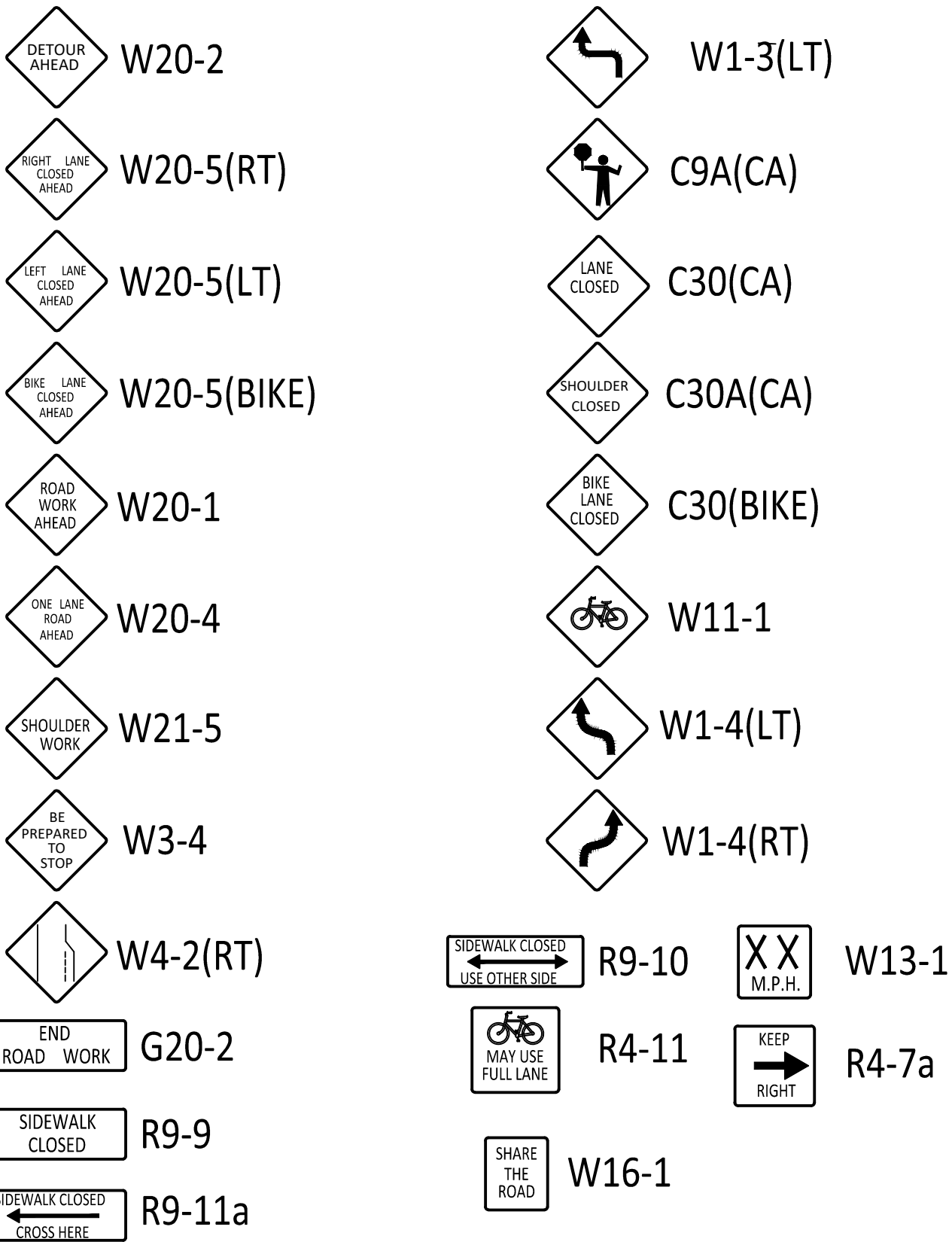
* SEE CA MUTCD TABLE 6E-101(CA) FOR SUSTAINED DOWNGRADES STEEPER THAN 3% AND LONGER THAN 1 MILE.

TABLE 3: SIGN SPACING, L₃

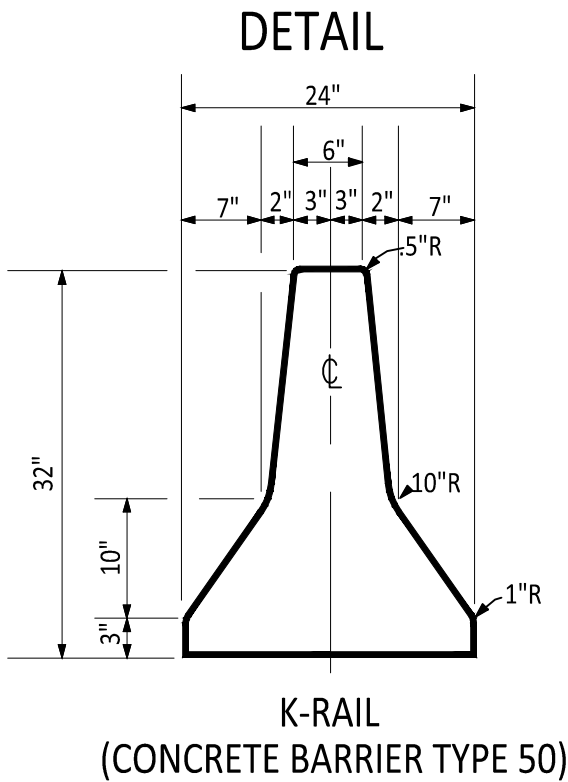
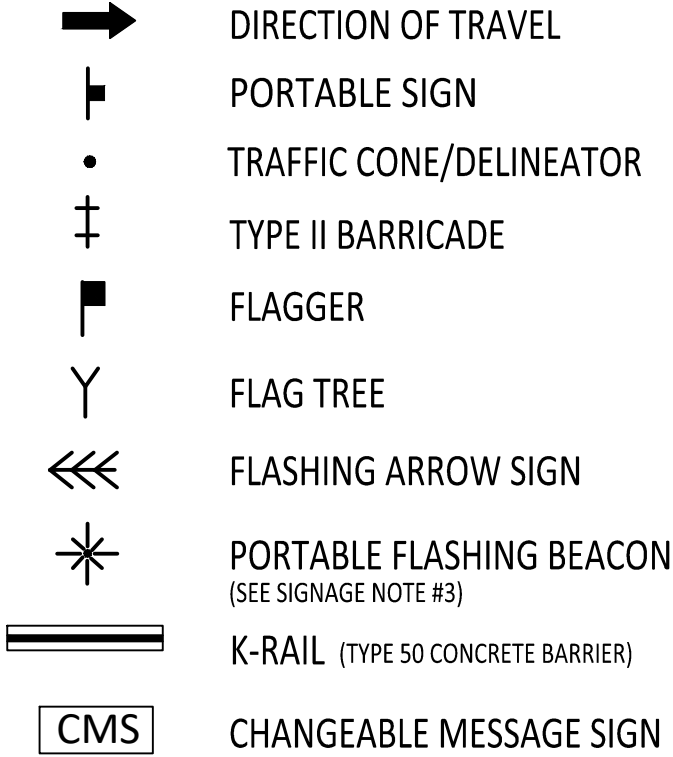
APPROACH SPEED (M.P.H.)	MINIMUM DISTANCE IN FEET L ₃	
	BETWEEN SIGNS *	FROM LAST SIGN TO TAPER *
LESS THAN 25	100'	100'
25 TO 40	350'	350'
GREATER THAN 40	500'	500'

* EXACT SPACING MAY VARY DUE TO FIELD CONDITIONS

SIGNS



LEGEND



NOT FOR CONSTRUCTION

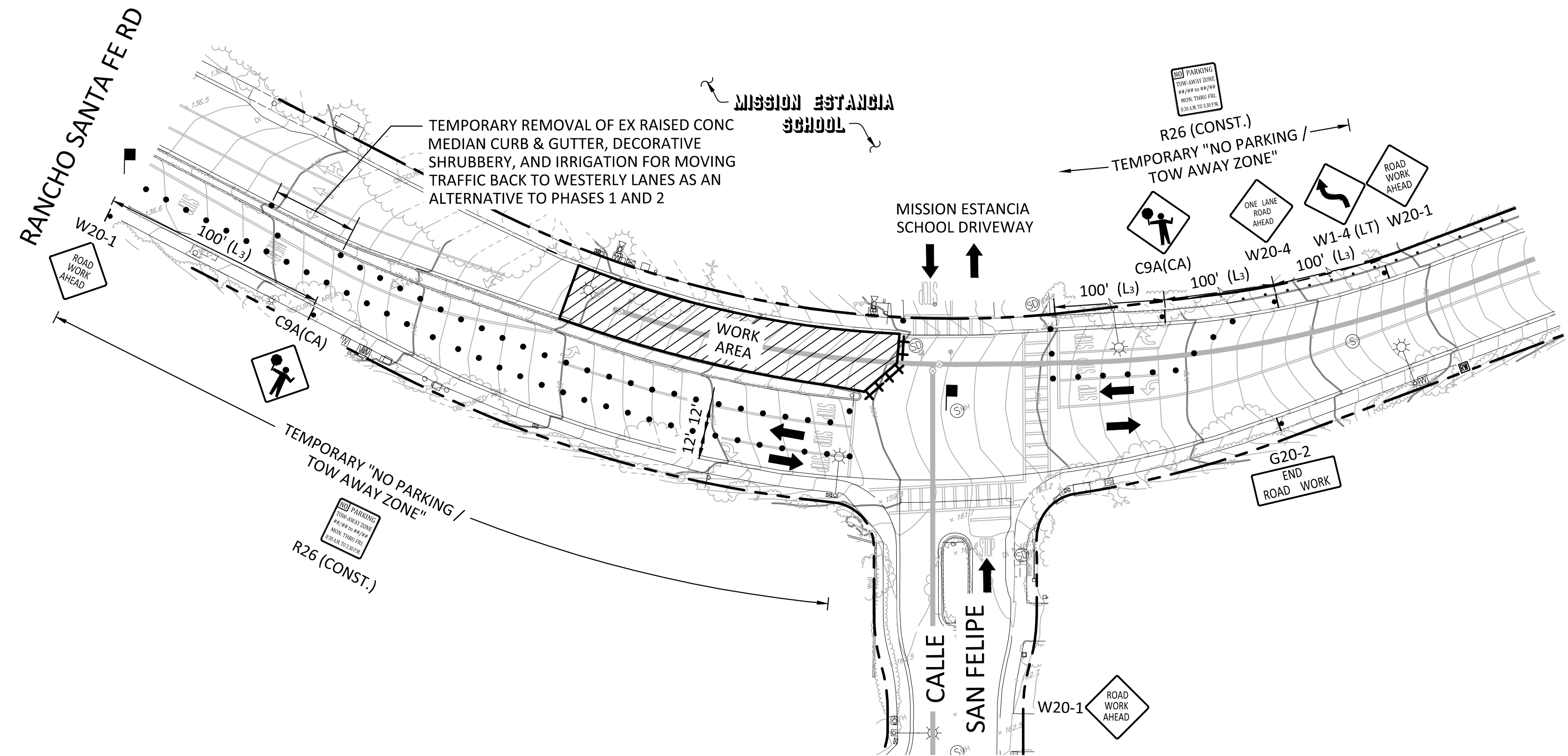
HOCH CONSULTING
804 PIER VIEW WAY - SUITE 100
OCEANSIDE, CA 92054
www.hochconsulting.com

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760)753-6466

RECYCLED WATER PIPELINE EXTENSIONS FOR
CALLE BARCELONA, VILLAGE PARK & SUMMERHILL
CONCEPTUAL TRAFFIC CONTROL PLANS
TITLE SHEET

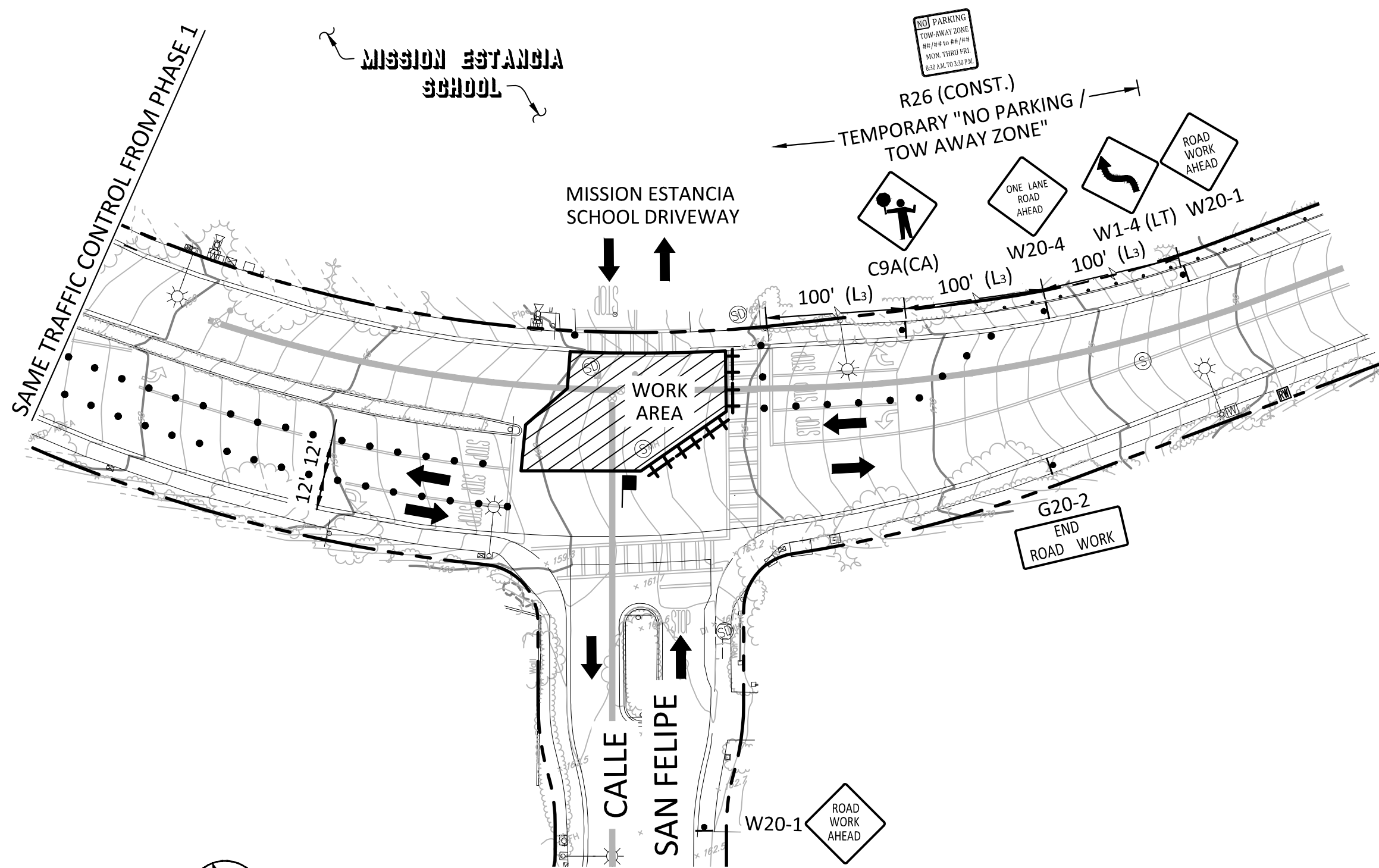
SHEET
1 OF 5
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ORIGINAL SCALE IN INCHES

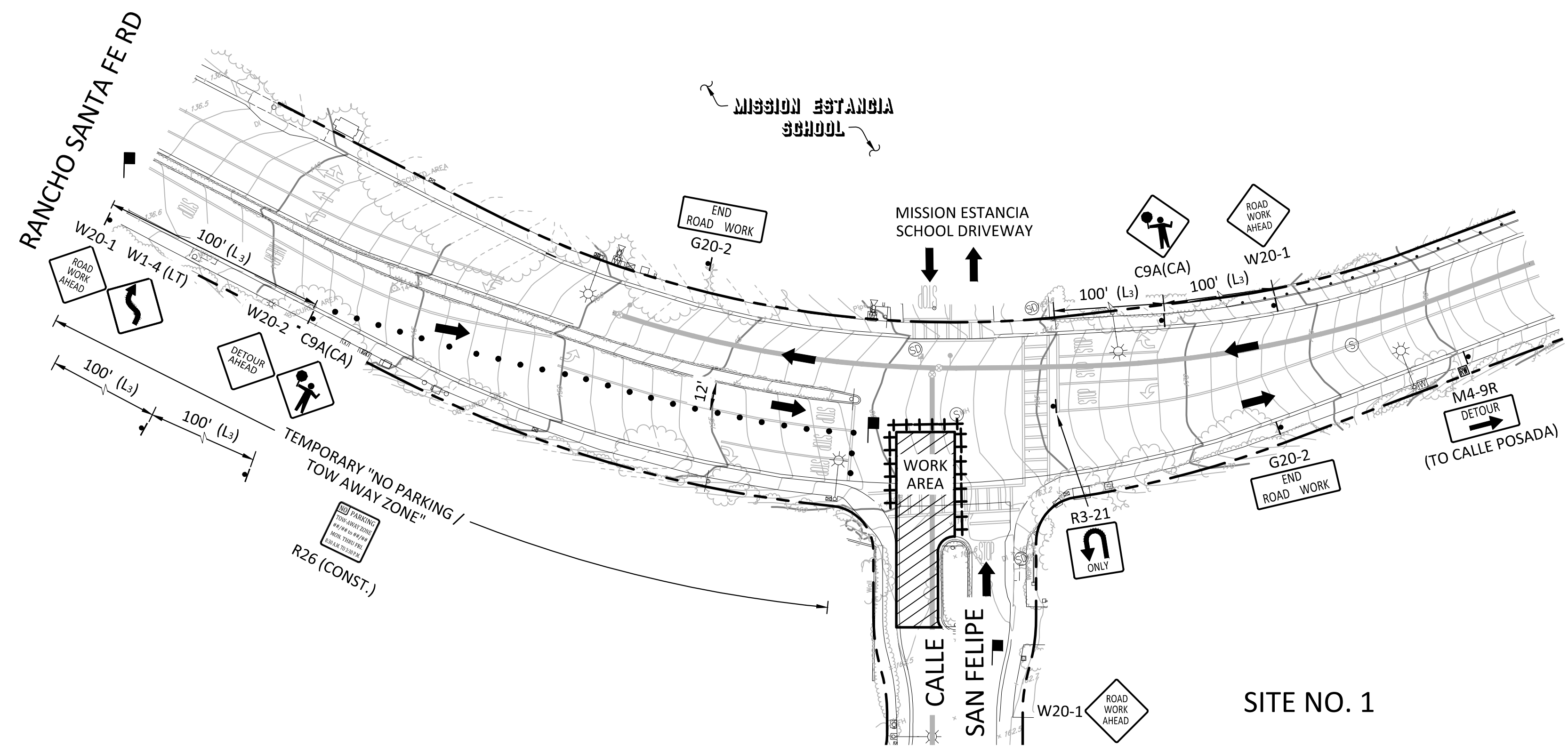
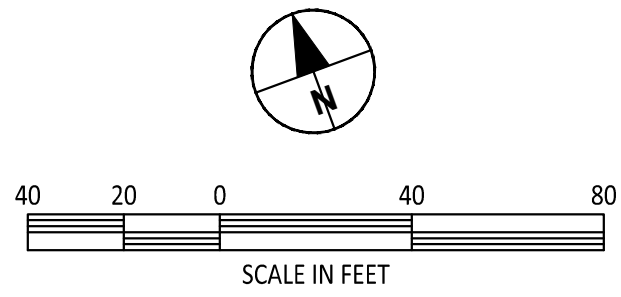


PHASE 1
SCALE: 1" = 40'

NOTE:
CONTRACTOR SHALL COORDINATE WITH THE JURISDICTIONAL AGENCY ON APPROPRIATE INGRESS AND EGRESS, WHICH MAY INCLUDE MODIFICATIONS TO THE TRAFFIC SIGNAL. ADDITIONAL TRAFFIC CONTROL NOT SHOWN HEREIN, AND/OR DEMOLITION OF THE EX MEDIAN TO ALLOW FOR TRAFFIC FLOW TO THE WESTERLY LANES



PHASE 2
SCALE: 1" = 40'



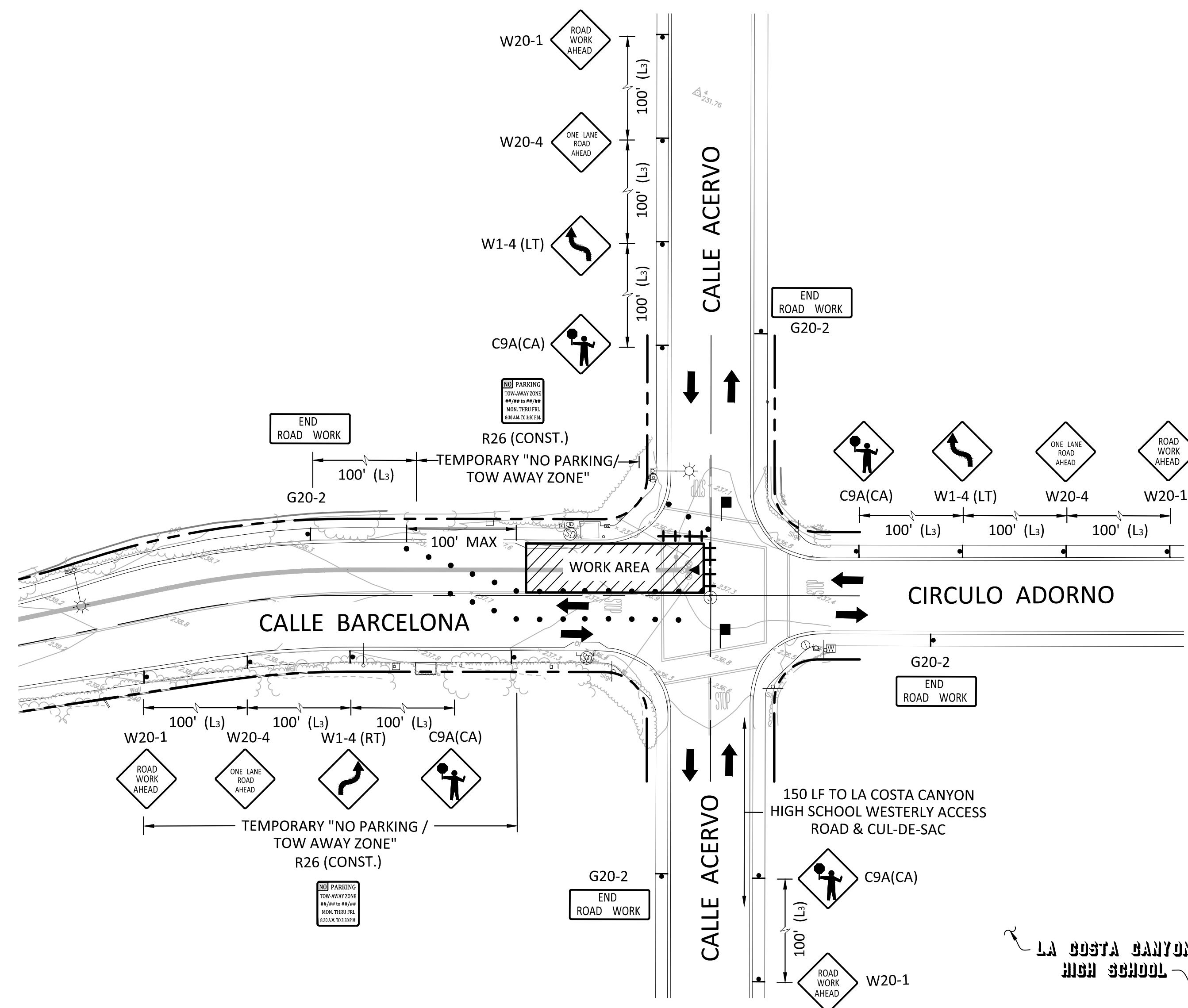
PHASE 3
SCALE: 1" = 40'

SITE NO. 1

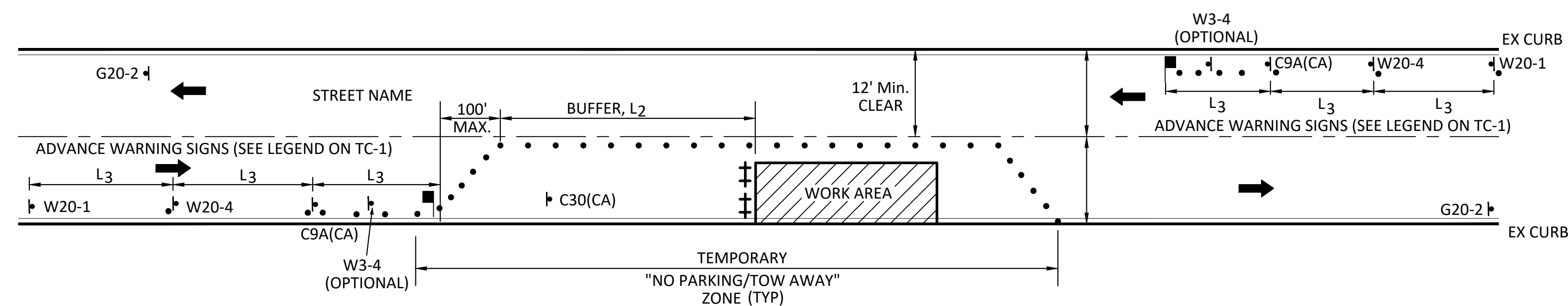
- PHASING NOTES:
1. PHASE 1 WORK AREA DEPICTS CONTRACTOR BEGINNING CONSTRUCTION AT EX 6" RECYCLED WTR PIPELINE CONNECTION (TIE-IN TO BE MADE AT A LATER DATE).
 2. PHASES 1 AND 3 WORK, THE MISSION ESTANCIA SCHOOL DRIVEWAY INGRESS & EGRESS SHALL REMAIN OPEN DURING ALL BUSINESS HOURS.
 3. PHASE 2 WORK SHALL BE COMPLETED WHEN THE MISSION ESTANCIA SCHOOL IS CLOSED FOR BUSINESS. CONTRACTOR SHALL COORDINATE WITH THE DISTRICT ENGINEER FOR SCHEDULING THIS WORK.
 4. PHASE 3 CALLE SAN FELIPE ROAD CLOSURE SHALL BE SIGNED WITH ADVANCE CLOSURE NOTICE TWO WEEKS PRIOR TO CONSTRUCTION.
 5. FOR TYPICAL CONSTRUCTION WORK ALONG CALLE BARCELONA, REFER TO TYPICAL LANE CLOSURE DETAIL ON SHEET 22.
 6. TRAFFIC CONTROL DELINEATORS & BARRICADES SHALL BE SPACED TO PROHIBIT VEHICLE ACCESS.

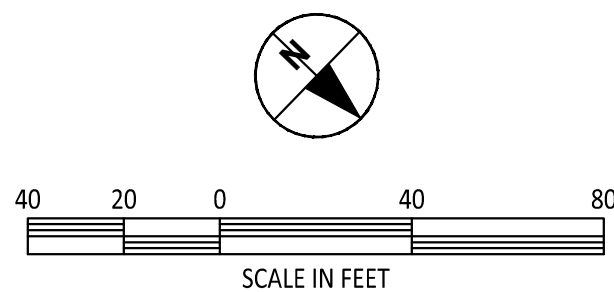
NOT FOR CONSTRUCTION

DESIGN		DRAWN		CHECK		MARK		DATE		BY		REVISIONS	
RR		RR		RR		RR		RR		RR		RR	
HOCH CONSULTING 804 PIER VIEW WAY - SUITE 100 OCEANSIDE, CA 92054 www.hochconsulting.com													
OLIVENHAIN Municipal Water District 1966 Olivenhain Road Encinitas, CA 92024 (760)753-6466													
RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK & SUMMERHILL													
CALLE BARCELONA & CALLE SAN FELIPE CONCEPTUAL TRAFFIC CONTROL PLAN													
SHEET		DRAWING		SHEET		DRAWING		SHEET		DRAWING		SHEET	
2		OF 5		TC-2		TC-2		TC-2		TC-2		TC-2	
D800019													
ORIGINAL SCALE IN INCHES													



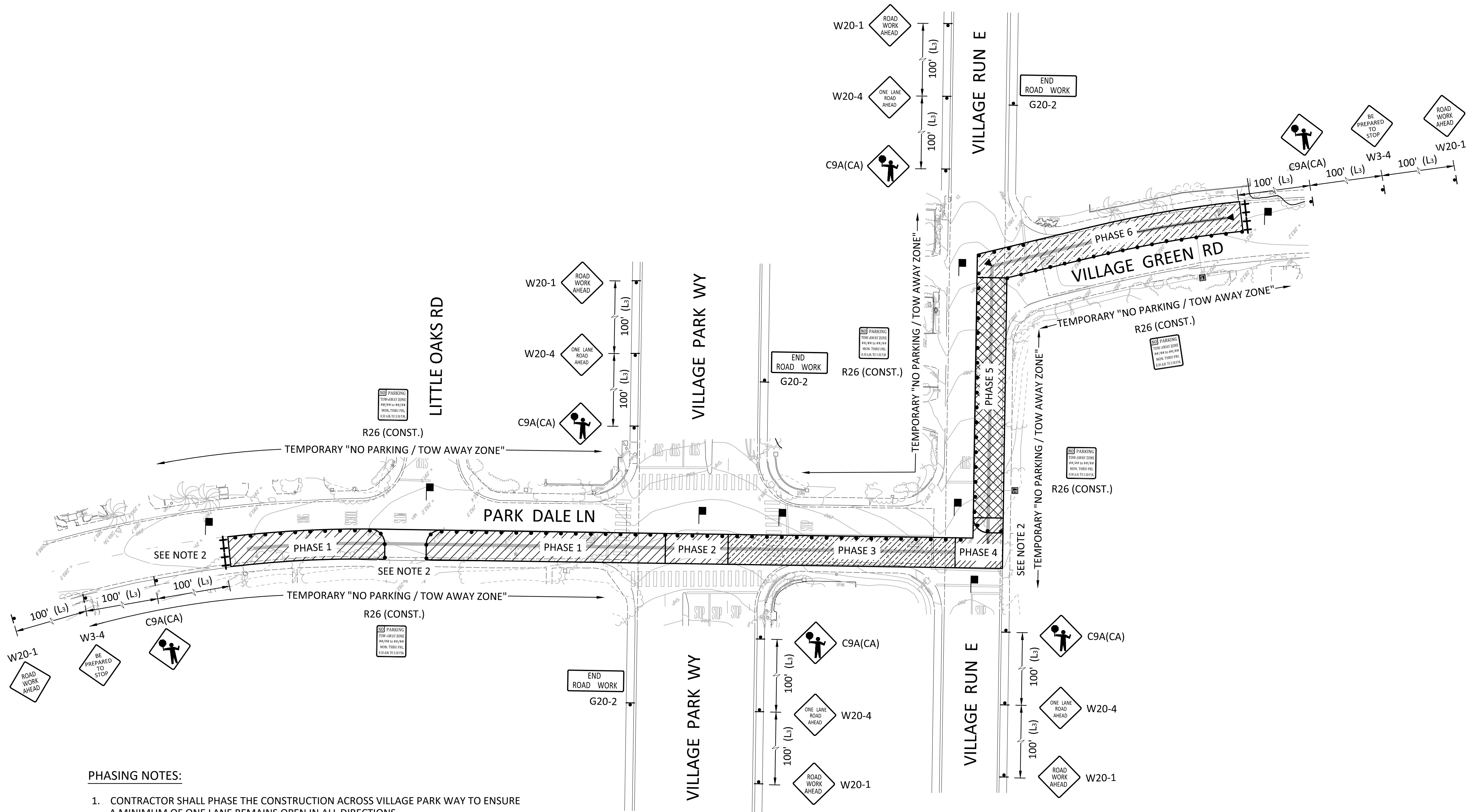
PHASING NOTES:






PHASING NOTES:

1. CONTRACTOR SHALL PHASE THE CONSTRUCTION ACROSS VILLAGE PARK WAY TO ENSURE A MINIMUM OF ONE LANE REMAINS OPEN IN ALL DIRECTIONS.
2. CONTRACTOR SHALL NOTIFY RESIDENTS ALONG PARK DR & THE VILLAGE PARK RECREATION CLUB WHERE DRIVEWAY ACCESS WILL BE AFFECTED TWO WEEKS PRIOR TO CONSTRUCTION.
3. WORKING HOURS FOR PHASES 2 & 4 SHALL BE COORDINATED WITH THE DISTRICT ENGINEER.
4. PHASING ALONG PARK DR, VILLAGE RUN E, & VILLAGE GREEN RD SHALL INCLUDE 2 FLAGGERS ON EACH END OF PHASE TO COORDINATE TRAFFIC FLOWS WHERE ONLY ONE LANE IS AVAILABLE EACH DIRECTION.
5. FOR TYPICAL CONSTRUCTION WORK BETWEEN INTERSECTIONS, REFER TO TYPICAL LANE CLOSURE DETAIL ON SHEET 22.
6. TRAFFIC CONTROL DELINEATORS & BARRICADES SHALL BE SPACED TO PROHIBIT VEHICLE ACCESS.

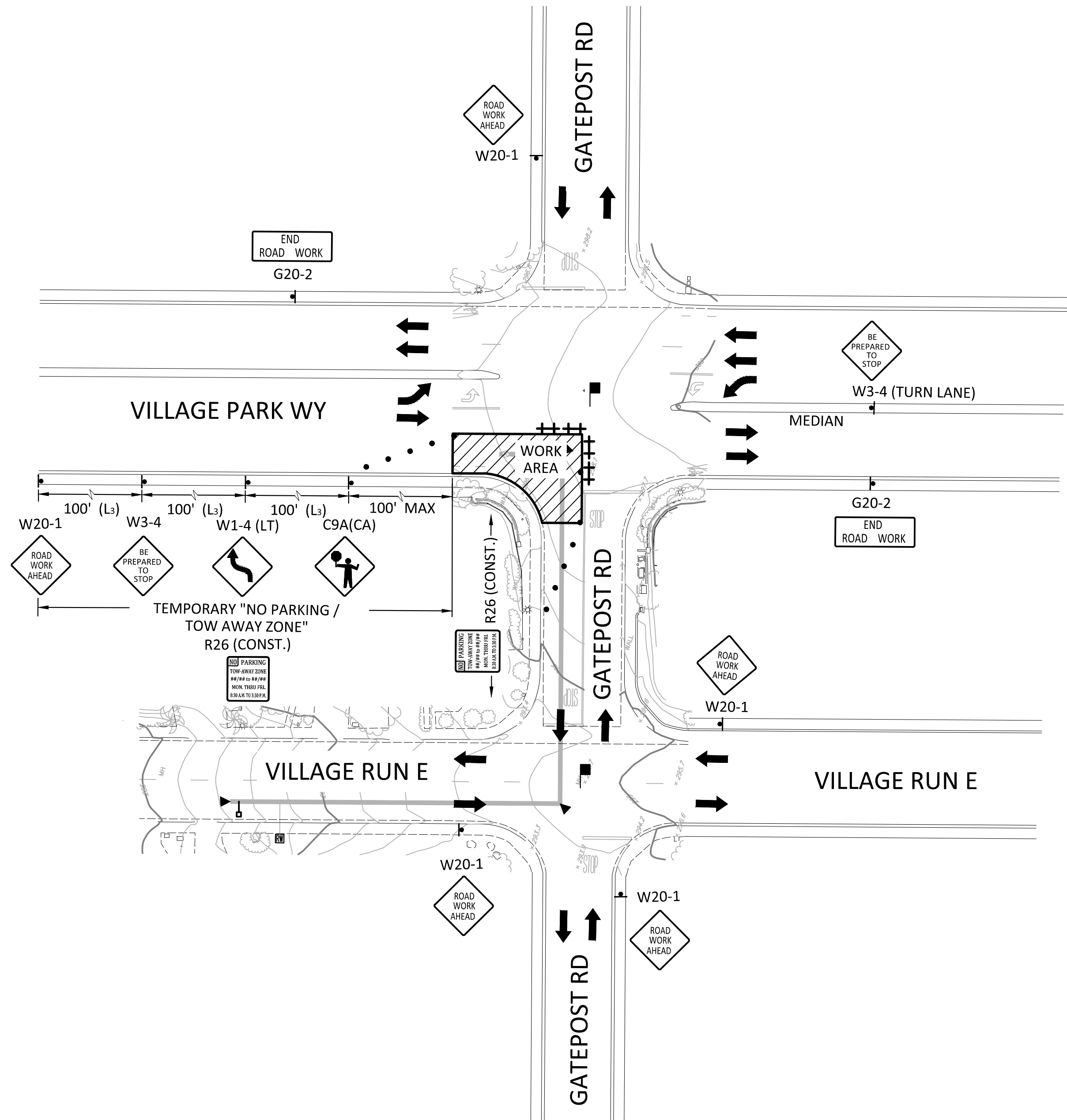
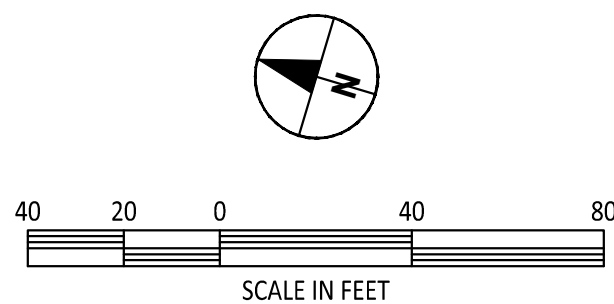


SITE NO. 2

NOT FOR CONSTRUCTION

RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK & SUMMERHILL		HOCH CONSULTING 804 PIER VIEW WAY - SUITE 100 OCEANSIDE, CA 92054 www.hochconsulting.com		DESIGN	
PARK DALE LN & VILLAGE PARK WY CONCEPTUAL TRAFFIC CONTROL PLAN		 Municipal Water District 1966 Olivenhain Road Encinitas, CA 92024 (760)753-6466		RR	
SHEET	DRAWING			RR	
4 OF 5	TC-4			CHECK	
D800019				AR/AH	
				MARK DATE BY REVISIONS	
				/AG	

ORIGINAL SCALE IN INCHES



PHASING NOTES:

1. WORK AREA DEPICTS THE PROP 6" PVC RECYCLED WTR TO THE EX 6" PVC RECYCLED WTR CONNECTION, WHICH INCLUDES TWO FLAGGERS CONTROLLING THE INTERSECTION IN ALL DIRECTIONS, WITH SPECIAL ATTENTION BEING PROVIDED FOR THE WESTBOUND & EASTBOUND LANES ON GATEPOST RD BETWEEN VILLAGE PARK WY & VILLAGE RUN EAST & THE LEFT TURN LANE FROM NORTHBOUND VILLAGE PARK WY TO GATEPOST RD WEST.
2. TRAFFIC CONTROL DELINEATORS & BARRICADES SHALL BE SPACED TO PROHIBIT VEHICLE ACCESS.

SITE NO. 2

NOT FOR CONSTRUCTION

RECYCLED WATER PIPELINE EXTENSIONS FOR CALLE BARCELONA, VILLAGE PARK & SUMMERHILL		PARK DR & VILLAGE PARK WY CONCEPTUAL TRAFFIC CONTROL PLAN		SHEET 5 OF 5		DRAWING TC-5		D800019	
OLIVENHAIN Municipal Water District 1966 Olivenhain Road Encinitas, CA 92024 (760)753-6466		HOCH CONSULTING 804 PIER VIEW WAY - SUITE 100 OCEANSIDE, CA 92054 www.hochconsulting.com		DESIGN RR		DRAWN RR		CHECK AR/AR	
				MARK		DATE		BY REVISIONS	

ORIGINAL SCALE IN INCHES

**GRANT AGREEMENT BETWEEN THE STATE OF CALIFORNIA
(DEPARTMENT OF WATER RESOURCES) AND
SAN DIEGO COUNTY WATER AUTHORITY
AGREEMENT NUMBER 4600014983
PROPOSITION 1 ROUND 2 INTEGRATED REGIONAL WATER MANAGEMENT (IRWM)
IMPLEMENTATION GRANT**

THIS GRANT AGREEMENT is entered into by and between the Department of Water Resources of the State of California, herein referred to as the "State" or "DWR," and the San Diego County Water Authority, a Public Agency in the State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee," which parties do hereby agree as follows:

- 1) **PURPOSE.** The State shall provide funding from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) to the Grantee to assist in financing the projects, which are included in and implemented in an adopted Integrated Regional Water Management Plan (IRWM Plan), pursuant to Chapter 7. Regional Water Security, Climate, and Drought Preparedness (Wat. Code, § 79740 et seq.). The provision of State funds pursuant to this Agreement shall be construed or interpreted to mean that the IRWM Plan, or any components of the IRWM Plan, implemented in accordance with the Work Plan as set forth in Exhibit A, has been adopted through the IRWM Plan Review Process, and is/are consistent with Water Code section 10530 et seq.
- 2) **TERM OF GRANT AGREEMENT.** The term of this Grant Agreement begins on November 23, 2022, through final payment plus three (3) years unless otherwise terminated or amended as provided in this Grant Agreement. However, all work shall be completed by December 31, 2027 in accordance with the Schedule as set forth in Exhibit C and no funds may be requested after March 31, 2028.
- 3) **GRANT AMOUNT.** The maximum amount payable by the State under this Grant Agreement shall not exceed \$16,084,697.
- 4) **GRANTEE COST SHARE.** The Grantee is required to provide a Local Cost Share (non-state funds) as set forth in Exhibit B (Budget). Local Cost Share may include Eligible Project Costs directly related to Exhibit A incurred after January 1, 2015.
- 5) **BASIC CONDITIONS.** The State shall have no obligation to disburse money for the Project(s) under this Grant Agreement until the Grantee has satisfied the following conditions (if applicable):
 - A. The Grantee shall demonstrate compliance with all eligibility criteria as set forth on pages 9-11, inclusive, of the 2022 IRWM Grant Program Guidelines (2022 Guidelines).
 - B. For the term of this Agreement, the Grantee shall submit Quarterly Progress Reports which must accompany an invoice (\$0 Invoices are acceptable) and all invoice backup documentation. The Quarterly Progress Report shall be submitted within 60 days following the end of the calendar quarter (i.e., reports due May 30, August 29, November 29, and March 1) and all other deliverables as required by Paragraph 14, "Submission of Reports" and Exhibit A, "Work Plan".
 - C. Prior to the commencement of construction or implementation activities, if applicable, the Grantee shall submit the following to the State.
 - i. Final plans and specifications certified, signed and stamped by a California Registered Civil Engineer (or equivalent registered professional as appropriate) to certify compliance for each approved project as listed in Exhibit A of this Grant Agreement.
 - ii. Work that is subject to the California Environmental Quality Act (CEQA) (including final land purchases) shall not proceed under this Grant Agreement until the following actions are performed:
 - a) The Grantee submits to the State all applicable permits, as indicated on the Environmental Information Form to the State,
 - b) All documents that satisfy the CEQA process are received by the State,

**IRWM Prop 1 Round 2
(EXCERPT STANDARD CONDITIONS)**

Grant Agreement No. 4600014983
Page 40 of 63

EXHIBIT D

STANDARD CONDITIONS

D.1. ACCOUNTING AND DEPOSIT OF FUNDING DISBURSEMENT:

- A. **Separate Accounting of Funding Disbursements:** Grantee shall account for the money disbursed pursuant to this Grant Agreement separately from all other Grantee funds. Grantee shall maintain audit and accounting procedures that are in accordance with generally accepted accounting principles and practices, consistently applied. Grantee shall keep complete and accurate records of all receipts and disbursements on expenditures of such funds. Grantee shall require its contractors or subcontractors to maintain books, records, and other documents pertinent to their work in accordance with generally accepted accounting principles and practices. Records are subject to inspection by State at any and all reasonable times.
- B. **Disposition of Money Disbursed:** All money disbursed pursuant to this Grant Agreement shall be deposited in a non-interest bearing account, administered, and accounted for pursuant to the provisions of applicable law.
- C. **Remittance of Unexpended Funds:** Grantee shall remit to State any unexpended funds that were disbursed to Grantee under this Grant Agreement and were not used to pay Eligible Project Costs within a period of sixty (60) calendar days from the final disbursement from State to Grantee of funds or, within thirty (30) calendar days of the expiration of the Grant Agreement, whichever comes first.

D.2. ACKNOWLEDGEMENT OF CREDIT AND SIGNAGE: Grantee shall include appropriate acknowledgement of credit to the State for its support when promoting the Project or using any data and/or information developed under this Grant Agreement. Signage shall be posted in a prominent location at Project site(s) (if applicable) or at the Grantee's headquarters and shall include the Department of Water Resources color logo and the following disclosure statement: "Funding for this project has been provided in full or in part from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 and through an agreement with the State Department of Water Resources." The Grantee shall also include in each of its contracts for work under this Agreement a provision that incorporates the requirements stated within this Paragraph.

D.3. AMENDMENT: This Grant Agreement may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. Requests by the Grantee for amendments must be in writing stating the amendment request and the reason for the request. Requests solely for a time extension must be submitted at least 90 days prior to the work completion date set forth in Paragraph 2. Any other request for an amendment must be submitted at least 180 days prior to the work completion date set forth in Paragraph 2. State shall have no obligation to agree to an amendment.

D.4. AMERICANS WITH DISABILITIES ACT: By signing this Grant Agreement, Grantee assures State that it complies with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C. § 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

D.5. AUDITS: State reserves the right to conduct an audit at any time between the execution of this Grant Agreement and the completion of the Project, with the costs of such audit borne by State. After completion of the Project, State may require Grantee to conduct a final audit to State's specifications, at Grantee's expense, such audit to be conducted by and a report prepared by an independent Certified Public Accountant. Failure or refusal by Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and State may elect to pursue any remedies provided in Paragraph 12 or take any other action it deems necessary to protect its interests. The Grantee agrees it shall return any audit disallowances to the State.

Pursuant to Government Code section 8546.7, the Grantee shall be subject to the examination and audit by the State for a period of three (3) years after final payment under this Grant Agreement with respect of all matters connected with this Grant Agreement, including but not limited to, the cost of administering this Grant Agreement. All records of Grantee or its contractor or subcontractors shall be preserved for this purpose for at least three (3) years after receipt of the final disbursement under this Agreement. If an audit reveals any impropriety, the Bureau of State Audits or the State Controller's Office may conduct a full audit of any or all of the Grantee's activities. Code, § 79708, subd. (b)

- D.6. BUDGET CONTINGENCY: If the Budget Act of the current year covered under this Grant Agreement does not appropriate sufficient funds for this program, this Grant Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of State to make any payments under this Grant Agreement. In this event, State shall have no liability to pay any funds whatsoever to Grantee or to furnish any other considerations under this Grant Agreement and Grantee shall not be obligated to perform any provisions of this Grant Agreement. Nothing in this Grant Agreement shall be construed to provide Grantee with a right of priority for payment over any other Grantee. If funding for any fiscal year after the current year covered by this Grant Agreement is reduced or deleted by the Budget Act, by Executive Order, or by order of the Department of Finance, the State shall have the option to either cancel this Grant Agreement with no liability occurring to State, or offer a Grant Agreement amendment to Grantee to reflect the reduced amount.
- D.7. CALIFORNIA CONSERVATION CORPS: Grantee may use the services of the California Conservation Corps or other community conservation corps as defined in Public Resources Code section 14507.5.
- D.8. CEQA: Activities funded under this Grant Agreement, regardless of funding source, must be in compliance with the California Environmental Quality Act (CEQA). (Pub. Resources Code, § 21000 et seq.) Any work that is subject to CEQA and funded under this Agreement shall not proceed until documents that satisfy the CEQA process are received by the State's Project Manager and the State has completed its CEQA compliance. Work funded under this Agreement that is subject to a CEQA document shall not proceed until and unless approved by the Department of Water Resources. Such approval is fully discretionary and shall constitute a condition precedent to any work for which it is required. If CEQA compliance by the Grantee is not complete at the time the State signs this Agreement, once State has considered the environmental documents, it may decide to require changes, alterations, or other mitigation to the Project; or to not fund the Project. Should the State decide to not fund the Project, this Agreement shall be terminated in accordance with Paragraph 12, "Default Provisions."
- D.9. CHILD SUPPORT COMPLIANCE ACT: The Grantee acknowledges in accordance with Public Contract Code section 7110, that:
- A. The Grantee recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Family Code section 5200 et seq.; and
 - B. The Grantee, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.
- D.10. CLAIMS DISPUTE: Any claim that the Grantee may have regarding performance of this Agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the DWR Project Representative, within thirty (30) days of the Grantee's knowledge of the claim. State and Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to this Agreement to implement the terms of any such resolution.

- D.11. COMPETITIVE BIDDING AND PROCUREMENTS: Grantee's contracts with other entities for the acquisition of goods and services and construction of public works with funds provided by State under this Grant Agreement must be in writing and shall comply with all applicable laws and regulations regarding the securing of competitive bids and undertaking competitive negotiations. If the Grantee does not have a written policy to award contracts through a competitive bidding or sole source process, the Department of General Services' *State Contracting Manual* rules must be followed and are available at: <https://www.dgs.ca.gov/OLS/Resources/Page-Content/Office-of-Legal-Services-Resources-List-Folder/State-Contracting>.
- D.12. COMPUTER SOFTWARE: Grantee certifies that it has appropriate systems and controls in place to ensure that state funds will not be used in the performance of this Grant Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.
- D.13. CONFLICT OF INTEREST: All participants are subject to State and Federal conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in the application being rejected and any subsequent contract being declared void. Other legal action may also be taken. Applicable statutes include, but are not limited to, Government Code section 1090 and Public Contract Code sections 10410 and 10411, for State conflict of interest requirements.
- A. Current State Employees: No State officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity, or enterprise is required as a condition of regular State employment. No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.
 - B. Former State Employees: For the two-year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements, or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.
 - C. Employees of the Grantee: Employees of the Grantee shall comply with all applicable provisions of law pertaining to conflicts of interest, including but not limited to any applicable conflict of interest provisions of the California Political Reform Act. (Gov. Code, § 87100 et seq.)
 - D. Employees and Consultants to the Grantee: Individuals working on behalf of a Grantee may be required by the Department to file a Statement of Economic Interests (Fair Political Practices Commission Form 700) if it is determined that an individual is a consultant for Political Reform Act purposes.
- D.14. DELIVERY OF INFORMATION, REPORTS, AND DATA: Grantee agrees to expeditiously provide throughout the term of this Grant Agreement, such reports, data, information, and certifications as may be reasonably required by State.
- D.15. DISPOSITION OF EQUIPMENT: Grantee shall provide to State, not less than thirty (30) calendar days prior to submission of the final invoice, an itemized inventory of equipment purchased with funds provided by State. The inventory shall include all items with a current estimated fair market value of more than \$5,000.00 per item. Within sixty (60) calendar days of receipt of such inventory State shall provide Grantee with a list of the items on the inventory that State will take title to. All other items shall become the property of Grantee. State shall arrange for delivery from Grantee of items that it takes title to. Cost of transportation, if any, shall be borne by State.
- D.16. DRUG-FREE WORKPLACE CERTIFICATION: Certification of Compliance: By signing this Grant Agreement, Grantee, its contractors or subcontractors hereby certify, under penalty of perjury under

the laws of State of California, compliance with the requirements of the Drug-Free Workplace Act of 1990 (Gov. Code, § 8350 et seq.) and have or will provide a drug-free workplace by taking the following actions:

- A. Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations, as required by Government Code section 8355.
- B. Establish a Drug-Free Awareness Program, as required by Government Code section 8355 to inform employees, contractors, or subcontractors about all of the following:
 - i. The dangers of drug abuse in the workplace,
 - ii. Grantee's policy of maintaining a drug-free workplace,
 - iii. Any available counseling, rehabilitation, and employee assistance programs, and
 - iv. Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.
- C. Provide, as required by Government Code section 8355, that every employee, contractor, and/or subcontractor who works under this Grant Agreement:
 - i. Will receive a copy of Grantee's drug-free policy statement, and
 - ii. Will agree to abide by terms of Grantee's condition of employment, contract or subcontract.

- D.17. EASEMENTS: Where the Grantee acquires property in fee title or funds improvements to real property using State funds provided through this Grant Agreement, an appropriate easement or other title restriction providing for floodplain preservation and agricultural and/or wildlife habitat conservation for the subject property in perpetuity, approved by the State, shall be conveyed to a regulatory or trustee agency or conservation group acceptable to the State. The easement or other title restriction must be in first position ahead of any recorded mortgage or lien on the property unless this requirement is waived by the State.

Where the Grantee acquires an easement under this Agreement, the Grantee agrees to monitor and enforce the terms of the easement, unless the easement is subsequently transferred to another land management or conservation organization or entity with State permission, at which time monitoring and enforcement responsibilities will transfer to the new easement owner.

Failure to provide an easement or other title restriction acceptable to the State may result in termination of this Agreement.

- D.18. FINAL INSPECTIONS AND CERTIFICATION OF REGISTERED PROFESSIONAL: Upon completion of the Project, Grantee shall provide for a final inspection and certification by a California Registered Professional (i.e., Professional Civil Engineer, Engineering Geologist), that the Project has been completed in accordance with submitted final plans and specifications and any modifications thereto and in accordance with this Grant Agreement.

- D.19. GRANTEE'S RESPONSIBILITIES: Grantee and its representatives shall:

- A. Faithfully and expeditiously perform or cause to be performed all project work as described in Exhibit A and in accordance with Exhibits B and C.
- B. Accept and agree to comply with all terms, provisions, conditions, and written commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by Grantee in the application, documents, amendments, and communications filed in support of its request for funding.
- C. Comply with all applicable California, federal, and local laws and regulations.
- D. Implement the Project in accordance with applicable provisions of the law.
- E. Fulfill its obligations under the Grant Agreement and be responsible for the performance of the Project.
- F. Obtain any and all permits, licenses, and approvals required for performing any work under this Grant Agreement, including those necessary to perform design, construction, or operation and maintenance of the Project. Grantee shall provide copies of permits and approvals to State.

- G. Be solely responsible for design, construction, and operation and maintenance of projects within the work plan. Review or approval of plans, specifications, bid documents, or other construction documents by State is solely for the purpose of proper administration of funds by State and shall not be deemed to relieve or restrict responsibilities of Grantee under this Agreement.
- H. Be solely responsible for all work and for persons or entities engaged in work performed pursuant to this Agreement, including, but not limited to, contractors, subcontractors, suppliers, and providers of services. The Grantee shall be responsible for any and all disputes arising out of its contracts for work on the Project, including but not limited to payment disputes with contractors and subcontractors. The State will not mediate disputes between the Grantee and any other entity concerning responsibility for performance of work.
- D.20. GOVERNING LAW: This Grant Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.
- D.21. INCOME RESTRICTIONS: The Grantee agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by the Grantee under this Agreement shall be paid by the Grantee to the State, to the extent that they are properly allocable to costs for which the Grantee has been reimbursed by the State under this Agreement. The Grantee shall also include in each of its contracts for work under this Agreement a provision that incorporates the requirements stated within this Paragraph.
- D.22. INDEMNIFICATION: Grantee shall indemnify and hold and save the State, its officers, agents, and employees, free and harmless from any and all liabilities for any claims and damages (including inverse condemnation) that may arise out of the Project and this Agreement, including, but not limited to any claims or damages arising from planning, design, construction, maintenance and/or operation of levee rehabilitation measures for this Project and any breach of this Agreement. Grantee shall require its contractors or subcontractors to name the State, its officers, agents and employees as additional insureds on their liability insurance for activities undertaken pursuant to this Agreement.
- D.23. INDEPENDENT CAPACITY: Grantee, and the agents and employees of Grantees, in the performance of the Grant Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.
- D.24. INSPECTION OF BOOKS, RECORDS, AND REPORTS: During regular office hours, each of the parties hereto and their duly authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this Grant Agreement or matters related hereto. Each of the parties hereto shall maintain and shall make available at all times for such inspection accurate records of all its costs, disbursements, and receipts with respect to its activities under this Grant Agreement. Failure or refusal by Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and State may withhold disbursements to Grantee or take any other action it deems necessary to protect its interests.
- D.25. INSPECTIONS OF PROJECT BY STATE: State shall have the right to inspect the work being performed at any and all reasonable times during the term of the Grant Agreement. This right shall extend to any subcontracts, and Grantee shall include provisions ensuring such access in all its contracts or subcontracts entered into pursuant to its Grant Agreement with State.
- D.26. LABOR CODE COMPLIANCE: The Grantee agrees to be bound by all the provisions of the Labor Code regarding prevailing wages and shall monitor all contracts subject to reimbursement from this Agreement to assure that the prevailing wage provisions of the Labor Code are being met. Current Department of Industrial Relations (DIR) requirements may be found at: <http://www.dir.ca.gov/lcp.asp>. For more information, please refer to DIR's *Public Works Manual* at: <https://www.dir.ca.gov/dlse/PWManualCombined.pdf>. The Grantee affirms that it is 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, and the Grantee affirms that it will comply with such provisions before commencing the performance of the work under this Agreement and will make its contractors and subcontractors aware of this provision.

- D.27. MODIFICATION OF OVERALL WORK PLAN: At the request of the Grantee, the State may at its sole discretion approve non-material changes to the portions of Exhibits A, B, and C which concern the budget and schedule without formally amending this Grant Agreement. Non-material changes with respect to the budget are changes that only result in reallocation of the budget and will not result in an increase in the amount of the State Grant Agreement. Non-material changes with respect to the Project schedule are changes that will not extend the term of this Grant Agreement. Requests for non-material changes to the budget and schedule must be submitted by the Grantee to the State in writing and are not effective unless and until specifically approved by the State's Program Manager in writing.
- D.28. NONDISCRIMINATION: During the performance of this Grant Agreement, Grantee and its contractors or subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex (gender), sexual orientation, gender identity, race, color, ancestry, religion, creed, national origin (including language use restriction), pregnancy, physical disability (including HIV and AIDS), mental disability, medical condition (cancer/genetic characteristics), age (over 40), marital/domestic partner status, and denial of medical and family care leave or pregnancy disability leave. Grantee and its contractors or subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Grantee and its contractors or subcontractors shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code, § 12990.) and the applicable regulations promulgated there under (Cal. Code Regs., tit. 2, § 11000 et seq.). The applicable regulations of the Fair Employment and Housing are incorporated into this Agreement by reference. Grantee and its contractors or subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.
Grantee shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Grant Agreement.
- D.29. OPINIONS AND DETERMINATIONS: Where the terms of this Grant Agreement provide for action to be based upon, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.
- D.30. PERFORMANCE BOND: Where contractors are used, the Grantee shall not authorize construction to begin until each contractor has furnished a performance bond in favor of the Grantee in the following amounts: faithful performance (100%) of contract value, and labor and materials (100%) of contract value. This requirement shall not apply to any contract for less than \$25,000.00. Any bond issued pursuant to this paragraph must be issued by a California-admitted surety. (Pub. Contract Code, § 7103; Code Civ. Proc., § 995.311.)
- D.31. PRIORITY HIRING CONSIDERATIONS: If this Grant Agreement includes services in excess of \$200,000, the Grantee shall give priority consideration in filling vacancies in positions funded by the Grant Agreement to qualified recipients of aid under Welfare and Institutions Code section 11200 in accordance with Public Contract Code section 10353.
- D.32. PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION: The Grantee shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the Project, or with Grantee's service of water, without prior permission of State. Grantee shall not take any action, including but not limited to actions relating to user fees, charges, and assessments that could adversely affect the ability of Grantee meet its obligations under this

Grant Agreement, without prior written permission of State. State may require that the proceeds from the disposition of any real or personal property be remitted to State.

- D.33. PROJECT ACCESS: The Grantee shall ensure that the State, the Governor of the State, or any authorized representative of the foregoing, will have safe and suitable access to the Project site at all reasonable times during Project construction and thereafter for the term of this Agreement.
- D.34. REMAINING BALANCE: In the event the Grantee does not submit invoices requesting all of the funds encumbered under this Grant Agreement, any remaining funds revert to the State. The State will notify the Grantee stating that the Project file is closed and any remaining balance will be disencumbered and unavailable for further use under this Grant Agreement.
- D.35. REMEDIES NOT EXCLUSIVE: The use by either party of any remedy specified herein for the enforcement of this Grant Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.
- D.36. RETENTION: The State shall withhold ten percent (10%) of the funds, for each project, until the project is complete, and a Final Project Report is approved and accepted by DWR. If a project has multiple components (within a project), at the State's discretion and upon a written request by the Grantee, any retained amount attributable to a single component may be released when that component is complete and the Final Component Completion Report is approved. Upon approval of the Final Project Report and/or Final Component Completion Report, any retained amounts due to the Grantee will be promptly disbursed to the Grantee, without interest.
- D.37. RIGHTS IN DATA: Grantee agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of this Grant Agreement shall be made available to the State and shall be in the public domain to the extent to which release of such materials is required under the California Public Records Act. (Gov. Code, § 6250 et seq.) Grantee may disclose, disseminate and use in whole or in part, any final form data and information received, collected and developed under this Grant Agreement, subject to appropriate acknowledgement of credit to State for financial support. Grantee shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State shall have the right to use any data described in this paragraph for any public purpose.
- D.38. SEVERABILITY: Should any portion of this Grant Agreement be determined to be void or unenforceable, such shall be severed from the whole and the Grant Agreement shall continue as modified.
- D.39. SUSPENSION OF PAYMENTS: This Grant Agreement may be subject to suspension of payments or termination, or both if the State determines that:
- A. Grantee, its contractors, or subcontractors have made a false certification, or
 - B. Grantee, its contractors, or subcontractors violates the certification by failing to carry out the requirements noted in this Grant Agreement.
- D.40. SUCCESSORS AND ASSIGNS: This Grant Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of this Grant Agreement or any part thereof, rights hereunder, or interest herein by the Grantee shall be valid unless and until it is approved by State and made subject to such reasonable terms and conditions as State may impose.
- D.41. TERMINATION BY GRANTEE: Subject to State approval which may be reasonably withheld, Grantee may terminate this Agreement and be relieved of contractual obligations. In doing so, Grantee must provide a reason(s) for termination. Grantee must submit all progress reports summarizing accomplishments up until termination date.

- D.42. TERMINATION FOR CAUSE: Subject to the right to cure under Paragraph 12, "Default Provisions," the State may terminate this Grant Agreement and be relieved of any payments should Grantee fail to perform the requirements of this Grant Agreement at the time and in the manner herein, provided including but not limited to reasons of default under Paragraph 12, "Default Provisions."
- D.43. TERMINATION WITHOUT CAUSE: The State may terminate this Agreement without cause on 30 days' advance written notice. The Grantee shall be reimbursed for all reasonable expenses incurred up to the date of termination.
- D.44. THIRD PARTY BENEFICIARIES: The parties to this Agreement do not intend to create rights in, or grant remedies to, any third party as a beneficiary of this Agreement, or any duty, covenant, obligation or understanding established herein.
- D.45. TIMELINESS: Time is of the essence in this Grant Agreement.
- D.46. TRAVEL – DAC, EDA, TRIBES PROJECT: Travel is only an eligible reimbursable expense for projects providing at least 75% of benefits to DACs, EDAs, and/or Tribes (based on population or geographic area). Only ground transportation and lodging are eligible for grant reimbursement. Per diem costs will not be eligible for grant reimbursement. Any reimbursement for necessary travel shall be at rates not to exceed those set by the California Department of Human Resources. These rates may be found at: <http://www.calhr.ca.gov/employees/Pages/travel-reimbursements.aspx>. Reimbursement will be at the State travel amounts that are current as of the date costs are incurred. No travel outside of the IRWM region shall be reimbursed unless prior written authorization is obtained from the State.
- D.47. UNION ORGANIZING: Grantee, by signing this Grant Agreement, hereby acknowledges the applicability of Government Code sections 16645 through 16649 to this Grant Agreement. Furthermore, Grantee, by signing this Grant Agreement, hereby certifies that:
- A. No State funds disbursed by this Grant Agreement will be used to assist, promote, or deter union organizing.
 - B. Grantee shall account for State funds disbursed for a specific expenditure by this Grant Agreement to show those funds were allocated to that expenditure.
 - C. Grantee shall, where State funds are not designated as described in (b) above, allocate, on a pro rata basis, all disbursements that support the program.
 - D. If Grantee makes expenditures to assist, promote, or deter union organizing, Grantee will maintain records sufficient to show that no State funds were used for those expenditures and that Grantee shall provide those records to the Attorney General upon request.
- D.48. VENUE: The State and the Grantee hereby agree that any action arising out of this Agreement shall be filed and maintained in the Superior Court in and for the County of Sacramento, California, or in the United States District Court in and for the Eastern District of California. The Grantee hereby waives any existing sovereign immunity for the purposes of this Agreement.
- D.49. WAIVER OF RIGHTS: None of the provisions of this Grant Agreement shall be deemed waived unless expressly waived in writing. It is the intention of the parties here to that from time to time either party may waive any of its rights under this Grant Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the Grant Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.

UNITED STATES DEPARTMENT OF THE INTERIOR

ASSISTANCE AGREEMENT

Agreement No. R22AP00518

Between

Bureau of Reclamation

And

Olivenhain Municipal Water District

For

North San Diego Water Reuse Coalition Regional Recycled Water Program Title XVI WIIN

Name (abbreviated when possible) and ALC Agency POC

- (iv) For recipients that do not have electronic remittance capability, please make check² payable to: “The Department of Health and Human Services.”

Mail Check to Treasury approved lockbox:

HHS Program Support Center, P.O. Box 530231, Atlanta, GA 30353-0231

²Please allow 4-6 weeks for processing of a payment by check to be applied to the appropriate PMS account.

- (v) Questions can be directed to PMS at 877-614-5533 or PMSSupport@psc.hhs.gov.

2.2 Payment Method.

Recipients must utilize the Department of Treasury Automated Standard Application for Payments (ASAP) payment system to request advance or reimbursement payments. ASAP is a Recipient-initiated payment and information system designed to provide a single point of contact for the request and delivery of Federal funds. ASAP is the only allowable method for request and receipt of payment. Recipient procedures must minimize the time elapsing between the drawdown of Federal funds and the disbursement for agreement purposes.

In accordance with 2 CFR 25.200(b)(2) the Recipient shall “Maintain an active SAM registration with current information, including information on a recipient's immediate and highest level owner and subsidiaries, as well as on all predecessors that have been awarded a Federal contract or grant within the last three years, if applicable, at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency. If the Recipient allows their SAM registration to lapse, the Recipient’s accounts within ASAP will be automatically suspended by Reclamation until such time as the Recipient renews their SAM registration.

3. PROCUREMENT STANDARDS (2 CFR 200.317 through 200.327)

§200.317 Procurements by States.

When procuring property and services under a Federal award, a State must follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will comply with §§200.321, 200.322, and 200.323 and ensure that every purchase order or other contract includes any clauses required by §200.327. All other non-Federal entities, including subrecipients of a State, must follow the procurement standards in §§200.318 through 200.327.

§200.318 General procurement standards.

- (a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.

Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and any program-specific statutes with anti-discrimination requirements. The Recipient shall comply with civil rights laws including, but not limited to, the Fair Housing Act, the Fair Credit Reporting Act, the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Equal Educational Opportunities Act, the Age Discrimination in Employment Act, and the Uniform Relocation Act.

Such Assurances also include, but are not limited to, the promise to comply with all applicable Federal statutes and orders relating to nondiscrimination in employment, assistance, and housing; the Hatch Act; Federal wage and hour laws and regulations and work place safety standards; Federal environmental laws and regulations and the Endangered Species Act; and Federal protection of rivers and waterways and historic and archeological preservation.

13. COVENANT AGAINST CONTINGENT FEES

The Recipient warrants that no person or agency has been employed or retained to solicit or secure this Agreement upon an Agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide offices established and maintained by the Recipient for the purpose of securing Agreements or business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the Agreement amount, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

14. TRAFFICKING VICTIMS PROTECTION ACT OF 2000 (2 CFR 175.15)

Trafficking in persons.

- (a) *Provisions applicable to a recipient that is a private entity.* You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not
 - (1) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
 - (2) Procure a commercial sex act during the period of time that the award is in effect; or
 - (3) Use forced labor in the performance of the award or subawards under the award.
- (b) We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —
 - (1) Is determined to have violated a prohibition in paragraph a.1 of this award term; or
 - (2) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either:
 - (i) Associated with performance under this award; or

- (ii) Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 *CFR part 1400*.
- (c) *Provision applicable to a recipient other than a private entity.* We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—
 - (1) Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or
 - (2) Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either:
 - (i) Associated with performance under this award; or
 - (ii) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at 2 *CFR part 1400*.
- (d) *Provisions applicable to any recipient.*
 - (1) You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.
 - (2) Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:
 - (i) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
 - (ii) Is in addition to all other remedies for noncompliance that are available to us under this award.
 - (3) You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.
- (e) *Definitions.* For purposes of this award term:
 - (1) “Employee” means either:
 - (i) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
 - (ii) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
 - (2) “Forced labor” means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services,

4. Subaward has the meaning given in 2 CFR 200.1.
5. Subrecipient has the meaning given in 2 CFR 200.1.

18. PROHIBITION ON TEXT MESSAGING AND USING ELECTRONIC EQUIPMENT SUPPLIED BY THE GOVERNMENT WHILE DRIVING

Executive Order 13513, *Federal Leadership On Reducing Text Messaging While Driving*, was signed by President Barack Obama on October 1, 2009 (ref: <http://edocket.access.gpo.gov/2009/pdf/E9-24203.pdf>). This Executive Order introduces a Federal Government-wide prohibition on the use of text messaging while driving on official business or while using Government-supplied equipment. Additional guidance enforcing the ban will be issued at a later date. In the meantime, please adopt and enforce policies that immediately ban text messaging while driving company-owned or rented vehicles, government-owned or leased vehicles, or while driving privately owned vehicles when on official government business or when performing any work for or on behalf of the government.

19. REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION (2 CFR 170 APPENDIX A)

I. Reporting Subawards and Executive Compensation.

a. Reporting of first-tier subawards.

1. Applicability. Unless you are exempt as provided in paragraph d. of this award term, you must report each action that equals or exceeds \$30,000 in Federal funds for a subaward to a non-Federal entity or Federal agency (see definitions in paragraph e. of this award term).
2. Where and when to report.
 - i. The non-Federal entity or Federal agency must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.
 - ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
3. What to report. You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

b. Reporting total compensation of recipient executives for non-Federal entities.

1. Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—
 - i. The total Federal funding authorized to date under this Federal award equals or exceeds \$30,000 as defined in 2 CFR 170.320;
 - ii. in the preceding fiscal year, you received—

through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

(3) “Private entity”:

- (i) Means any entity other than a state, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25. Includes:
 - (A) A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
 - (B) A for-profit organization.

(4) “Severe forms of trafficking in persons,” “commercial sex act,” and “coercion” have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

15. NEW RESTRICTIONS ON LOBBYING (43 CFR 18)

The Recipient agrees to comply with 43 CFR 18, New Restrictions on Lobbying, including the following certification:

- (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Recipient, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or amendment of any Federal contract, grant, loan, or cooperative agreement.
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying” in accordance with its instructions.
- (c) The Recipient shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

6. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)).

[85 FR 49526, Aug. 13, 2020]

20. RECIPIENT EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

- (a) This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub.L. 112-239).
- (b) The Award Recipient shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C 4712.
- (c) The Award Recipient shall insert the substance of this clause, including this paragraph (c), in all subawards or subcontracts over the simplified acquisition threshold. 48 CFR 52.203-17 (as referenced in 48 CFR 3.908-9).

21. REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE (APPENDIX XII to 2 CFR Part 200)

1. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

- a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
- b. Reached its final disposition during the most recent five-year period; and
- c. Is one of the following:

17. SYSTEM FOR AWARD MANAGEMENT and Universal Identifier Requirements (2 CFR 25, Appendix A)

A. Requirement for System for Award Management

Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain current information in the SAM. This includes information on your immediate and highest level owner and subsidiaries, as well as on all of your predecessors that have been awarded a Federal contract or Federal financial assistance within the last three years, if applicable, until you submit the final financial report required under this Federal award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another Federal award term.

B. Requirement for unique entity identifier

If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its unique entity identifier to you.
2. May not make a subaward to an entity unless the entity has provided its Unique Entity Identifier to you. Subrecipients are not required to obtain an active SAM registration, but must obtain a Unique Entity Identifier.

C. Definitions

For purposes of this award term:

1. System for Award Management (SAM) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <http://www.sam.gov>).
2. Unique entity identifier means the identifier required for SAM registration to uniquely identify business entities.
3. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
 - a. A Governmental organization, which is a State, local government, or Indian Tribe;
 - b. A foreign public entity;
 - c. A domestic or foreign nonprofit organization;
 - d. A domestic or foreign for-profit organization; and
 - e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

- b. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
- c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - (1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - (2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

[80 FR 43310, July 22, 2015, as amended at 85 FR 49582, Aug. 13, 2020]

22. CONFLICTS OF INTEREST

(a) Applicability.

- (1) This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements.
- (2) In the procurement of supplies, equipment, construction, and services by recipients and by subrecipients, the conflict of interest provisions in 2 CFR 200.318 apply.

(b) Requirements.

- (1) Non-Federal entities must avoid prohibited conflicts of interest, including any significant financial interests that could cause a reasonable person to question the recipient's ability to provide impartial, technically sound, and objective performance under or with respect to a Federal financial assistance agreement.
- (2) In addition to any other prohibitions that may apply with respect to conflicts of interest, no key official of an actual or proposed recipient or subrecipient, who is substantially involved in the proposal or project, may have been a former Federal employee who, within the last one (1) year, participated personally and substantially in the evaluation, award, or administration of an award with respect to that recipient or subrecipient or in development of the requirement leading to the funding announcement.
- (3) No actual or prospective recipient or subrecipient may solicit, obtain, or use non-public information regarding the evaluation, award, or administration of an award to that recipient or subrecipient or the development of a Federal financial assistance opportunity that may be of competitive interest to that recipient or subrecipient.

(c) Notification.

- (1) Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the DOI awarding agency or pass-through entity in accordance with 2 CFR 200.112, Conflicts of Interest.

- (2) Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.
- (d) Restrictions on Lobbying. Non-Federal entities are strictly prohibited from using funds under this grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR Part 18 and 31 USC 1352.
- (e) Review Procedures. The Financial Assistance Officer will examine each conflict of interest disclosure on the basis of its particular facts and the nature of the proposed grant or cooperative agreement, and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it.
- (f) Enforcement. Failure to resolve conflicts of interest in a manner that satisfies the Government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2 CFR Part 180).

23. DATA AVAILABILITY

- (a) Applicability. The Department of the Interior is committed to basing its decisions on the best available science and providing the American people with enough information to thoughtfully and substantively evaluate the data, methodology, and analysis used by the Department to inform its decisions.
- (b) Use of Data. The regulations at 2 CFR 200.315 apply to data produced under a Federal award, including the provision that the Federal Government has the right to obtain, reproduce, publish, or otherwise use the data produced under a Federal award as well as authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.
- (c) Availability of Data. The recipient shall make the data produced under this award and any subaward(s) available to the Government for public release, consistent with applicable law, to allow meaningful third party evaluation and reproduction of the following:
 - (i) The scientific data relied upon;
 - (ii) The analysis relied upon; and
 - (iii) The methodology, including models, used to gather and analyze data.

24. PROHIBITION ON PROVIDING FUNDS TO THE ENEMY

- (a) The recipient must—
 - (1) Exercise due diligence to ensure that none of the funds, including supplies and services, received under this grant or cooperative agreement are provided directly or indirectly (including through subawards or contracts) to a person or entity who is actively opposing the United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities, which must be completed through [2 CFR 180.300](#) prior to issuing a subaward or contract and;
 - (2) Terminate or void in whole or in part any subaward or contract with a person or entity listed in SAM as a prohibited or restricted source pursuant to subtitle E of Title VIII of the NDAA for FY 2015, unless the Federal awarding agency provides written approval to continue the subaward or contract.
- (b) The recipient may include the substance of this clause, including paragraph (a) of this clause, in subawards under this grant or cooperative agreement that have an estimated value over \$50,000 and will be performed outside the United States, including its outlying areas.
- (c) The Federal awarding agency has the authority to terminate or void this grant or cooperative agreement, in whole or in part, if the Federal awarding agency becomes aware that the recipient failed to exercise due diligence as required by paragraph (a) of this clause or if the Federal awarding agency becomes aware that any funds received under this grant or cooperative agreement have been provided directly or indirectly to a person or entity who is actively opposing coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

25. ADDITIONAL ACCESS TO RECIPIENT RECORDS

- (a) In addition to any other existing examination-of-records authority, the Federal Government is authorized to examine any records of the recipient and its subawards or contracts to the extent necessary to ensure that funds, including supplies and services, available under this grant or cooperative agreement are not provided, directly or indirectly, to a person or entity that is actively opposing United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities, except for awards awarded by the Department of Defense on or before Dec 19, 2017 that will be performed in the United States Central Command (USCENTCOM) theater of operations.
- (b) The substance of this clause, including this paragraph (b), is required to be included in subawards or contracts under this grant or cooperative agreement that have an estimated value over \$50,000 and will be performed outside the United States, including its outlying areas.

III. DEPARTMENT OF THE INTERIOR STANDARD AWARD TERMS AND CONDITIONS

The Department of the Interior (DOI) Standard Award Terms and Conditions found at <https://www.doi.gov/sites/doi.gov/files/uploads/doi-standard-award-terms-and-conditions-effective-december-2-2019-revised-june-19-2020.pdf> are hereby incorporated by reference as though set forth in full text. These terms and conditions are in addition to the assurances and certifications made as part of the award and terms, conditions or restrictions reflected on this Agreement. Recipient acceptance of this Agreement carries with it the responsibility to be aware of and comply with all DOI terms and conditions applicable to this Agreement. The Recipient is responsible for ensuring their subrecipients and contractors are aware of and comply with applicable statutes, regulations, and agency requirements.

Recipient and subrecipient failure to comply with the general terms and conditions outlined below and those directly reflected in this Agreement can result in the DOI taking one or more of remedies described in 2 Code of Federal Regulations parts 200.338 and 200.339. The DOI will notify the recipient whenever terms and conditions are updated to accommodate instances in the passage of a regulation or statute that requires compliance. Also, DOI will inform the Recipient of revised terms and conditions in the action of an Agreement amendment adding additional Federal funds. Reclamation will make such changes by issuing a Notice of Award amendment that describes the change and provides the effective date. Revised terms and conditions do not apply to the Recipient's expenditures of funds or activities the Recipient carries out before the effective date of the revised DOI terms and conditions.

Department of the Interior Standard
Award Terms and Conditions
Effective December 2, 2019

I. PREFACE

Recipients and subrecipients of the Department of the Interior (DOI) grant and cooperative agreement awards (hereafter referred to as ‘awards’) must comply with the applicable terms and conditions incorporated into their Notice of Award. These terms and conditions are in addition to the assurances and certifications made as part of the award and terms, conditions or restrictions reflected on the official financial assistance award document. Recipients indicate their acceptance of an award by drawing down funds, or accepting the award through electronic means. Recipient acceptance of an award from the DOI carries with the responsibility to be aware of and comply with all terms and conditions applicable to the award. Recipients are responsible for ensuring their subrecipients and contractors are aware of and comply with applicable award statutes, regulations, and agency requirements. Recipients must review their official award document for additional administrative and programmatic requirements. Recipient and subrecipient failure to comply with the general terms and conditions outlined below and those directly reflected on the official financial assistance award document can result in the DOI taking one or more of remedies described in [2 Code of Federal Regulations \(C.F.R.\) parts 200.338 and 200.339](#).

The DOI will notify the recipient whenever terms and conditions are updated to accommodate instances in the passage of a regulation or statute that requires compliance. Also, the DOI will inform the recipient of revised terms and conditions in the action of an award modification of adding additional funds. The DOI bureaus and offices will make such changes by issuing a Notice of Award amendment that describes the change and provides the effective date. Revised terms and conditions do not apply to the recipient’s expenditures of DOI funds or activities the recipient carries out before the effective date of the revised DOI terms and conditions.

II. PAYMENT SYSTEMS (and alternate payments)

For domestic financial assistance awards: All domestic financial assistance award payments/disbursements shall be made using a US-based financial institution. Payments shall be made using the Automated Standard Application for Payments (ASAP), a system administered by the Department of the Treasury.

For foreign financial assistance awards: The preferred method of payment is with a US-based financial institution. For foreign assistance awards where no such US-based banking relationship exists, payments may be made using the standard method established by the Department of the Treasury for International Treasury Services (ITS).

III. GENERAL PROVISIONS

The Recipient shall be subject to the following administrative, cost principles, and single audit requirements found in financial assistance regulations. Copies of these regulations can be obtained by visiting the [Electronic C.F.R.](#) website.

A. Institutions of Higher Education, State and Local Governments , Tribal Governments, and Non-Profit Organizations

- [2 C.F.R. part 200 Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards](#)
 - 2 C.F.R. subpart A, Acronyms and Definitions
 - 2 C.F.R. subpart B, General Provisions
 - 2 C.F.R. subpart C, Pre-Federal Award Requirements and Contents of Federal Awards
 - 2 C.F.R. subpart D, Post Federal Award Requirements
 - 2 C.F.R. subpart E, Cost Principles
 - 2 C.F.R. parts 200.416 and 200.417, Special Cost Considerations for State, Local Governments, and Indian Tribes
 - 2 C.F.R. parts 200.418 and 200.419, Special Cost Considerations for Institutions of Higher Education
 - 2 C.F.R. subpart F, Audit Requirements parts 200.501 to 200.512
- [2 C.F.R. parts 1402.103, 1402.112, 1402.113 and 1402.315 Financial Assistance Interior Regulation.](#)
- Publications— Results of any project carried out under a financial assistance award are to be published in professional journals, trade magazines, or publications otherwise made by the DOI. Such manuscripts or publications submitted to journals or professional books for publication shall be accompanied by the following notation: Submission of this manuscript for publication with the understanding that the United States Government is authorized to reproduce and distribute reprints for Governmental purposes. Publishers are required to send copies, whether they be in print or electronic format (CD-ROM, DVD). Materials born digitally and not produced in print or a tangible electronic format like a CD-ROM or DVD must send a link to the digital document. The address of the library is: U.S. Department of the Interior, Natural Resources Library, Division of Information and Library Services, Gifts and Exchange Section, 18th and C Streets, NW. Washington, DC 20240. For additional information please visit the website for the [Natural Resources Library](#).
- Indirect Costs Proposals
 - [Appendix III to 2 C.F.R. part 200 – Indirect \(F&A\) Costs Identification and Assignment, and Rate Determination for Institutions of Higher Education \(IHEs\)](#)
 - [Appendix IV to 2 C.F.R. part 200 – Indirect \(F&A\) Costs Identification and Assignment, and Rate Determination for Nonprofit Organizations](#)
 - [Appendix V to 2 C.F.R. part 200 – State/Local Government and Indian Tribe Wide Central Service Cost Allocation Plans](#)
 - [Appendix VI to 2 C.F.R. part 200 – Public Assistance Cost Allocation Plans](#)
 - [Appendix VII to 2 C.F.R. part 200 – States and Local Government and Indian Tribe Indirect Cost Proposals](#)

B. Foreign Entities

- Foreign entities are subject to the administrative requirements applicable to non-Federal entities in [2 C.F.R. part 200, subparts A through E](#) and:
 - 2 C.F.R. subpart A, Acronyms and Definitions
 - 2 C.F.R. subpart B, General Provisions
 - 2 C.F.R. subpart C, Pre-Federal Award Requirements and Contents of Federal Awards
 - 2 C.F.R. subpart D, Post Federal Award Requirements
 - 2 C.F.R. subpart E, Cost Principles, parts 200.400 to 200.411
- [2 C.F.R. parts 1402.103, 1402.112, 1402.113, 1402.300 and 1402.315 Financial Assistance Interior Regulation](#) (Please see exceptions in [2 C.F.R. part 1402.102](#))
- *Foreign public entities* are also subject to the requirements specific to States, with the following exceptions:
 - The State payment procedures in part 200.305(a) do not apply. Foreign public entities must follow the payment procedures in part 200.305(b).
 - The requirements in part 200.321 “Contracting with small and minority businesses, women’s business enterprises, and labor surplus area firms” do not apply.
 - The requirements in part 200.322 “Procurement of recovered materials” do not apply.
- *Foreign non-profit organizations* (see definition in 2 C.F.R. part 200.70) are also subject to the requirements specific to non-profit organizations.
- *Foreign Institutions of Higher Education* (IHEs) Institutions located outside the United States that meet the definition in [20 United States Code \(U.S.C.\) part 1001](#) are also subject to the requirements specific to IHEs.
- Publications— Results of any project carried out under a financial assistance award are to be published in professional journals, trade magazines, or publications otherwise made by the DOI. Such manuscripts or publications submitted to journals or professional books for publication shall be accompanied by the following notation: Submission of this manuscript for publication with the understanding that the United States Government is authorized to reproduce and distribute reprints for Governmental purposes. Publishers are required to send copies, whether they be in print or electronic format (CD-ROM, DVD). Materials born digitally and not produced in print or a tangible electronic format like a CD-ROM or DVD must send a link to the digital document. The address of the library is: U.S. Department of the Interior, Natural Resources Library, Division of Information and Library Services, Gifts and Exchange Section, 18th and C Streets, NW. Washington, DC 20240. . For additional information please visit the website for the [Natural Resources Library](#).
- *Foreign for-profit entities* are subject to the cost principles in [48 C.F.R. 1, subpart 31.2](#)
- *All other foreign entities* are subject to the requirements applicable to non-Federal entities in 2 C.F.R. part 200, Subpart E.
- *Foreign public entities* are also subject to the requirements specific to States.
- *Indirect Cost Foreign IHEs*: [Appendix III to part 200](#)—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for IHEs. The U.S. Department of Health and Human Services (HHS) is the cognizant agency for indirect costs for foreign IHEs. Please visit [HHS’ Cost Allocation Services](#) website for more information.
- *Indirect Cost Foreign non-profit organizations*: [Appendix IV to part 200](#)—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Nonprofit Organizations.
- *Indirect Cost Foreign public entities*: [Appendix VII to part 200](#)—States and Local Government and Indian Tribe Indirect Cost Proposals.
- *Indirect Cost Foreign for-profit entities*: Contact the National Interior Business Center (IBC), Indirect Cost Services by telephone at (916) 566-7111 or by e-mail at: ics@ibc.doi.gov. Visit the [IBC’s Indirect Cost Services](#) website for more information.

C. For-Profit Entities, Individuals, and Others Not Covered Above

- [2 C.F.R. part 200, subparts A through D Administrative Requirements, Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards](#)
 - 2 C.F.R. subpart A, Acronyms and Definitions
 - 2 C.F.R. subpart B, General Provisions
 - 2 C.F.R. subpart C, Pre-Federal Award Requirements and Contents of Federal Awards
 - 2 C.F.R. subpart D, Post Federal Award Requirements
 - 2 C.F.R. subpart E, Cost Principles, parts 200.400 to 200.411
- [2 C.F.R. parts 1402.206, 1402.207\(a\) and \(b\), 1402.112, 1402.113, 1402.300 and 1402.315 Financial Assistance Interior Regulation](#)
- Publications– Results of any project carried out under an assistance award are to be published in professional journals, trade magazines, or publications otherwise made by the DOI. Such manuscripts or publications submitted to journals or professional books for publication shall be accompanied by the following notation: Submission of this manuscript for publication with the understanding that the United States Government is authorized to reproduce and distribute reprints for Governmental purposes. Publishers are required to send copies, whether they be in print or electronic format (CD-ROM, DVD). Materials born digitally and not produced in print or a tangible electronic format like a CD-ROM or DVD must send a link to the digital document. The address of the library is: U.S. Department of the Interior, Natural Resources Library, Division of Information and Library Services, Gifts and Exchange Section, 18th and C Streets, NW. Washington, DC 20240. . For additional information please visit the website for the [Natural Resources Library](#).
- [48 C.F.R. 1 subpart 31.2 Contracts with Commercial Organizations](#) (not applicable to individuals or other entities not covered above).
- Indirect Cost Rate Negotiations – For information on indirect cost rate negotiations, contact the Interior Business Center (IBC) Indirect Cost Services Division by telephone at (916) 566-7111 or by e-mail at: ics@ibc.doi.gov. Please visit [IBC's Indirect Cost Services Division](#) website for more information.

IV. STATUTE AND REGULATION REQUIREMENTS

The following statutory and national policy requirements apply to individuals and non-Federal entities, including foreign public entities and foreign organizations, unless otherwise described in this section.

[2 C.F.R. part 25 Unique Entity Identifier](#) – Unless exempted from this requirement under 2 CFR 25.110, the recipient must maintain the currency of their information in the System for Award Management (SAM) until submission of their final financial report required under this award or receipt of final payment, whichever is later. The recipient must notify potential subrecipients of the requirement to provide its unique entity identifier. The requirements in this part do not apply to individuals or any entity with a qualifying condition and exempted by the awarding bureau or office before award per 2 CFR §25.110(d) and bureau or office policy.

[2 C.F.R. part 170 Reporting Subawards and Executive Compensation](#) – Unless the recipient is exempt from this award term, the recipient must report each action that obligates \$25,000 or more in federal funds for a sub-award to an entity. The recipient must report each obligating action to the [Federal Funding Accountability and Transparency Act Subaward Reporting System](#). No later than the end of the month following the month in which the obligation was made. Recipients must

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report executive total compensation described in paragraph (b)(1) of this award term as part of your SAM registration profile by the end of the month following the month in which this award is made, and annually thereafter. Recipients must include the award term at paragraph c. concerning reporting of subrecipient total executive compensation in subaward agreements. This rule applies to all other awards with a total Federal share of more than \$500,000. It does not apply to individuals.

[2 C.F.R. part 175 Award Term for Trafficking in Persons](#) – Applies to private entities as defined in 2 CFR §175.25(d) and awards to States, local governments, Indian tribes or foreign public entities, if funding could be provided under the award to a private entity as a subrecipient.

[2 C.F.R. part 200 Appendix XII Recipient Integrity and Performance Matters \(FAPHS\)](#) – Applies to awards with a total federal share of more than \$500,000.

[2 C.F.R. part 1400 Nonprocurement Debarment and Suspension](#) – A person or entity who is debarred or suspended is excluded from activities involving Federal financial and nonfinancial assistance and benefits. Recipients of DOI financial assistance (See exceptions in [part 1400.215](#) to "primary covered transactions"), are required to determine whether it or any of its principals (as defined in [2 C.F.R. part 180.995](#)) is excluded or disqualified from participating in a covered transaction (i.e., grant or cooperative agreement) prior to entering into the covered transaction, i.e., prior to the drawdown of funds which signals acceptance of the grant award. Individuals and entities excluded from receiving government financial assistance and contracts are can be found on the GSA's [System for Award Management](#) website.

[2 C.F.R. part 1401 Requirements for Drug-Free Workplace](#) – Under the Drug-Free Workplace Act of 1988, [41 U.S.C. parts 701-707](#) a drug-free workplace policy is required for any organizations receiving a federal financial assistance award of any size. At a minimum, such organizations must: (1) Prepare and distribute a formal drug-free workplace policy statement. (2) Establish a drug-free awareness program. (3) Ensure that all employees working on the federal contract understand their personal reporting obligations. (4) Take direct action against an employee convicted of a workplace drug violation. (5) Maintain an ongoing good faith effort to meet all the requirements of the Drug-free Workplace Act throughout the life of the award. This rule does not apply to foreign public entities or foreign organizations.

[43 C.F.R. part 18 New Restrictions on Lobbying](#) – The Authorized Representative's signature on the application submitted to the DOI bureau or offices certifies to the statements in [43 C.F.R. part 18, Appendix A Certification Regarding Lobbying](#). These provisions prohibit the use of Federal funds for lobbying the executive or legislative branches of the Federal government in connection with an award, and require disclosure of the use of non-Federal funds for lobbying ([31 U.S.C. part 1352](#)). Any recipient (See Definition in 43 C.F.R. part 18.105(o)) that requests or receives (31 U.S.C. part 1352(2)(b) more than \$100,000 in Federal funding and has made or agrees to make any payment using non-appropriated funds for lobbying in connection with a proposal or award shall submit a completed Form SF-LLL, "Disclosure of Lobbying Activities," regarding the use of non-Federal funds for lobbying. The Form SF-LLL shall be submitted at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. Recipient includes all contractors and subgrantees at any tier of the recipient of funds received in connection with a Federal grant, loan, or cooperative agreement. These restrictions do not apply to an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law. Please visit [43 C.F.R. part 18.110 Certification and Disclosure Requirements](#) for more information.

V. OTHER STATUTE AND REGULATION REQUIREMENTS

[Pub. L. 116-6 Representation and Certifications by Corporations Regarding Delinquent Tax Liability or a Felony Conviction](#) – As required by the provisions contained in the Consolidated Appropriations Act, 2019 sections 744 and 745, regarding unpaid federal tax liabilities and federal felony convictions. The DOI will not enter into a contract, cooperative agreement, grant, loan, or memorandum of understanding with any corporation that – (1) has any unpaid Federal tax liability currently assessed, for which all judicial and administrative remedies have been exhausted or have lapsed. Also, the tax liability is not being paid promptly under an agreement with the authority responsible for collection. Whereby the DOI is aware of the unpaid tax liability unless an agency has considered suspension or debarment of the corporation and decided that suspension or debarment is not necessary to protect the interests of the DOI. Or (2) was convicted of a felony criminal violation under any federal law within the preceding twenty-four (24) months preceding the award, where the DOI is aware of the conviction unless the DOI has considered suspension or debarment of the for-profit or non-profit and decided that this action is not necessary to protect the interests of the DOI. To comply with these provisions, only applicants that are or propose to be a corporation will submit a response to the representation and certifications as part of their pre-application. Applicants who do not furnish such information as may be requested by the contracting or financial assistance awarding officer shall be allowed to remedy the deficiency. Failure to provide an acceptable response may render the applicant ineligible to receive an award under this announcement or recover any funds the recipient has spent in violation of the above cited statutory provisions.

[41 U.S.C. part 4712 Enhancement of Recipient and Subrecipient Employee Whistleblower Protection](#) – Applies to all awards over the simplified acquisition threshold (currently \$250,000).

[41 U.S.C. part 6306 Prohibition on Members of Congress Making Contracts with Federal Government](#) – No member of or delegate to the United States Congress or Resident Commissioner shall be admitted to any share or part of this award, or to any benefit that may arise therefrom; this provision shall not be construed to extend to an award made to a corporation for the public's general benefit.

[Section 743 of Division E Title VII of Pub. L. 113-235 Prohibition on Issuing Financial Assistance Awards to Entities that Require Certain Internal Confidentiality Agreements](#)

[42 U.S.C. part 2000\(d\) Title VI of the Civil Rights Act of 1964](#), and the DOI implementing regulations published at [43 C.F.R. part 17](#) and Special Regulations at [43 C.F.R. part 4.800](#) prohibiting discrimination on the grounds of race, color, or national origin under programs or activities receiving Federal financial assistance.

[20 U.S.C. part 1681 Title IX of the Education Amendments of 1972](#), and DOI implementing regulations published at [43 C.F.R. part 41.100](#) prohibiting discrimination on the basis of sex in Federally assisted education programs or activities.

[42 U.S.C. part 12101 The Americans with Disabilities Act of 1990](#) – Prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by State and local governments or instrumentalities or agencies thereto, as well as public or private entities that provide public transportation.

[Section 504 of the Rehabilitation Act of 1973, as amended 29 U.S.C. part 794](#), and the DOI implementing regulations published at [43 C.F.R. part 17 subpart B](#) prohibiting discrimination on the basis of handicap under any program or activity receiving or benefiting from Federal financial assistance.

[41 C.F.R. parts 101-19.6 Accessibility Standards](#) – For purposes of complying with the standards set forth in non-federal entities must adhere to the regulations, published by the U.S. Department of Justice, implementing Title II of the Americans with Disabilities Act (ADA) [28 C.F.R. part 35](#); and [Title III of the ADA 28 C.F.R. part 36](#). The revised regulations adopted new enforceable accessibility standards called the “2010 ADA Standards for Accessible Design,” which replace and supersede the former Uniform Federal Accessibility Standards for new construction and alteration projects.

[42 U.S.C part 6101 The Age Discrimination Act of 1975](#), and DOI implementing regulations published at [43 C.F.R. parts 17.300-17.339](#) unless an exception applies in 43 C.F.R. part 17.302, the rule prohibits discrimination on the basis of age in programs or activities receiving Federal financial assistance.

[42 U.S.C. part 2000\(e\) Title VII of the Civil Rights Act of 1964](#) – Generally prohibits employers from discriminating against employees on the basis of religion. Title VII prohibits discriminatory treatment of employees on the basis of their religious beliefs and requires employers to make reasonable accommodations for employees’ religious practices. Religious organizations, however, may be exempt from some of the prohibitions of Title VII.

[49 U.S.C. part 40118 Fly American Act](#) – Federal travelers are required to use U.S. air carrier service for all air travel and cargo transportation services funded by the U.S. government. One exception to this requirement is transportation provided under a bilateral or multilateral air transport agreement, to which the U.S. government and the government of a foreign country are parties, and which the Department of Transportation has determined meets the requirements of the Fly America Act. The U.S. government has entered into several air transport agreements that allow federal funded transportation services for travel and cargo movements to use foreign air carriers under certain circumstances. There are currently bilateral/multilateral “Open Skies Agreements” (U.S. Government Procured Transportation) in effect:

- [U.S. Government and the European Union \(EU\)](#) effective April 30, 2007
- [U.S. - EU Amendment](#) effective June 24, 2010
- [U.S. - EU Amendment](#) effective June 21, 2011
- [U.S. - Australia Open Skies Agreement](#) effective October 1, 2008
- [U.S. - Switzerland Transport Agreement](#) effective October 1, 2008
- [U. S. and Japan](#) effective October 1, 2011

[Homeland Security Presidential Directive \(HSPD\) 12](#) – The subrecipient or contractor must comply with personal identity verification procedures identified in the subaward or contract that implement Homeland Security Presidential Directive 12 (HSPD-12), Office of Management and Budget (OMB) Guidance M-05-24, as amended, and Federal Information Processing Standards Publication (FIPS PUB) Number 201, as amended, for all employees under this subaward or contract who require routine physical access to a Federally-controlled facility or routine access to a Federally-controlled information system. The subrecipient or contractor must account for all forms of Government-provided identification issued to the subrecipient or contractor employees in connection with performance under this subaward or contract. The subrecipient or contractor must return such identification to the issuing agency at the earliest of any of the following, unless

otherwise determined: (1) When no longer needed for subaward or contract performance; (2) Upon completion of the subrecipient or contractor employee's employment; (3) Upon subaward or contract completion or termination.

[54 U.S. Code part 312502 The Historical and Archeological Data Preservation Act of 1974](#) – Requiring appropriate surveys and preservation efforts if a Federally-licensed project may cause irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data.

[Executive Order No. 11,988, 1977 Floodplain Management](#) and [Executive Order No. 11,990, 1977 Protection of Wetlands](#) – Non-Federal entities must identify proposed actions in federally defined floodplains and wetlands to enable DOI to make a determination whether there is an alternative to minimize any potential harm.

[Executive Order No. 11,246, 1965 Equal Employment Opportunity](#) – Requires federally assisted construction contracts to include the nondiscrimination provisions of parts 202 and 203 of Executive Order No. 11,246 and Department of Labor regulations implementing at [41 C.F.R. part 60-1.4\(b\)](#).

[Executive Order No. 12,432, 1983 Minority Business Enterprise Development](#)–Encourages recipients to utilize minority business enterprises in the performance of the award. When contracting for any supplies, services, research, or construction under the award, the recipients must make their best efforts to solicit bids, proposals, or quotations from minority business enterprises. A minority business enterprise is defined as a business that is at least 51 percent owned by one or more minority individuals, or in the case of any publicly owned business, at least 51 percent of the voting stock is owned by one or more minority individuals. The daily business operations are likewise managed by a minority owner. A minority individual is defined as a U.S. citizen who has been subjected to racial or ethnic prejudice or cultural bias because of his or her identity as a member of this group without regard to his or her individual qualities. Such groups include, but are not limited to: Black [African] Americans, Hispanic Americans, Native Americans, and Asian-Pacific Americans.

[Executive Order No. 13,043, 1997 Increasing Seat Belt Use in the United States](#) – Non-Federal entities are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees and contractors when operating company-owned, rented, or personally owned vehicles. Individuals are encouraged to use seat belts while driving in connection with award activities.

[Executive Order No. 13,166, 2000 Improving Access to Services for Persons with Limited English Proficiency](#)–Requires Federal agencies to examine the services provided, identify any need for services to those with limited English proficiency (LEP), and develop and implement a system to provide those services so LEP persons can have meaningful access to them. Title VI prohibition against national origin discrimination affecting LEP persons and to help ensure that non-Federal entities provide meaningful access to their LEP applicants and beneficiaries.

[Executive Order No. 13,513, 2009 Federal Leadership on Reducing Text Messaging While Driving](#) Non-Federal entities are encouraged to adopt and enforce policies that ban text messaging while driving company-owned, government-rented vehicles or while driving privately-owned vehicles in connection with award activities.

[Executive Order No. 13,798, 2017 Promoting Free Speech and Religious Liberty](#) –The order was issued to protect and promote free and open debate on college and university college campuses. Its application is for colleges and universities to follow their existing obligation to follow the Free Speech provisions of the Constitution.

VI. REQUIREMENTS RELATED TO ENVIRONMENTAL PROJECTS

Recipients of financial assistance under this award must comply with the following: [Pub. L. No. 89-544 Laboratory Animal Welfare Act of 1966](#); and [7 U.S.C. part 2131](#) as pertains to animal acquisition, transport, care, handling, and use in projects, and the implementing regulations. [9 C.F.R. parts 1-3](#); [16 U.S.C. part 1531 The Endangered Species Act](#); [16 U.S.C. part 1361 The Marine Mammal Protection Act](#) prohibits “taking possession of, transport, purchase, sale, export or import of wildlife and plants.” [16 U.S.C. part 4701](#) The Non-indigenous Aquatic Nuisance Prevention and Control Act, which “ensure[s] preventive measures are taken or that probable harm of using species is minimal if there is an escape or release;” and all other applicable statutes pertaining to the care, handling, and treatment of warm-blooded animals held for research, teaching, or other activities supported by Federal financial assistance.

[42 U.S.C. part 4321 The National Environmental Policy Act](#) – NEPA establishes protection of the environment as a national priority and mandates that environmental impacts must be considered before any federal action likely to significantly affect the environment is undertaken.

[42 U.S.C. part 7401 Clean Air Act](#), [33 U.S.C. part 1251 Clean Water Act](#), and [Executive Order No. 11,738 Providing for administration of the Clean Air Act and the Federal Water Pollution Control Act](#) with respect to Federal contracts and financial assistance.

[42 U.S.C. part 4002 The Flood Disaster Protection Act](#) –Requires that projects receiving federal assistance and located in an area identified by the Federal Emergency Management Agency (FEMA) as being within a Special Flood Hazard Areas (SFHA) be covered by flood insurance under the National Flood Insurance Program (NFIP). This term does not apply to formula financial assistance to States.

[16 U.S.C. part 1531 The Endangered Species Act](#) –Ensures that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife. Likewise, import, export, interstate, and foreign commerce of listed species are all generally prohibited.

[16 U.S.C. part 1451 The Coastal Zone Management Act](#)–Directs coastal states to develop and implement coastal zone management plans. If a state or territory chooses to develop a coastal zone management program and the program is approved, the state or territory (1) becomes eligible for several federal financial assistance and (2) can perform reviews of federal agency actions in coastal areas (known as federal consistency determination reviews).

[16 U.S.C. part 3501 The Coastal Barriers Resources Act](#) –Only in certain circumstances can Federal funding be provided for actions within a Coastal Barrier System.

[16 U.S.C. part 1271 The Wild and Scenic Rivers Act](#)–Applies to awards that may affect existing or proposed components of the National Wild and Scenic Rivers system.

[42 U.S.C. part 300f The Safe Drinking Water Act of 1974](#)—Precludes Federal assistance for any project that the United States Environmental Protection Agency (US EPA) determines may contaminate a sole source aquifer so as to threaten public health.

[42 U.S.C. part 6901 The Resource Conservation and Recovery Act](#)—Regulates the generation, transportation, treatment, and disposal of hazardous wastes, and also provides that non-Federal entities give preference in their procurement programs to the purchase of recycled products pursuant to US EPA guidelines at [40 C.F.R. part 247](#). For more information on this requirement please visit [2 C.F.R. part 200.322](#), Procurement of recovered materials.

[42 U.S.C. part 9601 The Comprehensive Environmental Response, Compensation, and Liability Act](#)—These requirements address responsibilities related to hazardous substance releases, threatened releases and environmental cleanup. There are also reporting and community involvement requirements designed to ensure disclosure of the release or disposal of regulated substances and cleanup of hazards to state and local emergency responders.

[Executive Order No. 13,658, 2014 Establishing a Minimum Wage for Contractors](#)—Establishes a minimum wage requirement for Federal contractors and subcontractors. The Order provides agencies shall, to the extent permitted by law, ensure that new covered contracts, contract-like instruments, and solicitations include a clause, which the contractor and any subcontractors shall incorporate into lower-tier subcontracts, specifying, as a condition of payment, that the minimum wage to be paid to workers, including workers whose wages are calculated pursuant to special certificates issued under [29 U.S.C. part 214\(c\)](#), in the performance of the contract or any subcontract.

VII. REQUIREMENTS RELATED TO CONSTRUCTION PROJECTS

[40 U.S.C. parts 3141–3144, 3146, 3147; 42 U.S.C. part 3212 The Davis-Bacon Act](#)— Requires that all contractors and subcontractors performing construction, alteration and repair (including painting and decorating) work under federal or District of Columbia contracts in excess of \$2,000 pay their laborers and mechanics not less than the prevailing wage and fringe benefits for the geographic location. Construction or renovation projects funded by federal funds, in whole or in part, are subject in their entirety to the Davis-Bacon Act as amended 40 U.S.C. parts 276(a) through 276(a-5). Award recipients are required by law to furnish assurances to the Secretary of Labor that all laborers and mechanics employed by contractors or subcontractors on DOI-supported construction projects shall be paid wages at rates that are not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor.

[40 U.S.C. parts 3701-3708 The Contract Work Hours and Safety Standards Act](#)

(1) Overtime requirements. No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any work week in which he or she is employed on such work to work in excess of forty hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the Contractor and any subcontractor responsible

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therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The DOI or the Recipient or Subrecipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Contracts and Subcontracts. The Recipient, Subrecipient, and Recipient's and Subrecipient's contractor or subcontractor shall insert in any Contracts, the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Recipient shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(5) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records to be maintained under this paragraph shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the DOI and the Department of Labor, and the Contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

[54 U.S.C. part 300101 The National Historic Preservation Act of 1966](#), and the Advisory Council on Historic Preservation Guidelines - Projects involving construction, renovation, repair, rehabilitation, or ground or visual disturbances must comply with [36 C.F.R. part 800](#) that requires the DOI to consider the effects of projects offered or awarded funding on historic properties and, when applicable, to provide the Advisory Council on Historic Preservation an opportunity to comment on such projects.

[42 U.S.C. part 4151 The Architectural Barriers Act of 1968](#) - Architectural Barriers Act Accessibility Standards (ABAAS): Effective May 8, 2006, GSA, as the lead access design standard setting agency for DOI and other agencies, approved the use of the Access Board's ABAAS for federal sites, facilities, buildings, and elements. This includes federal facilities where federal assistance was fully or partly used for construction of the specific facility. Since federal agencies are subject to ABAAS, notification of complaints alleging that a facility subject to the requirements of Section 504 of the Rehabilitation Act of 1973, as amended, is not readily accessible to and usable

by persons with disabilities must be reported to the United States Access Board pursuant to the requirements of [43 C.F.R. part 17.570](#).

[42 U.S.C. part 4601 The Uniform Relocation Assistance and Real Property Acquisition Policies of 1970](#), and implementing regulations issued at [49 C.F.R. part 24](#) (“Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs”), which establish uniform policies for the fair and equitable treatment of persons, businesses, or farm operations affected by the acquisition, rehabilitation, or demolition of real property acquired for a project financed wholly or in part with Federal financial assistance.

[42 U.S.C. part 6834 The Energy Conservation and Production Act](#) - Established energy efficiency performance standards for the construction of new residential and commercial structures undertaken with Federal financial assistance.

[Executive Order No. 13,858, 2017 Buy American and Hire American](#) – Encourages recipients of new federal awards for construction or infrastructure projects to use iron, aluminum, steel, cement, plastics, PVC pipe, concrete, glass, optical fiber, and lumber manufactured in the United States. This order expands the types of projects previously covered. It defines infrastructure projects to include those involving aviation, ports, water resources projects, energy production, generation, and storage, electricity transmission, gas, oil, and propane storage and transmission, electric, oil, natural gas, and propane distribution systems, broadband internet, pipelines, storm water and sewer infrastructure, and cybersecurity.