

**VENTURA COUNTY WATERSHED PROTECTION DISTRICT**

**ZONE 3**

**PLANS AND SPECIFICATIONS FOR CONSTRUCTION**

**OF**

**ARROYO SIMI  
UPSTREAM OF MADERA ROAD  
GRADE STABILIZER REPAIR**

**SPECIFICATION NO. WP16-03**

**PROJECT NO. 87007**



**2015**



VENTURA COUNTY WATERSHED PROTECTION DISTRICT  
PUBLIC WORKS AGENCY

NOTICE INVITING BIDS, PROPOSAL FORM, & SPECIFICATIONS

FOR


PROJECT NAME: ARROYO SIMI UPSTREAM OF MADERA ROAD  
GRADE STABILIZER REPAIR

LOCATION: SIMI VALLEY, CA


SPECIFICATION NO. WP16-03

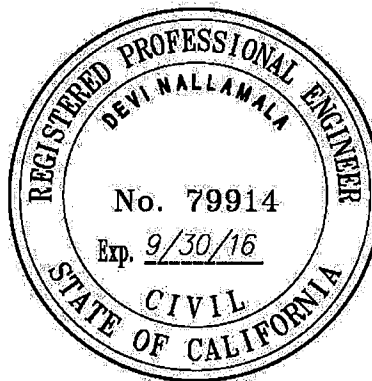
PROJECT NO. 87007

DESIGNED BY:

  
Masood Jilani, P.E.

CHECKED BY:

  
Devi Nallamala, P.E.



SUBMITTED BY:

  
Project Manager, Watershed Protection District

RECOMMENDED BY:

  
Deputy Director, Watershed Protection District

APPROVED BY:

  
Director of Watershed Protection District

APPROVED BY:

 9/16/15  
Director of Public Works Agency

BIDS WILL BE RECEIVED UNTIL 2:00 P.M.

October 6, 2015

at County Surveyor's Public Counter  
Third floor, Hall of Administration,  
800 South Victoria Avenue,  
Ventura, California 93009-1670

Construction bidding documents, including plans, specifications, addenda and any supplementary documents are now available on the Ventura County Web Site.

Printed copies may also be purchased at the Ventura County Hall of Administration, 800 South Victoria Ave, Ventura, CA 93009-1670 (Surveyor's Public Counter on 3<sup>rd</sup> floor).





# **NOTICE TO BIDDERS, SUBCONTRACTORS AND SUPPLIERS**

## **SOURCES OF INFORMATION**

### **DURING BIDDING PERIOD**

PLAN HOLDERS LIST & OTHER INFORMATION IS AVAILABLE ON THE INTERNET AT:  
<http://pwa.ventura.org/engineering-services-department/projects-out-to-bid>.

- and then click on "here" for instructions on using the County eBidBoard website -

<http://www.ebidboard.com/public/projects/index.asp?mbrguid=2B485702-FFAE-4327-A8B7-F1C22BE001D2>.

NUMBER OF ADDENDA ISSUED:

Phone: (805) 658-4378

TECHNICAL QUESTIONS on plans and specifications:  
Please FAX questions early in the bidding period  
as an addendum may be required.

FAX: (805) 677-8762  
indicate bid question.

**Please do not call other staff members or consultant.**

Note that our consultants are directed to refer all calls to the numbers listed.

### **DIRECTIONS TO VENTURA COUNTY GOVERNMENT CENTER**

**From US101 (Ventura Freeway)**, take Victoria Ave off ramp, north (towards mountains) about one mile to Telephone Road, then right on Telephone Road one block and turn left at Lark St. into the Government center parking lot.

**From Cal126 (Santa Paula Freeway)**, take Victoria Ave off ramp, south (away from mountains) about one mile to Telephone Road, then left on Telephone Road 1 block and turn left at Lark St. into the Government center parking lot.

**Go to the Hall of Administration** (building nearest the corner of Victoria & Telephone) and to the Surveyors counter on the third floor (at the top of the escalator) where plans can be purchased and bids placed in the **bid box**.

### **ONLY AFTER BID OPENING**

**BID RESULTS** are available on the internet site shown above, usually within 24 hours after bids are opened and Include abstracts of unit prices, totals of all bids & subcontractor's list for low & 2<sup>nd</sup> bidder. Click on "BIDS & SUBS".

### **LOW BIDDER - ONLY AFTER AWARD OF CONTRACT**

CONTRACT PREPARATION (Low Bidder only)

FAX: (805) 677-8762

Phone, depends on prefix of Spec. No.:

WW & WP: (805) 654-3984

RD: (805) 654-2910

CP: (805) 654-2039

ALL QUESTIONS concerning project

Project Manager  
named in the Notice of Award



**VENTURA COUNTY WATERSHED PROTECTION DISTRICT**

**ARROYO SIMI UPSTREAM OF MADERA ROAD  
GRADE STABILIZER REPAIR**

**SPECIFICATION NO. WP16-03**

**PROJECT NO. 87007**

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**WATERSHED PROTECTION DISTRICT  
NOTICE INVITING FORMAL BIDS**

Sealed bids will be received in the bid box at the County Surveyor's Public Counter, 3rd Floor, Administration Building, 800 South Victoria Avenue, Ventura, California 93009-1670, until 2:00 p.m. on **October 6, 2015**, and afterwards publicly opened, for **Arroyo Simi Upstream of Madera Road Grade Stabilizer Repair**, for Specification No. **WP16-03**, which consists of repairs of 877 CY of concrete rock riprap bank and grade stabilizer, 1,900 CY of excavation, 1,250 CY of fill, 46 CY of reinforcing concrete splash pool slab, and 100 linear feet of steel armoring over the grade stabilizer crest.

The estimated cost of construction is \$ **288,000**

The Agency is allowed 60 days to award a contract per 2-1.1, however it is the Agency's intent to award a contract immediately following the Bid Opening provided that the lowest responsive, responsible bidder's bid is within the amount authorized by the Agency Director. The Contractor is required to provide to the Agency the necessary insurance, bonds, signed contract documents, Stormwater Pollution Control Plan, and Construction Schedule to the Agency a minimum of seven days prior to the starting date of the contract. The starting date of the contract will be 14 calendar days after award.

The plans, specifications and proposal forms for this project are filed in the office of the Ventura County Surveyor and are, by reference, made a part of this Notice. Construction bidding documents, including plans, specifications, addenda and any supplementary documents are now available on the Ventura County Web Site at:

<http://pwa.ventura.org/engineering-services-department/projects-out-to-bid> then click on "eBidBoard Website" where the documents may be viewed, downloaded and printed.

Printed copies of the document can be purchased at most commercial printing companies that have internet access.

Printed copies may also be purchased for \$15.38 including tax and shipping, non-refundable (\$5.38 if picked up) Make checks payable to the County of Ventura and send to the attention of, or bring to, the County Surveyor's Office at the Ventura County Hall of Administration, 800 South Victoria Ave, Ventura, CA 93009-1670 (Surveyor's Public Counter on 3<sup>rd</sup> floor).

A **List of Plan Holders** is available on the **Website** shown above.

An abstract of bids received will be available at the same web site under **Bids & Subs**.

For **Technical Questions** concerning bidding documents, **Fax 805-677-8762**.

Bids must be submitted on the proposal form furnished with said documents. Each bid must be accompanied by a bid guarantee in the amount of not less than 10% of the amount bid, **PAYABLE TO THE VENTURA COUNTY WATERSHED PROTECTION DISTRICT** and guaranteeing that the bidder will enter into a contract in accordance with the terms of the bidding documents if award is made. The bid guarantee shall be in one of the following forms: a bid bond written by an admitted surety insurer on the form included with the Proposal form, a cashier's check drawn by a National bank, a check certified by a National bank or cash. An electronically transmitted copy (FAX) of the bid bond form included in the Proposal form may be used, but the form must have the original signatures of the principal and surety. A FAX of the completed bond will not be accepted.

Bidders must have a Class A California Contractors license, and will be required to furnish a Performance Bond and a Payment Bond, each in the amount of 100% of the contract price.

In accordance with Section 22300 of the Public Contract Code, securities may be substituted for

funds withheld.

The contractor must post copies of the prevailing wage schedule at each job site.

California general prevailing wage rates for construction can be obtained from the following Web site: <http://www.dir.ca.gov/DLSR/PWD/index.htm>.

Bidders, contractors and other interested parties can also obtain printed copies of the wage rates pertaining to specific current projects at the Ventura County Surveyor's public counter.



**PROPOSAL  
FOR**

**ARROYO SIMI UPSTREAM OF MADERA ROAD GRADE STABILIZER REPAIR**

**LOCATED IN  
VENTURA COUNTY, CALIFORNIA**

**MAKE BID GUARANTEE TO VENTURA COUNTY WATERSHED PROTECTION DISTRICT  
USE FORM PROVIDED (SEE PARAGRAPH 9, INSTRUCTION TO BIDDERS).**

**SPECIFICATION NO. WP16-13 INCLUDING 4 SHEETS OF PLANS**

**THERE WILL BE A NON-MANDATORY PREBID MEETING ON SEPTEMBER 29, 2015 AT 10:00 A.M. AT  
THE PROJECT SITE. MEET AT THE ACCESS ROAD GATE LOCATED ON EASY STREET AT THE  
BIKE TRAIL ENTRANCE.**

**BIDS WILL BE RECEIVED ON OCTOBER 6, 2015 AT 2:00 P.M.**

**AGENCY IS ALLOWED 60 DAYS TO AWARD A CONTRACT (SEE SECTION 2-1.1).**

**THE STARTING DATE OF CONTRACT WILL BE 14 CALENDAR DAYS AFTER AWARD OF CONTRACT  
(SEE SECTION 6-7.4).**

**COMPLETION TIME IS 45 WORKING DAYS (SEE SECTION 6-7).**

**LIQUIDATED DAMAGES ARE \$1,400 PER CALENDAR DAY (SEE SECTION 6-9).**

**CONTRACTOR'S LICENSE CLASSIFICATION REQUIRED IS CLASS A.**

**LIABILITY INSURANCE CLASS REQUIRED PER SECTION 7-4 IS L-B.**

**FEDERAL-AID CONTRACT PROVISIONS ARE NOT INCLUDED IN THESE SPECIFICATIONS.**

**THE NUMBER OF PAGES IN THIS PROPOSAL IS 8**

**BIDDER SHALL COMPLETE**

**NAME:** \_\_\_\_\_

**MAILING ADDRESS:** \_\_\_\_\_

**CITY:** \_\_\_\_\_ **STATE:** \_\_\_\_\_ **ZIP CODE:** \_\_\_\_\_

**DELIVERY ADDRESS (CONTRACT RELATED DOCS), IF DIFFERENT FROM MAILING ADDRESS:**

\_\_\_\_\_  
**TELEPHONE NUMBER:** (\_\_\_\_\_)\_\_\_\_\_-\_\_\_\_-\_\_\_\_ **FAX No.** (\_\_\_\_\_)\_\_\_\_\_-\_\_\_\_

**eMAIL ADDRESS:** \_\_\_\_\_

**PROPOSAL**  
**Instruction to Bidders**

1. **LICENSING OF BIDDER.** Before submitting bids, bidders shall be licensed in accordance with the provisions of Sections 7000 through 7145 of the Business and Professions Code of the State of California in the classification required for the work bid on. The bidder's license number, classification, and expiration date shall be inserted on page 7 of the proposal form. The bidder's name shall correspond in all respects with the name shown on the license. License numbers and names are checked with the State.
2. **SITE INSPECTION.** Personally visit the worksite before submitting your bid to ascertain the existence of any surface or subsurface conditions affecting the cost of the work.
3. **MODIFICATION AND INTERPRETATION.** Carefully review the plans and specifications for any errors, omissions, or ambiguities. If you discover any, notify the Engineering Services Department of the Agency far enough in advance of the bid opening to allow time for the issuance of appropriate written addenda. Written addenda shall be the sole means for modifying the plans and/or specifications prior to the bid opening. The Agency shall not be bound by oral communications purportedly modifying or interpreting the plans and/or specifications regardless of when or by whom such oral communications are made and you should not rely upon such oral communications in preparing your bid.
4. **BID ITEMS.** State in figures the unit prices, lump sum prices and extensions as indicated which shall be the prices for which you propose to supply all materials and services and perform all work required by the plans and specifications. All items described are to be construed as complete and in place. Include in the bid amount for items listed on the proposal form the cost of performing all work shown on the plans or required by the specifications for which a specific bid item is not provided. Bid on all items listed under Schedule of Work and Prices unless otherwise indicated in the proposal form.
5. **SIGNING OF BID.** Fill in all indicated blanks in this proposal using typewriter or ink and sign with ink. Proposals signed by an agent other than an owner, partner or corporate officer shall be accompanied by a power-of-attorney. Proposal form must be dated.
6. **NON-COLLUSION AFFIDAVIT.** The non-collusion affidavit required by Public Contract Code 7106 is included on page 5 of this Proposal.
7. **BID FORM NOT TO BE ALTERED.** Do not change the wording of this proposal. Any additions, deletions, conditions, limitations or provisions by the bidder will render the proposal irregular and may cause its rejection.
8. **CORRECTING BID.** Explain over your signature any erasures or deletions of information entered by the bidder in this proposal. Modifications submitted separately from this form will not be accepted

**9. BID GUARANTEE.** Each bid must be accompanied by a bid guarantee in the amount of not less than 10% of the amount bid and guaranteeing that the bidder will enter into a contract in accordance with the terms of the bidding documents if award is made to him. The bid guarantee shall be in one of the following forms: A bid bond written by an admitted surety insurer on the form included with the proposal form, a cashier's check drawn by a national bank, a check certified by a national bank or cash. An electronically transmitted copy (FAX) of the bid bond form included in the proposal form may be used, but the form must have the original signatures of the principal and surety. A FAX of the completed bond will not be accepted. Note: Performance and Payment Bonds are required from the bidder to whom a contract is awarded. See specifications Subsection 2-4 for contract bond requirements including limitations on the sureties that may issue the bonds.

**10. SUBMITTING BID.** Submit your bid on one copy only of this proposal form, with addenda acknowledged by inserting the addenda numbers on page 7 of this proposal and with bid guarantee attached, in a sealed envelope addressed to:

Public Works Agency, County of Ventura, County Surveyor's Public Counter,  
3rd Floor - Hall of Administration, 800 South Victoria Avenue, Ventura, California 93009-1670.

For proper handling, mark envelope as "SEALED BID", and show the project title and the bidder's name and address. Do not enclose other documents in the bid envelope.

**IMPORTANT:** Proposals received that are not signed will not be considered.

Late bids will not be opened or considered.

Bids must be on this form. Electronically transmitted bids, bid modifications or bid withdrawals will not be considered.

Notwithstanding anything stated, directed or indicated in the other bidding documents, the only items to be included with this proposal are:

1. This proposal form, signed and dated with addenda acknowledged.
2. The bid bond with original signatures of surety representative and contractor, or other bid guarantee as specified in 9 above.
3. Subcontractors and off-job fabricators list completed in accordance with Public Contract Code Section 4104.

**11. TIME OF BID CLOSURE.** The bid box will be closed promptly at the time specified on the first sheet of the proposal form. The person opening bids will not accept bids that are not in the bid box at closing time. Time can be obtained from <http://www.time.gov/timezone.cgi?Pacific/d/-8> (local standard time). Note that clocks in the building may not be set to the correct time and should not be relied upon.

**12. DELIVERY OF BID.** Bids delivered in person must be placed in the bid box near the Surveyor's Public Counter located at the head of the escalator on the third floor of the Ventura County Hall of Administration Building, 800 South Victoria Avenue, Ventura, California. The Hall of Administration is on the corner of Victoria Avenue and Telephone Road and is accessible from the Ventura Freeway (U.S. 101) by taking the Victoria Avenue off ramp and proceeding north on Victoria Avenue about one mile to Telephone Road. Access from the Santa Paula Freeway (Cal. 126) is by the Victoria Avenue off ramp, then south about 1/4 mile to Telephone Road. Access to the Hall of Administration parking lot is from Telephone Road at Lark St one block east of Victoria Ave. Bids must be placed in the bid box prior to the hour and date designated on Page 1 of this proposal.

**13. MAILED BIDS (Including Express Delivery).** Bids received in the County's Mail Room by 8 a.m. on the bid opening date will be considered to have been placed in the bid box on time, whether or not actually delivered to the bid box on time. U. S. Postal Service Special delivery, Registered and Certified mail may slow actual receipt of bids. Bidder is responsible for sending bid early enough to insure delivery to the County on time.

Mark bids, not placed directly in the bid box, in large letters on the outside of the delivery envelope "SEALED BID" and show the Spec no.

Electronically transmitted bids or modifications will not be considered.

**14. WITHDRAWAL OF PROPOSAL.** Proposals may be withdrawn by the bidder prior to the time stated for opening bids upon written request, signed by the bidder or his authorized agent and submitted in the same manner as a bid. To retrieve a bid from the bid box may take 10 or more minutes as it requires a written request to withdraw the bid, the positive identification of the person requesting the withdrawal, and the opening of the bid box.

**15. ERRORS.** Bidder will not be released on account of errors. Where a discrepancy occurs between unit prices and totals, the unit price shall govern in computing the total. If a unit price is omitted, it will be determined from the item total, if entered. If both the unit price and line total for any item are omitted, the bid will be considered non-responsive in accordance with Paragraph 4 above. If the total Bid Price is not equal to the sum of the Item Totals (as corrected) the Total Bid Price will be corrected. If no monetary symbol (\$ or ¢) is entered with a unit price, lump sum or extension, a dollar sign will be assumed to be the bidder's intent.

**16. SUBCONTRACTOR LICENSE NUMBERS.** License numbers for subcontractors must be provided at the time the bid is received.

**17. PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM.** No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]

No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5

**18. LABOR COMPLIANCE MONITORING.** This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The Prime Contractor shall post job site notices prescribed by regulation. (See 8 California Code Regulation section 16451(d) for notice that previously was required for projects monitored by the Compliance Monitoring Unit.

## PROPOSAL

I, the person whose signature is affixed to page 7 of this proposal, submit this proposal to the Board of Supervisors of the Ventura County Watershed Protection District and hereby declare:

1. That the bidder has read this proposal and has abided by and agrees to the conditions herein and has carefully examined the project plans and read the specifications and does hereby propose to furnish all materials and do all the work required to complete the work in accordance with the plans and specifications for the unit prices or lump sums named in the Schedule of Work and Prices.

2. That the addenda indicated on page 7 of this proposal are acknowledged.

3. That the bidder, as Principal, acknowledges himself as being bound by the attached bond or other acceptable bid guarantee.

### 4. NONCOLLUSION DECLARATION

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. 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 to refrain from bidding. 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. All statements contained in the bid are true. 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, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

Signature of Officer \_\_\_\_\_

Printed Name of Officer: \_\_\_\_\_

**PROPOSAL**

Contractor's Name \_\_\_\_\_

**List of Subcontractors**

Listing shall comply with the provisions of California Public Contract Code, Section 4104.

<b>Name of Subcontractor</b>	<b>Contractor's License Number</b>	<b>Business Address</b>	<b>Items of Work</b>

If more space is needed, attach additional sheets.

Public Contract Code Section 4104 provides that bidders must list:

- (a)(1) The name, the location of the place of business, and the California contractor license number of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater.
- (b) The portion of the work that will be done by each subcontractor under this act. The prime contractor shall list only one subcontractor for each portion as is defined by the prime contractor in his or her bid.

**PROPOSAL**

Schedule of work and prices for:

**ARROYO SIMI UPSTREAM OF MADERA ROAD GRADE STABILIZER REPAIR**

Item No.	Units	Approx Quantity	Item Description	Payment Reference	Unit-Prices (In Figures)	Item Total (In Figures)
1	LS	1	Mobilization	9-3.4.2		
2	LS	1	Water Pollution Control	1001-3		
3	LS	1	Diversion, Control and Removal of Water	1002-5		
4	LS	1	Clearing and Grubbing	1003-3		
5	LS	1	Excavation Safety	1004-5		
6	LS	1	Removal of Existing Facilities	1005-4		
7	CY	1,990[F]	Excavation	1006-3		
8	CY	1,250[F]	Fill and Backfill	1007-4		
9	CY	46	RC Slab	1008-4		
10	LF	100	Steel Armor	1009-4		
11	CY	877	1/2 Ton Concreted Rock Riprap	1010-4		
12	CY	75	Slurry	1011-4		
13	LS	1	Temporary Chain Link Gate	1012-3		
14	LS	1	Bike Trail Traffic Control	1013-3		
15	CY	195	Filter Material A	1014-4		
16	LS	1	Release on Contract	9-4		\$1.00
			<b>Total Amount Bid</b>			

The following addenda are acknowledged:

(Bidder must fill in number and date of each addenda or may enter the word "None " if appropriate)

Call (805) 654-2068 to determine addenda that have been issued.

Number	Dated

I make the above proposal and certify or declare under penalty of perjury under the laws of the State of California that the statements made on Page 5 of this Proposal, and below my signature, are true and correct.

Dated \_\_\_\_\_

Signature: \_\_\_\_\_

At \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

(City and State)

(Sole Owner, Partner, President, etc.)

License No. \_\_\_\_\_

Company Name \_\_\_\_\_

License Classification \_\_\_\_\_

Type of Organization \_\_\_\_\_  
(Individual, Partnership, Corp.)

License Expiration Date \_\_\_\_\_

Enter            }  
 Name &        }  
 Address        }  
 of Bonding     }  
 Company       }

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS: That we \_\_\_\_\_

\_\_\_\_\_, Principal,  
 and \_\_\_\_\_

\_\_\_\_\_, Surety, are held and firmly bound  
 unto

**VENTURA COUNTY WATERSHED PROTECTION DISTRICT** Obligee,  
 in the sum of Ten Percent of the total amount of the Bid for the payment of which we bind ourselves, our  
 legal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted or is about to submit a bid or proposal to Obligee on a contract  
 for

**ARROYO SIMI UPSTREAM OF MADERA ROAD GRADE STABILIZER REPAIR**

NOW, THEREFORE, if that contract be awarded to principal and principal shall, within such time as  
 specified, duly execute the contract in the prescribed form and deliver the same to obligee with all required  
 bonds/performance securities, certificates of insurance and such other items as required in the bidding or  
 contract documents then this obligation shall be null and void; otherwise to remain in full force and effect,  
 and if the contract is awarded to principal and principal fails, within the time specified, to duly execute the  
 contract in the prescribed form and deliver the same to obligee with all said required items, then surety shall  
 pay obligee the full sum of this bond.

Surety, for value received, hereby agrees that no extension of time, change, alteration, modification,  
 or addition to the bidding or contract documents, or of the work required thereunder, shall release or  
 exonerate surety on this bond or in any way affect the obligation of this bond; and surety does hereby waive  
 notice of same.

Signed, sealed and dated

\_\_\_\_\_  
 (Principal)

by \_\_\_\_\_ (Seal)

\_\_\_\_\_  
 (Surety)

by \_\_\_\_\_  
 Attorney-in-Fact

INDICATE COMPLETE ADDRESS OF SURETY TO WHICH  
 CORRESPONDENCE CONCERNING THIS BOND SHOULD BE  
 DIRECTED.

Telephone No. \_\_\_\_\_

Form PW-B-1



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**COUNTY OF VENTURA  
PUBLIC WORKS AGENCY  
STANDARD SPECIFICATIONS  
PART 1 - GENERAL PROVISIONS**

**SECTION 0 - SSPWC ADOPTION AND MODIFICATIONS**

**0-1 STANDARD SPECIFICATIONS**

Except as hereinafter provided or as modified by the Special Provisions, the provisions of Parts 2 through 5 of the 2012 edition of the Standard Specifications for Public Works Construction (referred to as SSPWC), published by BNi Building News, Los Angeles, are part of these Standard Specifications.

**0-2 DELETIONS**

The following portions of SSPWC are hereby deleted: Part 1 and Sections 200-1.6.2, and 301-1.4.

**0-3 NUMBERING OF SECTIONS**

The numbering in these modifications is compatible with the numbering in SSPWC. References to whole sections of SSPWC and these modifications are preceded by the word "Section", references to parts of sections show numbers only, such as "211-5", except at the beginning of a sentence, the word "Section" precedes the number. Standard Special Provisions, if included, are numbered as Sections 901 through 999. The Special Provisions are numbered starting with Section 1000 or higher.

Cross-references contained in SSPWC to sections deleted by 0-2 hereof shall be references to the sections of like number contained herein.

**0-4 ADDITIONS**

The sections that follow, either, replace sections of like number in SSPWC which were deleted in 0-2 above, modify sections of SSPWC, or add material not in SSPWC.

## **SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS**

**1-1 GENERAL** Unless otherwise stated, the words directed, required, permitted, ordered, instructed, designated, considered necessary, prescribed, approved, acceptable, satisfactory, or words of like meaning, refer to actions, expressions, and prerogatives of the Engineer.

### **1-2 TERMS AND DEFINITIONS**

**Acceptance**--The formal written acceptance by the Agency of the Work which has been completed in all respects in accordance with the Plans and Specifications and any Modifications thereof.

**Addendum**--Written or graphic instrument issued prior to the opening of Bids which clarifies, corrects or changes the bidding or Contract Documents. The term "Addendum" shall include bulletins and all other types of written notices issued to potential bidders prior to opening of Bids.

**Agency**--The legal entity for which the Work is being performed.

**Agreement**--See Contract.

**Base**--A layer of specified material of planned thickness placed immediately below the pavement or surfacing.

**Bid**--The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work.

**Bidder**--Any individual, firm, partnership, corporation, or combination thereof, submitting a Bid for the Work, acting directly or through a duly authorized representative.

**Board**--The officer or body constituting the awarding authority of the Agency.

**Bond**--Bid, performance and payment bond or other instrument of security.

**Cash Contract**--A contract financed by means other than special assessments.

**Certificate of Compliance**--A written document signed and submitted by a supplier or manufacturer that certifies that the material or assembled material supplied to the Work site conforms to the requirements of the Contract Documents.

**Change Order**--A written order to the Contractor signed by the Agency directing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract time issued after the effective date of the Contract. A Change Order may or may not also be signed by the Contractor.

**Code**--The terms Government Code, Labor Code, etc. refer to codes of the State of California.

**Consultant**--A professional engineer, architect, landscape architect or other professional who designed the project or performed other services for the Agency on the project.

**Contract**--The written agreement between the Agency and the Contractor covering the Work.

**Contract Documents**--The Contract, Addenda, notice inviting bids, instruction to bidders; Bid (including documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Contract, the Bonds, permits from jurisdictional regulatory agencies, Special Provisions, Plans, Standard Plans, Standard Specifications, Reference Specifications, Change Orders and Supplemental Agreements.

**Contractor**--The individual, partnership, corporation, joint venture, or other legal entity having a Contract with the Agency to perform the Work. In the case of work being done under permit issued by the Agency, the Permittee shall be construed to be the Contractor. The term "prime contractor" shall mean Contractor.

**Contract Price**--The total amount of money for which the Contract is awarded.

**Contract Unit Price**--The amount shown in the Bid for a single unit of an item of work.

**County Sealer**--The Sealer of Weights and Measures of the county in which the Contract is let.

**Days**--Days shall mean consecutive calendar days unless otherwise specified.

**Daily Extra Work Reports**--Reports on Agency furnished forms as required by 3-3.

**Disputed Work**--Work in which Agency and Contractor are in disagreement.

**Due Notice**--A written notification, given in due time, of a proposed action where such notification is required by the Contract to be given a specified interval of time (usually 48 hours or two Working Days) prior to the commencement of the contemplated action. Notification may be from Engineer to Contractor or from Contractor to Engineer.

**Electrolier**--Street light assembly complete, including foundation, standard, luminaire arm, luminaire, etc.

## 1-2 DEFINITIONS (Continued)

- Engineer--The Director of Public Works Agency acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.
- Field Directive--A written communication from the Engineer to the Contractor that does not make any Modification to the Contract Documents. It is used only to answer Contractor's questions and to provide decisions as specified in the Contract Documents.
- Geotextile--Synthetic fiber used in civil engineering applications, serving the primary function of separation and filtration.
- House Connection Sewer--A sewer, within a public street or right of way, proposed to connect any parcel, lot, or part of a lot with a main line sewer.
- House Sewer--A sewer, wholly within private property, proposed to connect any building to a house connection sewer.
- Luminaire--The lamp housing including the optical and socket assemblies (and ballast if so specified).
- Major Bid Item--A single Contract item constituting 10% or more of the original Contract Price.
- Mast Arm--The structural member or bracket, which, when mounted on a Standard, supports the luminaire.
- Modification--Includes Change Orders and Supplemental Agreements. A Modification may only be issued after the effective date of the Contract.
- Notice of Award--The written notice by the Agency to the successful Bidder stating that upon compliance by it with the required conditions, the Agency will execute the Contract.
- Notice to Proceed--A written notice given by the Agency to the Contractor fixing the date on which the Contract time will start.
- Owner--Same meaning as Agency.
- Person--Any individual, firm, association, partnership, corporation, trust, joint venture, or other legal entity.
- Plans--The drawings, profiles, cross sections, Standard Plans, working drawings, shop drawings, and supplemental drawings, or reproductions thereof, approved by the Engineer, which show the location, character, dimensions, or details of the Work.
- Private Contract--Work subject to Agency inspection, control, and approval, involving private funds, not administered by the Agency.
- Prompt--The briefest interval of time required for a considered reply, including time required for approval by a governing body.
- Proposal--See Bid.
- Reference Specifications--Those bulletins, standards, rules, methods of analysis or testing, codes, and specifications of other agencies, engineering societies, or industrial associations referred to in the Contract Documents. These refer to the latest edition, including amendments in effect and published at the time of advertising the project or issuing the permit, unless specifically referred to by edition, volume, or date.
- Roadway--The portion of a street reserved for vehicular use.
- Service Connection--All or any portion of the conduit cable or duct including meter, between a utility distribution line and an individual consumer.
- Service Lateral Connection--The interface of the House Connection Sewer with the host pipe.
- Sewer--Any conduit intended for the reception and transfer of sewage and fluid industrial waste.
- Shop Drawings--Drawings showing details of manufactured or assembled products proposed to be incorporated in the Work.
- Special Provisions--Any provisions which supplement or modify the Standard Specifications.
- Specifications--Standard Specifications, Reference Specifications, Standard Special Provisions, Special Provisions, and specifications in Change Orders or Supplemental Agreements between the Contractor and the Board.
- Standard--The shaft or pole used to support street lighting luminaire, traffic signal heads, mast arms, etc.
- Standard Plans--Details of standard structures, devices, or instructions referred to on the Plans or in the Specifications by title or number.
- Standard Special Provisions-- Special Provisions prepared in standardized form numbered in the series 401 through 499.

## 1-2 DEFINITIONS (Continued)

Standard Specifications--Parts 1 through 6 of this document. See Section 0. References to whole sections will be preceded by the word "Section", references to parts of sections will show numbers only, such as "3-2", except at the beginning of a sentence, the word "Section" precedes the number.

State--The State of California.

State Standard Plans--Standard Plans prepared by State of California, Business and Transportation Agency, Department of Transportation.

Stipulated Unit Price--Unit prices established by Agency in the Contract Documents.

Storm Drain--Any conduit and appurtenances intended for the reception and transfer of storm water.

Street--Any road, highway, parkway, freeway, alley, walk or way.

Subbase--A layer of specified material of planned thickness between a base and the subgrade.

Subcontractor--An individual, firm or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work.

Subgrade--For roadways, that portion of the roadbed on which pavement, surfacing, base, subbase, or a layer of other material is placed. For structures, the soil prepared to support a structure.

Supervision--Supervision, where used to indicate supervision by the Engineer, shall mean the performance of obligations, and the exercise of rights, specifically imposed upon and granted to the Agency in becoming a party to the Contract. Except as specifically stated herein, supervision by the Agency shall not mean active and direct superintendence of details of the Work.

Supplemental Agreement--A written amendment of the Contract Documents signed by both parties.

Surety--See 2-4.

Utility--Tracks, overhead or underground wires, pipelines, conduits, ducts, or structures, sewers or storm drains owned, operated or maintained in or across a public right of way or private easement.

Work--That which is proposed to be constructed or done under the Contract or permit, including the furnishing of all labor, materials, equipment, and services.

Working Day--See 6-7.2 and 6.7.2.1.

Working Drawings--Drawings showing details not shown on the Plans which are required to designed by the Contractor

## 1-3 ABBREVIATIONS

**1-3.1 General.** The abbreviations herein, together with others in general use, are applicable to these Standard Specifications and to all other Contract Documents.

All abbreviations and symbols used on Plans for structural steel construction shall conform to those given by the "Manual of Steel Construction" published by the American Institute of Steel Construction, Inc.

### 1-3.2 Common Usage

<u>Abbreviation</u>	<u>Word or Words</u>	<u>Abbreviation</u>	<u>Word or Words</u>
Aban	Abandon	l	Liters
Aband	Abandoned	Lab	Laboratory
ABS	Acrylonitrile-butadiene-styrene	Lat	Lateral
AC	Asphalt Concrete	LD	Local depression
ACP	Asbestos cement pipe	LED	Light Emitting Diode
ADA	Americans with Disabilities Act of 1990 (Public Law 101-336, 104 Stat. 1990,42 USC 12101-12213 (as amended))	LH	Lamp hole
Alt	Alternate	LL	Live load
AmerStd	American Standard	LOL	Layout line
APC	Air Placed Concrete	Long	Longitudinal
ARAM	Asphalt Rubber Aggregate Membrane	LP	Lamp post
ARHM	Asphalt Rubber Hot Mix	LPS	Low pressure sodium (Light)
AWG	American Wire Gage (non-ferrous wire)	LS	Lump sum
B/W	Back of wall	LTS	Lime treated soil
BC	Beginning of curve	m	Meters
BCR	Beginning of curb return	Maint	Maintenance
Bdry	Boundary	Max	Maximum
BF	Bottom of footing	MC	Medium curing
BM	Bench mark	MCR	Middle of curb return
BMPs	Best Management Practices	Meas	Measure
BVC	Beginning of vertical curve	MH	Manhole, maintenance hole
C&G	Curb & Gutter	Mil Spec	Military specification
C&G	Curb and gutter	Min	Minimum
CAB	Crushed aggregate base	Misc	Miscellaneous

<u>Abbreviation</u>	<u>Word or Words</u>	<u>Abbreviation</u>	<u>Word or Words</u>
CALOSHA	California Occupational Safety and Health Administration	Mon	Monument
CALTRANS	California Department of Transportation	MSDS	Material Safety Data Sheet
CAP	Corrugated aluminum pipe	Mult	Multiple
CB	Catch Basin	MUTCD	Manual on Uniform Traffic Control Devices
Cb	Curb	MVL	Mercury vapor light
CBP	Catch Basin Connection Pipe	N/A	No applicable
CBR	California Bearing Ratio	NRCP	Nonreinforced concrete pipe
C-C	Center to center	Obs	Obsolete
CCFRPM	Centrifugally Cast Fiberglass Reinforced Plastic Mortar	oc	On center
CCR	California Code of Regulations	OD	Outside diameter
CCTV	Closed Circuit TV	OE	Outer edge
CF	Cubic foot	Opp	Opposite
CF	Curb face	Orig	Original
CFR	Code of Federal Regulations	PAV	Pressure Aging Vessel
CFS	Cubic feet per second	PB	Pull box
CHDPE	Corrugated High Density Polyethylene	PC	Point of curvature
CIP	Cast iron pipe	PCC	Point of compound curvature
CIPP	Cast-in-place pipe	PCC	Portland cement concrete
CIPPC	Cast-in-place Concrete Pipe	PCVC	Point of compound vertical curve
CL	Clearance, center line	PE	Polyethylene
CLF	Chain link fence	PG	Performance Graded
CLSM	Controlled Low Strength Material	PI	Point of intersection
CMB	Crushed miscellaneous base	PL	Property line
CMC	Cement mortar-coated	PLI	Pounds per linear inch
CML	Cement mortar-lined	PMB	Processed miscellaneous base
cms	Cubic meters per second	POC	Point on curve
CO	Cleanout (Sewer)	POT	Point on tangent
Col	Column	PP	Power pole
Conc	Concrete	PRC	Point of reverse curve
Conn	Connection	PRCB	Precast Reinforced Concrete Box
Const	Construct, Construction	PRVC	Point of reverse vertical curve
Coord	Coordinate	PSI	Pounds per square inch
CQS	Cationic Quick-Setting	PT	Point of tangency
CRM	Crumb Rubber Modifier	PVC	Polyvinyl chloride
CRS	Cationic Rapid-Setting	Pvmt	Pavement
CSEP	Confined Space Entry Plan	Pvt R/W	Private right of way
CSP	Corrugated steel pipe	Q	Rate of flow in cms (CFS)
CSPA	Corrugated steel pipe arch	Quad	Quadrangle, Quadrant
CSS	Cationic Slow-Setting	R	Radius or Resistance value
CT	California Test	R&O	Rock and Oil
CTB	Cement treated base	R/W	Right of way
CV	Check valve	RA	Reclaimed Asphalt or Recycling agent
CY	Cubic yard	RAC	Recycled asphalt concrete
D	Depth, Load of pipe	RAP	Reclaimed asphalt pavement
db	Decibels	RBAC	Rubberized asphalt concrete
Dbl	Double	RC	Reinforced concrete or Rapid Curing
DF	Douglas Fir	RCB	Reinforced concrete box
Dia	Diameter	RCE	Registered civil engineer
DIP	Ductile iron pipe	RCP	Reinforced concrete pipe
DL	Dead load	RCV	Remote control valve
DT	Drain tile	Ref	Reference
Dwg	Drawing	Reinf	Reinforced or reinforcement
Dwy Appr	Driveway approach	Res	Reservoir
Dwy	Driveway	RGE	Registered geotechnical engineer
Ea	Each	RPPCC	Reclaimed Plastic Portland Cement Concrete
EC	End of curve	RR	Railroad
ECR	End of curb return	RSE	Registered structural engineer
EF	Each face	RTe	Registered traffic engineer
EG	Edge of gutter	RTFO	Rolling Thin Film Oven
EGL	Energy grade line	RW	Reclaimed Water
EI	Elevation	S	Slope
ELC	Electrolier lighting conduit	S/W	Sidewalk
ELT	Extra long ton of slurry	SC	Slow curing
Eng	Engineer, Engineering	SCCP	Steel cylinder concrete pipe
EP	Edge of pavement	SCNs	Supplementary Cementitious Materials
Esmt	Easement	SD	Storm drain
ETB	Emulsion treated base	SDR	Standard dimension ratio

<b><u>Abbreviation</u></b>	<b><u>Word or Words</u></b>
EVC	End of vertical curve
Exc	Excavation
Exist or Ex	Existing
Exp Jt	Expansion joint
F & C	Frame and cover
F & I	Furnish and install
F/W	Face of wall
Fab	Fabricate
FAS	Flashing arrow sign
FD	Floor drain
Fdn	Foundation
Fed Spec	Federal Specification
FG	Finished grade
FL	Flow line
FS	Finished surface
ft - lb	foot – pound
Ftg	footing
FW	Face of wall
Ga	Gauge
Galv	Galvanized
GG	Gap graded
GIP	Galvanized iron pipe
GL	Ground line or grade line
GM	Gas meter
GP	Guy pole
Gr	Grade
Grtg	Grating
GSP	Galvanized steel pipe
H	High or height
HB	Hose bib
HC	House connection
HDPE	High density Polyethylene
HDWL	Headwall
HGL	Hydraulic grade line
Hor, Horiz	Horizontal
Hp	Horsepower
HPG	High pressure gas
HPS	High pressure sodium (Light)
HRWRA	High Range Water Reducing Admixture
Hyd, Hydr	Hydraulic
ID	Inside diameter
Incl	Include, Including
Insp	Inspection
Inv	Invert
IP	Iron pipe
J	Joules
JC	Junction chamber
Jct	Junction
JS	Junction structure
Jt	Joint
kg	Kilograms
kPa	KiloPascals
L	Length

<b><u>Abbreviation</u></b>	<b><u>Word or Words</u></b>
SE	Sand Equivalent
Sec	Section
SF	Square foot
SG	Specific gravity
SI	International System of Units (Metric)
SLC	Service Lateral Connection
Spec	Specifications
SR	Standard ratio
SS	Sanitary sewer
SSB	Select sub-base
SSP	Structural steel plate pipe
SSPA	Structural steel plate pipe arch
St Hwy	State highway
Sta	Station
Std	Standard
Str Gr	Straight grade
Str	Straight
Struc	Structural/Structure
SW	Sidewalk
SWD	Sidewalk drain
SWPPP	Storm Water Pollution Prevention Plan
SY	Square Yard
T/W	Top of wall
Tan	Tangent
TC	Top of curb
TCP	Traffic control plan
Tel	Telephone
TF	Top of footing
Topo	Topography
Tr	Tract
Trans	Transition
TRMAC	Tire rubber modified asphalt concrete
TS	Traffic signal or transition structure
TSC	Traffic signal conduit
TSS	Traffic signal standard
TTC	Temporary traffic control
TW	Top of wall
Typ	Typical
U.S.	United States
U.S.C.	United States Code
USA	Underground Service Alert
Var	Varies, Variable
VB	Valve box
VC	Vertical curve
VCP	Vitrified clay pipe
Vert	Vertical
Vol	Volume
VTCSH	Vehicle Traffic Controls Signal Heads
W	Width or Wider
WATCH	Work Area Traffic Control Handbook
WI	Wrought iron
WM	Water meter
WPJ	Weakened plane joint
WTAT	Wet Track Abrasion Test
X Conn	Cross connection
x (as in 2x4)	by
X-Sec	Cross section

### 1-3.3 Institutions.

<u>Abbreviation</u>	<u>Word or Words</u>
AAN .....	American Association of Nurserymen
AASHTO .....	American Association of State Highway and Transportation Officials
ACI .....	American Concrete Institute
AGC .....	Associated General Contractors of America
AISC .....	American Institute of Steel Construction
ANSI .....	American National Standards Institute
API .....	American Petroleum Institute
APWA .....	American Public Works Association
AREA .....	American Railway Engineering Association
ASHRAE .....	American Society of Heating, Refrigeration and Air-Conditioning Engineers
ASME .....	American Society of Mechanical Engineers
ASTM .....	American Society for Testing and Materials
AWPA .....	American Wood Preserver's Association
AWS .....	American Welding Society
AWWA .....	American Water Works Association
CBSC .....	California Building Standards Commission
CRSI .....	Concrete Reinforcing Steel Institute
EIA .....	Electronic Industries Association
EPA .....	Environmental Protection Agency
ETL .....	Electrical Testing Laboratories
FCC .....	Federal Communications Commission
IAPMO .....	International Association of Plumbing and Mechanical Officials
ICC .....	International Code Council
IEEE .....	Institute of Electrical and Electronics Engineers
IMSA .....	International Municipal Signal Association
ITE .....	Institute of Traffic Engineers
NEMA .....	National Electrical Manufacturers Association
NFPA .....	National Fire Protection Association
NOAA .....	National Oceanic and Atmospheric Administration (Department of Commerce)
RUS .....	Rural Utility Service
UL .....	Underwriters' Laboratories, Inc.
USGS .....	United State Geological Survey
WFCFA .....	Western Fire Chiefs Association

**1-3.4 Building Codes.** The Ventura County Building Code (VCBC) and Ventura County Fire Code (VCFC) are applicable to the Work. VCBC and VCFC adopt by reference a number of uniform and national codes. Where such codes are referenced directly in the Specifications, such references shall be to the VCBC or VCFC which adopt and modify certain provisions in the referenced codes.

<u>Abbreviation</u>	<u>Code</u>	<u>Publisher</u>
CBC .....	California Building Code .....	CBSC
DBC .....	Uniform Code for Abatement of Dangerous Building .....	ICC
UBC .....	Uniform Building Code .....	ICC
UFC .....	Uniform Fire Code .....	ICC and WFCFA
UHC .....	Uniform Housing Code .....	ICC
UMC .....	Uniform Mechanical Code .....	IAPMO
UPC .....	Uniform Plumbing Code .....	IAPMO
NEC .....	National Electrical Code .....	NFPA

### 1-3.5 Reference Documents.

<u>Abbreviation</u>	<u>Document</u>
HDM	Highway Design Manual, State of California, Department of Transportation, Latest Edition
MUTCD	Manual on Uniform Traffic Control Devices
SSP	Standard Plans, State of California, Department of Transportation, latest edition
SPPWC	Standard Plans for Public Works Construction, Latest edition, published by BNi Building News, Los Angeles,
SPPWC	Standard Specifications for Public Works Construction, (See Section 0-1)
SSS	Standard Specifications, State of California, Department of Transportation, latest edition
VCSS	Ventura County Standard Specifications (Division 1, Sections 0 through 10, of which this section is a part)

## 1-4 UNITS OF MEASURE

**1-4.1 General.** The International System of Units, also referred to as SI or the metric system, is the principal measurement system in these Specifications and shall be used for construction, unless otherwise stated in the Contract Documents. U. S. Standard Measure, also called U. S. Customary System, are included in parenthesis. SI units and U. S. Standard Measure in parenthesis may or may not be exactly equivalent. If U. S. Standard Measures are specified for use in the Contract Documents, then all values used for construction shall be U. S. Standard Measures shown in parentheses. However, certain material Specifications and test requirements contained herein use SI units specifically and conversions to U. S. Measures have not been included in these circumstances. When U. S. Standard Measures are not included in parentheses, the SI units shall control.

Reference is also made to ASTM E 380 for definitions of various units of the SI system and a more extensive set of conversion factors.

**1-4.1.1 Units for Work.** Where U. S. Standard Measure units are shown on the Plans or are specified, U. S. Standard Measure shall be used for the Work.

### 1-4.2 Units of Measure, Equivalents and Abbreviations

One U.S. Customary Unit	(abbreviation)	Is Equal To	#	SI Unit
mil (=0.001 in)		25.4	micrometers	( $\mu\text{m}$ )
inch	(in)	25.4	millimeter	(mm)
inch	(in)	2.54	centimeter	(cm)
foot	(ft)	0.3048	meter	(m)
yard	(yd)	0.9144	meter	(m)
mile		1.6093	kilometer	(km)
square foot	(ft <sup>2</sup> )	0.0929	square meter	(m <sup>2</sup> )
square yard	(yd <sup>2</sup> )	0.8361	square meter	(m <sup>2</sup> )
cubic foot	(ft <sup>3</sup> )	0.0283	cubic meter	(m <sup>3</sup> )
cubic yard	(yd <sup>3</sup> )	0.7646	cubic meter	(m <sup>3</sup> )
acre (=43,560 ft <sup>2</sup> )		0.4047	hectare (1ha=10,000m <sup>2</sup> )	(ha)
gallon	(gal)	3.7854	Liter	(L)
fluid ounce	(fl. oz.)	29.5735	milliliter	(mL)
pound mass (avoirdupois)	(lbs)	0.4536	kilogram	(kg)
ounce mass	(oz)	0.02835	kilogram	(kg)
ounce mass	(oz)	28.35	grams	(g)
Ton (=2000 lb avoirdupois)		0.9072	Tonne (1 Tonne = 1000 kg)	
Poise		0.10	Pascal-second	(Pa-s)
centistoke	(cs)	1.00	square millimeter/sec.	(mm <sup>2</sup> /s)
pound force	(lbf)	4.4482	Newton	(N)
pound per square inch	(psi)	6.8948	Kilopascal	(kPa)
pound force per foot	(lbf/ft)	14.594	Newton per meter	(N/M)
foot-pound force	(ft-lbf)	1.3558	Joules	(J)
foot-pound force per second	(ft-lbf/s)	1.3558	Watt	(W)
part per million	(ppm)	1.00	milligram/liter	(mg/L)
Degree Fahrenheit	(°F)	0.5555	Degree Celsius	(°C)

Temperature: Celsius to Fahrenheit	Temperature: Fahrenheit to Celsius
Temperature °F = (1.8 x °C) + 32	Temperature °C = (°F - 32) / 1.8

SI Units Used in Both Systems		
Ampere (A)	second (s)	Candela (cd)
Volt (V)	decibel (db)	Lumen (lm)

Common Metric Prefixes					
kilo (k)	10 <sup>3</sup>	milli (m)	10 <sup>-3</sup>	nano (n)	10 <sup>-9</sup>
centi (c)	10 <sup>-2</sup>	micro (μ)	10 <sup>-6</sup>	pico (p)	10 <sup>-12</sup>

## 1-5 SYMBOLS

° Degree	<u>R</u> Property line	% Percent
' Feet or minutes	<u>S</u> Survey line or station line	# Number
" Inches or seconds	<u>C</u> Center line	/ per or of (between words)
Δ Delta, the central angle or angle between tangents		∠ Angle



## SECTION 2 - SCOPE AND CONTROL OF WORK

### 2-1 AWARD AND EXECUTION OF CONTRACT

**2-1.1 Award of Contract.** The right is reserved to waive minor irregularities in the proposals and to reject any or all proposals. The award of the Contract, if it be awarded, will be to the lowest responsive, responsible Bidder, determined as provided on the Proposal Form, whose Proposal complies with all the requirements prescribed. Such award, if made, will be made within the number of Days stated in the Proposal form. If the lowest responsible Bidder refuses or fails to execute the Contract, the Agency may, within 45 additional Days, consider the next lowest Bidder to be the lowest responsive, responsible Bidder. The periods of time specified above within which the award of Contract may be made shall be subject to extension for such further period as may be agreed upon in writing by the Bidder concerned. If the Bidder's bid guarantee was in the form of a bid bond, the Bidder shall also submit a statement from the Surety that the bond has been extended for the same period.

Proposals not accompanied by a properly executed Noncollusion Affidavit required by Public Contract Code Section 7106 will be considered nonresponsive and will not be considered for award.

All bids will be compared on the basis of the quantities, amounts and unit prices, or lump sums, as shown on the Bid Proposal.

Before award, the Bidder may be required to furnish acceptable evidence of adequate capability, equipment and financial resources to adequately perform the Work. Bidders found not to be so qualified may have their bids rejected. If reasonable cause exists to believe collusion exists among Bidders, or that prices Bid are unbalanced between Bid items, any or all proposals may be rejected.

Award will not be made to a Bidder who is listed by the State Labor Commissioner as ineligible to bid, work on, or be awarded public works projects.

**2-1.2 Notice of Award.** Within one Day after award of Contract by the Board, the Bidder to whom Contract is awarded will be notified of award by email and telephone, or if no contact is made by telephone, then by mail. Within three business days after award of Contract, a Notice of Award will be sent, transmitting the Contract Documents to such Bidder for execution. If telephone contact is made, the Bidder may request that the Contract Documents be held in Agency's office to be picked up.

**2-1.3 Execution of Contract Documents.** On receipt of the Contract Documents, the Bidder shall promptly obtain the required insurance coverage, certificates of insurance, power-of-attorney and Contract bonds, execute the Contract, and transmit all required documents to the Agency.

**2-1.4 Failure to Execute Documents.** Should the Bidder fail to furnish Agency all required documents, properly executed, prior to the starting day of the Contract time computed as provided in 6-7.4 and stated in the Notice of Award, Agency may thereafter declare the Bidder to be in default and its Proposal guarantee forfeited.

**2-1.5 Return of Proposal Guarantees.** Within 10 Days after the award of the Contract, Agency will return the Proposal guarantees, other than Bidder's bonds, accompanying such of the proposals as are not to be further considered in making the award. The low and second Bidder's Proposal guarantee will be held until the Contract has been executed, after which all Proposal guarantees, except Bidders' bonds and any guarantees which have been forfeited, will be returned to the respective Bidders whose proposals they accompany.

**2-2 ASSIGNMENT.** No Contract or portion thereof may be assigned without consent of the Board except that the Contractor may assign money due or which will accrue to it under the Contract. If given written notice, such assignment will be recognized by the Board to the extent permitted by law, but any assignment of money shall be subject to all proper withholdings in favor of the Agency and to all deductions provided for in the Contract. All money withheld, whether assigned or not, shall be subject to being used by the Agency for completion of the Work, should the Contractor be in default.

## **2-3 SUBCONTRACTS.**

**2-3.1 General.** Each Bidder shall comply with the Chapter of the Public Contract Code including Sections 4100 through 4113. The following excerpts or summaries of some of the requirements of that Chapter are included below for information.

The Bidder shall set forth in the Bid, as provided in 4104:

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

(2) An inadvertent error in listing the California contractor license number provided pursuant to paragraph (1) shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the corrected contractor's license number is submitted to the public entity by the prime contractor within 24 hours after the bid opening and provided the corrected contractor's license number corresponds to the submitted name and location for that subcontractor."

If the Contractor fails to specify a Subcontractor, or specifies more than one Subcontractor for the same portion of the Work to be performed under the Contract (in excess of one-half percent of 1 percent of the Contractor's total bid), the Contractor shall be qualified to perform that portion itself, and shall perform that portion itself except as otherwise provided in the Code.

Except as provided in Section 4107, no prime contractor, whose Bid is accepted, shall substitute any person or Subcontractor in place of the Subcontractor listed in the original bid other than for causes and by procedures established in Section 4107.5 which provides procedures to correct a clerical error in the listing of a Subcontractor.

Section 4110 provides that a Contractor violating any of the provisions of the Chapter violates the Contract and the Board may exercise the option either to cancel the Contract or assess the Contractor a penalty in an amount of not more than 10 percent of the subcontract involved, after a public hearing.

**2-3.1.1 Use of Debarred Subcontractors Prohibited.** The Contractor is prohibited from performing work using a Subcontractor who is listed by the State Labor Commissioner as ineligible to work on public works projects.

**2-3.2 Additional Responsibilities.** The Contractor shall give personal attention to the fulfillment of the Contract and shall keep the Work under its control.

Except where the required Contractor's License Class is "B", the Contractor shall perform, with its own organization, Contract work amounting to at least 50 percent of the Contract Price except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or Proposal with an "[S]". Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

Before the work of any Subcontractor is started, the Contractor shall submit to the Engineer for approval a written statement showing the work to be subcontracted giving the name, contractor license number and business of each Subcontractor and description and value of each portion of the work to be so subcontracted.

**2-3.3 Status of Subcontractors.** Subcontractors shall be considered employees of the Contractor, and the Contractor shall be responsible for their work.

**2-3.3.1 Subcontracts.** The Contractor shall incorporate into all subcontracts, and the Subcontractor shall incorporate into all lower tier subcontracts, all of the Plans and Specifications which are part of the Contract between the Contractor and the Agency.

**2-3.3.2 Contractor Responsible.** The Contractor is responsible for properly performing and completing all Work required by the Contract whether or not it employs subcontractors for certain portions of the Work. It shall coordinate the sequence and timing of its efforts and that of its subcontractors to insure the proper and timely completion of the Work.

**2-3.3.3 Specialty Contractors.** Where a specialty Contractor's license is required by law or by the Specifications in order to perform certain portions of the Work, the Contractor may perform such portion with its own forces if it holds the proper license. Otherwise, it shall employ a properly licensed subcontractor to perform that portion of the Work. Such requirement to employ a subcontractor does not modify the other requirements of 2-3.

**2-4 CONTRACT BONDS.** Before execution of the Contract by the Agency, the Bidder shall file surety bonds with the Agency to be approved by the Board in the amounts and for the purposes noted below. Bonds issued by a Surety who is listed in the latest version of U.S. Department of Treasury Circular 570, who is authorized to issue bonds in California, and whose bonding limitation shown in said circular is sufficient to provide bonds in the amount required by the Contract shall be deemed to be approved unless specifically rejected by the Agency. Bonds from all other sureties shall be accompanied by all of the documents enumerated in Code of Civil Procedure 995.660(a). The Bidder shall pay all bond premiums, costs, and incidentals.

Each bond shall incorporate, by reference, the Contract and be signed by both the Bidder and Surety and the signature of the authorized agent of the Surety shall be notarized.

The Bidder shall provide two good and sufficient surety bonds. The "Payment Bond" (Material and Labor Bond) shall be for not less than 100 percent of the Contract Price, to satisfy claims of material suppliers and mechanics and laborers employed by it on the Work. The bond shall be maintained by the Contractor in full force and effect until the Work is accepted by the Agency, and until all claims for materials and labor are paid, and shall otherwise comply with the Civil Code.

The "Performance Bond" shall be for 100 percent of the Contract Price to guaranty faithful performance of all Work, within the time prescribed, in a manner satisfactory to the Agency, and that all materials and workmanship will be free from original or developed defects. The bond must remain in effect until the end of the warranty period set forth in 6.8-2.

Should any bond become insufficient, the Contractor shall renew the bond within 10 Days after receiving notice from the Agency.

Should any Surety at any time be unsatisfactory to the Board, notice will be given the Contractor to that effect. No further payments shall be deemed due or will be made under the Contract until a new Surety shall qualify and be accepted by the Board.

Changes in the Work, or extensions of time, made pursuant to the Contract, shall in no way release the Contractor or Surety from its obligations. Notice of such changes or extensions shall be waived by the Surety.

**2-4.1 Bond Forms.** Bonds shall be on forms furnished by Agency.

## **2-5 PLANS AND SPECIFICATIONS**

**2-5.1 General.** The Contractor shall keep at the work site a copy of the Plans and Specifications, to which the Engineer shall have access at all times.

The Plans, Specifications, and other Contract Documents shall govern the Work. The Contract Documents are intended to be complementary and cooperative. Anything specified in the Specifications and not shown on the Plans, or shown on the Plans and not specified in the Specifications, shall be as though shown or specified in both.

The Plans shall be supplemented by such working drawings and shop drawings as are necessary to adequately control the Work.

The Contractor shall ascertain the existence of any conditions affecting the cost of the Work through reasonable examination of the work site prior to submitting the Bid..

Existing improvements visible at the work site, for which no specific disposition is made on the Plans, but which interfere with the completion of the Work, shall be removed and disposed of by the Contractor.

The Contractor shall, upon discovering any error or omission in the Plans or Specifications, immediately call it to the attention of the Engineer.

**2-5.1.1 Specifications Captions.** Captions accompanying specification parts, sections and paragraphs are for convenience of reference only and do not limit the content of such part, section or paragraph.

The division of the Plans into parts and the division of the Specifications into divisions and sections are for the ease of reference only and does not imply the division of work between trades or subcontractors.

**2-5.2 Precedence of Contract Documents.** If there is a conflict between any of the Contract Documents, the document highest in precedence shall control. The precedence shall be as follows:

- 1) Permits issued by jurisdictional regulatory agencies.
- 2) Change Orders and Supplemental Agreements; whichever occurs last.
- 3) Contract/Agreement.
- 4) Addenda.
- 5) Bid/Proposal.
- 6) Special Provisions.
- 7) Plans.
- 8) Standard Plans.
- 9) Standard Specifications.
- 10) Reference Specifications.

Detail drawings shall take precedence over general drawings.

**2-5.3 Shop Drawings, Working Drawings, and Submittals.**

**2-5.3.1 General.** Submittals shall be provided, at the Contractor's expense, as required in 2-5.3.2, 2-5.3.3 and 2-5.3.4, when required by the Plans or Special Provisions, or when requested by the Engineer.

Materials shall neither be furnished nor fabricated, nor shall any work for which submittals are required be performed, before the required submittals have been reviewed and accepted by the Engineer. Neither review nor acceptance of submittals by the Engineer shall relieve the Contractor from responsibility for errors, omissions, or deviations from the Contract Documents, unless such deviations were specifically called to the attention of the Engineer in the letter of transmittal. The Contractor shall be responsible for the correctness of the submittals.

The Contractor shall allow a minimum of 20 working days for review of submittals unless otherwise specified in the Special Provisions. Each submittal shall be accompanied by a letter of transmittal.

**2-5.3.2 Working Drawings.** Working drawings shall be of a size and scale to clearly show all necessary details.

Six copies and one reproducible shall be submitted. If no revisions are required, 3 of the copies will be returned to the Contractor. If revisions are required, the Engineer will return one copy along with the reproducible for resubmission. Upon acceptance, the Engineer will return 2 of the copies to the Contractor and retain the remaining copies and the reproducible.

Working drawings are required in the following subsections:

**TABLE 2-5.3.2 (A)**

Item	Section Number	Title	Subject
1	7-8.5.2	Sanitary Sewers	Sewage Bypass and Pumping
2	7.8.6.3	Water Pollution Control	Storm Water Pollution Prevention Plan
3	7-8.6.6	Water Pollution Control	Dewatering Plan
4	7-10.2.2	Work Area Traffic Control	Traffic Control Plan
5	7-10.4..2.2	Safety	Trench Shoring
6	207-8.4	Joints	Vitrified Clay Pipe
7	207-10.2.1	General	Fabricated Steel Pipe
8	300-3.2	Cofferdams	Structure Excavation & Backfill
9	303-1.6.1	General	Falsework
10	303-1.7.1	General	Placing Reinforcement
11	303-3.1	General	Prestressed Concrete Construction
12	304-1.1.1	Shop Drawings	Structural Steel
13	304-1.1.2	Falsework Plans	Structural Steel
14	304-2.1	General	Metal Hand Railings
15	306-2.1	General	Jacking Operations
16	306-3.1	General	Tunneling Operations
17	306-3.4	Tunnel Supports	Tunneling Operations
18	306-6	Remodeling Existing Sewer Facilities	Polyethylene Liner Installation
19	306-8	Microtunneling	Microtunneling Operations

Working drawings listed above as Items 4, 5, 8, 9, 11, 12, 13, 15 and 18 shall be prepared by a Civil or Structural Engineer registered by the State of California.

**2-5.3.3 Shop Drawings.** Shop drawings are drawings showing details of manufactured or assembled products proposed to be incorporated into the Work. Shop drawings required shall be as specified in the Special Provisions.

**2-5.3.4 Supporting Information.** Supporting information is information required by the Specifications for the purposes of administration of the Contract, analysis for verification of conformance with the Specifications, the operation and maintenance of a manufactured product or system to be constructed as part of the Work, and other information as may be required by the Engineer. Six copies of the supporting information shall be submitted to the Engineer prior to the start of the Work unless otherwise specified in the Special Provisions or directed by the Engineer. Supporting information for systems shall be bound together and include all manufactured items for the system. If resubmittal is not required, three copies will be returned to the Contractor. Supporting information shall consist of the following and is required unless otherwise specified in the Special Provisions:

- 1) List of Subcontractors per 2-3.2.
- 2) List of Materials per 4-1.4.
- 3) Certificates of Compliance per 4-1.5.
- 4) Construction Schedule per 6-1.
- 5) Spill Prevention and Emergency Response Plan per 7-8.5.3
- 6) Confined Space Entry Program per 7-10.4.5.1
- 7) Lean concrete base mix designs per 200-4
- 8) Concrete mix designs per 201-1.1.
- 9) Asphalt concrete mix designs per 203-6.1.
- 10) Pipeline layout diagrams per 207-2.1
- 11) Equipment and materials list per 307-1
- 12) Controller cabinet wiring diagrams per 307-17.2.2
- 13) Data, including, but not limited to, catalog sheets, manufacturer's brochures, technical bulletins, specifications, diagrams, product samples, and other information necessary to describe a system, product or item. This information is required for irrigation systems, street lighting systems, and traffic signals, and may also be required for any product, manufactured item, or system.

**2-5.4 Record Drawings.** The Contractor shall prepare and maintain a set of prints in the Engineer's Field Office on which the locations and description of all plumbing, mechanical, and electrical facilities, which were not detailed fully on the Plans, are marked in colored pencil. Such prints shall also indicate any authorized changes from the original Plans. Such prints shall be furnished to the Engineer before final Acceptance of the Work.

**2-6 WORK TO BE DONE.** The Contractor shall perform all work necessary to complete the Contract in a satisfactory manner. Unless otherwise provided, it shall furnish all materials, equipment, tools, labor and incidentals necessary to complete the Work.

All work under the Contract shall be performed in accordance with the highest standards prevailing in the trades unless otherwise specified on the Plans or in the Special Provisions. Unless otherwise specified, it is the intent that the Contractor will construct a complete facility ready for use.

**2-6.1 Manufacturer's Recommendations.** Where the manufacturer of any materials or equipment provides written recommendations or instructions for its use or method of installation (including labels, tags, manuals, or trade literature), such recommendations or instructions shall be complied with except where the Contract Documents specifically require deviations.

**2-6.2 Testing of Installed Components.** Where the specifications provide that any component of the Work is to be tested, calibrated or adjusted during or after installation, such testing shall be performed by a qualified firm, approved by the Engineer. The firm performing the testing or calibration shall be employed by and paid for by the Contractor.

**2-6.3 Training of Agency Personnel.** Where the specifications provide for training of Agency personnel in the use or maintenance of any component of the Work, the Contractor shall arrange for and pay for competent personnel to perform the training. Contractor shall schedule the training with the Engineer.

**2-7 SUBSURFACE DATA.** All soil and test hole data, groundwater elevations, and soil analyses shown on the Plans or included in the Specifications apply only at the location of the test holes and to the depths shown. Soil test reports for test holes which have been drilled are available for inspection at the office of the Engineer. Additional subsurface exploration may be performed by Bidders or the Contractor at their own expense. The indicated groundwater elevation is that existing at the date specified in the data. It is the Contractor's responsibility to determine and allow for the groundwater elevation on the date the Work is performed. A difference in groundwater elevation between what is shown in soil boring logs and what is actually encountered during construction will not be considered as a basis for Extra Work per 3-3.

Opinions, recommendations or conclusions contained in any soils report, soil boring logs, subsurface materials investigation, geological report or other similar studies, tests or reports, prepared for the Agency, are not a part of the Contract. Contractor shall be responsible for forming its own opinions and conclusions from the facts set forth in such reports.

**2-8 RIGHTS-OF-WAY.** Rights-of-way, easements or rights-of-entry for the Work will be provided by the Agency. Unless otherwise provided, the Contractor shall make arrangements, pay for, and assume all responsibility for acquiring, using, and disposing of additional work areas and facilities temporarily required. The Contractor shall indemnify and hold the Agency harmless from all claims for damages caused by such actions.

**2-9 SURVEYING**

**2-9.1 Permanent Survey Markers.** The Contractor shall notify the Engineer at least 7 Days before starting work to allow for the preservation of survey monuments, lot stakes (tagged), and bench marks. The Engineer, or the owner at its cost, shall file a Corner Record Form referencing survey monuments subject to disturbance in the Office of the County Surveyor prior to the start of construction and also prior to the completion of construction for the replacement of survey monuments. The Contractor shall not disturb survey monuments, lot stakes (tagged), or bench marks without the consent of the Engineer or the owner on Private Contracts. The Contractor shall bear the expense of replacing any that may be disturbed without permission. Replacement shall be done only under the direction of the Engineer by a Licensed Land Surveyor or a Registered Civil Engineer authorized to practice land surveying within the state.

When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall adjust the monument cover to the new grade within 7 Days of finished paving unless otherwise specified.

**2-9.2 Survey Service.** The Engineer will set only the horizontal and vertical control survey points shown on the Plans. These will be set prior to the commencement of construction. The Contractor shall preserve these points as well as any other surveys established by the Engineer for use by the Contractor for the duration of their usefulness. If any survey points established by Engineer are lost or disturbed and need to be replaced, such replacement shall be by the Engineer at the expense of the Contractor. The Contractor shall employ engineers or surveyors to perform adequate surveys and staking necessary to construct the Work to the lines, elevations and grades shown on the Plans and for the Engineer's use in checking such work. Copies of the field notes or diagrams used in setting stakes shall be promptly furnished to the Engineer.

**2-9.2.1 Open Areas.** Where dimensions are not given on the Plans for parking lots, landscaped areas or graded areas, distances shall be scaled. Unless otherwise indicated, straight grades and smooth vertical curves shall be set between indicated elevations. Finished surfaces shall be sloped to drain in order to eliminate ponding of water.

**2-9.2.2 Utilities.** Section 5-5.1 requires the Contractor's cooperation during the relocation of utilities, which may require the setting of lines and grades when needed by utility owners performing relocations.

**2-9.3 Contractor's Surveys.** Surveying by private engineers and surveyors on the Work shall conform to the quality and practice required by the Engineer.

**2-9.3.1 Errors in Surveys.** The Contractor is responsible for the accuracy of all surveys except those performed by the Engineer. To assure that a survey point set by the Engineer has not been disturbed since it was set and that it was accurately set, all surveys by the Contractor shall be based on at least two survey points set by the Engineer or by other governmental surveys, in accordance with good survey practice. Should discrepancies be found between such points, the Engineer shall be notified and construction shall not proceed until the discrepancy has been resolved.

**2-9.4 Line and Grade.** All Work upon completion shall conform to the lines, elevations, and grades shown on the Plans.

**2-9.5 Quantity Surveys.** The Engineer will perform all quantity surveys for payment purposes, however, in performing such quantity surveys, it may make use of surveys performed by the Contractor.

**2-9.6 Payment for Surveys.** Payment for performing all of the surveying and staking as required by the Specifications and such additional surveying and staking as required by the Contractor will be made at the lump sum price set forth in the Proposal and shall be full compensation for furnishing all labor, equipment, instruments and materials necessary to perform the Work. If no bid item for surveying is included in the Proposal, the cost of surveying shall be included in the prices bid for other applicable items of work.

**2-10 AUTHORITY OF BOARD AND ENGINEER.** The Board has the final authority in all matters affecting the Work. Within the scope of the Contract, the Engineer has the authority to enforce compliance with the Plans and Specifications. The Contractor shall promptly comply with instructions from the Engineer or its authorized representative.

On all questions relating to quantities, the acceptability of material, equipment, or work, the execution, progress or sequence of work, and the interpretation of Specifications or drawings, the decision of the Engineer is final and binding, and shall be precedent to any payment under the Contract, unless otherwise ordered by the Board.

**2-10.1 Decisions in Writing.** Any and all decisions of the Engineer interpreting Specifications or drawings shall be in writing. Any purported "interpretation" which is not in writing shall not be binding upon the Agency and should not be relied upon by the Contractor.

## **2-11 INSPECTION**

The Work is subject to inspection and approval of the Engineer. The Contractor shall notify the Engineer before noon of the working day before inspection is required. Work shall be done only in the presence of the Engineer, unless otherwise authorized. Any work done without proper inspection will be subject to rejection. The Engineer and any authorized representatives shall at all times have access to the Work during its construction at shops and yards as well as the Work site. The Contractor shall provide every reasonable facility for ascertaining that the materials and workmanship are in accordance with these specifications. Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all conditions of the Contract.

**2-11.1 Permit Inspections.** The Contractor shall arrange for code compliance inspections by all agencies issuing permits for the Work. The Work shall not continue beyond mandatory inspection points without clearance from the controlling agency. Each agency involved shall be notified in accordance with the code they enforce or in accordance with their standard operating procedures. No extensions of time will be granted for delays occasioned by such inspections except where, through no fault of the Contractor, the inspection is delayed more than one Day beyond normal response time after proper notification has been given. It shall be the Contractor's responsibility to see that any required inspection record card is signed off before proceeding with the next phase of the Work and completely signed off on completion of the Work.

**2-11.2 Structural Observation.** When the plans indicate that "Structural Observation" of specific work is required prior to Permit Inspection, Contractor shall notify Engineer, in writing, at least five working days prior to the date Contractor plans to have the work ready for structural observation. If the work is not ready for structural observation on the date indicated, Contractor shall reimburse Agency the cost of structural observer's visit to the Work site. If the work to be observed is substantially complete but is found to need correction before approval by the structural observer, Contractor shall give notice of a new date, as required above.

**2-12 SPECIAL NOTICES.** When specified in the Specifications or as directed by the Engineer, any notice required to be given in accordance with this subsection shall be in writing, dated, and signed by the Contractor or the Engineer. Such notices shall be served by any of the following methods:

- a) Personal delivery with proof of delivery which may be made by declaration under penalty of perjury by any person over the age of 18 years. The proof of delivery shall show that delivery was performed in accordance with these provisions. Service shall be effective on the date of delivery. Notices given to the Contractor by personal delivery may be made to the Contractor's authorized representative at the Work site; or
- b) Certified mail addressed to the mailing address of the recipient postage prepaid; return receipt requested. Service shall be effective on the date of the receipt of the mailing.

Simultaneously, the Agency may send the same notice by regular mail. If a notice that is sent by certified mail is returned unsigned, then delivery shall be effective pursuant to regular mail, provided the notice that was sent by regular mail is not returned.

## **2-13 AGENCY PERSONNEL AND AUTHORITY**

**2-13.1 General.** The Board has complete authority for the project within the limits prescribed by law. Pursuant to resolutions duly adopted by the Board, the authority to perform certain functions has been delegated to the Director of Public Works. Agency staff personnel and Consultants delegated thereto by the Director are authorized to perform functions limited as set forth in the following list of personnel and designated duties.

**2-13.2 Engineer.** The Director of the Public Works Agency of the County of Ventura is the Engineer and has general authority to administer the Contract. The Engineer has the following specific authority:

(a) To issue Contract Change Orders (CCO) and to settle claims subsequent to Acceptance as follows:

<u>Original Contract Amount</u>	<u>Maximum Amount of any Change Order or Claim Settlement</u>
\$50,000 or less.....	\$5,000
greater than \$50,000 and not over \$250,000 .....	10% of the original Contract amount
greater than \$250,000 and not over \$3,950,000 .....	\$25,000 plus 5% of the original Contract cost in excess of \$250,000.
greater than \$3,950,000 .....	\$210,000

CCOs and claim settlements exceeding the amounts set forth above require Board approval.

- (b) To make final adjustments of quantities (FAQ) on unit price items.
- (c) To accept the Work when the Contractor has completed all obligations of the Contract, in accordance with the Plans, Specifications and other Contract Documents. The Engineer also has authority to make and record the Notice of Completion.
- (d) To approve progress and final payments under the Contract, including the provisions for withholding funds.
- (e) To determine whether performance on the Work is satisfactory. Satisfactory performance includes compliance with all contract requirements.
- (f) To approve the substitution of a Subcontractor, where allowed by law, if the listed Subcontractor does not object when notified.
- (g) To suspend the Work for the benefit of the Agency.
- (h) In the absence of the Agency Director, a Public Works Agency Department Director, as Deputy Director of Public Works, may exercise the Engineer's authority. Such action will be indicated by "Acting" with the Department Director's signature.

**2-13.3 Department Director (Public Works Agency).** The Department Director responsible for the project is designated in the Notice to Proceed. The Department Director has the following authority:

(a) To issue Contract Change Orders (CCO) as follows:

<u>Original Contract Amount</u>	<u>Maximum Amount of any Change Order</u>
Less than \$500,000.....	\$5,000
\$500,000 to \$1,000,000 .....	1% of Bid Price
Greater than \$1,000,000 .....	\$10,000

- (b) To issue extensions of Contract time in accordance with the Contract Documents.
- (c) To make final adjustment of quantities where the total does not exceed the amounts listed in (a) above.
- (d) To approve the substitution of subcontractors, where allowed by law, if the listed Subcontractor does not object when notified.
- (e) To determine when the Work has been completed and acknowledge in writing the completion of the Work.



**2-13.4 Project manager.** The Project manager responsible for the project is designated in the Notice to Proceed. This person may also be referred to as Project Engineer. The Project manager has the following authority:

- (a) To interpret the Plans and Specifications.
- (b) To make minor changes in the location or features of the Work where no change in cost is involved. Such changes in cost may not be the net of multiple changes.
- (c) To approve substitutes for material and equipment specified by proprietary names when such material and equipment meet the Contract requirements.
- (d) To approve shop drawings and submittals.
- (e) To issue stop work orders when necessary to enforce the provisions of the Contract.
- (f) To make determinations of each Working Day to be charged against the Contract time in accordance with 6-7.3.
- (g) To take over a portion of the Work for Agency's use in accordance with 6-10.
- (h) To receive all correspondence and other documents from the Contractor.
- (i) To inspect the Work and perform Final Inspection subject to review by the Department Director and the Engineer.

**2-13.5 Inspector.** One or more inspectors will be assigned to the project by the Project manager. Substitutes may be used during absence of the assigned inspector. The Inspector has the following authority subject to review by the Project manager, Department Director and the Engineer:

- (a) To view and inspect the Work, sample and test components (at the Work site and at offsite manufacturing locations), and to discuss the Work with the Contractor's field representative.
- (b) To determine compliance with the Plans, Specifications and other Contract Documents and to issue warnings of noncompliance.
- (c) To issue stop work notices in the following two instances only:
  - 1) Where a safety hazard exists that has an immediate potential for serious injury or death.
  - 2) Where the operation in progress, if continued for even a short period of time, could be adverse to the Agency's interests.

#### **2-13.6 Other Agency Personnel and Consultants.**

**2-13.6.1 Materials Engineer.** The Materials Engineer is designated in the Notice to Proceed. The Materials Engineer may assign one or more Materials Inspectors to the project.

Materials Inspectors have authority to sample and test material at the Work site and at offsite manufacturing or storage locations. They may furnish available written test results to the Contractor's field representative. At batch plants, they may issue warnings of noncompliance, but stop notices require the signature of the Materials Engineer or Project manager.

**2-13.6.2 Surveyors & Technicians.** Surveyors and technicians shall have free access to the site to perform their duties but have no authority related to Contract administration.

**2-13.6.3 Other Persons.** Other Agency personnel who are not involved in construction administration and the general public may be present at the site because it is their present place of work, as client/customers, as visitors, as future users of the facility, or as persons who will maintain the completed facility. Where the facility is to continue in use during construction, work access for Agency workers and client/customers shall be maintained as provided in the Special Provisions. Where the facility (or portion where construction is being performed) is not in use during construction, admittance to the Work site by Agency personnel not involved in construction administration and visitors may be allowed by the Contractor or by the inspector, subject to compliance with safety regulations. Such persons have no authority under the Contract and the Agency is not responsible for their comments, suggestions or directions.

**2-13.6.4 Consultants.** Consultants hired by the Agency shall have free access to the site to perform their duties but have no authority related to Contract administration, unless such duties are specifically identified in writing to the Contractor. When so identified, Consultant may perform the duties of certain Agency personnel described above.

## SECTION 3 - CHANGES IN WORK

### 3-1 CHANGES REQUESTED BY THE CONTRACTOR

**3-1.1 General.** Changes in specified methods of construction may be made at the Contractor's request when approved in writing by the Engineer. Changes in the Plans and Specifications, requested in writing by the Contractor, which do not materially affect the Work and which are not detrimental to the Work or to the interests of the Agency, may be granted by the Board to facilitate the Work, when approved in writing by the Engineer. Nothing herein shall be construed as granting a right to the Contractor to demand acceptance of such changes.

**3-1.2 Payment for Changes Requested by the Contractor.** If such changes are granted, they shall be made at a reduction in cost or at no additional cost to the Agency. All costs to the Agency in reviewing the proposed change, or testing materials involved therein, shall be paid for by the Contractor, whether or not the change is approved.

### 3-2 CHANGES INITIATED BY THE AGENCY

**3-2.1 General.** The Agency may change the Plans, Specifications, character of the Work, or quantity of work, provided the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed 25 percent of the Contract Price. Should it become necessary to exceed this limitation, the change shall be by written Supplemental Agreement between the Contractor and Agency, unless both parties agree to proceed with the change by Change Order.

Change orders shall be in writing and state the dollar value of the change or establish method of payment, any adjustment in Contract time, and, when negotiated prices are involved, shall provide for the Contractor's signature indicating its acceptance.

#### 3-2.2 Payment for Changes Initiated by the Agency.

**3-2.2.1 Contract Unit Prices.** If a change is ordered in an item of work covered by a Contract unit price, and such change does not involve a substantial change in the character of the Work from that shown on the Plans or included in the Specifications, an adjustment in payment will be made based upon the increase or decrease in quantity and the Contract unit price. In the case of such an increase or decrease in a Major Bid Item, the use of this basis for the adjustment of payment will be limited to that portion of the change which, together with all previous changes to that item, is not in excess of 25% of the total cost of such item based on the original quantity and Contract unit price.

If a change is ordered in an item of work covered by a Contract unit price, and such change does involve a substantial change in the character of the Work from that shown on the Plans or included in the Specifications, an adjustment in payment will be made in accordance with 3-2.2.3.

Should any Contract item be deleted in its entirety, payment will be made only for actual costs incurred prior to notification of such deletion.

**3-2.2.2 Stipulated Unit Prices.** Stipulated unit prices are those established by the Agency in the Contract Documents, as distinguished from Contract unit prices submitted by the Contractor. Stipulated unit prices may be used for the adjustment of Contract changes.

**3-2.2.3 Pricing.** Adjustments in payments for changes other than those set forth in 3-2.2.1 and 3-2.2.2 will be determined by agreement between Contractor and Agency. If unable to reach agreement, the Agency may direct the Contractor to proceed on the basis of Extra Work in accordance with 3-3 or as set forth in 3-2.2.4.

**3-2.2.4 Non-Agreed Prices.** Agency may issue a change order directing the Contractor to proceed at a price set by the Agency or on the basis of Extra Work. If the Agency sets a price for the work covered by the change order, Contractor is entitled to payment for such work in accordance with 3-3 to the extent payment in accordance with 3-3 exceeds the price set by the Agency.

### 3-3 EXTRA WORK

**3-3.1 General.** New or unforeseen work will be classed as "Extra Work" when the Engineer determines that it is not covered by Contract Unit Prices or Stipulated Unit Prices.

#### 3-3.2 Payment.

**3-3.2.1 General.** When the price for the Extra Work cannot be agreed upon, the Agency will pay for the Extra Work based on the accumulation of costs as provided herein.

### 3-3.2.2 Basis for Establishing Costs

(a) **Labor.** The cost of labor will be the current cost for wages prevailing for each craft or type of workers performing the Extra Work at the time the Extra Work is done, plus payment of health and welfare, pension, vacation, apprenticeship funds, and other direct costs included in the prevailing rates applicable to the project, as well as assessments or benefits required by lawful collective bargaining agreements. To the total of these labor costs, the labor surcharge set forth in the current CALTRANS Labor Surcharge and Equipment Rental Rates publication shall be applied.

The use of a labor classification which would increase the Extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs.

Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for the equipment rental. The labor cost for foremen shall be proportioned to all of their assigned work and only that applicable to Extra Work shall be paid. A foreman is defined as a lead working journeyman.

Nondirect labor costs including superintendence, payroll taxes, all types of insurance, and all other labor costs, not specifically provided for, shall be considered to be paid for as part of the markup of 3-3.2.3(a)(1).

(b) **Materials.** The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the Work site in the quantities involved, plus sales tax, freight and delivery.

The Agency reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the Agency.

(c) **Tool and Equipment Rental.** No payment will be made for the use of tools which have a replacement value of \$200 or less.

Regardless of ownership, the rates to be used for determining equipment rental costs shall not exceed the following:

- (1) For equipment that is listed in the current CALTRANS Labor Surcharge and Equipment Rental Rates publication, the rates shown therein. The right of way delay and overtime/multiple shift factors contained therein shall be used as applicable.
- (2) For equipment not listed in said CALTRANS publication, the listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed.
- (3) For equipment rental that includes operators and helpers, the applicable cost from (1) or (2) above, plus the applicable labor costs as determined in accordance with (a) above.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Necessary loading and transportation costs for equipment used on the Extra Work shall be added to the other costs.

If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the Agency than holding it at the work site, it shall be returned, unless the Contractor elects to keep it at the work site at no expense to the Agency.

All equipment shall be acceptable to the Engineer, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and manufacturer's approved modifications shall be used to classify equipment and it shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

The reported rental rates for equipment already at the work site shall be for the duration of its use on the Extra Work, commencing at the time it is first put into actual operation on the Extra Work, plus the time required to move it from its previous site, and move it back to its previous site or to a closer site of next use.

### **3-3.2.2 Basis for Establishing Costs (Continued)**

**(d) Other Items.** The Agency may authorize other items which may be required on the Extra Work. Such items include labor, service, material and equipment which are different in their nature from those required for the Work specified in the Contract and which are of a type not ordinarily available from the Contractor or any of its subcontractors.

Invoices covering all such items in detail shall be submitted with the request for payment.

**(e) Invoices.** Vendors' invoices for material, equipment rental, and other expenditures, shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, the Agency may establish the cost of the item involved at the lowest price which was current at the time of the report.

### **3-3.2.3 Markup**

**(a) Work by Contractor.** The following percentage shall be added to the Contractor's costs and shall constitute the markup for all overhead and profits, and all other cost not specifically provided for:

- (1) Labor ..... 33%
- (2) Materials ..... 15%
- (3) Equipment Rental ..... 15%
- (4) Other Items and Expenditures ... 15%

To the sum of the cost and markups provided for in this section, 1 percent shall be added as compensation for bonding.

**(b) Work by Subcontractor.** When all or any part of the Extra Work is performed by a Subcontractor, the markup established in 3-3.2.3(a) shall be applied to the Subcontractor's actual cost of such work. A markup of 10% on the first \$5,000 of the subcontracted portion of the Extra Work and a markup of 5% on work in excess of \$5,000 of the subcontracted portion of the Extra Work may be added by the Contractor.

**3-3.3 Daily Extra Work Reports by Contractor.** When the price for the Extra Work cannot be agreed upon, the Contractor shall submit a Daily Extra Work Report to the Engineer on forms furnished by the Agency, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and for other services and expenditures when authorized. Failure to submit the Daily Extra Work Report, showing the labor and equipment hours and the quantity of materials used, by the close of the next Working Day may waive any rights for that day. Failure to submit fully completed Daily Extra Work Reports, with the required supporting documentation, within ten calendar days after the Engineer makes a written request for the such reports shall waive all rights for the work covered by the requested reports. An attempt shall be made to reconcile the Daily Extra Work Report daily, and it shall be signed by the Engineer and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the Daily Extra Work Report. Daily Extra Work Reports by Subcontractors or others shall be submitted through the Contractor.

The Daily Extra Work Report shall:

- 1) Show names of workers, classifications, and hours worked.
- 2) Describe and list quantities of materials used.
- 3) Show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.
- 4) Describe other services and expenditures in such detail as the Agency may require.

In addition to the Daily Extra Work Reports, the Contractor shall furnish Certified Payroll Records for the labor included in the reports before payment will be made.

**3-4 CHANGED CONDITIONS.** The Contractor shall notify the Engineer in writing of the following work site conditions, hereinafter called changed conditions, promptly upon their discovery and before they are disturbed:

- 1) Subsurface or latent physical conditions differing materially from those represented in the Contract;
- 2) Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character being performed; and
- 3) Material differing from that represented in the Contract which the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law.

The Engineer will promptly investigate conditions which appear to be changed conditions. If the Engineer determines that the conditions are changed conditions and that they will materially increase or decrease the costs of any portion of the Work, a Change Order will be issued adjusting the compensation for such portion of the Work in accordance with 3-2.2. If the Engineer determines that conditions are changed conditions and that they will materially affect the performance time, the Contractor, upon submitting a written request, will be granted an extension of time subject to the provisions of 6-6.

If the Engineer determines that the conditions of which it has been notified by the Contractor do not justify an adjustment in compensation, the Contractor will be so notified in writing. This notice will also advise the Contractor of its obligation to notify the Engineer, in writing, if the Contractor disagrees.

Should the Contractor disagree with such determination, it may submit a written notice of potential claim to the Engineer before commencing the disputed work. In the event of such a disagreement, the Contractor shall not be excused on account of that disagreement from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. However, the Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties. The Contractor shall proceed as provided in 3-5.

The Contractor's failure to give notice of changed conditions promptly upon their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith.

**3-5 DISPUTED WORK.** If the Contractor and the Agency are unable to reach agreement on disputed work, the Agency may direct the Contractor to proceed with the Work. Payment shall be as later determined by mediation or arbitration, if the Agency and the Contractor agree thereto, or as fixed in a court of law.

Although not to be construed as proceeding under Extra Work provisions, the Contractor shall keep and furnish records of disputed work in accordance with 3-3.

## SECTION 4 - CONTROL OF MATERIALS

### 4-1 MATERIALS AND WORKMANSHIP

**4-1.1 General.** All materials, parts, and equipment furnished by the Contractor in the Work shall be new, high grade, and free from defects. Quality of work shall be in accordance with the generally accepted standards. Material and work quality shall be subject to the Engineer's approval.

Materials and work quality not conforming to the requirements of the Specifications shall be considered defective and will be subject to rejection. Defective work or material, whether in place or not, shall be removed immediately from the site by the Contractor, at its expense, when so directed by the Engineer.

If the Contractor fails to replace any defective or damaged work or material after reasonable notice, the Engineer may cause such work or materials to be replaced. The replacement expense will be deducted from the amount to be paid to the Contractor.

Used or secondhand materials, parts, and equipment may be used only if permitted by the Specifications.

**4-1.1.1 Materials Furnished by Agency.** Materials furnished by the Agency will be available at locations designated in the Special Provisions or if not designated in the Special Provisions, they will be delivered to a single location of Agency's choice within the project area. They shall be hauled to the site of installation by the Contractor at its expense, including any necessary loading and unloading that may be involved. The cost of handling and placing materials furnished by the Agency shall be considered as included in the price paid for the Contract item involving such furnished materials.

The Contractor will be held responsible for all materials furnished to it, and it shall pay all demurrage and storage charges. Furnished materials, after delivery to Contractor, lost or damaged from any cause whatsoever shall be replaced by the Contractor. The Contractor will be liable to the Agency for the cost of replacing lost or damaged furnished material and such costs may be deducted from any monies due or to become due the Contractor.

**4-1.2 Protection of Work and Materials.** The Contractor shall provide and maintain storage facilities and employ such measures as will preserve the specified quality and fitness of materials to be used in the Work. Stored materials shall be reasonably accessible for inspection. The Contractor shall also adequately protect new and existing work and all items of equipment for the duration of the Contract.

The Contractor shall not, without the Agency's consent, assign, sell, mortgage, hypothecate, or remove equipment or materials which have been installed or delivered and which may be necessary for the completion of the Contract.

### 4-1.3 Inspection Requirements

**4-1.3.1 General.** Unless otherwise specified, inspection is required at the source for asphalt concrete pavement mixtures, structural concrete, metal fabrication, metal casting, welding, concrete pipe manufacture, protective coating application, and similar shop or plant operations. Steel pipe in sizes less than 450 mm (18 inches), vitrified clay and cast iron pipe in all sizes are acceptable upon certification as to compliance with the Specifications, subject to sampling and testing by the Agency. Standard items of equipment such as electric motors, conveyors, elevators, plumbing fixtures, etc., are subject to inspection at the Work site only. Special items of equipment such as designed electrical panel boards, large pumps, sewage plant equipment, etc., are subject to inspection at the source, normally only for performance testing. The Specifications may require inspection at the source for other items not typical of those listed in this section.

**4-1.3.2 Inspection of Materials Not Locally Produced.** When the Contractor intends to purchase materials, fabricated products, or equipment from sources located more than 80 km (50 miles) outside the geographical limits of the Agency, an inspector or accredited testing laboratory (approved by the Engineer), shall be engaged by the Contractor at its expense, to inspect the materials, equipment or process. This approval shall be obtained before producing any material or equipment. The inspector or representative of the testing laboratory shall evaluate the materials for conformance with the Plans and Specifications. The Contractor shall forward reports required by the Engineer. No materials or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by the approved agent. Approval by said agent shall not relieve the Contractor of responsibility for complying with the Contract requirements.

**4-1.3.3 Inspection by the Agency.** The Agency will provide all inspection and testing laboratory services within 80 km (50 miles) of the geographical limits of the Agency.

**4-1.3.4 Certificates of Compliance.** The Engineer may require certificates of compliance with the Specifications for materials or manufactured items produced outside of the Work site. Such certificates will not relieve the Contractor from the requirements of providing material and manufactured items complying with the Specifications even though they have been incorporated into the Work.

**4-1.4 Tests of Materials.** Before incorporation in the Work, the Contractor shall submit samples of materials, as the Engineer may require, at no cost to the Agency. The Contractor, at its own expense, shall deliver the materials for testing to the place and at the time designated by the Engineer. Unless otherwise provided, all initial testing and a reasonable amount of retesting shall be performed under the direction of the Engineer, and at no expense to the Contractor. If the Contractor is to provide and pay for testing, the Specifications will so state.

The Contractor shall notify the Engineer in writing, at least 15 Days in advance, of its intention to use materials for which tests are specified, to allow sufficient time to perform the tests. The notice shall name the proposed supplier and source of material.

If the notice of intent to use is sent before the materials are available for testing or inspection, or is sent so far in advance that the materials on hand at the time will not last but will be replaced by a new lot prior to use on the Work, it will be the Contractor's responsibility to re-notify the Engineer when samples which are representative may be obtained.

**4-1.5 Certification.** The Engineer may waive materials testing requirements of the Specifications and accept the manufacturer's written certification that the materials to be supplied meet those requirements. Materials test data may be required as part of the certification.

**4-1.6 Trade Names or Equals.** The Contractor may supply any of the materials specified or offer an equivalent. The Engineer shall determine whether the material offered is equivalent to that specified. Adequate time shall be allowed for the Engineer to make this determination.

Whenever any particular material, process, or equipment is indicated by patent, proprietary or brand name, or by name of manufacturer, such wording is used for the purpose of facilitating its description and shall be deemed to be followed by the words **or equal**. A listing of materials is not intended to be comprehensive, or in order of preference. The Contractor may offer any material, process, or equipment considered to be equivalent to that indicated. The substantiation of offers shall be submitted as provided in the Contract Documents.

The Contractor shall, at its expense, furnish data concerning items offered by it as equivalent to those specified. The Contractor shall have the material tested 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 item will fulfill its intended function.

Test methods shall be subject to the approval of the Engineer. Test results shall be reported promptly to the Engineer, who will evaluate the results and determine if the substitute item is equivalent. The Engineer's findings shall be final. Installation and use of a substitute item shall not be made until approved by the Engineer.

If a substitute offered by the Contractor is not found to be equal to the specified material, the Contractor shall furnish and install the specified material.

The specified Contract completion time shall not be affected by any circumstance developing from the provisions of this section.

**4-1.6.1 Compatibility with Design.** Where the size, configuration, weight, fastening locations, fastening strength, utility rough-in locations, and utility capacities of equipment or devices offered by the Contractor as equivalents do not conform to those provided for in the Contract Documents or those which are necessary for equipment or devices indicated by brand names, the Contractor shall bear all costs of redesign and changes in construction necessary to adapt the offered equipment or device to the Work.

Equipment or devices will not be considered "equal" where the life cycle cost of operation, utilities and maintenance of the offered alternate is greater than those listed by brand names. Life cycle costs shall mean utility charges (demand and usage charges), maintenance, operating personnel and replacement (equipment, installation and down time expenses) all reduced to an average annual rate using the current interest rate earned on funds invested by the County Treasurer.

**4-1.6.2 Trade Names Listed.** Where the Agency has listed products by brand or trade name on the Plans or in the Specifications, or both, this shall not be construed as meaning every product may be used without furnishing shop drawings, without redesign of the facility or without a change in utility rough-in requirements.

Where use of products listed on the Plans or in the Specifications, or both, or where use of a substitute proposed as an "equal" product requires shop drawings, redesign of the facility, or revisions in the size and location of rough-in utility connections, or in connecting work, the Contractor shall provide any necessary shop drawings, or shall cause the preparation of any necessary redesign or revisions to the Plans at its own expense and shall bear the full cost of any necessary additional construction or reconstruction work. No work described in shop drawings, a redesign, or a revision to the Plans shall be undertaken until such shop drawings, redesign, or revisions have been approved by the Engineer. Any proposed redesign or revision to the Plans shall be accompanied by complete computations and details prepared by an appropriate licensed design professional.

**4-1.7 Weighing Equipment.** All scales used for proportioning materials shall be inspected for accuracy and certified within the past 12 months by the State of California Bureau of Weights and Measures, by the County Director or Sealer of Weights and Measures, or by a scale mechanic registered with or licensed by the County.

The accuracy of the work of a scale service agency, except as stated herein, shall meet the standards of the California Business and Professions Code and the California Code of Regulations pertaining to weighing devices. A certificate of compliance shall be presented, prior to operation, to the Engineer for approval and shall be renewed whenever required by the Engineer at no cost to the Agency.

All scales shall be arranged so they may be read easily from the operator's platform or area. They shall indicate the true net weight without the application of any factor. The figures of the scales shall be clearly legible. Scales shall be accurate to within 1 percent when tested with the plant shut down. Weighing equipment shall be so insulated against vibration or moving of other operating equipment in the plant area that the error in weighing with the entire plant running will not exceed 2 percent for any setting nor 1.5 percent for any batch.

**4-1.8 Calibration of Testing Equipment.** Testing equipment, such as, but not limited to, pressure gages, metering devices, hydraulic systems, force (load) measuring instruments, and strain-measuring devices shall be calibrated by a testing agency acceptable to the Engineer at intervals not to exceed 12 months and following repairs, modification, or relocation of the equipment. Calibration certificates shall be provided when requested by the Engineer.



## SECTION 5 - UTILITIES

**5-1 LOCATION.** The Permittee (in the case of Private Contracts) and the Agency (in the case of Cash or Assessment Act Contracts), will search known substructure records and furnish the Contractor with copies of documents which describe the location of utility substructures, or will indicate on the Plans for the project those substructures (except for service connections) which may affect the Work. Information regarding removal, relocation, abandonment, or installation of new utilities will be furnished to prospective bidders.

Where underground main distribution conduits such as water, gas, sewer, electric power, telephone, or cable television are shown on the Plans, the Contractor shall assume that every property parcel will be served by a service connection for each type of utility.

As provided in Section 4216 of the California Government Code, at least 2 working days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California) and obtain an inquiry identification number.

The California Department of Transportation is not required by Section 4216 to become a member of the regional notification center. The Contractor shall contact it for location of its subsurface installations.

The Contractor shall determine the location and depth of all utilities, including service connections, which have been marked by the respective owners and which may affect or be affected by its operations. If no pay item is provided in the Contract for this work, full compensation for such work shall be considered as included in the prices bid for other items of work.

**5-2 PROTECTION.** The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the owner or order from the Agency. All valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities located as shown on the Plans or in accordance with 5-1, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at its expense.

Upon learning of the existence and location of any utility omitted from or shown incorrectly on the Plans, the Contractor shall immediately notify the Engineer in writing. When authorized by the Engineer, support or protection of the utility will be paid for as provided in 3-2.2.3 or 3-3.

The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged. The Contractor shall bear the costs of repair or replacement of any utility damaged if located as noted in 5-1.

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:

1. Furnish and install a 50 mm (2 inch) cushion of expansion joint material or other similar resilient material; or
2. Provide a sleeve or other opening which will result in a 50 mm (2 inch) minimum-clear annular space between the concrete and the utility; or
3. Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for structures which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer and arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system.

**5-3 REMOVAL.** Unless otherwise specified, the Contractor shall remove all interfering portions of utilities shown on the Plans or indicated in the Bid documents as "abandoned" or "to be abandoned in place". Before starting removal operations, the Contractor shall ascertain from the Agency whether the abandonment is complete, and the costs involved in the removal and disposal shall be included in the Bid for the items of work necessitating such removals.

**5-4 RELOCATION.** When feasible, the owners responsible for utilities within the area affected by the Work will complete their necessary installations, relocations, repairs, or replacements before commencement of work by the Contractor. When the Plans or Specifications indicate that a utility installation is to be relocated, altered, or constructed by others, the Agency will conduct all negotiations with the owners and work will be done at no cost to the Contractor, except as provided in 301-1.6. Utilities which are relocated in order to avoid interference shall be protected in their position and the cost of such protection shall be included in the Bid for the items of work necessitating such relocation.

After award of the Contract, portions of utilities which are found to interfere with the Work will be relocated, altered or reconstructed by the owners, or the Engineer may order changes in the Work to avoid interference. Such changes will be paid for in accordance with 3-2.

When the Plans or Specifications provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such work shall be included in the Bid for the items of work necessitating such work. Temporary or permanent relocation or alteration of utilities requested by the Contractor for its convenience shall be its responsibility and it shall make all arrangements and bear all costs.

The utility owner will relocate service connections as necessary within the limits of the Work or within temporary construction or slope easements. When directed by the Engineer, the Contractor shall arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. The relocation of such service connections will be paid for in accordance with provisions of 3-3. Payment will include the restoration of all existing improvements which may be affected thereby. The Contractor may agree with the owner of any utility to disconnect and reconnect interfering service connections. The Agency will not be involved in any such agreement.

**5-5 DELAYS.** The Contractor shall notify the Engineer of its construction schedule insofar as it affects the protection, removal, or relocation of utilities. Said notification shall be included as a part of the construction schedule required in 6-1. The Contractor shall notify the Engineer in writing of any subsequent changes in the construction schedule which will affect the time available for protection, removal, or relocation of utilities.

The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted, and completed in accordance with 5-1.

The Contractor may be given an extension of time for unforeseen delays attributable to unreasonably protracted interference by utilities in performing work correctly shown on the Plans.

The Agency will assume responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities within the area affected by the Work if such utilities are not identified in the Contract Documents. The Contractor will not be assessed liquidated damages for any delay caused by failure of Agency to provide for the timely removal, relocation, or protection of such existing facilities.

If the Contractor sustains loss due to delays attributable to interferences, relocations, or alterations not covered by 5-1, which could not have been avoided by the judicious handling of forces, equipment, or plant, there shall be paid to the Contractor such amount as the Engineer may find to be fair and reasonable compensation for such part of the Contractor's actual loss as was unavoidable and the Contractor may be granted an extension of time.

**5-5.1 Cooperation During Utility Relocation.** When utilities are to be relocated during construction, the Contractor shall cooperate and coordinate with the respective utility owners so they may relocate their facilities to clear the Work. Delays in relocation of utilities which result from failure to cooperate and coordinate will not be a cause for an extension of time or Non-Working Days.

**5-6 COOPERATION.** When necessary, the Contractor shall so conduct its operations as to permit access to the Work site and provide time for utility work to be accomplished during the progress of the Work.

## SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

### 6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.

The requirements of this section concerning submission of construction schedules shall not apply to projects where the time allowed to complete the Work is less than 25 Working Days or the total Contract Price bid is less than \$75,000 unless required by the special provisions.

The Contractor shall submit a construction schedule concurrently with the submittal of signed Contract, Contract bonds, and certificate of insurance. The Notice to Proceed will be delayed until the schedule is received. See 6-7.4, Starting of Contract Time.

When required by the Special Provisions, a revised schedule shall be submitted monthly prior to each progress payment closure date. Processing of the progress payment will be delayed until such revised schedule complying with this section is received.

The construction schedule shall be in the form of a Construction Element vs. Time Chart as shown in Appendix B-1 and a Work Complete vs. Time Chart as shown in Appendix B-2.

The B-1 Chart shall be in sufficient detail to show the chronological relationship of all activities of the project including, but not limited to, estimated starting and completion dates of various activities, submittal of shop drawings to the Engineer for approval, procurement of materials, and scheduling of equipment. The B-1 Chart shall recognize the requirements of 5-5. The B-1 Chart shall reflect obtaining all materials and completing all Work under the Contract within the specified time and in accordance with these Specifications. If the Contractor intends to complete the Work prior to the time for completion, the intended date of completion shall be set forth in the B-1 Chart and the Contractor shall execute a Contract Change Order that changes the number of Working Days allowed for completion to conform with such intended completion date. The Change Order shall not change the Contract Price.

The Contractor may submit a computer generated schedule in lieu of the form in Appendix B-1 and B-2, provided all of the elements shown on that form or specified herein are included.

An updated construction schedule shall be submitted prior to the next progress payment closure date whenever the actual percent Work complete versus percent time elapsed curve falls below and to the right of the dotted line shown on Appendix B-2.

If the Contractor desires to make a major change in its method of operations after commencing construction, or if its schedule fails to reflect the actual progress, it shall submit to the Agency a revised construction schedule in advance of beginning revised operations.

Revised and updated schedules shall show actual completion to the date of the revision in the lower segmented bar for each item.

The construction schedule shall be prepared as follows (see examples in Appendices C-1 and C-2):

1. On the B-1 Chart:
  - a. Enter the project name and Specification No. as shown on the notice inviting bids and the Contractors name.
  - b. List the items of Work either individually or combined where items are part of the same element of the Work.
  - c. Assign a value for each horizontal space plotting interval in Working Days as follows: 1 working day for total Contract time of less than 100 working days, 2 for 100 to 200 working days and 5 for longer projects. Enter the value used in the space provided in the lower part of the form.
  - d. At the end of performance time and draw a vertical line and label it "End Performance Time". Enter numbers at 10 times the plotting interval at the top of intermediate vertical lines.
  - e. Shade in a bar in the upper segmented section for each work item to indicate the period during which Work will be performed. Move-in time and delivery time for materials shall be shown if significant to the schedule.

## **6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK. (Continued)**

### **2. On the B-2 Chart:**

- a. Enter the project name and Specification No. as shown on the notice inviting bids.
- b. At time intervals of 10 or 20 working days:
  - (1) Compute the cumulative dollar value of Work which is expected to be completed for each item of Work, including the value of the completed portion of lump-sum items.
  - (2) Divide the values computed in "b(1)" by the Total Contract Price to determine the percentage of the entire Contract planned for completion at the end of each time interval.
  - (3) Divide the days of performance time at the end of each time interval by the total Contract performance time to obtain the percentage of elapsed performance time.
- c. Plot each percentage of completion value figure computed in "b(2)" against the corresponding percentage of completion time computed in "b(3)" using scales on the bottom and left side of chart.
- d. Connect points plotted in "c" with a line which will show the planned progress for the entire job.

If the proposed percent Work complete versus percent time elapsed line falls below and to the right of the dotted line drawn on the B-2 Chart, the Contractor shall provide sufficient information and backup to show that the Work can be completed on time.

**6-1.1 Beginning of Work.** The issuance of Notice to Proceed by Agency shall constitute the Contractor's authority to enter upon the site of the Work and to begin operations provided it has also notified Engineer at least 24 hours in advance. Entry upon the site without authority will be treated as trespassing.

**6-1.2 Starting Work.** The Contractor may start work at any time after the Notice to Proceed is issued but work shall begin within 15 Days after the starting date for the Contract, or at such other time as may be indicated in the Special Provisions. The actual date on which the Contractor starts work will not affect the required time for completion as provided for in 6-7 and 6-7.1.

**6-1.3 Work Sequence.** If required by the Special Provisions, the Contractor shall start construction operations on that part of the Work designated by the Engineer.

**6-1.4 Resources Required.** The Work shall be conducted in such a manner and with sufficient materials, equipment, and labor to insure its completion in accordance with the Plans and Specifications within the time set forth in the Contract.

**6-2 PROSECUTION OF WORK.** To minimize public inconvenience and possible hazard and to restore streets and other Work areas to their original condition and former state of usefulness as soon as practicable, the Contractor shall diligently prosecute the Work to completion. If, in the Engineer's opinion, the Contractor fails to prosecute the Work to the extent that the above purposes are not being accomplished, the Contractor shall, upon orders from the Engineer, immediately take the steps necessary to fully accomplish said purposes. All costs of prosecuting the Work as described herein shall be absorbed in the Contractor's bid. Should the Contractor fail to take the necessary steps to fully accomplish said purposes, after orders of the Engineer to do so, the Engineer may suspend the Work in whole or in part, until the Contractor takes said steps.

As soon as possible under the provisions of these Specifications, the Contractor shall backfill all excavations and restore to usefulness all improvements existing prior to the start of the Work.

If Work is suspended through no fault of the Agency, all expenses and losses incurred by the Contractor during such suspensions shall be borne by the Contractor. If the Contractor fails to properly provide for public safety, traffic, and protection of the Work during periods of suspension, the Agency may elect to do so, and deduct the cost thereof from monies due the Contractor. Such action will not relieve the Contractor from liability.

## **6-3 SUSPENSION OF WORK**

**6-3.1 General.** The Work may be suspended in whole or in part when determined by the Engineer that the suspension is necessary in the interest of the Agency. The Contractor shall comply immediately with any written order of the Engineer. Such suspension shall be without liability to the Contractor on the part of the Agency except as otherwise specified in 6-6.3.

**6-3.2 Archaeological and Paleontological Discoveries.** If discovery is made of items of archaeological or paleontological interest, the Contractor shall immediately cease excavation in the area of discovery and shall not continue until ordered by the Engineer. When resumed, excavation operations within the area of discovery shall be as directed by the Engineer.

Discoveries which may be encountered may include, but not be limited to, dwelling sites, stone implements or other artifacts, animal bones, human bones and fossils.

The Contractor shall be entitled to an extension of time and compensation in accordance with the provisions of 6-6.

**6-3.3 Temporary Suspension of Work.** Should suspension of Work be ordered by reason of the failure of the Contractor to carry out orders or to perform any provisions of the Contract; or by reason of weather conditions being unsuitable for performing any item or items of Work; the Contractor, at its expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public traffic during the period of such suspension. In the event that the Contractor fails to perform the work above specified, the Agency may perform such work and the cost thereof will be deducted from monies due or to become due the Contractor.

If the Engineer orders a suspension of all of the Work, or a portion of the Work which is the current controlling operation or operations, due to unsuitable weather or to such other conditions as are considered unfavorable to the suitable prosecution of the Work, the days on which the suspension is in effect shall not be considered Working Days.

If a portion of Work at the time of such suspension is not a current controlling operation or operations, but subsequently does become the current controlling operation or operations, the determination of Working Days will be made on the basis of the then current controlling operation or operations.

If a suspension of Work is ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract, the Days on which the suspension order is in effect shall be considered Working Days if such days are Working Days as defined.

#### **6-4 TERMINATION OF THE CONTRACT FOR DEFAULT..**

**6.4.1 General.** If, prior to the acceptance of the Work, the Contractor:

- a) becomes insolvent, assigns its assets for the benefit of its creditors, is unable to pay its debts as they become due, or is otherwise financially unable to complete the Work,
- b) abandons the Work by failing to report to the Work site and diligently prosecute the Work to completion,
- c) disregards written instructions from the Agency or materially violates provisions of the Contract Documents,
- d) fails to prosecute the Work according to the schedule approved by the Engineer,
- e) disregards laws or regulations of any public body having jurisdiction, or
- f) commits continuous or repeated violations of regulatory or statutory safety requirements, then the Agency will consider the Contractor in default of the Contract.

Notices, and other written communications regarding default between the Contractor, the Agency, and the Surety shall be transmitted in accordance with 2-12.

**6-4.2 Notice to Cure.** The Agency will issue a written notice to cure the default to the Contractor and its Surety. The Contractor shall commence satisfactory corrective actions within 5 Working Days after receipt.

**6-4.3 Notice of Termination for Default.** If the Contractor fails to commence satisfactory corrective action within 5 Working Days after receipt of the notice to cure, or to diligently continue satisfactory and timely correction of the default thereafter, then the Agency will consider the Contractor in default of the Contract and:

- a) will terminate the Contractor's right to perform under the Contract by issuing a written notice of termination for default to the Contractor and its Surety,
- b) may use any materials, equipment, tools or other facilities furnished by the Contractor to secure and maintain the Work site, and
- c) may furnish labor, equipment, and materials the Agency deems necessary to secure and maintain the Work site. The provisions of this subsection shall be in addition to all other legal rights and remedies available to the Agency.

**6-4.4 Responsibilities of the Surety.** Upon receipt of the written notice of termination for default, the Surety shall immediately assume all rights, obligations and liabilities of the Contractor under the Contract. If the Surety fails to protect and maintain the Work site, the Agency may do so, and may recover all costs incurred. The Surety shall notify the Agency that it is assuming all rights, obligations and liabilities of the Contractor under the Contract and all money that is due, or would become due, to the Contractor shall be payable to the Surety as the Work progresses, subject to the terms of the Contract.

Within 15 Working Days of receipt of the written notice of termination for default, the Surety shall submit to the Agency a written plan detailing the course of action it intends to take to remedy the default. The Agency will review the plan and notify the Surety if the plan is satisfactory. If the Surety fails to submit a satisfactory plan, or if the Surety fails to maintain progress according to the plan accepted by the Agency, the Agency may, upon 48 hours written notice, exclude the Surety from the premises, take possession of all material and equipment, and complete the Work in any way the Agency deems to be expedient. The cost of completing the Work by the Agency shall be charged against the Surety and may be deducted from any monies due, or which would become due, the Surety. If the amounts due under the Contract are insufficient for completion, the Surety shall pay to the Agency, within 30 days after the Agency submits an invoice, all costs in excess of the remaining Contract Price.

**6-4.5 Payment.** The Surety will be paid for completion of the Work in accordance with 9-3 less the value of damages caused to the Agency by acts of the Contractor.

**6-5 TERMINATION OF CONTRACT.** The Board may terminate the Contract at its own discretion or when conditions encountered during the Work make it impossible or impracticable to proceed, or when the Agency is prevented from proceeding with the Contract by act of God, by law, or by official action of a public authority.

The Agency will issue a written notice of termination for convenience in accordance with 2-12. Upon receipt, the Contractor shall immediately cease work, except work the Contractor is directed to complete by the Engineer or required to complete for public safety and convenience. The Contractor shall immediately notify Subcontractors and suppliers to immediately cease their work.

The Contractor will be paid without duplication for:

- a) work completed in accordance with the Contract Documents prior to the effective date of termination for convenience;
- b) reasonable costs incurred in settlement of terminated contracts with Subcontractors, suppliers and others; and
- c) reasonable expenses directly attributable to termination.

The Contractor shall submit a final termination settlement proposal to the Agency no later than 90 days from the effective date of termination, unless extended, in writing, by the Agency upon written request by the Contractor.

If the Contractor fails to submit a proposal, the Agency may determine the amount, if any, due the Contractor as a result of the termination. The Agency will pay the Contractor the amount it determines to be reasonable. If the Contractor disagrees with the amount determined by the Agency as being reasonable, the Contractor shall provide notice to the Agency within 30 days of receipt of payment. Any amount due shall be as later determined by arbitration, if the Agency and the Contractor agree thereto, or as fixed in a court of law.

## **6-6 DELAYS AND EXTENSIONS OF TIME**

**6-6.1 General.** If delays are caused by unforeseen events beyond the control of the Contractor, such delays will entitle the Contractor to an extension of time as provided herein, but the Contractor will not be entitled to damages or additional payment due to such delays, except as provided in 6-6.3. Such unforeseen events may include war, government regulations, labor disputes, strikes, fires, floods, adverse weather necessitating cessation of work, other similar action of the elements, inability to obtain materials, equipment or labor, required Extra Work, or other specific events as may be further described in the Specifications.

No extension of time will be granted for a delay caused by the Contractor's inability to obtain materials unless the Contractor furnishes to the Engineer documentary proof of the inability to obtain such materials in a timely manner in accordance with the sequence of the Contractor's operations and the approved construction schedule.

If delays beyond the Contractor's control are caused by events other than those mentioned above, but substantially equal in gravity to those enumerated, and an extension of time is deemed by the Engineer to be in the best interests of the Agency, an extension of time may be granted, but the Contractor will not be entitled to damages or additional payment due to such delays, except as provided in 6-6.3.

If delays beyond the Contractor's control are caused solely by action or inaction by the Agency, such delays will entitle the Contractor to an extension of time as provided in 6-6.2.

**6-6.2 Extensions of Time.** Extensions of time, when granted, will be based upon the effect of delays to the Work as a whole and will not be granted for noncontrolling delays to minor included portions of Work unless it can be shown that such delays did, in fact, delay the progress of the Work as a whole.

**6-6.3 Payment for Delays to Contractor.** The Contractor will be compensated for damages incurred due to delays for which the Agency is responsible if such delays are unreasonable in the circumstances involved and were not within the contemplation of the parties when the Contract was awarded to the Contractor and delay the Work as a whole. Such actual costs will be determined by the Engineer. The Agency will not be liable for, and in making this determination the Engineer will exclude, all damages which the Engineer determines the Contractor could have avoided by any reasonable means including, without limitation, the judicious handling of forces, equipment, or plant.

**6-6.4 Written Notice and Report.** If the Contractor desires payment for a delay as specified in 6-6.3 or an extension of time, it shall, within 30 Days after the beginning of the delay, file with the Agency a written request and report as to the cause and extent of the delay. The request for payment or extension must be made at least 15 Days before the specified completion date. Failure by the Contractor to file these items within the time specified will be considered grounds for refusal by the Agency to consider such request.

**6-6.4.1 Documentation of Delays.** When the Contractor requests an extension of time for delay due to inability to obtain materials or equipment, the documentary proof required by 6-6.1 shall include the following:

1. Date Engineer was notified of delay.
2. Date the delay began.
3. Exact description of material or equipment causing delay.
4. Documentation showing when and from whom ordered.
5. Documentation of promise to deliver.
6. Documentation of actual delivery date.
7. Description of how late delivery caused delay (include construction schedule).
8. Documentation of measures taken to get prompt delivery.
9. Documentation of attempts to get delivery from other sources.
10. Description of steps taken in project scheduling to minimize effects of late delivery.
11. Description of steps taken to get project back on schedule after actual delivery.
12. Statement of actual time lost as a result of late delivery.

#### **6-7 TIME OF COMPLETION**

**6-7.1 General.** The Contractor shall complete the Work within the time set forth in the Contract. The Contractor shall complete each portion of the Work within such time as set forth in the Contract for such portion. Unless otherwise specified, the time of completion of the Contract shall be expressed in Working Day

**6-7.2 Working Day.** A Working Day is any day within the period between the start of the Contract time as defined in 6-1 and the date provided in the Contract for completion or upon field acceptance by the Engineer of all Work provided for in the Contract, whichever occurs first, other than:

- (1) Saturday,
- (2) Sunday,
- (3) any day designated as a holiday by the Agency,
- (4) any other day designated as a holiday in a Master Labor Agreement entered into by the Contractor or on behalf of the Contractor as an eligible member of a Contractor Association,
- (5) any day the Contractor is prevented from working at the beginning of the workday for cause as defined in 6-6.1,
- (6) any day the Contractor is prevented from working during the first 5 hours of the workday with at least 60 percent of the normal work force for cause as defined in 6-6.1.

**6-7.2.1 Holidays.** Solely for the purposes of paragraph (3) of 6-7.2, the following days are designated as holidays by the Agency.

	A	B
<u>MONTH</u>	<u>AGENCY EMPLOYEE HOLIDAYS</u>	<u>OTHER DESIGNATED HOLIDAYS</u>
January .....	1st day; 3rd Monday .....	None
February .....	3rd Monday .....	12th day
March .....	None .....	31st day
March-April .....	None .....	One Friday between March 21 and April 23 designated as Good Friday
May .....	Last Monday .....	None
June .....	None .....	None
July .....	4th day .....	None
August .....	None .....	None
September .....	1st Monday .....	9th day
October .....	None .....	2nd Monday
November .....	11 <sup>th</sup> day; 4th Thursday .....	the Friday following the 4th Thursday
December .....	25th .....	23rd day, only if Thursday or Friday; 24th day; 31st day

If any day listed above falls on Saturday, the preceding Friday is the holiday. If any day listed above falls on Sunday, the succeeding Monday is the holiday.

No extra holiday shall result when such Friday or Monday is already designated as a holiday.

A copy of a Working Day calendar incorporating the above-listed holidays and used by the Agency for Contract time accounting purpose will be furnished to the Contractor upon request.

The term "holiday" as used in this section shall not be construed as being the same as "holiday" within the meaning of 7-2.2.

The Contractor may perform work on the holidays designated in Column A above provided it has obtained prior written approval of the Engineer at least two Days in advance of performing the work. The Contractor may perform work on the holidays designated in Column B above provided the Contractor notifies the Engineer two Days in advance of the holiday.

**6-7.2.2 Landscape Maintenance Period.** Where a landscape maintenance period is specified, the portion of the time in such period that follows the completion of all other Work required by the Contract shall not be Working Days for Contract time accounting.

**6-7.3 Contract Time Accounting.** The Engineer will make a daily determination of each Working Day to be charged against the Contract time. These determinations will be discussed and the Contractor will be furnished a periodic statement showing the allowable number of Working Days of Contract time, as adjusted, at the beginning of the reporting period. The statement will also indicate the number of Working Days charged during the reporting period and the number of Working Days of Contract time remaining. If the Contractor does not agree with the statement, the Contractor must file a written protest within 15 Days after receipt, setting forth the facts of the protest. Otherwise, the statement will be deemed to have been accepted.

**6-7.4 Starting Date for Contract Time and Notice to Proceed.** The starting date for Contract time accounting will be determined by adding the number of Days indicated on the Proposal form to the date the Contract is awarded, however the Agency may, at its option, delay the starting date by not more than 60 calendar Days if necessary to obtain permits, rights-of-way, or approval of federal or State authorities, or when prevented from starting the project due to causes beyond its control. Notice to Proceed will be issued within 7 calendar Days after the Contract, bonds, certificates of insurance and other documents have been returned, properly completed by the Contractor, unless the starting date is delayed as herein provided. If the Agency delays the Contract starting date, Notice to Proceed will be issued at least 7 calendar Days prior to the new starting date. Any delay caused by failure of the Contractor to properly complete or timely return the Contract Documents shall not change the Contract starting date and shall not be a cause for extending the Contract time. The Notice of Award will indicate a probable Contract starting date. The Notice to Proceed will indicate the actual Contract starting date, computed as herein described.

## **6-8 COMPLETION, ACCEPTANCE AND WARRANTY.**

**6-8.1 Completion and Acceptance.** Acknowledgment of completion of the Work will occur prior to Acceptance by the Agency. Acceptance will only occur after all Contract requirements have been fulfilled, such as training, submission of warranties, maintenance manuals, record drawings, Release on Contract and the like. Acceptance by the Agency will occur when the Engineer signs the Notice of Completion. The Work will be inspected by the Engineer promptly upon receipt of the Contractor's written assertion that the Work has been completed. If, in the Engineer's judgment, the Work has been completed in accordance with the Plans and Specifications, the Engineer will acknowledge completion of the Work. Completion of the Work, as used above, shall include the Contractor showing evidence of having received an occupancy clearance from Building and Safety, or other permit issuing agency, when a building, plumbing electrical, grading, or other permit is required for the Work. The Engineer will, in acknowledging completion of the Work, set forth in writing the date when the Work was completed. This will be the date when the Contractor is relieved from responsibility to protect the Work. This will also be the date to which liquidated damages will be computed.

**6-8.2 Warranty** The Work shall be warranted by the Contractor against defective workmanship and materials for a period of 1 year from the date the Work was completed. The Contractor shall replace or repair any such defective workmanship and materials in a manner satisfactory to the Engineer, after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such replacement or repair within the time specified in the notice, the Agency may perform the replacement or repair and the Contractor and its sureties shall be liable for the cost thereof.

**6-8.3 No Waiver of Legal Rights.** The Agency shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and Acceptance of the Work and payment therefor from showing the true amount and character of the Work performed and materials furnished by the Contractor, nor from showing that any such measurement, estimate, or certificate is untrue or is incorrectly made, nor that the Work or materials do not in fact conform to the Contract.

The Agency shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor or its sureties, or both, such damages as it may sustain by reason of the Contractor's failure to comply with the terms of the Contract.

Neither the Acceptance by the Engineer or by its representative, nor any payment for or Acceptance of the whole or any part of the Work, nor any extension of time, nor any possession taken by the Engineer shall operate as a waiver of any portion of the Contract or of any power herein reserved, or of any right to damages.

A waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.



**6-8.4 Landscape Maintenance Period.** Final Acceptance of the Contract shall follow the satisfactory completion of all Contract Work, including the landscape maintenance period if one is specified.

**6-8.5 Non-complying Work.** Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the Agency, shall constitute an Acceptance of Work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship.

**6-8.6 Written Warranties.** The Contractor shall obtain and deliver to the Engineer all written warranties required to be furnished by the Specifications. Each of such warranty shall be underwritten by the Contractor for the full period prescribed therein, and shall bear its endorsement to such effect.

**6-9 LIQUIDATED DAMAGES.** Failure of the Contractor to complete the Work within the time allowed will result in damages being sustained by the Agency. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified, as adjusted in accordance with 6-6, for completion of the Work the Contractor shall pay to the Agency, or have withheld from monies due it, the sum of \$250, unless otherwise provided in the Contract Documents.

Execution of the Contract under these Specifications shall constitute agreement by the Agency and Contractor that \$250 per day is the minimum value of the costs and actual damage caused by failure of the Contractor to complete the Work within the allotted time, that such sum is liquidated damages and shall not be construed as a penalty, and that such sum may be deducted from payments due the Contractor if such delay occurs.

**6-10 USE OF IMPROVEMENT DURING CONSTRUCTION.** The Agency reserves the right to take over and utilize all or part of any completed facility or appurtenance. The Contractor will be notified in writing in advance of such action. Such action by the Agency will relieve the Contractor of responsibility for injury or damage to said completed portions of the improvement resulting from use by public traffic or from the action of the elements or from any other cause, except injury or damage resulting from the Contractor's operations or negligence. The Contractor will not be required to reclean such portions of the improvement before field completion, except for cleanup made necessary by its operations. Nothing in this section shall be construed as relieving the Contractor from full responsibility for correcting defective work or materials.

In the event the Agency exercises its right to place into service and utilize all or part of any completed facility or appurtenance, the Agency shall assume the responsibility and liability for injury to persons or property arising out of or resulting from the utilization of the facility or appurtenance so placed into service, except for any willful or negligent act or omission by the Contractor, Subcontractor, their officers, employees or agents.

**6-10.1 Use of Improvements - Exceptions.** The provisions of 6-10 shall not apply to projects for the repair, modification, enlargement or improvement of existing facilities that are to remain in use during construction except where a portion of the project which is completely independent from the rest of the Work can be completed and put into use by the Agency.

On projects on public roads, after satisfactory completion of an isolated section of the Work involving roadway improvements or repairs, when all temporary signs and other temporary Contractor facilities have been removed, the section is not being used as a detour, the section is no longer under the Contractor's control, and the section is opened to public traffic through the end of the Contract period, that section of the Work shall be taken over by the Agency as provided in 6-10. The Contractor shall indicate to the Engineer in writing when the conditions of this paragraph have been complied with and shall specify the limits of the section involved. Any taking over of the Work by the Agency shall be effective only when formal written notification is issued by the Agency.

**6-11 NOTICE OF POTENTIAL CLAIM FOR ADDITIONAL COMPENSATION.** Procedures for notice of claims in specific situations and circumstances are provided in the following sections:

- 3-4 ..... Changed Conditions
- 6-6.4 ..... Delay and Extensions of Time
- 6-7.3 ..... Contract Time Accounting

Compliance with this section is not prerequisite to assertion of a claim involving those sections or based on differences in measurements or errors of computation as to Contract quantities.

Compliance with the provisions of this section is required in all other situations and circumstances.

It is the intention of this section that differences arising between the parties under and by virtue of the Contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action taken to resolve such differences.

The Contractor shall give the Engineer written notice of a potential claim, setting forth: (1) the reasons for which the Contractor believes additional compensation will or may be due; (2) the nature of the costs involved; and (3) insofar as possible, the amount of the potential claim.

If the claim is based upon an act or failure to act by the Engineer, the said notice must be given to the Engineer prior to the date when the work giving rise to the potential claim is commenced; in all other cases the said notice must be given to the Engineer within 15 Days after the happening of the event, thing or occurrence giving rise to the potential claim.

The Contractor shall not be entitled to the payment of any additional compensation where the written notice of potential claim has not been given to the Engineer in the manner required by and within the time limitations of this section.

## **6-12 DISPUTES AND CLAIMS; PROCEDURE.**

**6-12.1 GENERAL.** Any and all decisions made on appeal pursuant to this section shall be in writing. Any "decision" purportedly made pursuant to this section which is not in writing shall not be binding upon the Agency and should not be relied upon by the Contractor.

Filing or giving the notices required under 3-4, 6-6.4, 6-7.3 and 6-11 is prerequisite to recovery under a Contractor's claim for additional compensation; nothing in this section shall excuse the Contractor from its duty to file or give the required notices, or from performing other duties required by the Contract Documents.

**6-12.2 ADMINISTRATIVE REVIEW.** Prior to filing a Complaint in Arbitration, the Contractor shall exhaust its administrative remedies by attempting to resolve its dispute or claim with Agency's staff in the following sequence:

Project manager  
Department Director (Public Works Agency)  
Director of the Public Works Agency (the Engineer)

Should the Project manager or the Department Director (Public Works Agency) fail to address a request by the Contractor for review of a disputed decision within 14 calendar Days after receiving such request, the Contractor may proceed directly to the next person on the list.

At the option of the Agency, the person to whom the request for review is directed may elect to take such request to a higher level and the Contractor's request shall be deemed to be properly submitted to such higher level.

The Engineer shall address disputes or claims within 28 calendar Days after receiving such request and all necessary supporting data. The Engineer's decision on the dispute or claim shall be the Agency's final decision.

Requests for review made to the Project manager may be either oral or written. Requests for review made to the Department Director (Public Works Agency) and The Engineer shall be made in writing and shall include:

- a. A copy of the disputed decision.
- b. A statement as to why the Contractor believes the decision is in error.
- c. All correspondence and evidence that the Contractor wishes to have considered in the review. Where the request for review is made to the Engineer, in lieu of resubmitting correspondence and evidence which has already been submitted to the Department Director (Public Works Agency), the request may include a list of the correspondence and evidence which should be considered by the Engineer. Any additional correspondence and evidence not previously submitted to the Department Director (Public Works Agency) shall be included with the request to the Engineer, if the Contractor wishes it to be considered. If relevant evidence is not available at the time the request is made to the Department Director (Public Works Agency) or the Engineer, such evidence shall be identified and a statement included as to when such evidence will be submitted.

Each request for review shall be submitted by the Contractor within 21 calendar Days of receipt of the decision which it wishes reviewed.

**6-12.3 ARBITRATION.** Claims and disputes arising under or related to the performance of the Contract, except for claims which have been released by execution of the "Release on Contract" as provided in 9-4, shall be resolved by arbitration unless the Agency and the Contractor agree in writing, after the claim or dispute has arisen, to waive arbitration and to have the claim or dispute litigated in a court of competent jurisdiction. Arbitration shall be pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2 of the Public Contract Code and the regulations promulgated thereto, Chapter 4 (commencing with Section 1300) of Division 2 of Title 1 of the California Code of Regulations. The arbitration decision shall be decided under and in accordance with California law, supported by substantial evidence and, in writing, contain the basis for the decision, findings of fact, and conclusions of law.

Arbitration shall be initiated by a Complaint in Arbitration made in compliance with the requirements of said Chapter 4. A Complaint in Arbitration by the Contractor shall be filed not later than 90 calendar Days after receipt of the final written decision of the Agency on the claim or dispute or within 300 Days after Acceptance of the Work by the Agency if no written decision has been issued. For the purposes of this section, "Acceptance of the Work by the Agency" shall be defined as the date the Notice of Completion is filed.

Where an election is made by either party to use the Simplified Claims Procedure provided under Sections 1340-1346 of said Chapter 4, the parties may mutually agree to waive representation by counsel.

All contracts valued at more than \$25,000 between the Contractor and its subcontractors and suppliers shall include a provision that the subcontractors and suppliers shall be bound to the Contractor to the same extent that the Contractor is bound to the Agency by all terms and provisions of the Contract, including this arbitration provision.

## **6-13 CONTRACTOR'S WORK HOURS**

**6-13.1 Working Hours Limitations.** Except as otherwise specified, no work shall be performed by the Contractor at the Work site between the hours of 7:00 p.m. and 7:00 a.m. the following day, nor shall work be performed on Saturdays, Sundays or holidays listed in 6-7.2.1.

**6-13.2 Regular Work Schedule.** The Contractor shall furnish a work schedule with the Construction Schedule required by 6-1 and inform the Engineer at least two Days in advance of changing the schedule. The schedule shall include the times for starting and ending work on each day. Such starting and ending times shall not be more than 10 1/2 hours apart.

**6-13.3 Exceptions.** The limitations on working hours and days shall not apply to emergency work made necessary by unusual conditions where such work is necessary to protect the Work, to protect the property of others, to protect life, or to ensure the orderly flow of traffic.

The limitations of this section shall not apply where work at times other than allowed by 6-13.1 and 6-13.2 is necessary in order to make utility connections or is required by other provisions contained in these Specifications in order to perform the work in the manner specified. In these cases, the Contractor shall obtain prior written approval of the Engineer at least two Days in advance of performing the work.

## SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

### 7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

**7-1.1 General.** The Contractor shall furnish and maintain in good condition all equipment and facilities as required for the proper execution and inspection of the Work.

The Contractor shall provide and maintain enclosed toilets for the use of employees engaged in the Work. These accommodations shall be maintained in a neat and sanitary condition, and regularly pumped out.

**7-1.2 Temporary Utility Services.** The Contractor shall, at its own expense, make all arrangements necessary for the provision of temporary utility services necessary for its own use during performance of the Work.

The Contractor shall not draw water from any fire hydrant (except to extinguish a fire), without obtaining permission from the water utility owner.

**7-1.3 Crushing and Screening Operations.** Unless otherwise specified in the Special Provisions, the establishment and operation of portable screens and crushers will not be allowed on or adjacent to the Work site.

### 7-2 LABOR

**7-2.1 General.** The Contractor, its agents, and employees shall be bound by and comply with applicable provisions of the Labor Code and Federal, State, and local laws related to labor.

Any worker found by the Engineer to be incompetent, intemperate, troublesome, disorderly, or otherwise objectionable, or who fails to perform the Work properly and acceptably, shall be immediately removed from the Work site by the Contractor and shall not be reemployed in the performance on the Work.

**7-2.1.1 Special Qualifications.** Where the Engineer determines certain portions of the Work require experience, training, certification or other special qualifications that may not be possessed by the average journeyman, such portions of the Work will be specifically identified in the Special Provisions and the special qualifications identified.

When work requiring special qualifications is being performed, a person with such qualifications must be in immediate charge of the work. The person may be a lead journeyman, foreperson or trade superintendent. The general superintendent or a foreperson who is not specifically assigned to the area where the identified work is being performed will not be considered to be in immediate charge of the work.

Written certification of the required qualifications shall be furnished to the Engineer at least one week prior to the time work is commenced on the work requiring such qualifications. Such certification is subject to review and acceptance by the Engineer. If, during performance of work requiring special qualifications, the qualified person becomes temporarily or permanently unavailable to the Contractor, work shall not proceed until a qualified replacement has been accepted by the Engineer. The Engineer will promptly consider the certification of the replacement.

If identified work is performed without a person having the special qualifications in charge, the Engineer may, at its sole discretion, order such work removed and replaced at the Contractor's expense.

If, after certification is accepted, the Engineer finds that the certification was inaccurate, or work on the project indicates a lack of the knowledge and experience to supervise the work, the Engineer may order the work stopped until an acceptable replacement has been certified, accepted and is in charge.

**7-2.2 Prevailing Wages.** Pursuant to Section 1773.2 of the Labor Code, the current prevailing rate of per diem wages at the time of the Bid as determined by the Director of the Department of Industrial Relations (DIR) are on file at the office of the Engineer. The Contractor shall post a copy of these rates at the Work site. Pursuant to Section 1774 of the Labor Code, the Contractor and any Subcontractors shall pay not less than the specified prevailing rates of wages to workers employed on the Contract. If the Contract is Federally-funded, the Contractor and any Subcontractors shall not pay less than the higher of these rates or the rates determined by the United States Department of Labor. Pursuant to Section 1775 of the Labor Code, the Contractor and any Subcontractors, shall, as a penalty to the Agency, forfeit the prescribed amounts per calendar day, or portion thereof, for each worker paid less than the prevailing wage rates. The project is subject to the compliance monitoring and enforcement by the California Department of Industrial Relations (DIR). The contractor is responsible for posting job site notices as prescribed by regulation pursuant to Labor Code section 1771.4, subdivision (a)(2). The Contractor and each Subcontractor, if any, must be registered with the DIR pursuant to Labor Code section 1725.5 and section 1771.1. The Contractor and each Subcontractor, if any, must submit certified payrolls to the Labor Commissioner pursuant to Labor Code 1771.4.

**7-2.2.1 Apprentices.** Apprentices shall be employed on the Work in accordance with Labor Code Section 1777.5. The Contractor is responsible for compliance with Labor Code Section 1777.5 for all apprenticeable occupations whether employed directly or through subcontractors.

**7-2.2.2 Contractors' Duties Concerning Labor Code Compliance.** As required by Labor Code 1775(b)(1), Labor Code Sections 1771, 1775, 1776, 1777.5, 1813 and 1815 are required to be included in the contract between the Contractor and subcontractors. The Contractor agrees to comply with these sections and all remaining provisions of the Labor Code.

**7-2.3 Payroll Records.** Pursuant to Section 1776 of the Labor Code the Contractor and each Subcontractor, if any, shall keep, make available, and submit to the Engineer within ten (10) days of receipt of a written request, certified payroll records. Pursuant to Labor Code section 1776, subsection (h), the Contractor and each Subcontractor, if any, shall, as a penalty to the Agency, forfeit the prescribed amount for each calendar day, or portion thereof, for each worker, the Contractor and each Subcontractor, if any, fails to comply with that subsection until strict compliance is effectuated. The Contractor and each Subcontractor, if any, waives any right to any notice or hearing on the forfeiture of such penalties pursuant to Labor Code sections 1726 or 1771.6. The contractor shall include the in its subcontracts as required to make this paragraph effective as to each Subcontractor. Upon written request, the Contractor shall withhold penalties forfeited by a Subcontractor pursuant to Labor Code section 1776, subsection (h), and this paragraph from payment due to such Subcontractor and remit such penalties withheld to the Agency.

**7-2.4 Hours of Labor.** Pursuant to Section 1810 of the Labor Code, 8 hours of labor shall constitute a legal day's work. Pursuant to Section 1813 of the Labor Code, the Contractor and each Subcontractor, if any, shall, as a penalty to the Agency, forfeit the prescribed amount per calendar day for each worker required or permitted to work more than 8 hours in any 1 calendar day and 40 hours in any 1 calendar week without being compensated in accordance with Section 1815. Contractor and each Subcontractor, if any, waives any right to any notice or hearing on the forfeiture of such penalties pursuant to Labor Code sections 1726 and 1771.6. Contractor shall include terms in its subcontracts as required to make this paragraph effective as to each Subcontractor. Upon written request, Contractor shall withhold penalties forfeited by a Subcontractor pursuant to Labor Code section 1813 and this paragraph from payments due to such Subcontractor and remit such penalties withheld to the Agency.

## **7-3 INDEPENDENCE OF CONTRACTOR, INDEMNIFICATION AND POLLUTION**

**7-3.1 Independence of Contractor.** It is understood and agreed that Contractor is at all times an independent contractor and that no relationship of employer-employee exists between the parties hereto. Contractor will not be entitled to any benefits payable to employees of County, including but not limited to overtime, retirement benefits, workers' compensation benefits, injury leave or other leave benefits. County is not required to make any tax or benefit deductions from the compensation payable to Contractor under the provisions of this Agreement. As an independent contractor, Contractor hereby holds County harmless from any and all claims that may be made against County based upon any contention by any third party that an employer-employee relationship exists by reason of the Agreement.

If, in the performance of this Agreement, any third persons are employed by Contractor, such persons will be entirely and exclusively under the direction, supervision and control of Contractor. All terms of employment, including hours, wages, working conditions, discipline, hiring and discharging or any other terms of employment or requirements of law, will be determined by Contractor. County will have no right or authority over such persons or the terms of such employment, except as provided in this Agreement.

**7-3.2 Indemnification and Hold Harmless Clause.** All activities arising out of or relating to the performance of the Work covered by this Contract shall be at the risk of Contractor. To the fullest extent permitted by law, Contractor shall defend (at Agency's request), indemnify and hold harmless Agency, and the County of Ventura if the County of Ventura is not the entity defined as Agency under this Contract, including all of their boards, agencies, departments, officers, employees, agents and volunteers (collectively, "Indemnitee"), against any and all claims, suits, actions, legal or administrative proceedings, judgments, debts, demands, damages, including injury or death to any person or persons, and damage to any property including loss of use resulting therefrom, incidental and consequential damages, liabilities, interest, costs, attorneys' fees and expenses of whatsoever kind of nature, whether arising before, during or after commencement or completion of this Contract, whether against Contractor and Indemnitee or which are in any manner, directly, indirectly, in whole or in part, arising from any act, omission, fault or negligence, whether active or passive, of Contractor, a Subcontractor or anyone directly or indirectly employed by them or anyone for whose acts they may be liable in connection with or incident to the Contract, even though the same may have resulted from the joint, concurring or contributory negligence, or from the passive negligence, of Indemnitee or any other person or persons, unless the same be caused by the sole negligence of Indemnitee, or except to the extent caused by the active negligence or willful misconduct of Indemnitee.

The Agency will notify the Contractor of the receipt of any third party claims.

**7-3.3 Contamination and Pollution.** Contractor, solely at its own cost and expense, will provide clean up of any premises, property or natural resources contaminated or polluted due to Contractor activities. Any fines, penalties, punitive or exemplary damages assigned due to contaminating or polluting activities of the Contractor will be borne entirely by the Contractor.

## **7-4 INSURANCE REQUIREMENTS**

Contractor, at its sole cost and expense, shall obtain and maintain in full force during the term of this Contract the following types of insurance:

### **7-4.1 Workers' Compensation Insurance.**

**7-4.1.1 Coverage.** Workers' Compensation coverage, in full compliance with Labor Code 3700, for all employees of Contractor and Employer's Liability in the minimum amount of \$1,000,000. The Agency, the County of Ventura, its officers, employees or Consultants, will not be responsible for any claims in law or equity occasioned by failure of Contractor to comply with this paragraph.

**7-4.1.2 Certification.** Before execution of the Contract by Agency, Contractor shall file with the Engineer the following signed certification:

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

## **7-4.2 Commercial General Liability Insurance**

### **7-4.2.1 Insurance Classes.** "Occurrence" coverage in the minimum amount of:

<u>Coverage Class</u>	<u>Coverage</u>
L-A	\$1,000,000 combined single limit (CSL) bodily injury and property damage each occurrence and \$1,000,000 aggregate
L-B	\$1,000,000 CSL bodily injury and property damage each occurrence and \$2,000,000 aggregate
L-C	\$5,000,000 CSL bodily injury and property damage each occurrence and \$5,000,000 aggregate
L-D	\$10,000,000 CSL bodily injury and property damage each occurrence and \$10,000,000 aggregate including but not limited to coverages for premises/operations; products/completed operations; independent contractors; underground, explosion and collapse hazards; personal injury; broad form property damage; broad form blanket contractual.

If no coverage class is specified in "Proposal", coverage class L-B shall apply.

**7-4.2.2 Coverage Exceptions.** On projects where no explosives will be used and no demolition is involved, the coverage for explosion may be omitted. On projects where no excavation is involved, the coverage for underground hazard may be omitted. The omission of said coverages is at Agency's option, and shall not abrogate Contractor's responsibilities for indemnification as set forth in these Specifications.

**7-4.2.3 Excess Liability Policies.** All Excess Liability policies, if used, shall be on an "umbrella" or following form or the primary layer of coverage.

### **7-4.3 Commercial Automobile Liability Insurance**

Coverage in the minimum amount of \$1,000,000 CSL bodily injury and property damage, including automobile liability, any auto.

### **7-4.4 Property Insurance**

Contractor shall arrange for its own "Course of Construction" insurance on the project to protect its interests, as Agency does not have this coverage.

Contractor is responsible for delivering to Agency Work completed in accordance with the Contract except as provided in 7-18 (Acts of God). Should the Work being constructed be damaged by fire or other causes during construction, it shall be replaced by Contractor in accordance with the requirements of the Plans and Specifications without additional expense to Agency.

### **7-4.5 Other Insurance Provisions.**

**7-4.5.1 Insurance Company Qualifications.** All insurance required shall be issued by (a) an admitted company or admitted companies authorized to transact business in the State of California which have a BEST rating of B+ or higher and a Financial Size Category (FSC) of VII or larger or (b) a California approved Surplus Line carrier or carriers which have a BEST rating of A or higher and a Financial Size Category (FSC) of VII or larger.

Workers compensation insurance not meeting the above requirements but meeting all other requirements of the specifications, will be accepted.

**7-4.5.2 Primary Coverage.** All insurance required shall be primary coverage as respects Agency and any insurance or self-insurance maintained by Agency or the County of Ventura shall be in excess of Contractor's insurance coverage and shall not contribute to it.

**7-4.5.3 Aggregate Limits Exceeded.** Agency shall be notified immediately if any aggregate insurance limit is exceeded. Contractor shall purchase additional coverage to meet requirements.

**7-4.5.4 Liability in Excess of Limits.** Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve Contractor for liability in excess of such coverage, nor shall it preclude Agency or the County of Ventura from taking such other actions as is available to it under any other provisions of this Contract or otherwise in law.

**7-4.5.5 Additional Insured Endorsements.** The Agency and the County of Ventura, including its boards, and all special Districts governed by the Board of Supervisors, shall be named as Additional Insured as respects Work done by Contractor under the terms of the Contract on all policies required (except Workers' Compensation).

**7-4.5.6 Waiver of Subrogation Rights.** Contractor agrees to waive all rights of subrogation against the Agency, the County of Ventura, including its boards, and all special Districts governed by the Board of Supervisors, for losses arising directly or indirectly from the activities or Work performed by Contractor under the Contract (applies only to Workers' Compensation and Commercial General Liability).



**7-4.5.7 Cancellation Notice Required.** In the case of policy cancellation, Agency shall be notified by the insurance company or companies as provided for in the policy. Contractor shall notify Agency of any and all policy cancellations within three working days of the cancellation.

**7-4.5.8 Documentation Required.** Prior to execution of the Contract by Agency, Contractor shall provide Agency with Certificates of Insurance for all required coverages (see Appendix A for example) and indicating that the endorsement(s) required have been issued.

It is the responsibility of the Contractor to confirm that all terms and conditions of Section 7-4 Insurance Requirements are complied with by any and all subcontractors that Contractor may use in the completion of this Agreement.

**7-5 PERMITS.** The Agency will obtain, at no cost to the Contractor, all encroachment and building permits necessary to perform Contract Work in streets, highways, railways or other rights of way, unless the necessity for such permit(s) is created by a method of operation chosen by the Contractor. The Contractor shall obtain and pay for all costs incurred for permits necessitated by its operations such as, but not limited to, those permits required for night Work, overload, blasting and demolition.

The Contractor shall pay all business taxes or license fees that are required for the Work.

**7-5.1 Highway and Railroad Permits.** The Engineer will obtain the basic State highway and railroad encroachment permits which will include checking of plans. However, the Contractor must also obtain permits from these agencies. Inspection fees charged by these agencies must be paid by the Contractor.

**7-5.2 Grading Ordinance**

**7-5.2.1 General.** All excavation, filling and grading operations in Ventura County are governed by the Ventura County Grading Ordinance or City Ordinances, except within the project right of way shown on the Plans.

**7-5.2.2 Permits Required.** Work outside the project right of way which involves excavation or filling of soils is subject to all requirements of the applicable grading ordinance. The requirements may include, but are not limited to, submitting of a grading plan prepared by a Civil Engineer, obtaining a grading permit, paying the permit fee, posting a grading bond, hiring professionals for engineering and testing services, compacting fills, constructing drainage facilities and providing erosion protection.

**7-5.2.3 Imported and Exported Material.** To insure that neither the Agency nor the Contractor is a party to aiding or abetting any property owner (who is ultimately responsible) to violate the applicable grading ordinance, no material shall be imported from or exported or wasted outside the project right of way until the Contractor has furnished the Engineer a copy of the grading permit covering such operation on land where material is to be deposited or excavated, unless exempt.

**7-5.2.4 Exemptions from Permit.** No grading permit is required of the Contractor for Work performed within the project right of way shown on the Plans or on borrow or disposal areas shown on the Plans or described in the Special Provisions and which are specifically designated as being exempt from such permit requirements.

**7-5.3 Building Permit.**

**7-5.3.1 Agency Furnished Permits.** Except as provided in 7-5.3.2, Agency will submit the plans for the Work to Department of Building and Safety, and other building related permit issuing agencies, for plan check and make the corrections necessary for the issuance of building and related permits. Agency will Pay plan check and permit fees for the Work. The Contractor may be required to furnish information to the permit issuing agencies, as required for the issuance of permits, and sign the permit.

**7-5.3.2 Contractor Furnished Permits.** Components or systems, required by the Contract, may require the preparation of plans and calculations to obtain approvals or permits from state or local building, fire prevention, public health, safety, environmental protection and other agencies in addition to the basic permits arranged for by the Agency as provided in 7-5.3.1. Contractor shall take all actions in a timely manner to obtain such approvals or permits so as not to delay completion of the Work beyond the time provided in 6-7. Contractor shall include all costs and consider the time required to obtain approvals or permits in the Contract price bid.

**7-5.4 Coastal Zone Permits**

**7-5.4.1 Agency Furnished Permits.** Permits required for Work on the project within rights of way furnished by the Agency within the Coastal Zone will be obtained by the Agency.

**7-5.4.2 Contractor Furnished Permits.** Permits required for the Contractor's operations outside of rights of way furnished by the Agency must be obtained by the Contractor. Such permits are required for brush removal, grading, dredging, disposal of material and many other operations within the Coastal Zone.

**7-6 THE CONTRACTOR'S REPRESENTATIVE.** Before starting work, the Contractor shall designate in writing a representative who shall have complete authority to act for it. An alternative representative may be designated as well. The representative or alternate shall be present at the Work site whenever work is in progress or whenever actions of the elements necessitate its presence to take measures necessary to protect the Work, persons, or property. Any order or communication given to this representative shall be deemed delivered to the Contractor. A joint venture shall designate only one representative and alternate. In the absence of the Contractor or its representative, instructions or directions may be given by the Engineer to the superintendent or person in charge of the specific work to which the order applies. Such order shall be complied with promptly and referred to the Contractor or its representative.

In order to communicate with the Agency, the Contractor's representative, superintendent, or person in charge of specific work shall be able to speak, read, and write the English language.

**7-7 COOPERATION AND COLLATERAL WORK.** The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous, collateral, and essential work by others. The Agency, its workers and contractors and others, shall have the right to operate within or adjacent to the Work site during the performance of such work.

The Agency, the Contractor, and each of such workers, contractors and others, shall coordinate their operations and cooperate to minimize interference.

The Contractor shall include in its Bid all costs involved as a result of coordinating its work with others. The Contractor will not be entitled to additional compensation from the Agency for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall redeploy its work force to other parts of the Work.

Should the Contractor be delayed by the Agency, and such delay could not have been reasonably foreseen or prevented by the Contractor, the Engineer will determine the extent of the delay, the effect on the Work, and any extension of time.

## **7-8 WORK SITE MAINTENANCE**

**7-8.1 General** Throughout all phases of construction, including suspension of the Work, and until acceptance per 6-8, the Contractor shall keep the Work site clean and free from rubbish and debris. Rubbish and debris collected on the Work site shall only be stored in roll-off, enclosed containers prior to disposal. Stockpiles of such will not be allowed.

When required by the Special Provisions, the Contractor shall provide a self-loading motorized street sweeper equipped with a functional water spray system. The sweeper shall clean all paved areas within the Work site and all paved haul routes at least once each working day.

The Contractor shall ensure there is no spillage along haul routes. Any such spillage shall be removed immediately and the area cleaned.

Should the Contractor fail to keep the Work site free from rubbish and debris, the Engineer may suspend the Work per 6-3 until the condition is corrected.

**7-8.2 Air Pollution Control** The Contractor shall not discharge smoke, dust, equipment exhaust, or any other air contaminants into the atmosphere in such quantity as will violate any Federal, State, or local regulations.

The Contractor shall also abate dust nuisance by cleaning, sweeping and spraying with water, or other means as necessary. The use of water shall conform to 7-8.6.

**7-8.3 Noise Control.** Noise generated from the Contractor's operations shall be controlled as specified in the Special Provisions.

## **7-8.4 Storage of Equipment and Materials.**

**7-8.4.1 General** Materials and equipment shall be removed from the Work site as soon as they are no longer necessary. Before inspection by the Engineer for acceptance, the Work site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance.

Excess excavated material shall be removed from the Work site immediately unless otherwise specified in the Special Provisions.

Forms and form lumber shall be removed from the Work site as soon as practicable after stripping.

**7-8.4.2 Storage in Public Streets.** Construction materials and equipment shall not be stored in streets, roads, or highways for more than 5 days after unloading unless otherwise specified in the Special Provisions or approved by the Engineer. All materials or equipment not installed or used in construction within 5 days after unloading shall be stored at a location approved by the Engineer.

Excavated material, except that which is to be used as backfill in the adjacent trench, shall not be stored in public streets unless otherwise specified in the Special Provisions or approved by the Engineer. Immediately after placing backfill, all excess material shall be removed from the Work site.

## **7-8.5 Sanitary Sewers.**

**7-8.5.1 General.** The flow of sewage shall not be interrupted. Should the Contractor disrupt the operation of existing sanitary sewer facilities, or should disruption be necessary for performance of the Work, the Contractor shall bypass the sewage flow around the Work. Sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. Sewage shall not be permitted to flow in trenches nor be covered by backfill.

Whenever sewage bypass and pumping is required by the Plans or Specifications, or the Contractor so elects to perform, the Contractor shall submit per 2-5.3 a working drawing conforming to 7-8.5.2 detailing its proposed plan of sewage bypass and pumping.

**7-8.5.2 Sewage Bypass and Pumping Plan.** The plan shall indicate the locations and capacities of all pumps, sumps, suction and discharge lines. Equipment and piping shall be sized to handle the peak flow of the section of sewer line to be bypassed and pumped. Equipment and piping shall conform to 7-10, the Plans, and the Special Provisions. Bypass piping, when crossing areas subject to traffic loads, shall be constructed in trenches with adequate cover and otherwise protected from damage due to traffic. Lay-flat hose or aluminum piping with an adequate casing and/or traffic plates may be allowed if so approved by the Engineer. Bypass pump suction and

discharge lines that extend into manholes shall be rigid hose or hard pipe. Lay flat hose will not be allowed to extend into manholes. The Contractor shall provide a backup bypass pumping system in case of malfunction. The backup bypass system shall provide 100 percent standby capability, and be in place and ready for immediate use.

Each standby pump shall be a complete unit with its own suction and discharge piping. In addition to the backup system, the Contractor shall furnish and operate vacuum trucks when required by the Plans or Special Provisions.

**7-8.5.3 Spill Prevention and Emergency Response Plan.** The Contractor shall prepare and submit per 2-5.3 a spill prevention and emergency response plan. The plan shall address implementation of measures to prevent sewage spills, procedures for spill control and containment, notifications, emergency response, cleanup, and spill and damage reporting.

The plan shall account for all storm drain systems and water courses within the vicinity of the Work which could be affected by a sewage spill. Catch basins that could receive spilled sewage shall be identified. Unless otherwise specified in the Special Provisions, these catch basins shall be sealed prior to operating the bypass and pumping system. The Contractor shall remove all material used to seal the catch basins when the bypass and pumping system operations are complete.

The Contractor shall be fully responsible for containing any sewage spillage, preventing any sewage from reaching a watercourse, recovery and legal disposal of any spilled sewage, any fines or penalties associated with the sewage spill imposed upon by the Agency and/or the Contractor by jurisdictional regulatory agencies, and any other expenses or liabilities related to the sewage spill.

**7-8.6 Water Pollution Control** The Contractor shall prevent, control, and abate discharges of pollutants from the construction site in order to protect the storm drain system, which includes pipes, channels, streams, waterways, and other bodies of water, by the construction, installation or performance of water pollution control measures as shown on the Stormwater Pollution Control Plan (SWPCP) or Stormwater Pollution Prevention Plan (SWPPP) depending on the land area affected by the construction activity. The Contractor shall ensure compliance with the current State NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activity (General Construction Permit), NPDES No. CAS000002 and current Ventura County NPDES Municipal Separate Storm Sewer System (MS4) Permit No. CAS004002.

## **7-8.6.1 Compliance with NPDES General Construction Permit**

### **7-8.6.1.1 Construction Sites**

If the Work involves construction activity that results in soil disturbance of one acre or more of total land area, or results in soil disturbances of less than one acre but is a part of a work area larger than one acre, the Contractor shall comply with the requirements of the General Construction Permit NPDES No. CAS000002. Construction activity includes clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement. Construction activity does not include routine maintenance such as, maintenance of original line and grade, hydraulic capacity, or original purpose of the facility.

The Contractor shall comply with requirements of the General Construction Permit (NPDES No. CAS000002), obtained by the Agency, including a site-specific Storm Water Pollution Prevention Plan (SWPPP) for the Work to be developed by Qualified SWPPP Developer (QSD) and implemented by the Qualified SWPPP Practitioner (QSP). After July 1, 2010, the Agency will electronically file all required Permit Registration Documents (PRDs) through the State Water Board's Stormwater Multi-Application and Report Tracking System (SMARTS) website, as required prior to the commencement of construction activity. PRDs consist of the Notice of Intent (NOI), Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, a signed certification statement by the Legally Responsible Party (LRP), and the first annual fee. For the Permit application, the Contractor shall submit to Project Manager the following:

- The completed site-specific Risk Assessment
- Post-construction calculations if applicable for the project, and
- Site-specific SWPPP developed in accordance with applicable Permits.

**7-8.6.1.2 Linear Utility Projects;** Contractor shall comply with the requirements of the General Construction Permit NPDES No. CAS000002 for Linear Underground/Overhead projects (LUPs) one acre or greater.

### **7-8.6.2 Compliance with NPDES MS4 Permit**

**7-8.6.2.1 Construction Sites Less Than One Acre** The Contractor shall ensure implementation of an effective combination of erosion and sediment control Best Management Practices (BMPs) listed in **Table 6** of the Ventura County NPDES MS4 Permit. The Contractor shall develop and implement a Storm Water Pollution Control Plan (SWPCP).

**7-8.6.2.2 Construction Sites One Acre but Less Than 5 Acres** The Contractor shall ensure implementation of an effective combination of appropriate erosion and sediment control BMPs from **Table 7** (BMPs at Construction sites 1 acre or greater but less than 5 acres) of the Ventura County NPDES MS4 Permit in addition to the ones identified in **Table 6** (BMPs at Construction sites less than 1 acre) to prevent erosion and sediment loss, and the discharge of construction wastes. For all construction sites one acre or greater, the Contractor shall submit the SWPPP to the Agency for review and certification as the Local SWPPP.

**7-8.6.2.3 Construction Sites 5 Acres and Greater** The Contractor shall ensure implementation of an effective combination of the following BMPs in **Tables 8** (BMPs at Construction sites 5 acres or greater) in addition to the ones identified in **Table 6** (BMPs at Construction sites less than 1 acre) and **Table 7** (BMPs at Construction sites 1 acre or greater but less than 5 acres) at all construction sites 5 acres and greater to prevent erosion and sediment loss, and the discharge of construction wastes. For all construction sites one acre or greater, the Contractor shall submit the SWPPP to the Agency for review and certification as the Local SWPPP.

### **7-8.6.2.4 Enhanced Construction BMP Implementation**

Construction sites located on hillsides, adjacent or directly discharging to CWA 303(d) listed waters for siltation or sediment, and directly adjacent to Environmentally Sensitive Areas are termed "high risk sites." Contractor shall implement enhanced practices that preclude impacts to water quality posed by the high risk sites.

Contractor shall ensure that high risk sites are inspected by the Qualified SWPPP Developer, Qualified SWPPP Practitioner, or Certified Professionals in Erosion and Sediment Control (CPESC) at the time of BMP installation, at least weekly during the wet season, and at least once each 24 hour period during a storm event that generates runoff from the site, to identify BMPs that need maintenance to operate effectively, that have failed or could fail to operate as intended.

During the wet season, the area of disturbance shall be limited to the area that can be controlled with an effective combination of erosion and sediment control BMPs. Enhanced sediment controls should be used in combination with erosion controls and should target portions of the site that cannot be effectively controlled by standard erosion controls described above. Effective sediment and erosion control BMPs proposed by the Contractor shall include the BMPs listed in Table 9 (Enhanced Construction BMP Implementation) of the NPDES MS4 Permit. The Contractor shall implement the BMPs listed in Table 9 unless shown unnecessary. Also, the Contractor shall retain records of the inspection and a determination and rationale of the BMPs selected to control runoff.

### **7-8.6.3 Plan.**

**7-8.6.3.1** The SWPCP, required for construction projects less than one acre, shall be prepared in accordance with the requirements of current Ventura County NPDES MS4 Permit No. CAS004002 and County Ordinance No. 4142.

**7-8.6.3.2** The SWPPP, required for construction projects one acre or greater, shall be prepared in accordance with the requirements of the state's General Construction Permit NPDES Permit CAS000002, Ventura Countywide Stormwater Quality Management Program, NPDES MS4 Permit No. CAS004002, and County Ordinance No. 4142.

**7-8.6.3.3** The SWPCP/SWPPP shall identify potential pollutant sources on the construction site that may affect the quality of discharges, whether non-stormwater or stormwater, from the site and design the use and placement of water pollution control measures, BMPs, to effectively prohibit the entry of pollutants from the site into the storm drain system during construction. At a minimum, and depending on the size of the project area, the SWPCP/SWPPP will include all appropriate minimum BMPs as required by the Ventura Countywide Stormwater Quality Management Program, NPDES MS4 Permit No. CAS004002 (Tables 6 through 9). The SWPCP/SWPPP must utilize the measures recommended in the California Stormwater Quality Association (CASQA) Stormwater BMPs Handbook for Construction (January 2003 version until July 1, 2010 and 2009 version after July 1, 2010). Starting July 1, 2010 SWPPP shall be prepared by QSD as defined in the NPDES Permit CAS000002. The Contractor shall complete, sign and submit the SWPCP/SWPPP for review and final approval by the Project Engineer, prior to issuance of the Notice to Proceed as provided in 6-7.4.

**7-8.6.3.4** For all construction projects one acre and greater, the Contractor shall submit the SWPPP to the Agency for review and certification as Local SWPPP in accordance with NPDES MS4 Permit No. CAS004002 prior to the Notice to Proceed as provided in 6-7.4.

**7-8.6.4 Measures.** All water pollution control measures shall conform to the requirements of the submitted SWPCP/SWPPP. If circumstances during the course of construction require changes to the original SWPCP/SWPPP, a revised SWPCP/SWPPP shall be promptly submitted to the Project Manager in each instance. The SWPPP shall be amended or revised by QSD. A copy of the current SWPCP/SWPPP including revisions and amendments shall be kept at the site to ensure that field personnel has access to the current document at all times. If measures being taken are inadequate to control water pollution effectively, the Project Manager may direct the Contractor to revise the operations and no further work shall be performed until adequate water pollution control measures are implemented. Effective September 2, 2011, implementation of the SWPPP shall be overseen by the Contractor's QSP as defined in the General Construction Permit NPDES No. CAS000002. All work installed by the Contractor in connection with the SWPCP/SWPPP but not specified to become a permanent part of the Work shall be removed and the site restored in so far as practical to its original condition prior to completion of the Work.

**7-8.6.4.1 Post-Construction Standards;** Contractor shall ensure that applicable post-construction standards are implemented to meet applicable project requirements of the Ventura County NPDES MS4 Permit and General Construction Permit NPDES No. CAS000002 (effective September 2, 2012).

**7-8.6.4.2 Active Treatment Systems;** Contractor shall comply with requirements of the General Construction Permit NPDES No. CAS000002 for active treatment systems as applicable.

### **7-8.6.5 Monitoring and Reporting**

**7-8.6.5.1 Monitoring;** In accordance with the General Construction Permit NPDES No. CAS000002, the Contractor shall develop and implement monitoring program for Risk Level 2 and 3 sites. In addition at Risk Level 3 sites, contractor shall perform receiving water monitoring to meet Permit requirements.

**7-8.6.5.2 Reporting;** the Contractor shall ensure that all submittals and reports are prepared and submitted to the RWQCB in accordance with the applicable Permits. At minimum the reports will include Annual Report (for applicable projects due September 1<sup>st</sup>), Rain Event Action Plan (due 48 hrs prior to the rain event for the applicable projects), Numeric Action Levels (NAL) Exceedance Report (as required), Numeric Effluent Limitations (NELs) Violation Report (within 24 hours after NEL exceedance is identified). Contractor shall submit required reports to the Project Manager for review and approval prior to submittal to the RWQCB.

**7-8.6.6 Dewatering Activities.** All dewatering activities shall be performed in accordance with applicable regulatory requirements issued by the Los Angeles Regional Water Quality Control Board, including specific requirements contained in the Waste Discharge Requirements (WDR) when issued for the Work.

**7-8.6.7 Payment.** The Contract lump sum price for water pollution control shall include full compensation for furnishing all labor, materials, tools, equipment, services and incidentals and for doing all work involved in water pollution control as specified herein. Payment for water pollution control will be made as the Work proceeds, and is in compliance with the approved Water Pollution Control Plan, on the following basis.

Partial payment estimate (excluding mobilization & water pollution control payments) as a percentage of the original Contract price (excluding the mobilization & water pollution control Bid items).		Cumulative amount of water pollution control pay item earned is the lesser of the amounts as computed by these two columns.	
Equal to or greater than	Less than	Percentage of water pollution control pay item	Percentage of the original Contract total.
5	10	10	1
10	20	20	2
20	50	50	3
50	Completion of Work	75	5
Completion of Work		100	

Where no Bid item is provided for water pollution control, payment for water pollution control shall be considered to be included in the other Bid items.

**7-8.7 Drainage Control.** The Contractor shall maintain drainage within and through the Work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete or other acceptable material will be permitted when necessary to protect the Work, provided their use does not create a hazard or nuisance to the public. Such dams shall be removed from the site as soon as their use is no longer necessary.

**7-8.8 Final Cleaning.** At the completion of the Work, the Contractor shall remove all waste materials and rubbish from and about the project, as well as all tools, construction equipment, temporary facilities, machinery, and surplus materials.

At completion of construction and just prior to final inspection, the Contractor shall thoroughly clean the interior and exterior of the buildings, including hardware, floors, roofs, sills, ledges, glass, or other surfaces where debris, plaster, paint, spots, and dirt or dust may have collected. All glass shall be washed clean and polished. Remove all grease, stains, labels, fingerprints, and other foreign materials from interior and exterior surfaces. Repair, patch, and touch up marred surfaces to match adjacent finishes.

The Contractor shall use only experienced workmen or professional cleaners for final cleaning. It shall use only cleaning materials recommended by the manufacturer of the surface to be cleaned, and use cleaning materials only on surfaces recommended by the cleaning material manufacturer.

It shall broom-clean all paved surfaces and rake-clean other surfaces of grounds.

The Contractor shall replace air conditioning filters if units were operated during construction, and clean all ducts, blowers, and coils if air conditioning units were operated without filters during construction.

After cleaning, the Contractor shall maintain the building in a clean condition until it is accepted by the Agency.

**7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.** The Contractor shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements within the right-of-way which are not designated for removal (e.g., curbs, sidewalks, driveways, fences, walls, signs, utility installations, pavement, structures, etc.) which are damaged or removed as a result of its operations. When a portion of a sprinkler system within the right-of-way must be removed, the remaining lines shall be capped. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

Maintenance of street and traffic signal systems that are damaged, temporarily removed or relocated shall be done in conformance with 307-1.5.

Trees, lawns, and shrubbery that are not designated to be removed shall be protected from damage or injury. If damaged or removed because of the Contractor's operations, they shall be restored or replaced in as nearly the original condition and location as is reasonably possible. Lawns shall be reseeded and covered with suitable mulch.

The Contractor shall give reasonable notice to occupants or owners of adjacent property to permit them to salvage or relocate plants, trees, fences, sprinklers and other improvements which are designated for removal and would be destroyed because of the Work.

All costs to the Contractor for protecting, removing, and restoring existing improvements shall be absorbed in its bid.

In existing buildings, all surfaces, equipment, furniture and other property shall be protected from loss or damage by or as result of the Contractor's operations. The Contractor shall replace damaged property or shall repair and restore it to its previous condition. Patching, painting, replacement of wall, ceiling and floor covering and similar Work shall be done in such a manner that the repaired Work will not be readily noticeable.

## **7-10 PUBLIC CONVENIENCE AND SAFETY**

### **7-10.1 Access.**

**7-10.1.1 General.** The Contractor's operations shall cause no unnecessary inconvenience to the public or businesses in the vicinity of the Work. The Contractor shall have no greater length or quantity of Work under construction than can be properly prosecuted with a minimum of inconvenience to the public and other contractors engaged in adjacent or related work.

The Contractor shall provide continuous and unobstructed access to the adjacent properties unless otherwise specified in the Special Provisions or approved by Engineer. Work requiring traffic lane closures shall only be performed between the hours specified in the Special Provisions or shown on the TCP. Traffic shall be permitted to pass through the Work site, unless otherwise specified in the Special Provisions or shown on the TCP.

**7-10.1.1.1 Vehicular Access.** Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access. If backfill has been completed to the extent that safe access may be provided and the street is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.

**7-10.1.1.2 Pedestrian Access.** Safe, adequate, and ADA compliant pedestrian access shall be maintained unless otherwise approved by the Engineer. 7-10.2 Work Area Traffic Control.

### **7-10.2 Traffic Control**

**7-10.2.1 General.** Work area traffic control shall conform to the California MUTCD, WATCH, or as specified in the Special Provisions. The total length of the traffic control zone shall include a buffer space, advance signing, striping transitions in advance of the Work site, existing striping, signing, and raised medians.

#### **7-10.2.2 Traffic Control Plan.**

**7-10.2.2.1 General.** If so specified in the Special Provisions or on the permit, the Contractor shall submit a TCP in accordance with 2-5.3. The sheets of the TCP shall display the title, phase identification, name of the firm preparing the TCP, name and stamp of the Registered Traffic or Civil Engineer, approval block for each jurisdictional agency, north arrow, sheet number, and number of sheets comprising the TCP. General notes and symbol definitions shall be included when required. Adequate dimensioning shall be provided to allow for proper field installation. The TCP shall be drawn to a 1 inch = 40 feet scale on common size sheets, either 8-1/2 inches x 11 inches, 8-1/2 inches x 14 inches, 11 inches x 17 inches, or 2-foot x 3-foot plan sheets as dictated by the length of the Work.

The requirements in the Special Provisions shall govern the design of the proposed TCP.

**7-10.2.2.2 Payment.** Payment for preparation of the TCP shall be included in the appropriate lump sum Bid items. If no Bid items have been provided, payment shall be included in the various Bid items unless otherwise specified in the Special Provisions.

**7-10.3 Haul Routes.** Unless otherwise specified in the Special Provisions, the haul route(s) shall be determined by the Contractor.

**7-10.4 Safety.**

**7-10.4.1 Work Site Safety.**

**7-10.4.1.1 General.** The Contractor shall provide safety measures as necessary to protect the public and workers within, or in the vicinity of, the Work site. The Contractor shall ensure that its operations will not create safety hazards. The Contractor shall provide safety equipment, material, and assistance to Agency personnel so that they may properly inspect all phases of the Work. When asbestos is being removed, the requirements of the CCR Title 8, Div. 1, Chapter 4, Subchapter 4 and Subchapter 7 shall be implemented.

**7-10.4.1.2 Work Site Safety Official.** The Contractor shall designate in writing a "Project Safety Official" who shall be at the Work site at all times, and who shall be thoroughly familiar with the Contractor's Injury and Illness Prevention Program (IIPP) and Code of Safe Practices (CSP). The Project Safety Official shall be available at all times to abate any potential safety hazards and shall have the authority and responsibility to shut down an unsafe operation, if necessary.

**7-10.4.2 Safety Orders.**

**7-10.4.2.1 General.** The Contractor shall have at the Work site, copies or suitable extracts of Construction Safety Orders, Tunnel Safety Orders, and General Industry Safety Orders issued by the State Division of Industrial Safety. Prior to beginning any excavation 5 feet in depth or greater, the Contractor shall submit to the Engineer, the name of the "Competent Person" as defined in CCR, Title 8, Section 1504, in accordance with 2-5.3. The "Competent Person" shall be present at the Work site as required by Cal-OSHA.

**7-10.4.2.2 Shoring Plan.** Before excavating any trench 5 feet (105m) or more in depth, the Contractor shall submit in accordance with 2-5.3 a detailed working drawing (shoring plan) showing the design of the shoring, bracing, sloping, or other provisions used for the workers' protection. If the shoring plan varies from the shoring system standards, the shoring plan shall be prepared by a registered Structural or Civil Engineer. The shoring plan shall accommodate existing underground utilities. No excavation shall start until the Engineer has accepted the shoring plan and the Contractor has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to the Engineer in accordance with 2-5.3. If the Contractor fails to submit a shoring plan or fails to comply with an accepted shoring plan, the Contractor shall suspend work at the affected location(s) when directed to do so by the Engineer. Such a directive shall not be the basis of a claim for Extra Work and the Contractor shall not receive additional compensation or Contract time due to the suspension.

**7-10.4.2.3 Payment.** Payment for shoring shall be included in the Bid item provided therefor. Payment for compliance with the provisions of the safety orders and all other laws, ordinances, and regulations shall be included in the various Bid items.

**7-10.4.3 Use of Explosives.** Explosives may be used only when authorized in writing by the Engineer, or as otherwise specified in the Special Provisions.

Explosives shall be handled, used, and stored in accordance with all applicable regulations.

Prior to blasting, the Contractor shall comply with the following requirements:

- a) The jurisdictional law enforcement agency shall be notified 24 hours in advance of blasting.
- b) The jurisdictional fire department shall be notified 24 hours in advance of blasting.
- c) Blasting activities and schedule milestones shall be included in the Contractor's construction schedule per 6-1.

For a Private Contract, specific permission shall be obtained from the Agency in writing, prior to any blasting operations in addition to the above requirements.

The Engineer's approval of the use of explosives shall not relieve the Contractor from liability for claims caused by blasting operations.



**7-10.4.4 Hazardous Substances.** An MSDS as described in CCR, Title 8, Section 5194, shall be maintained at the Work site for all hazardous material used by the Contractor. Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturer warnings and application instructions listed on the MSDS and on the product container label. The Contractor shall notify the Engineer if a specified product cannot be used under safe conditions. **7-10.4.5 Confined Spaces.** **7-10.4.5.1 Confined Space Entry Program (CSEP).** The Contractor shall be responsible for implementing, administering and maintaining a CSEP in accordance with CCR, Title 8, Sections 5156, 5157 and 5158.

Prior to the start of the Work, the Contractor shall prepare and submit a CSEP in accordance with 2-5.3. The CSEP shall address all potential physical and environmental hazards and contain procedures for safe entry into confined spaces such as the following:

- a) Training of personnel
- b) Purging and cleaning the space of materials and residue
- c) Potential isolation and control of energy and material inflow
- d) Controlled access to the space
- e) Atmospheric testing of the space
- f) Ventilation of the space
- g) Special hazards consideration
- h) Personal protective equipment
- i) Rescue plan provisions

The submittal shall include the names of the Contractor's personnel, including each Subcontractor's personnel, assigned to the Work that will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

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- b) Purging and cleaning the space of materials and residue.
- c) Potential isolation and control of energy and material inflow.
- d) Controlled access to the space.
- e) Atmospheric testing of the space.
- f) Ventilation of the space.
- g) Special hazards consideration.
- h) Personal protective equipment.
- i) Rescue plan provisions.

The submittal shall include the names of the Contractor's personnel, including each Subcontractor's personnel, assigned to the Work that will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

**7-10.4.5.2 Permit-Required Confined Spaces.** Entry into permit-required confined spaces as defined in CCR, Title 8, Section 5157 may be required as a part of the Work. Manholes, tanks, vaults, pipelines, excavations, or other enclosed or partially enclosed spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. The Contractor shall implement a permit-required CSEP prior to performing any work in a permit-required confined space. A copy of the permit shall be available at all times for review by the Contractor and the Engineer at the Work site.

**7-10.4.5.3 Payment.** Payment for the CSEP shall be included in the Bid items for which the CSEP is required.

#### **7-10.5 Security and Protective Devices.**

**7-10.5.1 General.** Security and protective devices shall consist of fencing, steel plates, or other devices as specified in the Special Provisions to protect open excavations

**7-10.5.2 Security Fencing.** The Contractor shall completely fence open excavations. Security fencing shall conform to 304-3.5. Security fencing shall remain in place unless workers are present and construction operations are in progress during which time the Contractor shall provide equivalent security..

**7-10.5.3 Steel Plate Covers.** The Contractor shall provide steel plate covers as necessary to protect from accidental entry into openings, trenches, and excavations.

**7-11 PATENT FEES OR ROYALTIES.** The Contractor shall absorb in its Bid, the patent fees or royalties on any patented article or process which may be furnished or used in the Work. The Contractor shall indemnify and hold the Agency harmless from any legal action that may be brought for infringement of patents.

**7-12 ADVERTISING.** The names of contractors, subcontractors, architects, or engineers, with their addresses and the designation of their particular specialties, may be displayed on removable signs. The size and location of such signs shall be subject to the Engineer's approval.

Commercial advertising matter shall not be attached or painted on the surfaces of buildings, fences, canopies, or barricades.

**7-13 LAWS TO BE OBSERVED.** The Contractor shall keep fully informed of State and National laws and County and Municipal ordinances and regulations which in any manner affect those employed in the Work or the materials used in the Work or in any way affect the conduct of the Work. It shall at all times observe and comply with all such laws, ordinances and regulations.

**7-13.1 Mined Materials.** Mined material from California surface mines, used on the Work, shall be from a mine identified in the list published by the California Department of Conservation (referred to as 3098 List), as required by Public Contract Code 20676. This list is available on the Internet at [www.conservation.ca.gov/OMR/ab\\_3098\\_list/index.htm](http://www.conservation.ca.gov/OMR/ab_3098_list/index.htm).

**7-14 ANTITRUST CLAIMS.** Section 7103.5 of the Public Contract Code provides:

"In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgement by the parties."

**7-15 RECYCLABLE CONSTRUCTION & DEMOLITION WASTES.** Ventura County Ordinance Code Section, 4421 et seq, requires that if any recyclable solid wastes or marketable reusable materials will be generated on the site of the Work within the unincorporated areas of Ventura County, the Contractor shall prepare a Construction & Demolition Debris Waste Diversion Plan and submit it to the Ventura County Public Works Agency, Water & Sanitation Department - Integrated Waste Management Division (IWMD). The Contractor shall prepare and file Construction & Demolition Debris Waste Diversion Reporting Forms as required by the IWMD.

For projects within the unincorporated areas of Ventura County, the Contractor shall submit an IWMD Form B-Recycling Plan approved by IWMD prior to issuance of the Notice to Proceed as provided in 6-7.4.

For projects within the unincorporated areas of Ventura County, the Contractor shall submit an IWMD Form C-Reporting Form approved by IWMD prior to the Engineer preparing the final estimate as provided in 9-3.2.

If the site of the Work is within an incorporated city, the Contractor shall comply with all the recycling, solid waste diversion, and hauling requirements of that incorporated city.

**7-16 BLANK**

**7-17 LOSS OR DAMAGE TO THE WORK.** The Contractor is responsible for delivering to the Agency Work completed in accordance with the Contract except as provided in 7-18. Should the Work being constructed be damaged by fire or other causes before Acceptance by the Agency, it shall be replaced in accordance with the requirements of the Plans and Specifications without additional expense to the Agency. The Agency does not carry "Course of Construction" insurance on the Work. Contractor should arrange for its own insurance to protect its interests.

**7-18 ACTS OF GOD.** As provided in Section 7105 of the California Public Contract Code, the Contractor shall not be responsible for the cost of repairing or restoring damaged portions of the Work determined to have been proximately caused by an act of God in excess of 5 percent of the contracted amount, provided that the Work damaged was built in accordance with accepted and applicable building standards and the Specifications and Drawings. The Contractor shall obtain insurance to indemnify the Agency for any damage to the Work caused by an act of God if the premium of said insurance coverage is called for as a separate bid item in the bidding schedule for the Work. For purposes of this section, the term "acts of God" shall include only the following occurrences or conditions and effects: earthquakes in excess of a magnitude of 3.5 on the Richter Scale, and tidal waves.

## **SECTION 8 - FACILITIES FOR AGENCY PERSONNEL**

**8-1 GENERAL.** A field office shall be provided when required by the Plans or Special Provisions. The field office shall be at a suitable location approved by the Engineer.

A field office shall be a weather-tight building of suitable proportions with 16 m<sup>2</sup> (120 sq. ft.) of floor area, at least one door, and a window area of 2 m<sup>2</sup> (22 Sq. Ft.). A field office may be a building or a separate room in a building the Contractor may be required to provide or that it may desire to provide for its own use. In either case, the room shall have a separate exterior door. All doors shall be provided with hasps for padlocks.

The office shall be convenient to the Work. It shall be adequately heated, ventilated, electrically lighted, and provided with telephone service, all at the expense of the Contractor or plant owner. Offices are for the exclusive use of Agency personnel, unless otherwise provided herein.

Field offices at the worksite shall be removed upon completion of the Work.

All costs incurred in furnishing, maintaining, servicing, and removing a field office required at the Work site shall be included in the price bid for such item. If such item is required by the Plans or Specifications and no bid item is provided in the Proposal, the costs shall be absorbed in the other items for which bids are entered. Buildings and equipment furnished by the Contractor at the Work site under the provisions of this section are the property of the Contractor.

The first progress payment will not be approved until all facilities are in place and fully comply with the Specifications.

**8-2 EQUIPMENT FOR FIELD OFFICES.** Unless otherwise specified, a field office shall be equipped with:

- Plan table, 0.75 m x 1.5 m (2 1/2 ft. x 5 ft.) or larger
- Plan rack, capacity to hold two sets of project Plans plus all shop drawings
- Desk and chair
- Two lockers with hasps for padlocks

## SECTION 9 - MEASUREMENT AND PAYMENT

### 9-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK

**9-1.1 General.** Unless otherwise specified, quantities of work shall be determined from measurements or dimensions in horizontal planes. However, linear quantities of pipe, piling, fencing, and timber shall be considered as being the true length measured along longitudinal axis.

Unless otherwise provided in Specifications, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. The planimeter shall be considered an instrument of precision adapted to measurement of all areas.

**9-1.2 Methods of Measurement.** Materials and items of Work which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in the particular sections involved.

**9-1.3 Certified Weights.** When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing actual net weights. The Agency will accept the certificate as evidence of weights delivered.

**9-1.4 Units of Measurement.** Measurements shall be in accordance with 1-4.1 and 1-4.2. A metric ton or "tonne" is equal to 1000 kilograms and the unit of liquid measure is a Liter (in U.S. Standard Measures, a pound is an avoirdupois pound; a ton is 2000 pounds avoirdupois; and the unit of liquid measure is a gallon).

**9-2 LUMP SUM BID ITEMS.** Items for which quantities are indicated as "Lump Sum", "L.S." or "Job" shall be paid for at the price indicated in the Proposal. Such payment shall be full compensation for the items of Work and all Work appurtenant thereto.

When required by the Specifications or requested by the Engineer, the Contractor shall submit to the Engineer within 15 Days after award of Contract, a detailed schedule in triplicate, to be used only as a basis for determining progress payments on a lump sum contract or any designated lump sum bid item. This schedule should equal in total the lump sum bid and shall be in such form and sufficiently detailed as to satisfy the Engineer that it correctly represents a reasonable apportionment of the lump sum. If Mobilization or Water Pollution Control are included in the detailed schedule, those items will be paid for as provided in 9-3.4.2 and 7-8.6.4, receptively.

### 9-3 PAYMENT

**9-3.1 General.** The quantities listed in the Bid schedule will not govern final payment unless identified by Agency on the Proposal as [F]. The symbol "[F]" indicates that the quantities shown on the Proposal form are the final pay quantities. Payment to the Contractor (except those items identified as [F]) will be made only for the actual quantities of Contract items constructed in accordance with the Plans and Specifications. Upon completion of construction, if the actual quantities show either an increase or decrease from the quantities given in the Bid schedule, the Contract Unit Prices will prevail subject to the provisions of 3-2.2.1. Payment for those items identified as [F] will be based on the quantities shown on the Proposal unless changed as provided in 3-2.2.1.

The unit and lump sum prices to be paid shall be full compensation for the items of work and all appurtenant work, including furnishing all materials, labor, equipment, tools and incidentals.

Payment for items shown on the Plans or required by the Specifications, for which no pay item is provided, shall be considered included in the prices named for the other items shown on the Proposal.

Payment will not be made for materials wasted or disposed of in a manner not called for under the Contract. This includes rejected material not unloaded from vehicles, material rejected after it has been placed and material placed outside of the Plan lines. No compensation will be allowed for disposing of rejected or excess material.

Whenever any portion of the Work is performed by the Agency at the Contractor's request, the cost thereof shall be charged against the Contractor, and may be deducted from any amount due or becoming due from the Agency.

Whenever immediate action is required to prevent injury, death, or property damage, and precautions which are the Contractor's responsibility have not been taken and are not reasonably expected to be taken, the Agency may, after reasonable attempt to notify the Contractor, cause such precautions to be taken and shall charge the cost thereof against the Contractor, or may deduct such cost from any amount due or becoming due from the Agency. Agency action or inaction under such circumstances shall not be construed as relieving the Contractor or its Surety from liability.

### **9-3.1 General. (Continued)**

Payment shall not relieve the Contractor from its obligations under the Contract; nor shall such payment be construed to be Acceptance of any of the Work. Payment shall not be construed as the transfer of ownership of any equipment or materials to the Agency. Responsibility of ownership shall remain with the Contractor who shall be obligated to store, protect, repair, replace, rebuild, or otherwise restore any fully or partially completed work or structure for which payment has been made; or replace any materials or equipment required to be provided under the Contract which may be damaged, lost, stolen or otherwise degraded in any way prior to completion of the Work under the Contract, except as provided in 6-10.

Warranty periods shall not be affected by any payment but shall commence on the date equipment or material is placed into service at the written direction of the Engineer. In the event such items are not placed into service prior to partial or final completion of the Work, the warranty periods will commence on the date set forth as the date of field completion in the Engineer's acknowledgement of completion.

If, within the time fixed by law, a properly executed notice to stop payment is filed with the Agency, due to the Contractor's failure to pay for labor or materials used in the Work, all money due for such labor or materials will be withheld from payment to the Contractor in accordance with applicable laws.

At the expiration of 35 Days from the date of recording of the Notice of Completion, or as prescribed by law, the amount deducted from the final estimate and retained by the Agency will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract to be further retained.

**9-3.2 Partial and Final Payment.** The Engineer will, after award of Contract, establish a closure date for the purpose of making monthly progress payments. The Contractor may request in writing that such monthly closure date be changed. The Engineer may approve such request when it is compatible with the Agency's payment procedure.

Each month, the Engineer will make an approximate measurement of the Work performed to the closure date and, as a basis for making monthly payments, estimate its value based on the Contract Unit Prices or as provided for in 9-2. When the Work has been satisfactorily completed, the Engineer will determine the quantity of Work performed and prepare the final estimate.

Work not conforming to the Contract Documents shall not be measured for payment.

Conformance with the Contract Documents shall be, in addition to constructing the Work in accordance with the Contract Documents, the Contractor's compliance with those portions of the Contract Documents not directly related to the completed Work, including but not limited to: construction and maintenance of detours; diversion and control of water; protection and repair of existing facilities of the Agency and adjacent owners; site maintenance; coordination with utilities and other contractors on the site; proper survey procedures and records; obtaining required permits and inspections; complying with working hour limitations; providing a Contractor's representative while Work is being performed; complying with environmental requirements; maintaining access and safety for users of facilities that are to remain in service during construction; and obeying all laws affecting the Work.

Payment for Extra Work will be made only on approved Daily Extra Work Reports with supporting documentation as required in 3-3.

From each progress estimate, 5 percent will be deducted and retained by the Agency, and the remainder less the amount of all previous payment will be paid to the Contractor.

No progress payment made to the Contractor or its sureties will constitute a waiver of the liquidated damages under 6-9.

### **9-3.2 Partial and Final Payment. (Continued)**

As provided for in Sections 22300 of the California Public Contract Code, the Contractor may substitute securities for any monies withheld by the Agency to ensure performance under the Contract. In substituting securities, the Contractor may either:

- a. Deposit qualifying securities already owned by the Contractor with the Escrow prior to the Contract payment date, or
- b. Direct the Agency to send retained funds to the Escrow to be invested by the Escrow in qualifying securities as directed by the Contractor.

**9-3.2.1 Release of Withheld Contract Funds.** Pursuant to Public Contract Code Section 22300, Contractor has the option to deposit securities with an Escrow Agent as a substitute for retention earnings required to be withheld by Agency pursuant to the construction Contract between the Agency and the Contractor. A form of Escrow Agreement for Security Deposits in Lieu of Retention has been adopted by the Agency as one of the Contract Documents; procedures for implementing the provisions of the Escrow Agreement are contained in Escrow Instructions which shall become effective upon exercise of the option by the Contractor.

The Contractor shall take the following steps if it desires to substitute securities:

- a. Execute the Escrow Agreement for Security Deposits in Lieu of Retention.
- b. Furnish to the Escrow Agent a power of attorney and other forms necessary to empower the Escrow Agent to convert the securities to cash.
- c. Furnish to the Escrow Agent the securities described.
- d. Pay the Escrow Agent's fees and costs.

When the Contractor deposits with the Escrow Agent securities in lieu of money required to be withheld from progress payments, a sum of money equivalent to the current cash value of the securities as determined by the Escrow Agent shall be released to the Contractor by, or upon the direction of, the Agency.

If the total of the money plus the current cash conversion value of securities on deposit should fall below the aggregate amount of the sums required to be withheld from progress payments pursuant to 9-3.1 and 9-3.2, an amount equal to the difference shall be withheld from the next regular progress payment in addition to the amount which would ordinarily be withheld pursuant to 9-3.1 and 9-3.2. If the next regular progress payment is less than the total of the amounts to be withheld therefrom, the Contractor shall immediately either deposit with the Agency cash in the amount of the difference or deposit with the Escrow Agent additional securities having a current cash conversion value equal to or greater than the difference.

The Contractor shall be the beneficial owner of any such securities on deposit with the Escrow Agency and shall be entitled to any interest earned thereon prior to conversion. The Agency may direct the Escrow Agency to convert securities with the Escrow Agency into cash, and to deliver the cash to the Agency, in any case where the Contractor is in default, including the following:

- a. where the Agency would be entitled to use funds withheld pursuant to 9-3.1 and 9-3.2 to satisfy claims of workers, materials suppliers or subcontractors, or to complete or correct work which the Contractor has failed or refused to complete or correct, or
- b. where the Contractor has failed to comply with the requirements of this section respecting the deposit of additional cash or securities to make up for a fall in the value of securities already on deposit with the Escrow Agency.

The Agency may hold and use cash resulting from such a conversion of securities in the same manner as it would be entitled to hold and use funds withheld pursuant to 9-3.1 and 9-3.2.

**9-3.2.2 Timely Progress Payments.** As required by Public Contract Code Section 20104.50, the Contractor is informed that should a progress payment not be made within 30 Days after receipt of an undisputed and properly submitted payment request from the Contractor, the Agency shall pay interest to the Contractor on the unpaid amount at the rate set forth in the Code of Civil Procedures, Section 685.010(a). Agency shall promptly review payment requests, and if not determined to be proper, document to the Contractor, within 7 Days, the reasons why the request is not proper.

Contractor should refer to the code sections cited for further information.

**9-3.3 Delivered Materials.** Payment for the cost of materials and equipment delivered to the Work site but not incorporated in the Work will be included in the progress estimate if, prior to the closure date for the monthly progress payment, the material or equipment is listed by the Contractor on the Agency's form together with date of delivery, vendor's or Subcontractor's name and cost; is accompanied by a copy of an invoice showing the cost thereof; has an aggregate cost in excess of \$5,000 for each progress payment; is currently on the Work site at an approved location and in good condition; and is one of the following:

1. Precast concrete units weighing more than 100 kilograms (200 pounds) each.
2. Structural steel members weighing more than 100 kilograms (200 pounds) each.
3. Individual pieces of electrical equipment costing over \$1,000 each.
4. Individual pieces of mechanical equipment costing over \$1,000 each.
5. Reinforced concrete pipe of any size.
6. Storm drainage pipe 900 mm (36") in diameter and larger.
7. Water and sewer pipe 300 mm (12") in diameter and larger.
8. Finish hardware for doors.
9. Other individual items of equipment costing over \$1,000 each
10. Materials where the aggregate value of a single type of material exceeds \$1,000 and is either:
  - a) Fabricated or cut to fit the Work before delivery, or
  - b) Of a size or type not available from any manufacturer without a special production run.

On unit price Bid items, the amount paid for materials or equipment delivered but not incorporated in the Work shall not exceed 75% of the amount of the Bid item which includes such material or equipment.

On lump sum Bid items, the amount paid for materials and equipment delivered and not incorporated in the Work shall not exceed 75% of the item in the approved schedule submitted in accordance with 9-2 of which such materials or equipment is a part.

Should materials or equipment previously paid for be damaged, destroyed, stolen or removed from the Work site, the payment previously made therefor will be deducted from the next progress payment, unless such materials or equipment are replaced prior thereto.

On the closure date for progress payments, as provided in 9-3.2, the Contractor shall certify that all materials and equipment not incorporated into the Work, for which payment has previously been made or is being requested, is still at the Work site and in good condition. Failure to provide such certification will be cause for deducting previous payments for materials not incorporated in the Work from the amount due the Contractor in the progress payment.

Payment for materials or equipment, as provided herein, shall not constitute approval or acceptance thereof nor shall such payment modify or abridge any of the rights the Agency has under the Specifications or at law nor relieve the Surety of any of its obligations under the bonds.

### **9-3.4 Mobilization**

**9-3.4.1 Scope.** Mobilization includes preliminary services, work and operations, including but not limited to, furnishing required bonds, obtaining necessary permits and work areas, providing a specified field office, the movement of labor, supplies, equipment and incidentals to the Work site, and for all other work, services and operations which must be performed or for which costs are incurred prior to performing work of the other Contract items.

**9-3.4.2 Payment.** The Contract lump sum price bid for mobilization shall include full compensation for furnishing all labor, materials, tools, equipment, services and incidentals and for doing all work involved in mobilization as specified herein. Payment for mobilization will be made as the Work proceeds on the following basis except that where a field office is required by the Specifications, no payment for mobilization will be made until the specified field office has been provided:

Partial payment estimate (excluding mobilization & water pollution control payments) as a percentage of the original Contract price (excluding the mobilization & water pollution control Bid items).		Cumulative amount of mobilization pay item earned is the lesser of the amounts as computed by these two columns.	
Equal to or greater than	Less than	Percentage of mobilization pay item	Percentage of the original Contract total.
5	10	50	5
10	20	75	7.5
20	50	95	9.5
50	Completion of Work	100	10
Completion of Work		100	

Where no Bid item is provided for mobilization, payment for mobilization shall be considered to be included in the other Bid items.

**9-4 TERMINATION OF AGENCY LIABILITY.** After completion of all work required by the contract, Agency will furnish Contractor a Release on Contract form stating the amount of total authorized payments for the project. Contractor shall execute and return said form within 21 days of receipt. Said form shall release and discharge the Agency from all claims of and liability to the Contractor for all manner of debts, demands, accounts, claims, and causes of action under or by virtue of said Contract except:

- The claim against the Agency for the remainder, if any, of the amounts retained as provided in 9-3.2, and any amounts retained as required by Stop Notices or Labor Code provisions.
- Any unsettled claims or disputes listed on the Release on Contract form which has been processed in compliance with the requirements for making claims under the Contract, including given timely notice pursuant to the applicable provisions of the Contract and following the procedure set forth in 6-12.

Acceptance of the Release on Contract by the Agency shall not be deemed a waiver or release of the Agency's right to contest either the substantive or procedural validity of any listed unsettled claims or disputes.

When executing the Release on Contract, the Contractor shall certify that each unsettled claim or dispute listed thereon has been processed in compliance with the requirements for making claims under the Contract, including giving timely notice pursuant to the applicable provisions of the Contract and following the procedures for resolution of disputes or claims set forth in 6-12 and that acceptance of the Release on Contract by the Agency shall not be deemed a waiver or release of the Agency's right to contest either the substantive or procedural validity of any listed unsettled claims or disputes.

If Contractor fails to execute and submit a Release on Contract within the 21 day time period set forth above, the Release on Contract shall be deemed to have been submitted with no unsettled claims or disputes listed on the Release on Contract. A payment of \$1.00 will be made to the Contractor for such Release on Contract and waiver.



## **SECTION 10 - DIVERSION, CONTROL AND REMOVAL OF WATER**

**10-1 DESCRIPTION.** This section covers the diversion, control and removal of all water entering into the construction area or otherwise affecting construction activities.

**10-2 REQUIREMENTS.** All permanent construction shall be performed in a site free from water unless otherwise provided for in the Special Provisions. The Contractor shall construct, maintain, and operate all necessary cofferdams, pumps, channels, flumes, drains, well points and/or other temporary diversion, protective, and water removal works required for diversion, control and removal of all water, whether surface or groundwater, whatever its source, during construction.

Inundation of partially completed Work due to lack of control during non-working periods will not be permitted, and may be cause for requiring removal and replacement of Work already completed.

The Contractor shall be responsible for obtaining the use of any property in addition to that provided for in the Plans and Specifications, which may be required for the diversion, protective, and water removal works so as not to create a hazard to persons or property or to interfere with the water rights of others.

It shall be understood and agreed that the Contractor shall hold the Agency and the Engineer harmless from legal action taken by any third party with respect to construction and operations of the diversion and protective works.

### **10-3 DIVERSION AND CONTROL WORKS.**

Prior to beginning of work involving diversion, control and removal of water, the Contractor shall submit a water control plan to the Engineer. In the event circumstances during the course of construction require changes to the original water control plan, a revised water control plan shall be promptly submitted to the Engineer in each instance. No responsibility shall accrue to the Engineer or the Agency as a result of the plan or as a result of knowledge of the plan.

Construction and operation of the diversion, control and removal works shall be in accordance with the water control plan submitted, except deviations therefrom may be specifically approved by the Engineer.

All works installed by the Contractor in connection with dewatering, control, and diversion of water but not specified to become a permanent part of the Work, shall be removed and the site restored, insofar as practical, to its original condition prior to completion of construction or when directed by the Engineer.

**10-4 PAYMENT.** No separate Bid item is included. Payment for this item of Work will be considered to be included in the payments made for other items of Contract Work to which water control is incidental.

## PART 2 CONSTRUCTION MATERIALS

### SECTION 200 - ROCK MATERIALS

#### 200-1 ROCK PRODUCTS

##### 200-1.6 Stone for Riprap

**200-1.6.1A Alternate Stone for Riprap.** As an alternate to the requirements of Subsection 200-1.6, the sample may be subject to the following tests:

TESTS	TEST METHOD NO.	REQUIREMENTS
Apparent Specific Gravity	ASTM C 127	2.40 Min.
Resistance to Abrasion	ASTM C 535, Grading 1	35% Max.
Soundness	Section 211-8	10% Max.
Wet and Dry Loss	Section 211-9	5% Max.
Solubility	Section 211-10	No Loss

All rock shall be angular or subangular in shape. Angular shall be defined as having sharp corners and straight planes on all faces, with no evidence of wear caused by wind, water or abrasion. Subangular shall be defined the same as angular except that evidence of wear by wind, water or abrasion may be allowed. Determination of angularity will be made by the Engineer.

##### 200-1.6.2 Riprap Size

The individual classes of rock used for riprap shall conform to the following:

Rock Sizes	RIPRAP CLASSES					
	1-Tonne (1-Ton)	½-Tonne (½-Ton)	¼-Tonne (¼-Ton)	Light	Facing	Cobble
	PERCENTAGE LARGER THAN					
2-Tonne (2-Ton)	0-5					
1-Tonne (1-Ton)	50-100	0-5				
½-Tonne (½-Ton)		50-100	0-5			
¼-Tonne (¼-Ton)	90-100		50-100	0-5		
100-kg (200-lb)		90-100		50-100	0-5	
35-kg (75-lb)			90-100	90-100	50-100	0-5
10-kg (25-lb)					90-100	95-100
0.5-kg (1-lb)	100	100	100	100	100	100

The amount of material smaller than the smallest size listed in the table for any class of riprap shall not exceed the percentage limit listed in the table determined on a weight basis.

Compliance with the percentage limit shown in the table for all other sizes of the individual pieces of any class of riprap shall be determined by the ratio of the number of individual pieces larger than the specified size compared to the total number of individual pieces larger than the smallest size listed in the table for that class.

Flat or needle shapes will not be accepted unless the thickness of individual pieces is greater than 1/3 the length.

Before placing in final location, depositing, or stockpiling within the project limits, each individual load of riprap must meet the size requirements of the class specified.

## SECTION 206 - MISCELLANEOUS METAL ITEMS

### 206-3 GRAY IRON AND DUCTILE IRON CASTINGS

#### 206-3.3.2A Manhole Frame and Cover Sets

Unless otherwise specified, manhole frames and covers shall be in accordance with the following Standard Plans contained in the SPPWC:

Clear Opening Diameter mm (Inches)	SPPWC Plan No.	Catalog Numbers	
		Alhambra Foundry	Long Beach Iron Works
600 (24)	630-1	A-1495	X-162
675 (27)	631-1	A-1496	X-164
750 (30)	632-1	A-1497	X-163
900 (36)	633-1	A-1498	X-106A

### 206-5 METAL RAILINGS.

#### 206-5.2 Flexible Metal Guard Rail Materials.

**206-5.2A Flexible Metal Guard Rail Materials; Modification.** The "Construction" grade Douglas Fir for "posts, including blocks" does not have to be "free of heart center".

## SECTION 210 - PAINT AND PROTECTIVE COATINGS

**210-6 STORM DRAIN HARDWARE.** All storm drain hardware, including manhole frames and covers, grates, protection bars, steps, etc., shall be protected from corrosion.

Storm drain hardware made of cast iron shall be protected by painting with, or dipping in, a commercial grade asphalt paint. Storm drain hardware made of steel shall be galvanized.

## SECTION 211 - MATERIAL TESTS

**211-6 SIEVE ANALYSIS.** Sieve analysis shall be performed in accordance with ASTM C136.

**211-7 Sand Equivalent Test.** This test is intended to serve as a field test to indicate the presence or absence of plastic fine material. The test shall be run in accordance with Calif. test 217 or ASTM D2419. When testing material containing asphalt, this test method shall be modified by drying the sample at a temperature not exceeding 38°C (100°F).

**211-8 R-VALUE.** Resistance (R-value) shall be determined by California Test 301.

**211-9 SPECIFIC GRAVITY AND ABSORPTION.** Apparent specific gravity, bulk specific gravity and absorption shall be determined by California Test 206, 207, 208, 209, 224, 225, or 308, Method C where zinc stearate may be substituted for paraffin.

**211-10 LOS ANGELES RATTLER TEST.** Loss in Los Angeles Rattler shall be determined by California Test 211.

**211-11 SOUNDNESS.** For riprap, the soundness shall be determined in accordance with Calif. Test 214, excluding sections D, E, G.2.b, and H, and adding the following:

- a. The test sample shall be prepared by breaking or sawing a representative sampling of riprap into particles passing the 75 mm (three inch) and retained on the 50 mm (two inch) sieve. If there are a variety of rock types or degrees of weathering within a rock type, each unique type or condition must meet the loss requirement.
- b. The test sample size shall be 25,000 grams (55 lbs.)  $\pm$  1 percent.
- c. All particles of test sample which break into three or more pieces during testing shall be discarded. The remaining sample shall be washed on a 4.75 mm (#4) sieve and all particles retained shall be oven dried.
- d. The loss in weight shall be determined by subtracting from the original weight of the test sample the final weight of all particles retained on the 4.75 mm (#4) sieve. Divide the loss in weight by the original weight and multiply by 100 to determine the percent loss.
- e. Report the following:
  - (1) The percent loss.
  - (2) The number of pieces affected, classified as to number disintegrating, splitting, crumbling, cracking, flaking, etc.

**211-12 WET AND DRY LOSS.** Wet and dry loss shall be determined as follows:

A sample of rock shall be crushed, screened, oven dried, and 1,000 g (2.2 lbs.) to 1,500 g (3.3 lbs.) of the 19 mm (3/4 inch) to 9.5 mm (3/8 inch) fraction shall be taken for the test.

The crushed and graded sample shall be submerged in tap water for 8 hours at room temperature, after which the sample shall be drained and oven dried at 78°C (140°F). When dry, the sample shall be cooled to room temperature. This completes one cycle.

After 10 cycles, the percent loss shall be computed as follows:

$$\% \text{ Loss} = \frac{100 \times \text{Weight of Material Passing 4.75 mm (No. 4) Sieve}}{\text{Total Weight of Sample}}$$

**211-13 SOLUBILITY.** Approximately 0.5 kg (one pound), air dried samples shall be immersed in local tap water and in Pacific Ocean water (or a 3.5% sodium chloride solution) for 8 hours each at 78°C (140°F). After immersion, the samples shall be washed with tap water, air dried and reweighed.

**211-14 Permeability Test.** Permeability tests for granular soils shall be performed in accordance with ASTM D2434, using samples compacted to the specified field density.

## **PART 3 CONSTRUCTION METHODS**

### **SECTION 301 - TREATED SOILS, SUBGRADE PREPARATION AND PLACEMENT OF BASE MATERIALS**

#### **301-1 SUBGRADE PREPARATION**

##### **301-1.3 Relative Compaction**

**301-1.3.1 Firm, Hard and Unyielding.** The term "firm, hard and unyielding" as used in 301-1.3 shall mean that when the heaviest construction and hauling equipment used on the Work drives over the subgrade, no permanent deformation shall occur either before or during pavement construction.

**301-1.4 Subgrade Tolerances.** Subgrade for pavement, sidewalk, curb and gutter, driveways, or other roadway structures shall not vary more than 15 mm (0.05 feet) from the specified grade and cross section. Subgrade for subbase or base material shall not vary more than 15 mm (0.05 feet) from the specified grade and cross section.

Variations within the above specified tolerances shall be compensating so that the average grade and cross section specified are met.

#### **301-2 UNTREATED BASE**

##### **301-2.3 Compacting**

**301-2.3.1 Tolerances.** The tolerance requirement in 301-2.3 is modified from 6 mm (0.02 foot) to 15 mm (0.05 foot).

### **SECTION 302 - ROADWAY SURFACING**

#### **302-5 ASPHALT CONCRETE PAVEMENT**

##### **302-5.1 General**

**302-5.1.1 Asphalt Concrete Berms.** Asphalt concrete berms shall be constructed of Class III-D-PG70-10 asphalt concrete by mechanical means to conform to the details and location as shown on the Plans.

A tack coat, as provided in 302-5.4, shall be applied to the existing or new pavement preceding the placement of the asphalt concrete berms.

##### **302-5.4 Tack Coat**

**302-5.4.1 Fog Seal.** When specified, a fog seal consisting of material meeting the requirements of 203-3 shall be applied to the surfaces of all completed asphalt concrete at the rate of 0.36 liter per square meter (0.08 gallon per square yard) of the combined emulsion or such lesser rate ordered by the Engineer. Surface to be sealed shall be free from dust, dirt, and other foreign material. Surface shall be sealed within 7 Days after paving.

##### **302-5.9 Measurement and Payment**

**302-5.9.1 Measurement and Payment for Asphalt Berm.** Asphalt concrete berms will be paid for at the Contract Unit Price per linear meter (feet) of berm in place. No separate measurement or payment will be made for asphalt, aggregate, or tack coat.

**302-5.9.2 Measurement and Payment for Fog Seal, Tack Coat, and Prime Coat.** Measurement and payment for the specified material shall be by the tonne (ton) in place. Emulsions shall be measured after the specified dilution has been made.

## **SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION**

### **303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS AND DRIVEWAYS**

#### **303-5.1 Requirements**

**303-5.1.4 Concrete Substitution.** Class 280-C-14 (470-C-2000) may be used in lieu of Class 310-C-17 (520-C-2500) and Class 280-D-14 (470-D-2000) in lieu of Class 310-D-17 (520-D-2500) as specified in 201-1.1.2 for street surface improvements, excluding concrete pavement, when no class is specified on the Plans or in the Special Provisions.

## **SECTION 306 - UNDERGROUND CONDUIT CONSTRUCTION**

### **306-1 OPEN TRENCH OPERATIONS**

#### **306-1.2 Installation of Pipe**

##### **306-1.2.1 Bedding**

**306-1.2.1.1 Bedding Material.** When native material is allowed for backfill in the bedding zone, no rocks larger than 40 mm (1½") in maximum dimensions shall be included. Material containing ashes, cinders, and types of refuse or other deleterious material shall not be used as bedding.

**306-1.2.1.2 Sewer Pipe Bedding.** Bedding for sewer pipe from 100 mm (4") below the pipe to the spring line (horizontal diameter) of the pipe shall be free draining, granular material with a maximum size of 15 mm (1/2 inch), unless another bedding method is shown on the Plans.

Densification of the bedding material may be by the application of water or by mechanical means. Unless otherwise specified, all bedding material shall be densified to a relative density of 90%. Acceptability of densification in the bedding zone will be determined by visual inspection and probing to determine that no voids exist in the backfill material. In this paragraph, the word "voids" does not include intergranular voids in the soil structure.

**306-1.2.1.3 Flexible Pipe Bedding.** Bedding for flexible drainage and sewer pipe shall be granular material having a sand equivalent of at least 50. The bedding material shall be placed and compacted from 150 mm (six inches) below the pipe to the top of the bedding as defined in 306-1.2.1. A 1 m (three foot) long section of low permeability material (50% passing 75 µm (200) sieve) shall be installed and mechanically compacted in lieu of the above specified bedding material at intervals of 60 m (200 feet) or as otherwise indicated on the Plans.

**306-9 DISINFECTION.** All water mains and appurtenances shall be disinfected before being placed in service in accordance with AWWA C651 except as specified herein:

- a. The water mains shall be chlorinated so that a chlorine residual of not less than 20 ppm remains in the water after standing in the pipe for 24 hours.
- b. The Agency will perform sampling and testing of bacteriologic samples. Disinfection shall be repeated until two or more consecutive samples are negative for coliform organisms.

The pressure in the line being chlorinated shall be maintained at least 35 kPa (5 psi) lower than that existing in any Agency line to which it is connected.

## **306-10 WATERWORKS APPURTENANCES**

**306-10.1 Valves.** Valves shall be located as shown on the drawings.

Each valve shall be operated prior to its installation to assure proper functioning. Valves shall be installed plumb and in alignment with the water main. Valves shall be anchored by metal ties to a concrete base. Line valves may be moved to the closest joint upon approval of the Engineer.

**306-10.2 Valve Boxes.** Each underground valve shall be provided with a valve box. The valve boxes shall be installed plumb and centered over the operating nut of the valve. Valve boxes shall be installed with concrete collars.

Where valve boxes are to be placed in asphaltic type pavement, they shall not be set to grade until after paving has been completed.

Where valve boxes are to be placed in concrete pavement, they shall be set to grade prior to paving operations.

**306-10.3 Thrust Devices.** A reaction or thrust device shall be provided on all dead ends, tees, elbows, and bends with more than 5 degrees deflection on pressure pipe lines.

Thrust devices shall be cast-in-place concrete, poured against undisturbed or compacted earth. Thrust devices shall be sized and constructed in accordance with the Plans.

Thrust devices and anchor blocks shall be constructed of Class 280-C-14 (420-C-2000) concrete. Thrust devices and anchor blocks shall be cured at least 7 Days where Type IP or II cement is used or at least 48 hours where Type III cement is used.

Metal tie-rods or clamps shall be of adequate strength to prevent movement of pipe. All metal shall be coated in accordance with AWWA C110.

**306-10.4 Fire Hydrants.** Fire Hydrants shall be installed as shown on the Plans.

All hydrants shall stand plumb and shall have their nozzles parallel with or at right angles to the curb, with the pumper nozzle facing the curb, except that hydrants having only two hose nozzles 90 degrees apart shall be set with each nozzle facing the curb at an angle of 45 degrees.

In uncurbed public road rights of way, fire hydrants shall be located as far as possible from the traveled way while providing a 1 m (3-foot) wide clear space between the fire hydrant and the right of way line. In curbed public road rights of way, fire hydrants shall be installed so that there is 300 mm (12 inches) clear between the face of curb and the fire hydrant.

**306-10.5 Fire Hydrant Barricades.** Fire hydrant barricades shall consist of 100 mm (4-inch) standard steel pipe, schedule 40, filled with concrete, and having a total length of 2 m (72 inches). They shall be embedded in concrete blocks 300 mm (12 inches) in diameter and 1000 mm (40 inches) deep below ground surface with the barricade pipe embedded to 100 mm (4 inches) above the bottom of the concrete so 1 m (36 inches) extends above ground surface. The steel pipe above ground shall be painted chrome yellow in accordance with AWWA C503.

Barricades shall be installed between the fire hydrant and vehicle traffic paths at locations indicated on the Plans or where required by the water purveyor or Fire Department. Barricades shall not be installed within public road rights of way.

Fire hydrant barricades shall not obstruct the hydrant outlets.

## **SECTION 310 - PAINTING**

### **310-5 Painting Various Surfaces**

#### **310-5.6 Painting Traffic Striping, Pavement Markings, and Curb Markings.**

**310-5.6.8A Application of Paint - Two Coats** All painted traffic striping and markings shall be applied in two coats. The price named in any Bid item for painting traffic striping and markings shall include all costs for both applications, including any delays entailed for the required drying time between applications. If bleeding, curling or discoloration occurs following application of the second coat, unsatisfactory areas shall be given an additional coat, or coats, of paint. No additional payment will be made for work necessary to correct bleeding, curling or discoloration.



## **PART 4**

### **SECTION 400 - ALTERNATE ROCK PRODUCTS, ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE AND UNTREATED BASE MATERIAL**

#### **400-1 Rock Products**

##### **400-1.1 Requirements**

###### **400-1.1.1 General**

Alternate rock material, Type S, as specified in Section 400 may be used on the Work.

###### **400-3 Portland Cement Concrete**

Suppliers of portland cement concrete shall file mix designs as required by 400-1.1.2

###### **400-4 Asphalt Concrete**

Suppliers of asphaltic cement concrete shall file mix designs as required by 400-1.1.2



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

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

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

PRODUCER	CONTACT NAME	
	PHONE (City, St., Zip):	FAX (City, St., Zip):
INSURED	ADDRESS:	
	PRODUCER	
	CUSTOMER ID #	
	INSURER(S) AFFORDING COVERAGE	
	NAIC #	
	INSURER A:	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:

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

TYPE OF COVERAGE	TYPE OF INSURANCE	ADDITIONAL INSURED	POLICY NUMBER	POLICY EFF. DATE (MM/DD/YYYY)	POLICY TERM (MM/DD/YYYY)	LIMITS
GENERAL LIABILITY	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					EACH OCCURRENCE \$
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					DAMAGE TO RENTED PREMISES (Per occurrence) \$
						MED EXP (Any one person) \$
						PERSONAL & ADV INJURY \$
GENERAL AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$
<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PER-ACC <input type="checkbox"/> LOC						PRODUCTS - COMMER AGG \$
AUTOMOBILE LIABILITY	<input checked="" type="checkbox"/> ANY AUTO					COMBINED SINGLE LIMIT (Per accident) \$
	<input type="checkbox"/> ALL OWNED AUTOS					BODILY INJURY (Per person) \$
	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS					PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> NONOWNED AUTOS					\$
						\$
UMBRELLA LIAB	<input checked="" type="checkbox"/> EXCESS LIAB <input checked="" type="checkbox"/> OCCUR					EACH OCCURRENCE \$
	<input type="checkbox"/> CLAIMS-MADE					AGGREGATE \$
	<input type="checkbox"/> DEDUCTIBLE					\$
	<input type="checkbox"/> RETENTION \$					\$
WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	<input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/NEVERA EXCLUDED? (Waiver only in PR)	<input type="checkbox"/> Y/N				<input checked="" type="checkbox"/> WC STATL <input type="checkbox"/> ORA RS
	<input type="checkbox"/> If yes, describe under DESCRIPTION OF OPERATIONS below					\$
						\$
						\$
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)						\$

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

Agency - (Project name) (Spec. No. #) (City, St., Zip)

The Agency and the County of Ventura, including its boards and all special districts governed by the Board of Supervisors is named as Additional Insured as respects work done by the Contractor under the terms of the contract on General Liability and auto Liability Policies. Waiver of Subrogation is applicable to the agency and the County of Ventura, its boards and all special districts governed by the Board of Supervisors for Work Comp and General Liability.

Endorsements required for the referenced contract will be issued by the Insurance Company.

## CERTIFICATE HOLDER

## CANCELLATION

County of Ventura  
Public Works Agency L-1670  
800 South Victoria Avenue  
Ventura, CA 93009-1670

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

AUTHORIZED REPRESENTATIVE

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ACORD 25 (2008/09)

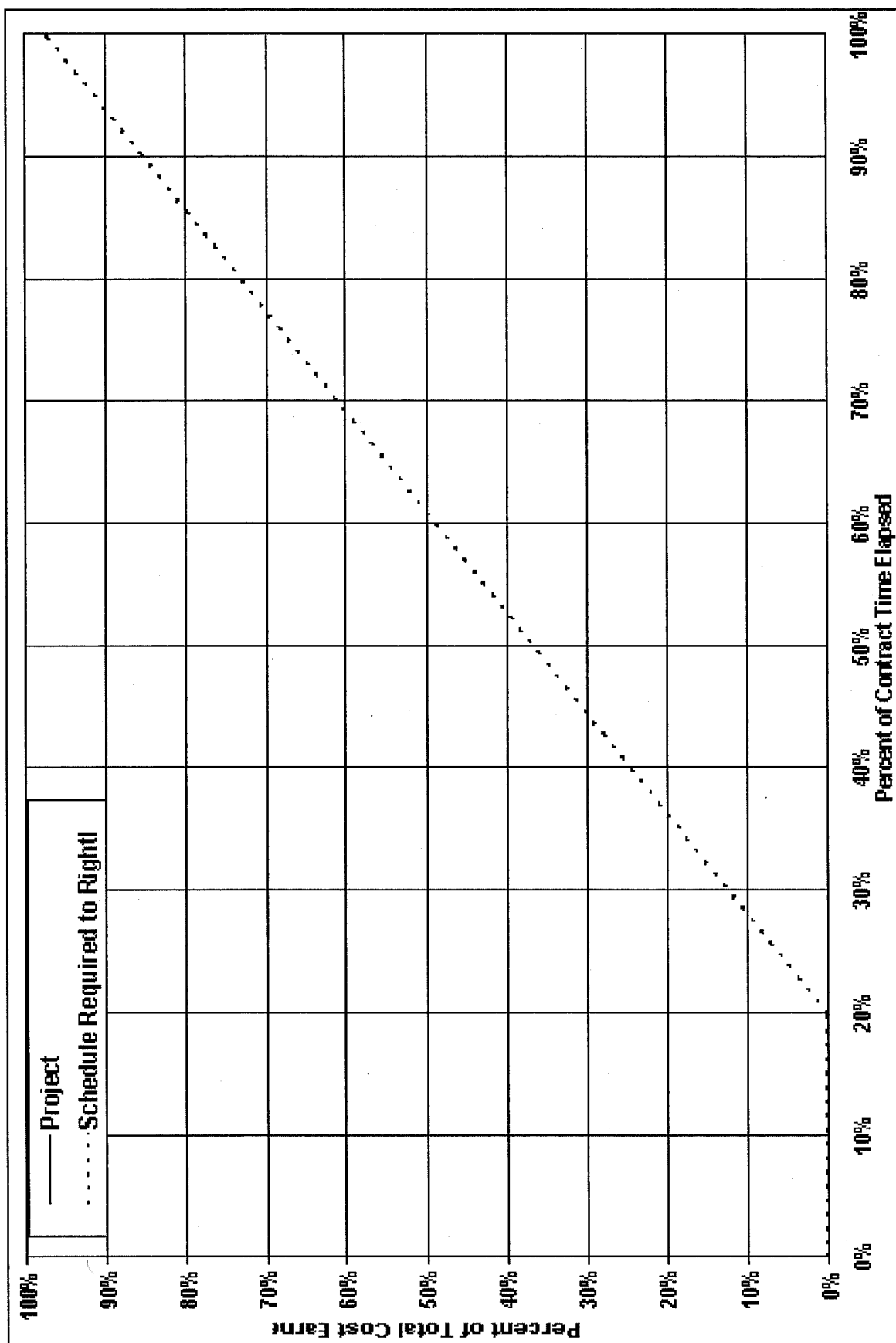
The ACORD name and logo are registered marks of ACORD

EACH HORIZONTAL INTERVAL EQUALS \_\_\_\_\_ WORKING DAYS OF CONTRACT TIME

Date \_\_\_\_\_

Spec. No.

Project Name



[illegible]

	EACH HORIZONTAL INTERVAL EQUALS	1	WORKING DAYS OF CONTRACT TIME
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Submitted Dilbert and Company Construction

Contractor

By *Tina Blair*

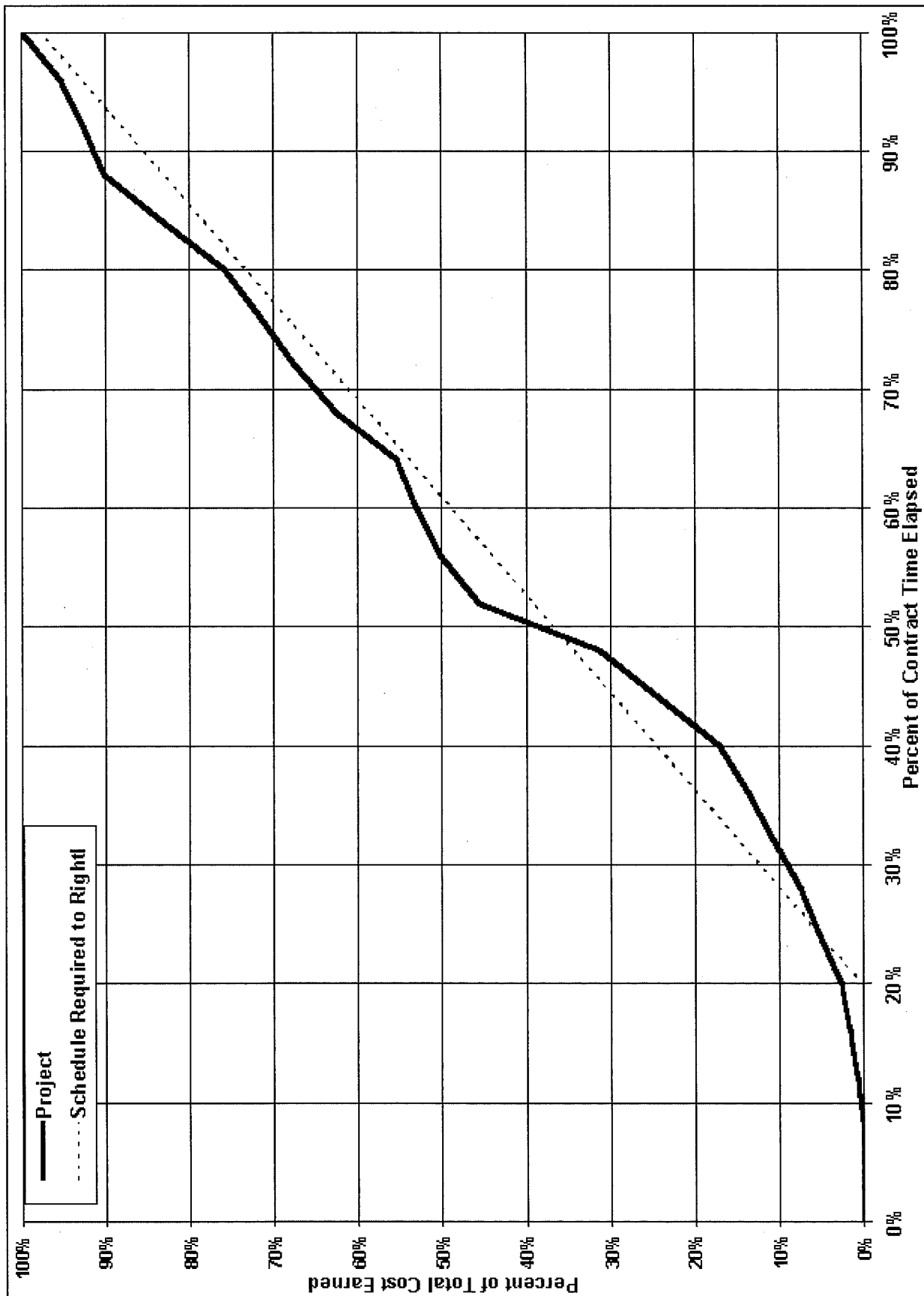
5/22/97

Date

**Title President**

FC97-32

Arroyo Santa Margarita



ESCROW AGREEMENT FOR  
SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between

("Agency") whose address is \_\_\_\_\_ and

("Contractor") whose address is \_\_\_\_\_ and

("Escrow Agent") whose address is \_\_\_\_\_.

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

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Agency pursuant to the Construction Contract entered into between the Agency and Contractor for \_\_\_\_\_ in the amount of dated \_\_\_\_\_, (hereinafter referred to as the "Contract") which Contract is identified by Spec. No. \_\_\_\_\_ and Auditor Controller's Contract No. \_\_\_\_\_. Alternatively, on written request of the Contractor, the Agency shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Agency within ten days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Agency and Contractor. Securities shall be held in the name of \_\_\_\_\_, and shall designate the Contractor as the beneficial owner.

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

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

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the escrow account. These expenses and payment terms shall be determined by the Agency, Contractor and Escrow Agent.

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

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

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

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

(9) Escrow Agent shall rely on the written notifications from the Agency and the Contractor pursuant to Sections (1) to (8), inclusive, of this Agreement and the Agency and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

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

On behalf of Agency:

\_\_\_\_\_, Director,  
Public Works Agency

\_\_\_\_\_, Director  
Central Services Department

\_\_\_\_\_, Director  
Engineering Services Department

Address for all of the above:  
Public Works Agency  
800 South Victoria Avenue  
Ventura, CA 93009

**SAMPLE FORM**

Form used for escrow will have names and  
signatures of persons authorized in accordance  
with paragraph 10.

On behalf of Contractor:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City & State

\_\_\_\_\_  
Zip Code

On behalf of Escrow Agent:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City & State

\_\_\_\_\_  
Zip Code

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

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

Agency:  
(Agency name)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

Contractor:  
(Contractor company name)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature



**EXHIBIT "A"**  
**ESCROW INSTRUCTIONS**

The parties to this escrow are \_\_\_\_\_ ("Agency") and \_\_\_\_\_ ("Contractor") and \_\_\_\_\_ ("Escrow Agent"). Agency and Contractor have entered into a contract for the construction of \_\_\_\_\_ which contract is identified by Spec. No. \_\_\_\_\_ and Auditor-Controller's Contract No. \_\_\_\_\_ and was entered into by and between Agency and Contractor ("Construction Contract"). Pursuant to Public Contract Code Section 22300, Contractor may substitute certain securities for an equivalent amount of money required to be withheld from progress payments by Agency to Contractor pursuant to the Construction Contract.

The Escrow Agent is hereby instructed as follows:

1. Contractor may deliver to Escrow Agent:
  - (a) Securities of the types specified in Sections 22300 of the Public Contract Code and Section 16430 of the Government Code.
  - (b) Such other documents as are necessary to enable Escrow Agent to convert such securities into cash.
2. Upon receipt of such securities and other documents, Escrow Agent shall notify Agency within ten days of the deposit, and shall examine them to determine whether they are in a form sufficient to effect conversion of the securities into cash. Escrow Agent shall thereupon send written notice of its determination to Agency.
3. Escrow Agent shall hold such securities as trustee for Agency. The right of Agency to such securities is superior to any other lien or claim of lien; provided, however, that Contractor shall be entitled to any interest earned by such securities prior to their conversion to cash pursuant to section 5 hereof, and further provided that such interest may be withdrawn by Contractor at any time and from time to time without notice to Agency.

Securities may be substituted by Contractor, but any securities substituted for securities previously deposited shall not reduce the current cash value of securities held below that last reported to Agency by Escrow Agent.
4. Escrow Agent shall determine the current cash value of such securities held by it as of the close of business on the first business day following the \_\_\_\_\_ day of each month and, in addition, on any other days which the Agency may from time to time specify in a written notice to Escrow Agent. Current cash value shall be determined as follows:
  - (a) For securities traded over-the-counter or on a stock exchange:
    - (1) Determine either the current bid price for the securities as of the close of business or the face value of the securities, whichever is less.
    - (2) Subtract the cost of sale (broker commission).
    - (3) Subtract all unpaid escrow fees and costs associated therewith.
  - (b) For certificates of deposit:
    - (1) Determine the face amount.
    - (2) Subtract the potential interest penalty for immediate conversion.
    - (3) Subtract all unpaid escrow fees and costs associated therewith.
  - (c) Determine the value of other securities by procedures calculated to determine net realizable value. Promptly upon making each such determination, Escrow Agent shall notify Agency of the securities held and current cash value of such securities.

5. At any time or times that Agency believes it has a right to do so under the provisions of the Construction Contract, Agency may, without the consent of Contractor, deliver to Escrow Agent a written demand that Escrow Agent convert to cash all or any part of such securities. Upon seven days' written notice from Agency of such demand, Escrow Agent shall convert to cash all or part of such securities as demanded and shall distribute the cash as instructed by the Agency.
6. When the Construction Contract has been satisfactorily completed on the part of Contractor and any stop notices filed against the Construction Contract have been released, Agency shall give written notice to Escrow Agent that such securities may be returned to Contractor. Upon receipt of such written notice and payment of all escrow fees and costs, the Escrow Agent shall deliver to Contractor all money, interest, securities and other documents remaining in escrow and the escrow shall terminate.
7. Contractor, and not Agency, shall be liable to Escrow Agent for all of Escrow Agent's fees and costs associated with this escrow.
8. The Director of the Ventura County Public Works Agency, a Department Director of said Agency, or other person authorized in writing by such Director or Department Director is authorized to give written notice and to make written demands on behalf of Agency pursuant to sections 4, 5 and 6 hereof.
9. All written notices and demands pursuant to the escrow agreement and these instructions shall be addressed as follows:

(a) To Agency:

Director, Ventura County Public Works Agency  
800 South Victoria Avenue  
Ventura, California 93009

(b) To Contractor:

(c) To Escrow Agent:

DATED: \_\_\_\_\_

By _____	By _____	By _____
Title _____	Title _____	Title _____

AGENCY

CONTRACTOR

ESCROW AGENT

Bank Charter: State ☐   
Federal ☐

Escrow Agent's Address:

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



RELEASE ON CONTRACT

CONTRACT NAME: \_\_\_\_\_

SPEC. NO. \_\_\_\_\_, PROJECT NO. \_\_\_\_\_

WHEREAS, by the terms of the contract dated \_\_\_\_\_, 20\_\_\_\_ entered into by

\_\_\_\_\_, and the undersigned CONTRACTOR,

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

undersigned CONTRACTOR agreed to perform certain work for the compensation specified in said contract; and

WHEREAS, the CONTRACTOR represents that said work is fully completed and that final payment is due to the CONTRACTOR under terms of said contract,

NOW, THEREFORE, in consideration of the promises and the payment by [AGENCY NAME] to the CONTRACTOR of the amount due under the contract, to wit, the sum of \$\_\_\_\_\_ and the additional consideration of \$1.00, receipt of which is hereby acknowledged by the CONTRACTOR, the CONTRACTOR hereby releases and forever discharges \_\_\_\_\_ of and from all manner of debts, dues, demands, sum or sums of money, accounts, claims and causes of action, in law and in equity, under or by virtue of said contract except the claim against the Agency for the remainder, if any, of the amounts retained as provided in 9-3.2, any amounts retained as required by Stop Notices or Labor Code Provisions, and any unsettled claims or disputes as follows: (If none, leave blank)

Description of Claim or Dispute	Amount	Date of Claim	Date of Notice of Potential Claim
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The CONTRACTOR certifies that each unsettled claim or dispute listed hereon has been processed in compliance with the requirements for making claims under the contract, including giving notice pursuant to the applicable provisions of the contract, and following the procedures for resolution of disputes or claims set forth in subsection 6-12 of the contract. Acceptance of this Release on Contract by the [Agency Name] shall not be deemed as a waiver or release of its right to contest either the substantive or procedural validity of any listed unsettled claims or disputes.

IN WITNESS WHEREOF, the hand and seal of the CONTRACTOR have been  
hereunto set this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

THIS FORM MUST BE ACCOMPANIED  
by a proper acknowledgement form  
(See Civil Code Section 1189)

Contractor

By

Title

**SURETY BONDS  
PERFORMANCE BOND**

Whereas, the «Agency», hereinafter called "Agency", and «Contr», hereinafter called "principal", have entered into a contract dated «ContrDate» whereby principal agrees to complete certain designated work identified as project «ProjName» (Spec. No. «SpecNo»), and to perform other duties and obligations as described in said contract, which is incorporated herein by this reference and made a part hereof; and

Whereas, principal is required under the terms of said contract to furnish a bond to guarantee principal's faithful performance of the work and all terms and conditions of the contract;

Now, therefore, we the principal and the undersigned, as corporate surety, are held and firmly bound unto Agency in the penal sum of «CostText» (\$«OrigCostFmtd») lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

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

The above obligation shall continue after Agency's acceptance of the work for the duration of the warranty period as specified in the contract during which time if principal fails to make full, complete, and satisfactory repair or replacement to the work and/or fails to protect Agency from loss or damage resulting from or caused by defective materials or faulty workmanship, the obligation of surety hereunder shall continue so long as any obligation of principal remains.

**PAYMENT BOND**

And, whereas, under the terms of said contract, principal is required before entering upon the performance of the work, to file a good and sufficient payment bond with the Agency to secure the claims to which reference is made in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code of the State of California.

Now, therefore, said principal and the undersigned, as corporate surety, are held firmly bound unto the Agency and all contractors, subcontractors, laborers, material suppliers and other persons employed in the performance of the aforesaid contract and referred to in the aforesaid Civil Code in the like sum of «CostText» dollars (\$«OrigCostFmtd») for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, 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 the contractor's subcontractors, that said surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees including reasonable attorney's fees incurred in successfully enforcing such obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should this condition of this bond be fully performed, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

**GENERAL TERMS**

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said contract or the plans and specifications accompanying the same shall in any manner affect its obligations on these bonds, and it does hereby waive notice of any such change, extension, alteration or addition.

Nothing herein shall limit the Agency's rights or surety's obligations under the contract or applicable law, including, without limitation, California Code of Civil Procedure section 337.15.

In witness whereof, this instrument has been duly executed by the principal and surety above named

on \_\_\_\_\_, 20

«Contr»  
Name of Principal

By \_\_\_\_\_

Title \_\_\_\_\_

Name of Surety

By \_\_\_\_\_

Attorney-in-Fact

Address \_\_\_\_\_

City \_\_\_\_\_

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

INDICATE COMPLETE ADDRESS OF SURETY TO WHICH  
CORRESPONDENCE CONCERNING THIS BOND SHOULD BE  
DIRECTED.

**SAMPLE BOND FORM**

Agency will prepare the Bond in this format and transmit it to the Contractor along with the Contract and the Notice of Award letter.

Surety shall fill in the Bond No., date identification and signature of surety in places provided.

Contractor shall sign and indicate title in place provided.

Telephone No. \_\_\_\_\_

A-467/9-Tmpl

## **SECTION 1000**

### **GENERAL RESPONSIBILITIES OF THE CONTRACTOR**

#### **1000-1      SCOPE**

General responsibilities and miscellaneous administrative requirements shall be complied with as specified in the Standard Specifications, the plans, and these Special Provisions.

#### **1000-2      AWARD AND START OF CONTRACT**

The Agency is allowed 60 days to award a contract per 2-1.1, however it is the Agency's intent to award a contract immediately following the Bid Opening provided that the lowest responsive, responsible bidder's bid is within the amount authorized by the Agency Director. The Contractor is required to provide to the Agency the necessary insurance, bonds, signed contract documents, Stormwater Pollution Control Plan, and Construction Schedule to the Agency a minimum of seven days prior to the starting date of the contract. The starting date of the contract will be 14 calendar days after award.

#### **1000-3      PRE-BIDDING-CONFERENCE**

The pre-bid conference will be held at the place and time indicated on Page 1 of the Proposal for the purpose of answering any questions concerning the project. The information transmitted at this meeting will not change or modify the plans and specifications. Any modifications will be forwarded to all plan holders as an addendum.

#### **1000-4      CONTRACTOR'S REPRESENTATIVE**

The Contractor to whom the contract is awarded shall provide the following information in writing and submit it at the time and concurrently with the signed contract, contract bonds and certificates of insurance. Failure to comply may result in delays in the processing of the contract documents.

1. Name of authorized representative at the job site.
2. Address and telephone number where the above person can be reached.

3. Address of the nearest office of the Contractor, if any, and the name and telephone number of a person at that office who is familiar with the project.
4. Address and telephone number of the Contractor's main office and the name and telephone number of the person at that office familiar with the project.

1000-5 **CONSTRUCTION SCHEDULE**

In addition to the requirements of 6-1, the following shall apply: An updated construction schedule shall be submitted monthly prior to each progress payment closure date. Processing of progress payments will be delayed until the schedule complying with this Special Provision and the Standard Specification is received and approved. If the Contractor intends to submit a computer generated schedule, it shall be generated in Microsoft Project, and submitted in electronic and hard copy forms.

1000-6 **CONSTRUCTION SURVEYS**

Surveys provided by the Contractor pursuant to Subsections 2-9.3 through 2-9.7 required for construction of facilities shall conform to the general industry standards and the following minimum quality and standards.

1000-6.1 **Performance and Accuracy**

The surveys shall be accomplished with sufficient precision to result in the required accuracy and shall be performed under the supervision of a Land Surveyor or Civil Engineer licensed by the State of California. The requirements herein shall apply to the minimum essential control required to accomplish establishment of lines and grades by the Contractor, and to provide the Engineer the necessary references for insuring construction accuracy. Contractor shall utilize conventional surveying methods. Survey GPS/ modeling shall not be allowed.

1000-6.2 **Details of Staking**

1000-6.2.1 **Alignment**

Centerline alignment stakes or offset stakes shall be set at a maximum of 50-foot intervals and at all curve points, angle points, and changes in elevation or wall height. On curves, stakes shall be set at 25-foot intervals.

#### **1000-6.2.2 Right-of-Way and Temporary Work Area Limits**

If required by the plans, Contractor shall establish those limits using ties to the survey control line provided on the plans. The accuracy shall be within plus or minus a half foot.

#### **1000-6.2.3 Rough Grade Stake**

For rough grading with cuts or fills, at least one line of stakes shall be set on catch or hinge points, or an offset line. These stakes shall be marked with cut or fill to permit rough finishing of the grading plane. Where slope check points have been set near the elevation of the grading plane, they may be used as rough grade stakes. The longitudinal interval shall be 50 feet.

#### **1000-6.2.4 Final Grade Stakes - Flood Control and Drainage Structures**

For RC concrete channels and box conduits 10-foot or less in width, earth channels 20 feet or less in width, and single levees, one set of final grade stakes shall be established in the invert to control and to check all elements of the structural section, earth channel or levee slopes. Two sets, one on each side of the invert, shall be established for any facility in excess of the above. These shall be in addition to those set outside the limits of the structure or the excavation. Offset distance from each edge of structure or centerline shall be a constant.

Grade shall refer to the plane of the finished invert or slope surface. The mark on the stake shall be on the plane or at a uniform vertical offset from the plane of the finished surface. Longitudinal spacing will be 50 feet for tangent alignment and grade. Spacing will be reduced to 25 feet when radius of curvature is less than 1,000 feet or when rate of change of slope is less than 0.005 ft/ft. Prior to concrete placement, grade stakes and forms shall be checked. Any displacement shall be corrected. If the displacement resulted from settlement or heave, or if the stakes were not used within a reasonable period of time after being set, they shall be re-staked.

For pipe conduits, stakes shall be set at the ends and at grade and line breaks. If conduit is to be constructed in stages, the ends of the staged lengths shall be staked. When ends of long, straight runs are not intervisible, intermediate stakes shall be set. The finished pipe grades shall be controlled by optical sighting devices. Use of string line will not be allowed.



#### **1000-6.2.5 Final Grade Stakes - Roadways**

One set of final grade stakes shall be set to control and to check all elements of the structural section of each roadbed, including AC and PCC pavements. Two lines, one on each side, shall be set for each roadbed. They shall be set outside the limits of the structural section. Offset from each edge of pavement is to be a constant. On wide roadway, grade stakes may be required on the centerline to control the crown. Grade will be referred to the plane of the pavement's surface. Longitudinal spacing will be 50 feet for tangent alignment and grade. Spacing will be reduced to 25 feet when radius of curvature is less than 3,000 feet or when rate of change of grade is more than 0.8 percent per station. Prior to Cement Treated Base (CTB) and/or paving operations, final grade stakes shall be checked.

#### **1000-6.2.6 Minor Drainage Structure Stakes**

References shall be established to the end of all side inlets and drains and to grade and line breaks. In certain cases, supplemental stakes may be necessary. If a drain is required to be constructed in stages, the ends of the staged lengths shall be staked. When ends of long, straight runs are not intervisible, intermediate stakes shall be set. Such intermediate stakes are to be intervisible, but the general spacing shall not be less than 200 feet. Horizontal and vertical locations of junctions drop inlets, risers, and manholes shall be staked. A minimum of two stakes should be set in each case. Show elevations on reference point.

#### **1000-6.2.7 Fence**

For fence along a right-of-way line not parallel to the channel centerline, the Engineer shall establish some right-of-way references for use by Contractor and the remaining references shall be set as follows:

- (1) For tangent alignment, set intervisible points at breaks in terrain or at a maximum interval of 200'±.
- (2) Set points for changes in alignment.
- (3) Set stakes at regular interval on curves. Use an interval of 50 feet for radii of 1,000 feet and greater; use 25 feet for shorter radii.

#### **1000-6.2.8 Miscellaneous**

Survey staking for miscellaneous facilities shall be performed as required by the Engineer.

1000-6.3     **Survey Notes**

All survey notes shall be kept on 8-1/2" x 11" standard Agency forms. Notes shall indicate the name of the project, the Contractor, the firm performing surveys and party chief, and shall be dated. Copies of the notes shall be provided to the Engineer or his representative within one day of performance. No construction work shall be initiated on an increment of the project before the Engineer or his field representative receives survey notes. The original notes shall be retained by the surveyor and submitted to the Engineer upon completion of work organized in a proper order in a loose-leaf folder.

1000-7     **EXISTING IMPROVEMENTS**

The Contractor shall protect all existing facilities and improvements, except as noted on the construction plans. The Contractor shall protect the existing grade stabilizer, gate, RC outlet structure, CMB and AC Pavement, any damage to the existing facilities shall be replaced in kind to a condition equal to or better than what existed prior to construction at Contractor's own expense.

1000-8     **SECURE WORK AREA**

It is the responsibility of the Contractor to maintain safe and secure work area at all the times. Safe work areas shall include the use of barricades, guards, lights, signs and any other devices necessary to protect the public.

1000-9     **WATER FOR CONSTRUCTION**

Water for construction purposes may be obtained from City of Simi Valley. The City will supply a water meter or meters. The Contractor shall make all arrangements to transport the water, and shall at its own expense, furnish and install all necessary piping and fittings. All water used for the proposed construction shall be metered, and the Contractor will be charged for such water used at the City's prevailing rates.

1000-10    **EQUIPMENT AND MATERIALS STORAGE**

The Contractor shall arrange and maintain a secure storage site for all the equipment and materials. All deliveries of materials to the job site shall be planned and executed so that traffic and the neighboring businesses are not obstructed or interfered with in any fashion.

Construction and stored equipment and supplies shall not be permitted within the road rights of way and shall not obstruct access to residences or businesses, nor shall sight distance be restricted by stored equipment and supplies.

1000-11      **CONSTRUCTION SITE MAINTENANCE**

In accordance with Section 7-8 of the Standard Specifications, the Contractor shall provide the means to maintain a construction site free from dust and excessive noise. The Contractor is required to control dust during the entire contract period, including holidays and weekends.

If the Contractor fails to maintain a clean construction site in accordance with these specifications, the Agency reserves the right to hire another Contractor or agency to perform this work on a "force account" basis. The cost of performing this work will be deducted from the total contract price at final payment.

1000-12      **AIR QUALITY MITIGATION MEASURES**

The Contractor shall be responsible to implement the following Air Quality mitigation measures for this project:

- All engines shall be properly tuned and maintained.
- The area disturbed by clearing and grading operation shall be minimized to prevent excessive dust generation.
- Disturbed soils and soil piles shall be watered as necessary to reduce fugitive dust emissions.
- Clearing and grading activities shall cease during periods of high winds (greater than 20 miles per hour, averaged over one hour).
- Silt containing materials excavated, stockpiled or transported during construction shall be watered as necessary to reduce fugitive dust emissions.
- Trucks transporting earth material off-site shall be covered or maintain a minimum two-foot freeboard.

1000-13      **ARCHEOLOGICAL RESOURCES**

Archeological and paleontological discoveries shall conform to 6-3.2. If human remains are unearthed, State Health and Safety Code Section 7050.5 require that no further disturbance shall occur until the County Coroner has made necessary findings as to the origin and deposition pursuant to Public Resources Code Section 5097.98. If the remains are

determined to be of Native American descent, the Coroner has 24-hours to notify the Native American Heritage Commission.

1000-14 **PERMITS AND AGREEMENTS**

1000-14.1 **Liability**

The Contractor shall indemnify and hold harmless the Agency from all damage, including but not limited to penalties, legal fees, and other expenses resulting from any violation of any permit included as part of this project if the damage is caused in whole or in part by any action or omission of the Contractor. The Contractor and its sureties shall be liable for the amount necessary to indemnify and hold the Agency harmless for all damage resulting from any such violation, and that amount may be deducted from any amount due or that will become due to contractor from the Agency.

1000-14.2 **Permits and Agreements Obtained by the Agency and Ground Water Sampling**

This work is a part of the Agency's ongoing Operations and Maintenance (O & M) Program. The O&M Best Management Practices (BMPs) and Water Diversion Guide, which are a part of this program, are a requirement of these specifications, part of the contract, and shall be on-site at all times. Mandatory BMPs for this project are: 1, 3, 4, 14, 17, 18, 21, 22, 23, 24, 25, 26, and 28.

This project has been approved under the following regulatory permits: California Department of Fish and Game (Streambed Alteration Agreement No. 1600-2004-0512-R5) and California Regional Water Quality Control Board (File No. 14-038). Applications to the California Regional Water Quality Control Board for Waste Discharge requirements for Discharges of Groundwater From Construction and Project Dewatering To Surface Waters (Water Quality Control Board may have additional conditions to treat the pollutants exceeding the minimum levels set by NPDES requirements), and U.S. Army Corps of Engineers for Regional General Permit No. 92 have been applied for and the Agency anticipates receiving these permits prior to awarding the project. In addition, the U.S. Army Corps of Engineers has issued a project-specific Notice to Proceed (File No. SPL-2014-00262-AJS). These programmatic permits are a requirement of the specifications, part of the contract and shall be on-site at all times. All the permits are attached with the exception of the dewatering permit, for which a sample is attached.

The programmatic permits, BMPs, and Water Diversion Guide are included at the end of this specification.

The Contractor shall coordinate and cooperate with District's bio-monitoring consultant to collect ground water samples for baseline sampling.

The Contractor shall allow two weeks for the sample results to come in to determine if the results show any pollutant levels exceeding the minimum levels set by NPDES requirements before any discharge.

1000-15

#### **ENVIRONMENTAL COORDINATION**

The Contractor shall coordinate and fully cooperate with the Agency and the Agency's Environmental Monitor as follows:

- a) Provide a minimum of five (5) working days' notice to the Engineer prior to mobilization to facilitate surveying of native species in the path of construction. No-work buffer zones may be required if surveys determine the presence of nesting birds within or immediately adjacent to the work limits.
- b) Provide a minimum of five (5) working days' notice to the Engineer prior to mobilization to facilitate collection of baseline water quality samples as required in the permits.
- c) Provide a minimum of five (5) working days' notice to the Engineer so that installation, modification, and removal of the Water Diversion per 1002 may be witnessed and guided by the Environmental Monitor.
- d) Facilitate access so that the Environmental Monitor may relocate aquatic life from any surface waters within the work area that require dewatering prior to construction.
- e) Facilitate access so water quality samples may be collected daily during the first week of the diversion operation and weekly thereafter until the diversion is removed, in accordance with the Water Quality Certification (14-038) Condition No. 19. The Contractor shall be solely responsible for ensuring the water quality meets the requirements of Condition 19.
- f) Provide a minimum of five (5) working days' notice to the Engineer so the vegetation clearing, if any, may be witnessed and guided by the Environmental Monitor.

1000-16     **ACCESS TO THE PROJECT SITE**

Contractor's access to the project site shall be from the District's access road on Madera Road and or from East Easy Street.

Contractor shall exert caution at ingress and egress of the project site; and shall make provisions for traffic control, flag person, and shall obtain all permits incidental to traffic control from the City of Simi Valley and pay all costs incurred by the permit requirements.

1000-17     **TEMPORARY WORK AREA LIMITS**

The temporary work area limits shown on the plans shall be staked prior to any work on the site. The Contractor shall restore all existing surface and subsurface facilities within the temporary work areas to their original condition and the Engineer's satisfaction upon completion of the project. Restoring shall include but not be limited to asphalt concrete, pavement markings, curb and gutter, cross gutter, concrete sidewalk, irrigation system, and utilities as indicated on the plans.

1000-18     **SATURDAY WORK**

The Contractor may, at its option, work Saturdays with no adjustment to working days or payment for inspection costs.

1000-19     **PAYMENT**

No separate payment will be made for compliance with all provisions of Section 1000. All costs involved shall be absorbed in the Contractor's bid for the project.

## **SECTION 1001**

### **WATER POLLUTION CONTROL**

#### **Bid Item No. 2**

##### **1001-1      SCOPE**

This item shall consist of preventing, controlling, and abating discharges of pollutants from the construction site, and shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

##### **1001-2      CONSTRUCTION METHODS**

The affected construction area is less than one acre, and therefore the Contractor shall comply with the Ventura Countywide Stormwater Quality Management Program (VCQMP) and National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit.

Contractor shall prepare the Storm Water Pollution Control Plan (SWPCP) and Storm Water High Risk (SW-HR) prior to construction for Engineer's approval. All work shall be performed in accordance with 7-8.6.2, 7-8.6.3, 7-8.6.4, and 7-8.6.5.

##### **1001-3      MEASUREMENT AND PAYMENT**

Progress payments for the Water Pollution Control will be computed by the Engineer based on his estimate of the percentage completion of this item of the work. In general, this will be proportional to the percentage completion of the major items of work to which water pollution control is incidental. Payment will be made on a lump sum basis at the contract price bid for Bid Item No. 2, and will include full compensation for installation and removal of water pollution control works, including all labor, equipment, materials, and all other necessary and incidental items required to complete the work.

## **SECTION 1002**

### **DIVERSION, CONTROL AND REMOVAL OF WATER**

#### **Bid Item No. 3**

##### **1002-1 SCOPE**

This item shall consist of diversion, control, and removal of all water entering into the construction area or otherwise affecting construction activities and shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

##### **1002-2 WATER DIVERSION**

The Contractor shall submit a water diversion plan to the Engineer for approval prior to any work within the creek. After completion of the work, all diversion works shall be re-graded back to the original stream grade.

##### **1002-2.1 Water Diversion Structures in Arroyo Simi**

Any artificial dam, water diversion, or other artificial obstruction in Arroyo Simi shall be built only from materials such as clean gravel or stacked sandbags and shall be approved by the District prior to construction.

##### **1002-2.2 Water Diversion Structures**

Any artificial dams consisting of Concrete Masonry Units (CMU) will only be allowed for the purpose of water diversion of side drains to Arroyo Simi.

##### **1002-2.3 Water Quality Requirements**

Flow diversion within Arroyo Simi shall be completed in a manner that prevents pollution and siltation, and provides flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow can support aquatic life. Said flows shall be of sufficient quality and quantity, and appropriate temperature to support fish and other aquatic life both above and below the diversion pursuant to California Department of Fish and Wildlife Services Fish and Game Code (FGC) Section 5937. Normal flows shall be restored to the affected stream immediately upon completion of work at that location.



1002-3      **DEWATERING DISCHARGE**

The Contractor is responsible to implement the groundwater dewatering discharge measures as outlined in the Regional Water Quality Control Board Permit (sample permit is attached) Water Quality Control Board may have additional conditions to treat the pollutants exceeding the minimum levels set by NPDES requirements.

1002-4      **CONSTRUCTION METHODS**

The Engineer shall approve all work for diversion, control and removal of water proposed by the Contractor. All work shall be performed in accordance with 10-1, 10-2, and 10-3, and with the District's Operations and Maintenance Program Water Diversion Guide.

1002-5      **MEASUREMENT AND PAYMENT**

Delete 10-4. Payment for Diversion, Control and Removal of Water will be computed by the Engineer based on his estimate of the percentage completion of this item of the work. In general, this will be proportional to the percentage completion of the major items of work to which diversion of water is incidental. Payment will be made on a lump sum basis at the contract price bid for Bid Item No. 3 and will include full compensation for installation and removal of diversion and control works, any treatment measures required by the permit(s), including all labor, equipment, materials, and all other necessary and incidental items required to complete the work.

## **SECTION 1003**

### **CLEARING AND GRUBBING**

#### **Bid Item No. 4**

##### **1003-1 SCOPE**

This item shall consist of Clearing and Grubbing the project work area and disposal of materials removed in accordance with the requirements of 300-1. Items to be removed shall include, but not be limited to trees, logs, upturned stumps, and roots of downed trees, tree branches, shrubs, grass, weeds, vines bushes and all other artificial objectionable materials within the limits of construction. The Agency biological monitor must be present during all vegetation removal activities to ensure protection of wildlife.

Grubbing shall extend to the outside excavation and fill slope lines, except that where slopes are to be rounded, the areas shall extend to the outside limits of slope rounding. Within the limits of clearing, all stumps, roots 1-1/2 inches in diameter or larger, buried logs, and all other objectionable material shall be removed 3 feet below the existing ground surface or subgrade, whichever is deeper.

##### **1003-2 DISPOSAL SITES**

All material designated for removal and disposal shall be disposed of in the following order of priority: 1) at a County-recognized recycling/buyback facility, 2) lawfully at a site in accordance with local ordinances. Non-native vegetation as identified by the Agency biological monitor shall be disposed as a destruction load.

##### **1003-3 MEASUREMENT AND PAYMENT**

Payment for Clearing and Grubbing will be made on a lump sum basis at the contract price bid for Bid Item No. 4 in accordance with 300-1.4. Such payment shall be considered full compensation for removal and proper disposal of all the resulting materials, furnishing all labor, materials, tools, equipment, and incidental items required to complete the work.

## **SECTION 1004**

### **EXCAVATION SAFETY**

#### **Bid Item No. 5**

##### **1004-1 SCOPE**

This section shall consist of performing all the necessary work for Worker Safety, including, but not limited to: trenching and shoring, confined spaces, and other appurtenant work.

In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work.

##### **1004-2 TEMPORARY SHORING**

Trenches should be excavated and shored in accordance with federal (OSHA) and state (Cal/OSHA) standards, project specifications, safe construction practices, geotechnical reports, and any other local ordinances and building codes, as required. The Contractor shall be responsible for the design and safety of temporary excavations. Temporary excavations should be monitored for stability during construction and be modified if necessary.

For braced shoring, a uniform soil pressure of  $25H$  pounds per square foot (pcf) can be used for design, where  $H$  equals the depth of the excavation in feet. Moderate vehicle traffic (live loads) is anticipated near the top of the trench. Live loads imposed on the shoring system from vehicle traffic within a 1:1 (horizontal: vertical) line projected from the bottom of the excavation should be included in the shoring design. Live loads imposed from construction equipment within this same envelope also should be considered.

##### **1004-3 WORKER SAFETY PROTECTION PLAN**

Worker Safety Protection plan shall consist of a detailed description outlining safety measures required for trench construction, confined space work and other appurtenant work in accordance with applicable provisions of 7-10.4, & 306-1.1, the plans and these Special Provisions.

The right of the Engineer or the Agency'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.

In the event that any hazardous materials, including but not limited to asbestos, are utilized in construction or hazardous 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 materials. The Contractor is solely responsible for protection of persons and property that could be affected by construction and the Contractor's handling of such materials.

In addition, entry into all manholes and all construction excavations shall be governed by current Cal/OSHA requirements for confined space.

1004-4

#### **EXCAVATION**

The Contractor shall submit to the Agency for approval, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any pits, trench or trenches. The plan shall be prepared by a registered civil or structural engineer. As a part of the plan, a note shall be included stating that the registered civil or structural engineer certifies that the plan complies with the Cal/OSHA construction safety orders, or that the registered civil or structural engineer certifies that the plan is not less effective than the shoring, bracing, sloping, or other provisions of the Safety Orders

Shoring selection should consider maintenance of safe working conditions, support lateral loads, support the existing pavements and underground utilities, and construction facility. The shoring system should maintain contact with and provide positive pressure against the trench sidewall. Trench excavation should proceed such that no voids are developed between the shoring and trench sidewalls. Past experience with shoring systems that maintain positive pressure against the trench sidewalls include beam and plate systems (soldier pile and steel plate lagging), sheet piling (braced near the top), rolling side rail systems, or press pile systems.

The detailed plan 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 plan 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.

1004-5

**MEASUREMENT AND PAYMENT**

The measurement and payments for Excavation Safety, including but not limited to shoring and workers safety, will be computed by the Engineer based on his estimate of the percentage completion of this item of work. In general, this will be proportional to the percentage completion of the major items of work to which excavation safety is incidental.

Progress payments for Excavation Safety including but not limited to shoring and worker safety, will be made on a lump sum basis at the contract price bid for Bid Item No. 5. Such payment shall be considered full compensation for furnishing all labor, materials, equipment, tools, transportation and incidentals, and for doing all the work involved and necessary to accomplish trenching and shoring, worker safety, confined spaces, and other appurtenant work complete in place, as specified in these Special Provisions, and as required for Shoring and Worker Safety, and as directed by the Engineer.

## **SECTION 1005**

### **REMOVAL OF EXISTING FACILITIES**

#### **Bid Item No. 6**

#### **1005-1     SCOPE**

This item shall consist of furnishing all labor, materials and equipment necessary for removing the existing concreted rock riprap and rock riprap, unsuitable creek deposits, RC slab, Steel Armor and appurtenances and shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

#### **1005-2     CONSTRUCTION METHODS**

##### **1005-2.1     Concrete Rock Riprap**

Remove and dispose of concreted rock riprap at the locations shown on the plans.

##### **1005-2.2     Rock Riprap**

Remove and dispose of the rock riprap on the creek bottom and on the bank at the locations shown on the plans.

##### **1005-2.3     Steel Armor**

Sawcut, remove and dispose of the grade stabilizer steel armor as shown on the plans.

##### **1005-2.4     Unsuitable Creek Deposits**

Remove and dispose of the unsuitable creek deposits on the splash pool slab and clean all the materials and algae from the face of the stabilizer before placing the steel Armor.

##### **1005-2.5     RC Slab**

Sawcut, remove and dispose of the existing RC slab as shown on the plans.

1005-3      **DISPOSAL METHODS**

The Contractor shall dispose of all materials including, but not limited to the above materials at a County recognized recycling/buy back facility or an approved site in accordance with local ordinances.

1005-4      **MEASUREMENTS AND PAYMENT**

Payment for Removal of Existing Facilities will be made on a lump sum basis at the contract price bid for Bid Item No. 6. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment, and doing all the work.

## **SECTION 1006**

### **EXCAVATION**

#### **Bid Item No. 7**

#### **1006-1      SCOPE**

This item shall consist of excavation necessary for the repair of the grade stabilizer, repair of the splash pool invert, concreted and non-concreted rock riprap bank protection and all other related structures shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

#### **1006-2      CONSTRUCTION METHODS**

##### **1006-2.1      Excavation**

Excavation shall be performed in accordance with 300-3 and 300-7.3. Excavated material may be used for fill and backfill, providing it meets the requirements of 300-3.5. Unsuitable and excess excavation material shall be disposed of by the Contractor outside the project site.

#### **1006-3      MEASUREMENT AND PAYMENT**

Original ground lines shown on the plans are based upon topographic and field survey data dated 08/2015. The Agency does not warrant the accuracy of such information as of the date of bid submittal. It is the Contractor's responsibility to ascertain the existence of any conditions affecting the cost of the work by reasonable examination of the site.

The quantities used in determining payment for excavation will not be measured in the field, but shall be based upon the original ground lines and pay lines indicated on the plans. No allowance will be made in the event the excavation quantities based on the computations as outlined above do not equal the actual amount shown on the proposal form only, except as provided for in the specifications.

The voids and cavities under the existing RC slab and concrete rock riprap has been estimated as shown on plans.

Measurement and payment for the Excavation (F) will be paid on a cubic yard basis for at the contract unit price bid for Bid Item No. 7. Such payment shall be considered full compensation for furnishing all labor, materials,



tools, equipment and doing all work including grading, shaping, disposing of the excess material, restoring adjacent ground to original condition and other work required under this subsection or by the plans.

## **SECTION 1007**

### **FILL AND BACKFILL**

#### **Bid Item No. 8**

##### **1007-1      SCOPE**

This item shall consist of Fill and Backfill under the RC splash pool slab, rock riprap slopes, grade stabilizer and related facilities, and shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

##### **1007-2      CONSTRUCTION MATERIALS**

Fill and backfill materials shall conform to 300-3.5, and may consist of native or imported materials, or both. Structural fill materials shall not be larger than 4-Inches and shall be performed in accordance with 300-7.4. Fill and backfill material shall be approved by the Engineer prior to use. All unsuitable and excess excavation material shall be disposed of outside the project limits.

##### **1007-3      CONSTRUCTION METHODS**

###### **1007-3.1      Compaction**

Compacted fill shall be 90 percent relative compaction.

###### **1007-3.2      Fill**

Fill shall be constructed in accordance with the requirements of 300-7.4. During the fill operation the moisture content of all fill materials shall be maintained within 1 percent below and 3 percent above optimum. Fill material shall be dried or moistened, as necessary to achieve the required moisture content. The Engineer will determine the optimum moisture content for each site or soil type.

###### **1007-3.3      Subgrade Preparation**

RC slab and concreted rock riprap grade stabilizer and bank protection subgrades shall be stabilized by the contractor by placing subgrade stabilization rock 6-inch minus at the depth of two feet thick to stabilize subgrade. The filter material shall meet requirements of Section 1014.

Dewatering includes well system(s), pumping and collecting the seepage and run-off groundwater under RC slab, concreted rock riprap grade stabilizer and from toe of the bank protection per discharge permits and shall be paid per Section 1002.

1007-4

#### **MEASUREMENT AND PAYMENT**

Original ground lines shown on the plans are based upon field topographic data obtained during August 2015. The Agency does not warrant the accuracy of such information as of the date of bid submittal. It is the Contractor's responsibility to ascertain the existence of any conditions affecting the cost of the work by reasonable examination of the site.

The voids and cavities under the existing RC slab, and concreted rock riprap grade stabilizer and concreted rock riprap bank protection has been estimated as shown on the plans.

Payment for Fill and Backfill (F) will be made on a cubic yard basis at the contract unit price bid for Bid Item No. 8. Such payment shall be considered full compensation for furnishing all labor, materials, tools and equipment, and doing all the work, including subgrade preparation, grading, shaping, compacting or consolidating, and other work required under this section or by the plans.

## SECTION 1008

### REINFORCED CONCRETE (RC) SLAB

#### Bid Item No. 9

#### 1008-1 SCOPE

This item shall consist of repair of the RC slab, splash pool armor and shall be performed in accordance with the Standard Specifications, the Plans, and these Special Provisions.

#### 1008-2 CONSTRUCTION MATERIALS

##### 1008-2.1 Steel Reinforcing Bars

All reinforcing steel shall be Grade 60 billet steel conforming to 201-2.

##### 1008-2.2 Portland Cement

Cement shall be Type II, low alkali Portland cement conforming to ASTM C 150 and the low alkali requirements of Table 2 therein, with a maximum water to cement ratio of 0.45 per Table 201-1.1.3 for moderate exposure.

##### 1008-2.3 Aggregate

Aggregate shall meet the requirements of the combined aggregate gradation C in accordance with 201-1.3.2, Table 210-1.3.2(A). Soundness loss determined by California Test Method 214 shall not exceed 10 percent.

##### 1008-2.4 Strength Requirements

All concrete shall meet the requirements of 201-1 and attain a minimum 28-day compressive strength of 4,000 psi.

##### 1008-2.5 Curing Compound

Curing compound shall comply with 201-4.1.1, Type 1-D, with red fugitive dye.

1008-3      **CONSTRUCTION METHODS**

1008-3.1    **Forming of Steel in Repair Section**

Contractor shall place new reinforcing steel in the slab repair section per detail shown on the plans. All the reinforcement shall be doveled into the existing outlet structure via epoxy.

Provide minimum two inches clearance between the rebar (existing and new) and the surrounding concrete.

1008-3. 2    **Concrete**

All concrete facilities shall be constructed in accordance with 303. Outside limits of these structures shall be formed for full thickness indicated on the plans. Exposed concrete surfaces shall be steel troweled or broom finished on road related facilities and shall be constructed prior to placement of road surfacing. The Grades shall conform to the details shown on the Plans. Expansion joints and weakened plane joints shall be provided at 30 feet and 10 feet intervals, respectively, per 303-5.4.2 and 303-5.4.3.

1008-4      **MEASUREMENT AND PAYMENT**

Measurement and payment for RC Slab will be measured to the neat lines and limits shown on the plans and will be made on cubic yard basis at the contract price bid for Bid Item No. 9. Such payments shall constitute full compensation for furnishing all labor, materials, reinforcing steel (including lap splices), concrete, equipment, tools, and incidentals necessary to complete the work and accepted by the Agency.

Such payments shall be considered full compensation for furnishing all the labor, materials, tools, equipment, and incidentals required to perform and complete the work.

## **SECTION 1009**

### **STEEL ARMOR**

#### **Bid Item No. 10**

#### **1009-1     SCOPE**

This item shall consist of furnishing all labor, materials and equipment necessary for the installation of the steel armor on the grade stabilizer in accordance with the Standard Specifications, the plans, and these Special Provisions.

#### **1009-2     CONSTRUCTION MATERIALS**

##### **1009-2.1     Armor, Nuts & Bolts**

The steel armor, nuts, bolts and miscellaneous fasteners shall conform to the requirements of 206-1.

##### **1009-2.2     Galvanizing**

Nuts and bolts shall be galvanized after fabrication unless otherwise specified, and shall conform to the requirements of 210-3.

#### **1009-3     CONSTRUCTION METHODS**

##### **1009-3.1     Placing**

The Contractor shall place the steel armoring on the grade stabilizer per notes and detail shown on the plans.

#### **1009-4     MEASUREMENT AND PAYMENT**

Steel Armor and appurtenant work will be paid for on a linear foot basis at the contract unit price bid for Bid Item No. 10. Such payments will include full compensation for furnishing all the labor, materials, tools, equipment, furnishing all incidentals required to perform the work, including nuts and bolts and welding.

## SECTION 1010

### ½-TON CONCRETED ROCK RIPRAP

#### Bid Item No. 11

#### 1010-1 DESCRIPTION

This item shall consist of placement of ½-Ton concreted rock riprap grade stabilizer and ½-Ton concreted rock riprap bank protection construction and shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

#### 1010-2 CONSTRUCTION MATERIALS

##### 1010-2.1 Rock Gradation

The rock shall conform to the following gradation:

½ -TON CLASS	
Rock Sizes	Percentage Larger Than
1-Ton	0-5
½ -Ton	50-100
200-Lb.	90-100

The amount of material smaller than the smallest size listed in the table for any class of riprap shall not exceed the percentage limit listed in the table determined on a weight basis. Compliance with the percentage limit shown in the table for all other sizes of the individual pieces of any class riprap shall be determined by the ratio of the number of individual pieces larger than the smallest size listed in the table for that class.

Flat or needle shapes will not be accepted unless the thickness of individual pieces is greater than 1/3 the length.

Each individual load of rock riprap delivered to the project site shall meet the size requirements of the specified gradation.

## 1010-2.2 **Rock Quality**

Rock shall meet the requirements of Section 200, except that all rock shall be angular or sub-angular in shape. Angular shall be defined as having sharp corners and straight planes on all faces, with no evidence of wear caused by wind, water or abrasion. Sub-angular shall be defined the same as angular, except with the evidence of wear caused by wind, water and abrasion. Determination of angularity will be made by the Engineer.

The following quality requirements and tests shall apply:

- (a) Minimum apparent specific gravity of 2.5 per ASTM C-127.
- (b) Los Angeles Abrasion test at 1,000 revolutions and a maximum abrasion loss of 35 percent per ASTM C-535, Grading 1.
- (c) Weight loss in 5 cycles shall be not more than 10 percent when sodium sulfate is used or 15 percent when magnesium sulfate is used in the test for soundness performed according to the procedure for ledge rock in ASTM D 5240-92, Method 203-01.
- (d) A maximum wetting and drying loss of 5 percent after 10 cycles. A sample of rock shall be crushed, screened, oven-dried, and 1,000 to 1,400 grams of 3/4-inch to 3/8-inch fraction shall be taken for the test.

After 10 cycles, the percent loss shall be computed as follows:

$$\% \text{ Loss} = 100 \times \frac{\text{Weight of Material Passing No. 4 Sieve}}{\text{Total Weight of Sample}}$$

## 1010-2.3 **Concrete**

Concrete shall be Class 560-E-2500P and shall conform to the requirements of 201-1. The water content of the concrete shall be such as to permit pumping into the interstices with limited spading and brooming. The Engineer shall approve the amount of water to be used.

## 1010-2.4 **Weepholes**

1010-2.4.1 Pipe for weepholes shall be polyvinyl chloride plastic pipe (PVC), Class 200, and shall conform to the requirements of 207-17.

1010-2.4.2 Sacked filter material shall consist of one cubic foot of No. 3 concrete aggregate per 200-1.4 in a non-woven polypropylene bag meeting the requirements of SSS 80-1.03.



1010-2.4.3 Screen shall be PVC floor drain cover.

1010-3 **CONSTRUCTION METHODS**

1010-3.1 **Placing Rock Riprap**

The rock shall be placed by equipment on surfaces and to the thickness and grades shown on plans. The riprap shall be constructed to the full course thickness in one operation and chinking or filling with loose material shall be avoided. The rock shall be delivered and placed in a manner that will insure that the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks and spalls filling the voids between larger rocks. Placement of rock riprap shall begin at the bottom of the toe trench and proceed up the slope.

Riprap shall be placed in a manner to prevent damage to structures. Hand placing will be required to the extent necessary to prevent damage to structures.

Placement of riprap by dumping will not be allowed.

1010-3.2 **Placing Concrete**

The surfaces of the rock to be concreted shall be cleaned of adhering dirt and clay and then moistened. Concrete shall be placed in a continuous operation for any day's run at any one location. Concrete shall be brought to the place of final deposit by means of pumping. Placement shall start at the bottom or toe of the rock to be concreted. In no case shall the concrete be permitted to flow on the slope protection a distance in excess of 10 feet. Immediately after depositing, the concrete shall be spaded and rodded into place with suitable spades, trowels or other approved means until the minimum penetration shown on the plans is attained and the surface of the concrete has attained a uniform line. Large depression into the surface of the concrete will not be allowed.

After the concrete has been placed, the rocks shall be thoroughly brushed so that their top surfaces are exposed. The outer rocks shall project approximately 1/3 of the required thickness of the layer above the concreted surface. After completion of any 10-foot strip, no workman or load shall be permitted on the surface for a period of at least 24 hours. Concreted riprap shall be cured as provided in 302-6.6, except that a fully atomizing, non-agitator tank may be used.

1010-3.3     **Subgrade Preparation**

Soft yielding and saturated subgrades shall be stabilized by the contractor by placing subgrade stabilization rock 6-inch minus at the depth of two feet thick to stabilize subgrade. The filter material shall meet the requirements of section 1014.

Dewatering includes well system(s), pumping and collecting the seepage and run-off groundwater from toe of the bank protection per discharge permits and shall be paid per Section 1002.

1010-4     **MEASUREMENT AND PAYMENT**

Quantities of ½-Ton Concreted Rock Riprap will be measured to the neat lines and limits shown on the plans, and will be paid for on a cubic yard basis at the contract unit price bid for Bid Item No. 11. Such payment shall be considered full compensation for furnishing all labor, sub-grade stabilization, materials, weepholes, 6-inch concrete cap, tools and equipment, and doing all the work.

## **SECTION 1011**

### **SLURRY**

#### **Bid Item No. 12**

##### **1011-1 SCOPE**

This item shall consist of filling all voids and cavities with slurry under the concreted rock riprap bank protection on the south bank if it is determined by the Project Engineer that the cavity/voids that are yielding need to be filled with slurry. All work shall be in accordance with the Standard Specifications, the plans, and these Special Provisions. This item may be deleted if no void or cavity was filled with slurry.

##### **1011-2 CONSTRUCTION MATERIALS**

###### **1011-2.1 Controlled Low Strength Material (CLSM) Backfill**

CLSM shall have 2-sack cement minimum per cubic yard, and shall conform to the requirements of 201-6.2.

##### **1011-3 CONSTRUCTION METHODS**

###### **1011-3.1 CLSM Placement**

Slurry shall be pumped to the void and cavity areas under the existing outlet structure. Placement shall conform to the requirement of 201-6.6.

##### **1011-4 MEASUREMENT AND PAYMENT**

Measurement and payment for the Slurry under concreted rock riprap bank protection south bank will be made only if the cavity is filled with slurry per direction by the Engineer. Slurry fill will be paid on a cubic yard basis for at the contract unit price bid for Bid Item No.12. Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment, pumps and doing all work including disposing of the excess material, restoring adjacent ground to original condition and other work required under this subsection or by the plans. The quantity in the contract is an estimated quantity.

## **SECTION 1012**

### **TEMPORARY CHAIN LINK GATE**

#### **Bid Item No. 13**

#### **1012-1 SCOPE**

This item consists of furnishing all labor, material and equipment necessary for the construction and installation of Temporary chain Link Gate at downstream of North Simi Drain box culvert on the District's access road and shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

#### **1012-2 CONSTRUCTION MATERIALS AND INSTALLATION**

##### **Chain Link Gate**

Materials for Temporary Chain Link Gate shall meet the requirements of SPPWC 600-3 and installation shall be in accordance with 304-3.3. The Temporary Chain Link Gates shall be 6 feet high x 20 feet wide single leaf gate. The Contractor shall make sure the access road is securely closed. The Temporary Chain Link Gate shall be safely secured during the non-construction hours.

#### **1012-3 MEASUREMENT AND PAYMENT**

Measurement and payment for Temporary Chain Link Gate will be made on lump sum basis at the contract unit price bid for Bid Item No. 13.

Such payment shall be considered full compensation for furnishing all labor, materials, tools, equipment, and all incidentals required to complete the work.

## **SECTION 1013**

### **BIKE TRAIL TRAFFIC CONTROL**

#### **Bid Item No. 14**

##### **1013-1      SCOPE**

This item shall consist of Bike Trail Traffic Control for the construction activities shall be performed in accordance with the Standard Specifications, the plans, and these Special Provisions.

##### **1013-2      CONSTRUCTION MATERIALS AND INSTALLATION**

Two temporary signs (per detail herein) showing the construction start and end date shall be installed on Easy Street and at upstream of North Simi Drain box culvert on the District's access road two weeks prior to start of construction.

Four temporary bike trail closure signs (Bike Trail Closed Ahead) shall be placed two on Easy Street and two at upstream of North Simi Drain box culvert on the District's access road prior to start of construction and shall be maintained throughout the completion of the project.

Whenever construction operations create a condition hazardous to the public, the Contractor shall furnish, erect and maintain, at his expense, such fences, barricades, lights, signs, delineators, flagmen, and other devices as deemed necessary by the Engineer to prevent accidents or damage or injury to the public in accordance with said Manual and the Standard Specifications.

##### **1013-3      MEASUREMENT AND PAYMENT**

Payment for Bike Trail Traffic Control will be made on a lump sum basis at the contract price bid for Bid Item No. 14. Such payment shall be considered full compensation for maintaining and controlling bike, pedestrian and construction traffic, construction signing, flagmen and furnishing all labor, materials, tools, equipment, removing construction signs and barricades and incidentals necessary to complete the work. No additional compensation will be provided therefore.

## SECTION 1014

### FILTER MATERIAL A

#### Bid Item No. 15

#### 1014-1 SCOPE

This item shall consist of furnishing and installing the filter material and filter fabric under the 1/2-Ton rock riprap grade stabilizer and RC Slab excavation to stabilize the subgrade, and shall be performed in accordance with the Standard Specifications, the plans and these Special Provisions.

#### 1014-2 CONSTRUCTION MATERIALS

##### 1014-2.1 Quality Requirements

Filter Materials shall conform to quality requirements for coarse aggregate for Portland cement concrete as specified in Section 200-1.4, except that the specific gravity shall be a minimum of 2.5. Soundness loss determined by California Test Method No. 214 shall not exceed 10 percent.

##### 1014-2.2 Gradation

Filter material shall conform to the following gradation:

SIEVE SIZE	PERCENT PASSING
	FILTER A
9"	100
6"	70-90
3"	20-70
2"	10-20
1"	0-5

##### 1014-2.3 Filter Fabric

Filter fabric shall be placed on top of Filter Material, Filter fabric is composed of a nonwoven geotextile of polypropylene fibers which are formed into stable network such that the fibers retain their relative position. Filter fabric shall meet the specification of Mirafi, 1100N or equal.

Filter Fabric shall meet the following material properties:

<b><u>PROPERTY</u></b>	<b><u>Test Method</u></b>	<b><u>Value</u></b>
Average Weight	N/A	10 oz/ft <sup>2</sup>
Tensile Strength	ASTM D-4632	250 lbs
Elongation At Break	ASTM D-4632	50%
Mullen Burst	ASTM D-3786	500 psi
Puncture Strength	ASTM D-4833	155 lbs
Trapezoidal Tear	ASTM D-4533	100 lbs
AOS – U.S. Std Sieve	ASTM D-4751	100
U.V. Resistance (500 hrs)	ASTM D-4355	70 %

The Contractor shall furnish to the Engineer, for his approval, a minimum of one square yard of the chosen fabric, the manufacturer's name, fabric style number, and product specifications 15 days prior to installation.

### 1014-3 **CONSTRUCTION METHODS**

#### 1014-3.1 **Base Preparation**

Surfaces and trenches shall be clean and free of organic matter, loose soil, foreign substances, and standing water when Filter A is placed. Earth surfaces upon or against which Filter A will be placed shall not be scarified.

#### 1014-3.2 **Placement**

Filter Material A shall be installed to the neat lines and grades shown on the plans, and may be placed and spread by suitable equipment. However, care shall be exercised to prevent contamination with native or deleterious material. Filter Material A shall be compacted to 9-inch layers using three passes of hand directed compaction equipment.

At the time of compaction, the moisture content of the material shall be such as to insure a firm and unyielding surface.

#### 1014-3.3 **Filter Fabric**

The filter fabric shall be placed on top of the filter material for subgrade stabilization and RC slab exaction to stabilize the subgrade at the locations shown on the drawings. The surface to receive the fabric shall be prepared to a relatively smooth condition free of obstructions, depressions and debris. The cloth shall not be laid in a stretched condition, but shall be laid loosely. Stone shall not be dropped on the cloth from a height greater than 2 feet.

Filter fabric damaged or displaced before or during installation or during placement of riprap shall be replaced or repaired to the satisfaction of the Engineer at the Contractor's expense

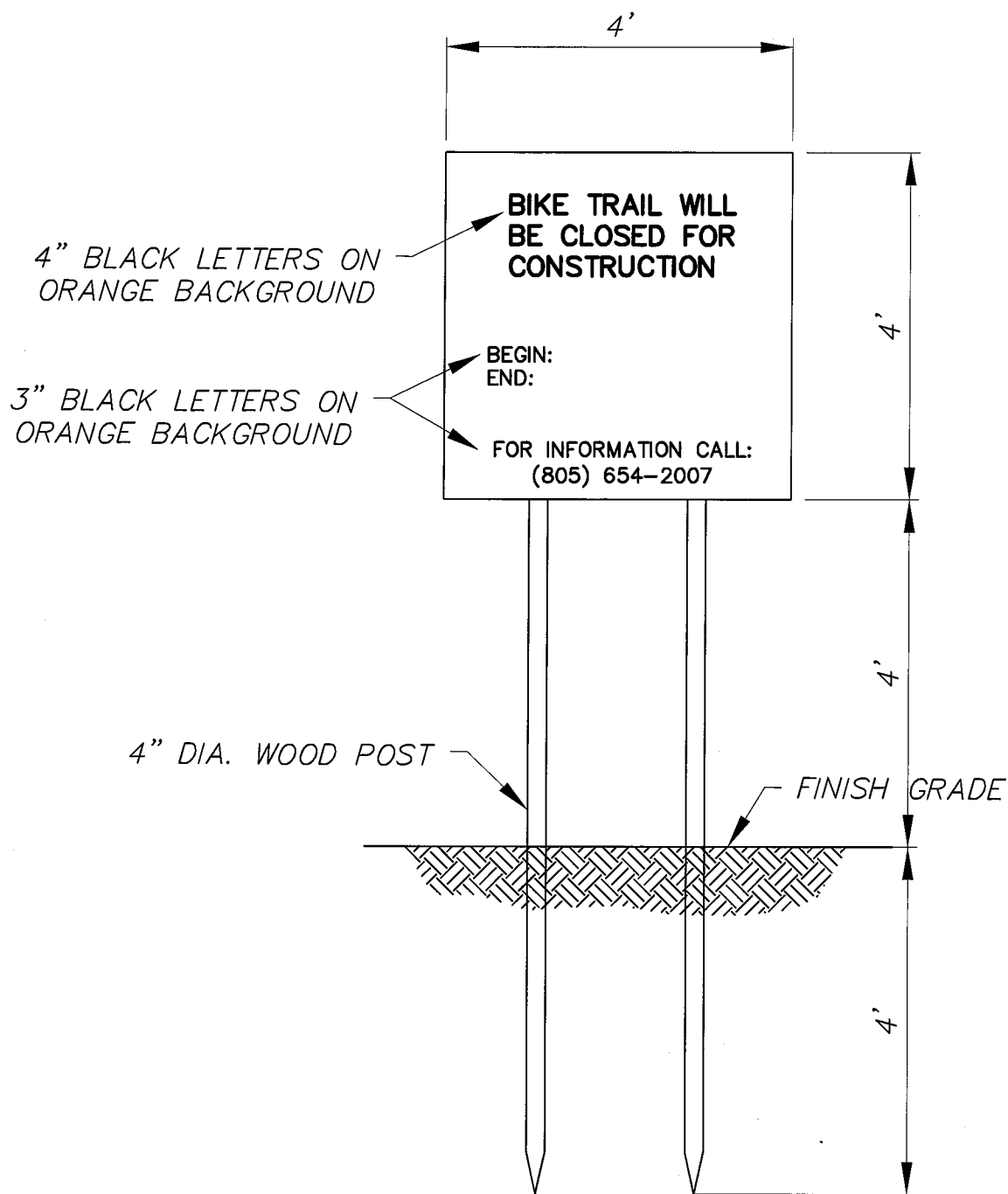
1014-4

**MEASUREMENT AND PAYMENT**

Filter Material will be measured to the neat lines as shown on the typical pay section. No adjustment will be made for changes in the excavation or over excavation not specifically required by the Engineer for Filter Material A.

Installation of Filter Material will be paid for on a cubic yard basis at the contract unit price bid for Bid Item No. 15 and will be considered full compensation for furnishing all labor, materials, tools, equipment and incidentals to complete the installation in place including filter fabric. No additional payment will be made for filter fabric.





## BIKE TRAIL CLOSURE SIGN DETAIL

N.T.S.

K:\PROJECTS\ZONE3\ARROYO SIMI\ARROYO\_SIMI\_US\_MADERA\GRADE\_STABILIZER\_REPAIR\DESIGN\DESIGNDRAWINGS\60\_PERCENT\_PLANS\ARS\_MADERA-SHT 8.5X11.DWG

WATERSHED PROTECTION DISTRICT

DATE  
AUGUST 2015



ARROYO SIMI UPSTREAM OF MADERA ROAD  
GRADE STABILIZER REPAIR

FIGURE  
No. 1

# **WATER DIVERSION GUIDE**

## **FOR THE PROGRAM ENVIRONMENTAL IMPACT REPORT**

### **ENVIRONMENTAL PROTECTION MEASURES FOR THE ONGOING OPERATIONS AND MAINTENANCE PROGRAM**

*Prepared for:*

**Ventura County Watershed Protection District**

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November 2007

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## **1.0 INTRODUCTION**

### **1.1 BACKGROUND**

The Ventura County Watershed Protection District's (District) ongoing maintenance program focuses on the proper operation and function of the District's flood control facilities. Routine maintenance and repair activities preserve the engineered flow conveyance and retention capacities of the District's flood control facilities and prevent the accumulation of obstructing vegetation and sediments that could increase existing flood or erosion hazards.

This Water Diversion Guide has been developed in conjunction with the Maintenance Program Environmental Impact Report (Program EIR) to address potential impacts to water quality and aquatic habitat during routine maintenance and repair activities. This guidance provides detailed Best Management Practices (BMPs) for the District and its contractors to use during water diversion activities to reduce environmental impacts to hydrology, water quality and aquatic habitat.

### **1.2 PURPOSE**

During routine maintenance and repair operations, flowing or ponded water may be present at a flood control facility. Water flowing through work areas can potentially impact downstream water quality through the discharge of sediment, debris, construction materials and other pollutants. Construction activity may also impact aquatic life by altering flow channels and hydrology, mechanically damaging aquatic habitat or contributing to siltation and turbidity.

Temporary water diversion is required during a routine maintenance or repair activity when work in flowing or ponded water has the potential to negatively impact water quality or native aquatic life. A water diversion facility must be constructed, operated, maintained and removed so as to minimize impacts. BMPs implemented as part of the water diversion water quality impacts by minimizing the discharge of sediments and other pollutants from the work area. BMPs for the protection, removal and relocation of native aquatic life during water diversion reduce impacts to aquatic life. Water quality monitoring is usually required during the operation and removal of a water diversion. The results of water quality monitoring can be used to assess the performance of BMPs and address any potential impacts to water quality from the water diversion.

### **1.3 DISTRICT ZONES**

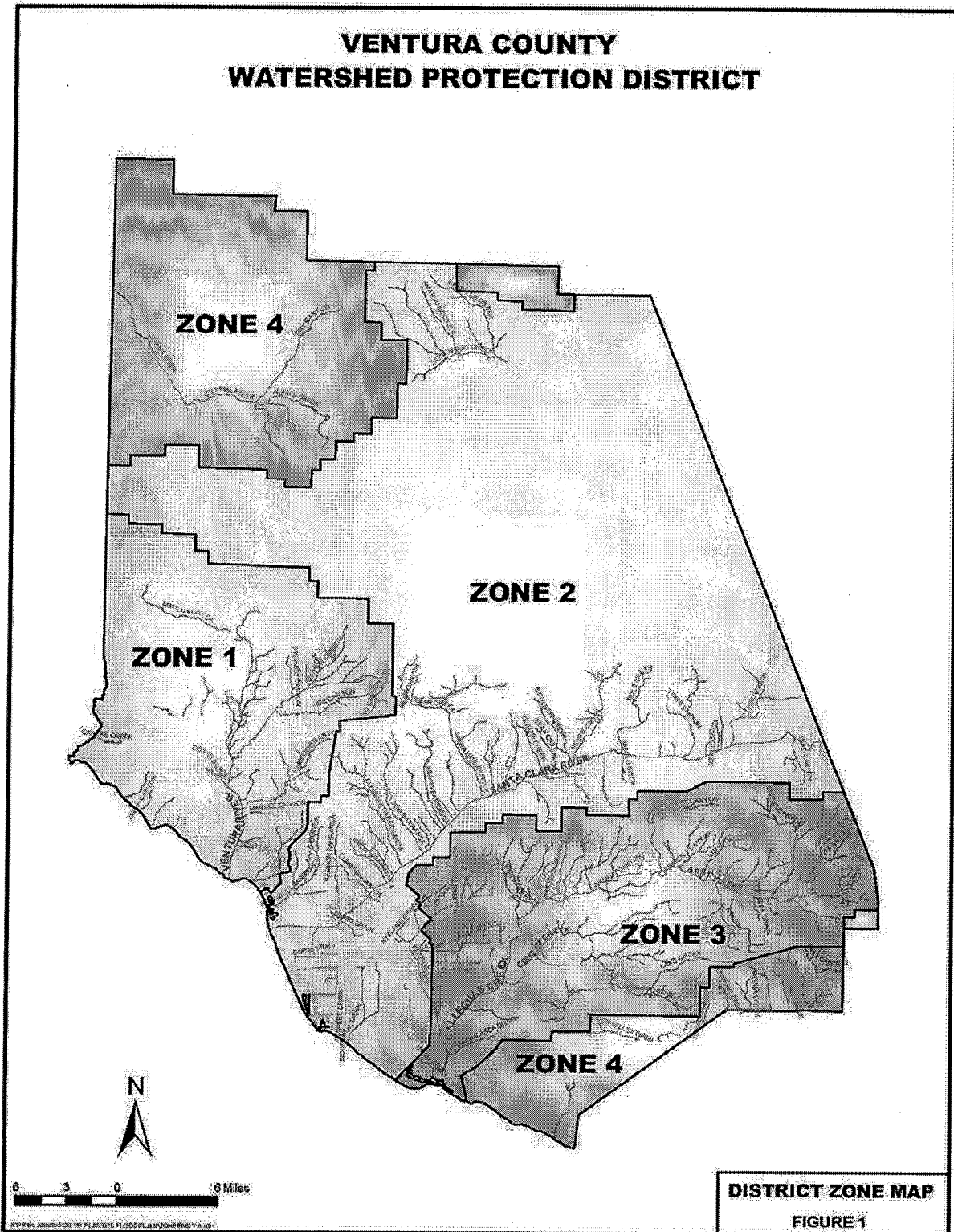
The District operates and maintains projects that have been either constructed by the District or constructed by others and transferred to the District. The District has divided Ventura County into four management zones as summarized in Table 1-1 and as shown in Figure 1.

**TABLE 1-1  
SUMMARY OF DISTRICT ZONES**

<b>Zone No.</b>	<b>Watershed</b>	<b>Major Drainages</b>	<b>Cities and Communities</b>
1	Ventura River watershed	Ventura River, San Antonio Creek, tributaries in the Ojai Valley	Ojai, Ventura, Oak View, Casitas Springs, Live Oak Acres, Meiners Oaks
2	Santa Clara River watershed and Oxnard Plain	Santa Clara River and its tributaries, various Oxnard Plain drains	Piru, Fillmore, Santa Paula, Ventura, El Rio, Saticoy, Oxnard, Port Hueneme, Nyeland Acres
3	Calleguas Creek watershed	Arroyo Conejo, Arroyo Simi, Arroyo Santa Rosa Creek, Conejo Creek, Arroyo Las Posas, Calleguas Creek, Revolon Slough	Simi Valley, Moorpark, Camarillo, Thousand Oaks, Newbury Park, Somis
4	Potrero Creek watershed, Upper Cuyama River watershed	Potrero Creek, Medea Creek	Agoura Hills, Westlake Village



**FIGURE 1  
DISTRICT MANAGEMENT ZONES**



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## **2.0 FACILITY TYPES AND DESCRIPTIONS**

A variety of basin and linear facilities are maintained by the District. A comprehensive list of the District's facilities and their location, dimensions, capacities and other pertinent information is included in the District's Catalog of Facilities (Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program EIR, Appendix C) and the Debris and Detention Basin Manual (Appendix D). The main types of linear facilities are Open Channels; Open Channel Inlets, Outlets, and Transitions; Bank Protection and Related Facilities; and Pipe and Box Culverts (Underground Facilities). There are about 200 miles of maintained linear facilities with open channels accounting for one half of the total. There are 39 debris and detention basins that are maintained by the District.

### **2.1 OPEN CHANNELS**

#### **2.1.1 Channel Types**

More than 50 percent of the District's linear facilities are some type of open channel. The most abundant type, comprising approximately 68 percent of District channels, is the reinforced rectangular or trapezoidal concrete channel. This is a fully lined concrete structure with either a trapezoidal or rectangular (vertical wall) channel geometry. Approximately 22 percent of the open channels are graded, earthen channels or unlined channels. The remaining 10 percent of channels are grouted (i.e., concreted) riprap channels with earthen bottoms. Channel geometries for earthen channels are usually trapezoidal.

Open channels in the District can be "improved" or "unimproved" channels. Improved channels have been designed for a specific storm flow conveyance capacity, with engineering drawings that specify a certain width and depth. Most "improved" channels are fully or partially lined with concrete. "Improved" earthen channels have design dimensions that must be maintained. "Unimproved" channels are full earthen channels or channels with bank protection (i.e., rock rip-rap, gunite) and a soft bottom that do not have engineered design specifications, but are maintained to specific configurations as part of the District's ongoing maintenance program.

#### **2.1.2 Maintenance Activities in Channels**

Several types of routine maintenance and repair operations are conducted by the District on an annual basis. Any of these activities can occur at a facility with flowing or ponded water that would require a water diversion and appropriate BMPs.

## **2.0 FACILITY TYPES AND DESCRIPTIONS**

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#### **2.1.2 Maintenance Activities in Channels**

Several types of routine maintenance and repair operations are conducted by the District on an annual basis. Any of these activities can occur at a facility with flowing or ponded water that would require a water diversion and appropriate BMPs.

**2.1.2.1 Channel Cleanout**

The District is the Principal co-permittee for implementation of the Ventura County Municipal NPDES Permit and Stormwater Management Program (SMP)<sup>1</sup>. The SMP requires co-permittees to routinely clean catch basins, drainage facilities, detention/retention basins and reinforced concrete open channels at least once each year prior to the wet season. At most sites, sediments are removed from the channel bottom using an excavator or a crane working from the top of the banks.

**2.1.2.2 Channel Bed and Bank Repair**

Repair activities include the re-shaping and compaction of earthen channels to repair erosion damage, replacement of damaged concrete in lined channels and other in-kind replacement bank protection. These types of repairs do not alter the facility footprint or change the type of construction.

**2.2 DEBRIS AND DETENTION BASINS**

The District operates and maintains 41 debris and detention basins. The number, location and capacity of the District's detention basin are provided in the VCWPD Debris and Detention Basin Manual (Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program EIR, Appendix D). They are typically located in headwaters above developed areas. The basins are usually formed by the construction of an earthen dam that may or may not have rock facing. If basin volumes or dam designs exceed certain state criteria, they are regulated by the California State Division of Safety of Dams (DSOD). State-size facilities store more than 50 acre-feet of water or have dams that are more than 25 feet high.

**2.2.1 Debris Basins**

Most of the District basins are "debris basins" which capture large debris (sediment, boulders, trees, etc.) during winter storms. These types of basins function by allowing flood waters to pond in the basin, thereby slowing water velocity so that debris and sediment settle out in the basin.

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<sup>1</sup> The Ventura County Stormwater Quality Management Plan (SMP) defines the requirements of the Ventura County Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Board Order No. 00-108; NPDES Permit No. CAS004002) issued by the Los Angeles Regional Water Quality Control Board (RWQCB).

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### 3.0 ASSESSING FIELD CONDITIONS

Prior to a maintenance or repair activity in a channel or basin with ponded or flowing water, the District or its contractor will determine the need for a water diversion, the appropriate type of water diversion and appropriate BMPs for the activity. This requires the District or its contractor to perform a pre-construction assessment of field conditions including the type of facility, flow conditions and the potential for aquatic habitat.

#### 3.1 ASSESSMENT OF FLOW CONDITIONS

##### 3.1.1 Open Channels

Some open channels within the District have year-round or perennial flow. Significant flows occur in the channels mainly during rain events or after storms. However, water can be present year-round due to “nuisance” discharges from storm drains, high ground water seeping from “weepholes” in concrete lined channels and agricultural return flows. Some channels have perennial flows due to permitted discharges from water or wastewater treatment plants.

The rainy season runs approximately from October to April. During the rainy season flows from storm events should be anticipated and provisions for water diversions incorporated into project planning. For coastal facilities, the influence of tidal flows will need to be taken into consideration.

Water diversion and incorporation of appropriate BMPs during a routine maintenance or repair operation in an open channel is indicated under the following flow conditions:

- The maintenance or repair activity is to be conducted in the rainy season between October and April.
- The channel conveys tidal flows or is tidally influenced.
- The channel conveys flows from a special status stream (Table 3-1).
- The channel conveys perennial flows from either man-made or natural upstream sources.
- Flow or ponded water is present in an earthen bottom channel.
- Flows or ponded water within a concrete-lined channel are 3 inches or deeper<sup>2</sup>.

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<sup>2</sup> The District typically schedules routine channel cleanouts of improved channels during the dry season from April to October. During this time most of the channels are either dry or have very low flows of less than two inches in depth. BMPs for low flow conditions during routine dry-season channel clean-outs are incorporated into Section 5 of this document.

**3.1.2 Debris and Detention Basins**

A water diversion is needed in a debris or detention basin if water is either flowing into the basin or ponded within it and the maintenance activity will potentially impact downstream water quality or aquatic habitat. Water may be ponded within a basin due to groundwater seepage or retained storm flows. A water diversion with appropriate BMPs is indicated for a routine maintenance or repair activity in a basin under the following flow conditions:

- Water is flowing into the basin from an upstream source.
- Water is ponded within the basin.
- The activity is scheduled during the rainy season from October to April.

**3.2 ASSESSMENT OF POTENTIAL AQUATIC HABITAT**

Most District flood control facilities in the district are managed to minimize riparian, wetland and aquatic habitat. However, measures must be taken during water diversions to protect aquatic habitat and species if they are present. Facilities that convey flows for sensitive species are identified in the Catalog of Facilities (Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program EIR, Appendix C) and are summarized in Table 3-1 below.

A biological survey must be conducted by a qualified biologist for facilities with potential habitat for native aquatic species prior to initiation of the water diversion and any maintenance or repair activity. Prior to initiating work the District or its contractor must determine if the following conditions that may require a biological survey are present at the facility:

- The facility conveys flows from a special status stream (Table 3-1).
- The facility supports established wetland or riparian vegetation.
- The facility is an earthen bottom channel or debris basin with ponded or flowing water deeper than three inches.
- The facility conveys perennial flows from a man-made or natural upstream source.
- The facility conveys tidal flows or flows that are tidally influenced.
- The facility is a concrete-lined channel conveying flows deeper than 3 inches.

Prior to initiating work, if the District or its contractor observes the above conditions at a facility with flowing or ponded water, the District will assign a qualified biologist to conduct the biological survey.



**TABLE 3-1**  
**SENSITIVE SPECIES POTENTIALLY OCCURRING**  
**IN THE VICINITY OF DISTRICT FACILITIES**

Channel	Reach	Zone	Aquatic Sensitive Species
Cal-Trans Secondary	41728	1	Southern Steelhead
Fox Canyon	41422	1	California Red-legged Frog
Fox Canyon	41424	1	California Red-legged Frog
Howard Ave. Secondary	41717	1	California Red-legged Frog
Kenewa St. Secondary	41716	1	California Red-legged Frog
Live Oak Acres Bank Protection	41031	1	Southern Steelhead
Parkview Drive Secondary	41701	1	California Red-legged Frog
Ramona St. Secondary	41730	1	California Red-legged Frog and Southern Steelhead
San Jon Barranca	41551	1	Tidewater Goby
Skyline Drain	41224	1	California Red-legged Frog
Stanley Ave. Drain	41110	1	California Red-legged Frog
Thatcher Creek	41443	1	California Red-legged Frog and Southern Steelhead
Hueneme Drain (Pump Drain)	42331	2	Tidewater Goby
Hueneme Drain	42332	2	Tidewater Goby
Hueneme Drain	42333	2	Tidewater Goby and Southwestern Pond Turtle
J Street Drain	42321	2	Tidewater Goby
Oxnard Industrial Drain	42301	2	Tidewater Goby
Santa Clara River	42036	2	Southern Steelhead
Santa Clara River Levee (North Groins)	42026	2	Southern Steelhead
Santa Clara River Levee	42037	2	Southern Steelhead
Santa Paula Creek	43061	2	Southern Steelhead and Arroyo Toad
Santa Paula Creek	43062	2	Southern Steelhead and Arroyo Toad
Santa Paula Creek	43065	2	Southern Steelhead and Arroyo Toad
Sespe Creek	43308	2	Southern Steelhead, California Red-legged Frog, and Arroyo Toad
Sespe Creek Levee	43305	2	Arroyo Toad and Southern Steelhead
Sespe Creek Levee	43306	2	Southern Steelhead, California Red-legged Frog, and Arroyo Toad
Arroyo Las Posas	45051	3	Arroyo Chub
Arroyo Las Posas	45063	3	Arroyo Chub
Arroyo Las Posas	45065	3	Arroyo Chub

**TABLE 3-1 (CONTINUED)**  
**SENSITIVE SPECIES POTENTIALLY OCCURRING**  
**IN THE VICINITY OF DISTRICT FACILITIES**

<b>Channel</b>	<b>Reach</b>	<b>Zone</b>	<b>Aquatic Sensitive Species</b>
Arroyo Santa Rosa Trib.	46081	3	Arroyo Chub
Arroyo Simi	47011	3	Arroyo Chub
Arroyo Simi	47012	3	Arroyo Chub
Arroyo Simi	47013	3	Arroyo Chub
Arroyo Simi	47014	3	Arroyo Chub
Arroyo Simi	47015	3	Arroyo Chub
Arroyo Simi	47016	3	Arroyo Chub
Arroyo Simi	47017	3	Arroyo Chub
Arroyo Simi	47021	3	Arroyo Chub
Arroyo Simi	47022	3	Arroyo Chub
Arroyo Simi	47024	3	Arroyo Chub
Arroyo Simi	47025	3	Arroyo Chub
Arroyo Simi	47027	3	Arroyo Chub
Arroyo Simi	47031	3	Arroyo Chub
Arroyo Simi	47033	3	Arroyo Chub
Arroyo Simi	47035	3	Arroyo Chub
Arroyo Simi	47037	3	Arroyo Chub
Beardsley Wash	45241	3	Arroyo Chub
Beardsley Wash	45243	3	Arroyo Chub
Beardsley Wash	45245	3	Arroyo Chub
Beardsley Wash	45247	3	Arroyo Chub
Beardsley Wash	45248	3	Arroyo Chub
Calleguas Creek	45021	3	Arroyo Chub
Calleguas Creek	45023	3	Arroyo Chub
Calleguas Creek	45025	3	Arroyo Chub
Calleguas Creek	45027	3	Arroyo Chub
Calleguas Creek	45033	3	Arroyo Chub
Calleguas Creek	45035	3	Arroyo Chub
Calleguas Creek	45037	3	Arroyo Chub
Conejo Creek	46011	3	Arroyo Chub
Conejo Creek	46012	3	Arroyo Chub
Conejo Creek	46013	3	Arroyo Chub
Conejo Creek	46014	3	Arroyo Chub

**TABLE 3-1 (CONTINUED)**  
**SENSITIVE SPECIES POTENTIALLY OCCURRING**  
**IN THE VICINITY OF DISTRICT FACILITIES**

Channel	Reach	Zone	Aquatic Sensitive Species
Conejo Creek	46015	3	Arroyo Chub
Conejo Creek	46016	3	Arroyo Chub
Revelon Slough	45101	3	Arroyo Chub
Revelon Slough	45103	3	Arroyo Chub
Revelon Slough	45105	3	Arroyo Chub
South Branch Arroyo Conejo	46113	3	Arroyo Chub
South Branch Arroyo Conejo	46114	3	Arroyo Chub

If the pre-construction biological survey indicates that the facility has the potential for native aquatic habitat, BMPs for the protection of aquatic life must be implemented as part of the water diversion. BMPs for the protection and relocation of aquatic life are included in Section 5 of this document and additional recommendations or requirements may be provided by the qualified biologist as part of the survey.

If the biological survey indicates the potential presence of a threatened, endangered or sensitive aquatic species, District requirements for the protection of listed species must be implemented as required under the biological opinion and take permit for that species or other appropriate documentation.

### 3.3 GROUNDWATER DEWATERING

A high water table is usually associated with a basin but may also occur within channels. Maintenance and repair activities requiring excavation below the water table require groundwater dewatering to maintain a dry work area. However, the RWQCB prohibits activities involving wet excavations (i.e., excavations below the seasonal high water table) unless authorized by an NPDES or Waste Discharge Requirement.

To comply with the requirements established by the Los Angeles RWQCB for groundwater dewatering, the following applies to maintenance or repair activities requiring excavation.

- In non-coastal areas, groundwater tables fluctuate seasonally and high groundwater can be avoided by scheduling maintenance and repair activities in the dry season.
- A minimum 5-foot buffer zone must be maintained above the existing groundwater level during excavation activities.

## **SECTION 3.0**

## **ASSESSING FIELD CONDITIONS**

- If groundwater dewatering is proposed or anticipated, the District will file a Report of Waste Discharge to the RWQCB and obtain any necessary NPDES permits/Waste Discharge Requirements prior to discharging groundwater to a waterway.
- If groundwater is encountered without the benefit of appropriate permits, the District or District contractor will cease all activities in the areas where groundwater is present until the RWQCB is notified and the necessary NPDES permits/Waste Discharge Requirements are obtained.

## 4.0 WATER DIVERSION METHODS

### 4.1 WATER DIVERSION COMPONENTS

The purpose of water diversion is to prevent flowing or tidal waters from entering a work area. In general, the work area may be isolated by the impounding of flows behind a coffer dam or within an in-stream excavated basin. Flows from the coffer dam or excavated basin are routed around or through the work area by a bypass system. The bypass system may consist of a pipeline, excavated channel, lined flume or a bermed portion of the existing channel. Because of the potential of the water diversion to impact water quality and potential aquatic life, appropriate BMPs must be incorporated into the design and operation of the water diversion. Water diversion design and planning must typically take into account the following:

- Design and construction of cofferdam or excavated basin
- Design of bypass system
- Management of sediment
- Bypass outlet protection
- Water Quality Monitoring
- Protection of aquatic species and habitat
- Equipment and vehicle use

### 4.2 COFFERDAMS

#### 4.2.1 Types of Cofferdams

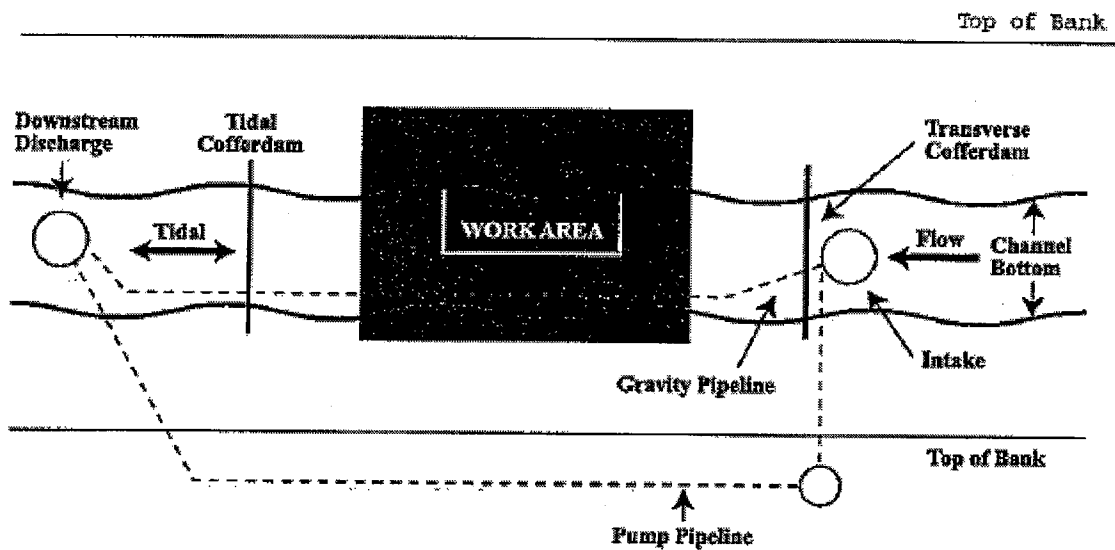
Temporary cofferdams are used to keep flowing or ponded water out of facility work areas. Cofferdams are used with bypass systems to divert water either around or through the work area. Cofferdams can be generally categorized as transverse, longitudinal or tidal. A simple plan view of a transverse, longitudinal and tidal cofferdam and bypass system is shown below in Figure 2. BMPs for the design and construction of cofferdams are provided in Section 5 of this document.

##### 4.2.1.1 Transverse Cofferdam

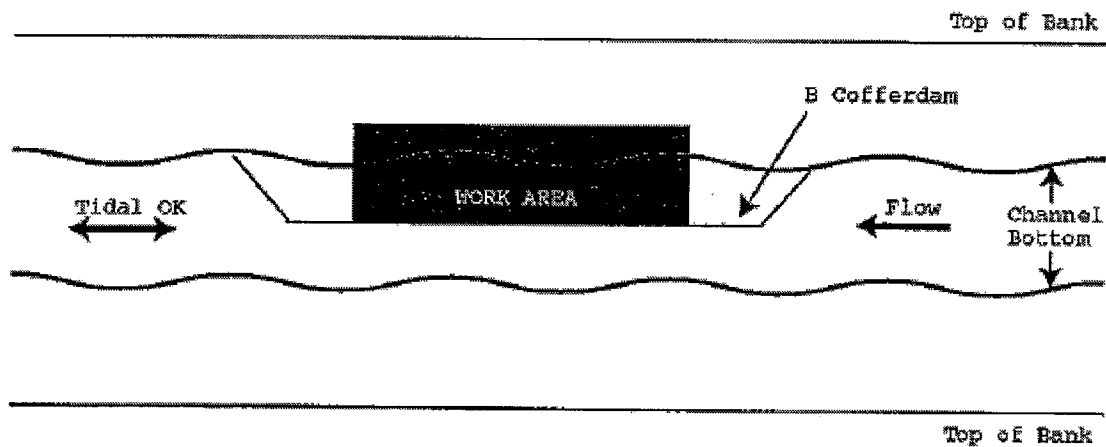
Transverse cofferdams are used in channels or basins to span the entire cross-section of the facility upstream of the maintenance or repair activity. Water is impounded upstream of the cofferdam and a bypass system is used to route flows through the work area. Transverse cofferdams typically consist of sandbags, inflatable dams or k-rails.

**FIGURE 2**  
**COFFERDAM AND BYPASS SYSTEMS**

**Plan View of Transverse Cofferdam and Bypass System**



**Plan View of Longitudinal Cofferdam and Bypass System**



**4.2.1.2 Longitudinal Cofferdam**

A longitudinal cofferdam allows work to proceed in a portion of the channel while allowing natural flow to continue along the remaining part of the channel. Longitudinal cofferdams are typically constructed parallel to the channel or basin banks and can consist of sandbags, inflatable dams, compacted earth or k-rails.

In facilities with low flows or for maintenance activities undertaken during the dry season, longitudinal cofferdams may be constructed of in-channel materials or of imported materials such as concrete k-rails or sand bags. In earthen bottom channels, a longitudinal cofferdam may be constructed from materials excavated from the temporary low-flow channel. The discharge of sediment into the temporary low flow channel can be reduced by the use of erosion and siltation controls such as silt-fencing, coir rolls (also known as wattles), filter fabric and silt-free sand bags as described in Section 5.0.

**4.2.1.3 Tidal Cofferdams**

In channels that convey tidal flows or are tidally influenced, transverse or longitudinal cofferdams may be constructed. A transverse coffer dam in a tidally influenced channel may require a cofferdam both upstream and downstream of the work area. The downstream transverse cofferdam must be constructed at a height adequate to retain tidal flows and must be sturdy enough to withstand tidal surge. If a longitudinal cofferdam is constructed, the bypass channel must have adequate flow capacity to accommodate tides. Tidal cofferdams should be installed and removed at low tide.

**4.2.1.4 Excavated Basin Diversion**

In low-flow conditions within earthen bottom channels, a cofferdam may not be needed to pond water. Water may be diverted through the work area by either constructing an excavated basin and pipeline or by excavating a temporary low-flow channel around the work area. Sediment control measures for excavated basins include using stand-pipes to reduce the intake of sediment (refer to Figure 3) and the use of filter fabric or hay bale filters within the excavated basin. Wattles may be used upstream or downstream of the excavated basin and downstream of the bypass outlet. BMPs to address the discharge of sediment from excavated basins are included in the Bypass System BMPs incorporated into Section 5.0 of this document.

**4.3 BYPASS SYSTEMS**

Bypass systems are used to divert water impounded by an upstream cofferdam around or through the work area. Bypass systems typically consist of pipelines, excavated low-flow channels or constructed channels or flumes. A berm constructed in the channel bottom may also be used to route low-flows around the work area. Selection of a bypass system design

**FIGURE 3**  
**INTAKE CONFIGURATIONS**



depends on the type of facility and activity, cofferdam design, flow conditions, and presence of aquatic habitat.

Transverse and tidal cofferdams typically use a pipeline to divert water through the work area. The pipeline may operate by gravity flow or require water to be pumped. Low flow conditions or channel geometry in an earthen bottom channel may require the excavation of an upstream basin and standpipe to facilitate pumping as shown in Figure 3 (refer to Section 5.3.3).

Bypass systems for longitudinal cofferdams may consist of an open channel formed by the cofferdam or berm, an excavated low-flow channel adjacent to the work area, a constructed open flume or a pipeline.

Outlet protection may be required as part of a bypass system to reduce the velocity and energy of concentrated flows by placing temporary devices or rock at pipe outlets. Outlet protection helps prevent scour in earthen bottom channels and prevents erosion and reduces turbidity. Rock aprons are the most common type of outlet protection for high flows.

BMPs for the design and construction of bypass systems are provided in Section 5 of this document.



## **5.0 WATER DIVERSION BEST MANAGEMENT PRACTICES**

### **5.1 GENERAL WATER DIVERSION BMPS**

#### **5.1.1 Maintenance and Repair Planning**

Prior to maintenance and/or repair activities, the District or its contractor must determine if a water diversion is necessary and incorporate any water diversion into pre-project planning. Planning for water diversions during maintenance and repair activities should incorporate and identify the following:

- A pre-maintenance biological survey must be conducted by a qualified biologist for facilities with potential habitat for native aquatic species prior to initiation of the water diversion and any construction work. Section 3.2 provided guidance for determining if a facility would be subject to this requirement.
- Proposed cofferdam construction methods, materials and anticipated duration of diversion activities.
- Identification of erosion control BMPs, including methods, materials and installation, maintenance and removal requirements.
- A map or drawing indicating the location of cofferdams, type and location of bypass system, anticipated water retention depth, cofferdam height and location of downstream discharge point.
- Location of proposed upstream and downstream water quality monitoring sites.

#### **5.1.2 Operation and Maintenance**

- The water diversion and work area dewatering system must be in place and functional before in-channel work is started.
- While the water diversion is in place, it must be operational 24 hours a day.
- Inspection and maintenance of the water diversion and associated erosion and sediment control BMPs should be conducted on a daily basis.
- Maintenance and/or repair activities should not be conducted during a rainfall event.
- During cofferdam operation, sufficient water will at all times be allowed to pass downstream to maintain aquatic life below the water diversion as appropriate.

#### **5.1.3 Removal Post-maintenance**

- The cofferdam, bypass system, and erosion control will be removed when the work is completed. Removal normally proceeds from downstream in an upstream direction.

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## **WATER DIVERSION BEST MANAGEMENT PRACTICES**

- Remove temporary fill as appropriate, such as access ramps diversion structures or earthen cofferdams. Material excavated from the channel bottom for the construction of temporary in-channel berms or channels may be left in place.
- Normal flows should be restored to the affected stream immediately upon completion of work.

### **5.2 COFFERDAMS**

#### **5.2.1 General Design Considerations for Cofferdams**

- Cofferdams will be designed with adequate height to retain dry weather flows and anticipated storm flows.
  - Cofferdam height for non-tidally influenced channels should generally be higher than the normal high water mark.
  - Cofferdam height is to be established by the District based on facility dimensions and conditions, existing flow conditions, time of year and other pertinent factors.
- Cofferdam construction will be adequate to prevent seepage into or from the work area.
- Cofferdams may be constructed from sand bags, concrete k-rails, sheet piles or other appropriate materials.
- Cofferdams constructed of earth or other materials subject to erosion will be enclosed by erosion control measures such as filter fabric, silt-fencing, sheet-piling or other appropriate materials.
- Materials used for the construction of earthen cofferdams will not incorporate contaminated sediments, clays or other materials including concrete, pavement, trash or debris.
- The use of concrete k-rails or sand bags for transverse dam construction is recommended. Transverse cofferdams should not be made of earth or other substances subject to erosion.
- Longitudinal cofferdams in low flow channels may be constructed from alluvium excavated from the channel and compacted onsite.

#### **5.2.2 Inspection and Maintenance**

- Inspect all system components twice a day
- Check for water seepage under the dam and general integrity of the dam
- Fix all leaks immediately
- If water is discharged from the work area despite the cofferdam:

## **SECTION 5.0**

## **WATER DIVERSION BEST MANAGEMENT PRACTICES**

- Implement BMPs to remove sediment from the water.
- Appropriate BMPs include the placement of wattles, filter fabric, silt fencing across the flow stream downstream of the work area.
- For higher flows, construction of a downstream de-silting basin may be required.
- Clean water intake if clogged.

### **5.2.3 Removal**

- Once project work is complete, reintroduce water into the channel slowly so that high turbidity is avoided.
- Remove imported construction materials.
- After removal of the cofferdam, dismantle the bypass system and restore disturbed areas to pre-construction grades.
- Flows in an earthen bottom channel may be left within the temporary low flow channel if re-introduction of flows to the work area would result in excessive discharge of sediment downstream.

## **5.3 BYPASS SYSTEMS**

### **5.3.1 General Considerations for Bypass Systems**

- Flows within the bypass will be maintained to the greatest extent feasible in order to maintain adequate water quality and quantity to support fish and other aquatic life
- During the water diversion the following upstream and downstream monitoring will be conducted:
  - pH, temperature, dissolved oxygen, turbidity, and total suspended solids monitoring will be implemented.
  - Monitoring will generally be conducted on a daily basis during the first week of diversion activities, and then on a weekly basis, thereafter, until the in-stream work is complete.
  - Results of the analyses will be retained by the District and submitted to regulatory agencies as needed.

### **5.3.2 Open Channel Bypass Systems**

- An open channel bypass will be protected from erosion or spillage of material from channel and basin banks and slopes using readily available BMPs.

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## **WATER DIVERSION BEST MANAGEMENT PRACTICES**

- BMPs include the placement of filter fabric, silt fencing, straw bales, sand bags on cofferdam banks, channel banks and slopes.
- An upstream silt catchment basin may be constructed so that silt or other deleterious materials are not allowed to pass into the open channel bypass.
  - The silt catchment basin should be monitored and cleaned/repaired weekly.
- For facilities that support sensitive species or in perennial streams, an open bypass channel or flume may be required in conjunction with a longitudinal cofferdam.

### **5.3.3 Pipeline Bypass Systems**

- Bypass systems with pipelines may be gravity flow or pumped as necessary.
- When using a gravity flow system, the pipeline must slope continuously downgrade and therefore may have to pass through or near the work area.
- A pumped system is required where there is no available discharge point continuously downgrade of the intake (i.e., if the pipeline cannot be routed through the work area).
- Intakes and/or excavated basins may be required for gravity flow or pump-fed bypass systems (see Figure 3).
  - Turbulence around the intake and associated turbidity can be reduced by means of ponding water behind the cofferdam or in an excavated sump.
  - In earthen bottom channels or basins the intake pipe end should be substantially above the bottom of the ponded water or excavated basin as shown in Figure 3 to avoid discharge of sediments.
  - For gravity systems, a standpipe arrangement is very effective (see Figure 3). An intake filter can also be used to screen out sediment but can be easily clogged so is not recommended if the pump must run on a 24-hour schedule.
- Outlet protection should be incorporated at the pipe outlet to prevent generation of turbidity, erosion and scour. Refer to Outlet Protection BMPs in this Section.
- As dry weather flows vary, the contractor may select the proper size pump in the field. A backup pump should be provided.

## **5.4 SEDIMENT CONTROL ACTIVITIES**

- Work areas, channel banks or stockpile areas adjacent to the water diversion area that could be subject to erosion during storm events will be stabilized with erosion control measures:

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## **WATER DIVERSION BEST MANAGEMENT PRACTICES**

- Appropriate erosion control materials include silt fencing, straw bales, sand bags, filter fabric, coir rolls or wattles.
- In low flow channels an upstream silt basin may be constructed so that silt or other deleterious materials settle out before passing through the water diversion area.
- Erosion control methods used to prevent siltation should be monitored and cleaned/repared weekly.
- Sediment may be discharged downstream as a result of returning flows to the original low-flow channel:
  - When returning flows, minimize the discharge of sediment by installing filter fabric, wattles or silt fencing downstream of the work area.
  - Bypass flows should be introduced into the dewatered area at the lowest velocity possible to allow minimize erosion and turbidity.
- Water diversions are not typically used by the District during clean-outs of concrete-lined channels where flows are minimal (less than three inches deep) and channel widths are narrow (25 feet or less). In low-flow concrete-lined channels, the District uses small bulldozers or “bobcats” working upstream to downstream within the channel bottom to scrape sediment, trash and debris into piles for collection. In-stream BMPs typically used by the District for this type of channel clean-out include primary and secondary placement of wattles (net-wrapped coir rolls/wattles) downstream of the work area across the channel width. In low flow conditions, 6-inch diameter wattles are adequate to contain and filter flows within a concrete-lined channel. Proper placement and removal of the wattles prevents the discharge of sediment and debris downstream of the work area.

### **5.5 OUTLET PROTECTION**

- Place effectively sized outlet protection underneath pipeline outlet of where diverted water is discharged into stream.
- Rock aprons are the most common type of outlet protection for high flows; however, erosion control fabric, wattles, or silt fencing may be installed in front of an outlet to provide additional velocity reduction.
- Energy dissipation or other protection may not be necessary if the discharge is to an existing hardened structure (culvert, riprap or concrete), to deep water or a heavily vegetated area.
- When designing the outlet project, consider flow depth, roughness, gradient, side slopes, discharge rate, and velocity.

- If the discharge is to a tidal area, it may be necessary to equip the discharge pipe with a flap gate to prevent tidal flows from backing up to the intake.

## **5.6 AQUATIC LIFE PROTECTION MEASURES**

If the results of the pre construction biological survey indicate that the facility has the potential for native aquatic life, protective measures shall be taken during water diversions to prevent entrapment and mortality of fish and amphibians. If the survey determines that the aquatic life present at the site is composed of invasive or exotic species, no further action to protect aquatic species during the water diversion is necessary.

The following are minimum measures to be undertaken to protect native and sensitive aquatic life during the construction, operation and removal of a water diversion. During construction of the water diversion and during removal, a qualified biologist will be available to oversee measures undertaken to prevent entrapment and mortality of native aquatic life. Recovery and replacement of aquatic life may be undertaken by personnel under the supervision of the qualified biologist.

### **5.6.1 Prior to Cofferdam Construction**

- Prior to construction of cofferdams, the channel section shall be isolated at the upstream and downstream ends and aquatic organisms removed and relocated:
  - Block nets should be secured upstream and downstream of the channel section fully spanning the cross section of flow.
  - Block nets should be secured into the substrate in soft channel bottoms or weighted across the channel cross section in hard bottom channel.
  - A seine net should be used within the isolated area to recover fish, macro-invertebrates, and amphibians under the direction of the biologist.
  - Recovered aquatic life may be placed and transported in water-filled buckets to be released downgradient of the work site, or to other nearby appropriate habitat.
  - A minimum of three full channel sweeps should be conducted to remove aquatic organisms prior to commencement of dewatering.
  - After initial seine netting and removal of aquatic life, cofferdams may be constructed within the area isolated by the block nets.
  - During construction and operation of the cofferdams flow downstream of the work site should be maintained.

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### **5.6.2 Protection of Aquatic Life during Bypass Operation**

- Pump inlets and outlets shall be protected using an appropriate mesh screen:
  - Mesh size will be based on protection of smallest native fish or amphibian species as established by field survey.
  - Default mesh size is 5 mm.
- Bypass pipelines will be adequately sized to pass flows and maintain existing water flows downstream of the work area.

### **5.6.3 Dewatering of Work Area**

- Seine netting of organisms shall continue during dewatering of the dry work space under supervision of the qualified biologist.

### **5.6.4 Maintaining Flow through Work Site**

- For water diversions where an open flow channel is maintained or an alternative flow channel is excavated, measures shall be taken to ensure that adequate flows are maintained and that aquatic organisms are not stranded in the temporary flow channel.

### **5.6.5 Re-establishing Flows Post-construction**

- During flows into an existing channel from a temporary channel, the qualified biologist shall survey the de-watered temporary channel to ensure that aquatic organisms are not trapped or stranded.
  - Trapped or stranded aquatic organisms will be placed in water-filled buckets for transport and release into the existing flow channel.
  - Applicable to diversions in soft bottom channels: if aquatic life has established itself within a temporary channel during the time of construction, flows may be left within the temporary channels.

## **5.7 EQUIPMENT AND VEHICLE USE**

### **5.7.1 Equipment Operation**

- Stationary equipment such as motors, pumps, generators and welders located within or adjacent to the channel or basin will be positioned over drip pans.
- Access to the work site via existing roads and access ramps will be shown on the project plans. If no ramps are available in the immediate area, a temporary ramp may be

constructed within the flagged work area. Any temporary ramp will be removed upon completion of the project.

### **5.7.2 Equipment Maintenance During Construction**

- Any equipment or vehicles driven and/or operated within or adjacent to the channel or basin should be checked and maintained daily, to prevent leaks of materials that could be deleterious to aquatic life if introduced to water. All maintenance will occur in a designated offsite area. The designated area will include a drain pan or drop cloth and absorbent material to clean up spills.
- Fueling and equipment maintenance will be done in a designated area removed from the area of the channel or basin such that no petroleum products or other pollutants from the equipment may enter these areas via rainfall or runoff. The designated area will include a drain pan or drop cloth and absorbent materials to clean up spills.

### **5.7.3 Spill Prevention, Control, and Containment**

- Prior to maintenance or repair activities, the District or Contractor will identify the methods, materials and procedures for spill prevention, control and containment. This information will be incorporated into the contract documents. Spill containment methods should address the types of materials and equipment to be used at the site. Materials for the containment of spills (i.e., absorbent materials, silt fencing, filter fabric, coir rolls) should be identified and be available onsite prior to commencement of maintenance and/or repair activities.
- Any accidental spill of hydrocarbons or coolant that may occur within the work area will be cleaned immediately. Absorbent materials will be maintained within the work area for this purpose.
- No wet concrete product will come into contact with any flowing or standing water at any time. Areas where raw cement or grout are applied or where concrete curing or finishing operations are conducted will be separated from any ponded or diverted water flows by a cofferdam or silt-free, exclusionary fencing. All equipment involved with the concrete or grouting operations will be located within a contained area while using any slurry or concrete product. The protective berm or other structure will be in place prior to maintenance and/or repair activities.
- Any spill of the grout, concrete, concrete curing or wash water adjacent to or within the work area will be removed immediately.
- During concrete spill clean-up operations and until cessation of maintenance and/or repair activities, pH monitoring will be conducted on a daily basis upstream and downstream of the spill site. The results of post-spill pH monitoring will be submitted to the District and kept with the contract documents.



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## **WATER DIVERSION BEST MANAGEMENT PRACTICES**

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- If vacuum trucks are used to clean up a spill into ponded or diverted water, the vacuum hose should be placed in a 3 to 4 square foot area, and protected on all sides by exclusionary fencing to prevent the migration of contaminants. The intake of the vacuum hose should be protected with 5 mm mesh screen to prevent uptake of aquatic life or as determined by regulatory permits.

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## **6.0 REGULATORY SUMMARY**

Many of the District's facility maintenance activities occur in watercourses or basins where such activities are regulated by state, federal or local agencies. Currently, most activities undertaken by the District require individual noticing and/or permitting. The District is in the process of developing long-term permits to address routine maintenance and repair activities. This section of the Guidance describes the applicable regulatory authorities and permit requirements for the maintenance program.

### **6.1 FEDERAL AGENCIES**

#### **6.1.1 U.S. Army Corps of Engineers**

Activities that result in the discharge of dredged or fill material in natural watercourses (such as bank stabilization and channel shaping) are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Most of the Districts maintenance and repair activities are permitted under Nationwide Permits (NWP) No. 3., No. 31 and No. 33. However, this program may be authorized under a Regional General Permit or Individual Permits.

#### **6.1.2 U.S. Fish and Wildlife Service and National Marine Fisheries Service (NMFS)**

The requirements of the Endangered Species Act (ESA) apply to any project permitted under a CWA Section 404. An ESA Section 7 Incidental Take permit would be needed if actions taken for a project would have the potential to adversely affect listed species or designated critical habitats, either directly or indirectly. Facilities that convey flows for sensitive species are identified in the Catalog of Facilities (Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program EIR, Appendix C).

A Section 7 consultation process will take place concurrent with the Section 404 permit review process.

### **6.2 STATE AGENCIES**

#### **6.2.1 Regional Water Quality Control Board**

The Regional Water Quality Control Board (RWQCB) Los Angeles Region administers both the Section 401 Water Quality Certification program and programs under Section 402 of the CWA including the National Pollutant Discharge Elimination System (NPDES) in Ventura County.

**6.2.1.1 Section 401 Water Quality Certification**

The RWQCB requires a Section 401 Water Quality Certification for any activity undertaken under a Section 404 permit. Projects that require water diversions during maintenance and/or repair activities have been required by the RWQCB to submit a separate Water Diversion Plan. This Guidance incorporates the requirements of the Water Diversion Plan and will ensure that future water diversions undertaken by the District comply with current Section 401 certification requirements.

**6.2.1.2 Section 402**

Section 402 of the Clean Water Act governs the NPDES which regulates point source discharges to waters of the United States. The RWQCB issues both NPDES permits for point source discharges to waters and Waste Discharge Requirements (WDRs) applicable to discharges to surface and groundwater.

A maintenance or repair activity undertaken by the District may require the submittal of a Notice of Intent (NOI) for coverage under the California Construction General Stormwater Permit. This permit requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP). If a water diversion is needed, the appropriate BMPs are incorporated into the SWPPP.

WDRs can be required for water diversions, dewatering activities or any type of pumping and release of water. Short term water diversions for routine maintenance in the District do not normally require WDRs unless there is a need for groundwater dewatering. Groundwater dewatering operations are not covered under this Guidance or the Maintenance Program EIR and will be permitted separately under the following general permit: *Order No. R4-2003-0111(Permit No. CAG994004), General National Pollutant Discharge Elimination System and Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the State Board on August 7, 2003.*

**6.2.2 California Department of Fish and Game**

The modification to the bed, bank, and/or vegetation in a natural drainage (and certain man-made drainages) is regulated by the California Department of Fish and Game (CDFG) under Section 1600 of the Fish and Game Code. Such modifications require a Streambed Alteration Agreement.

A Section 2081 review process for state listed threatened and endangered species will take place concurrent with the Streambed Alteration Agreement permit review process.

## **ENVIRONMENTAL BEST MANAGEMENT PRACTICES and PERMIT CONDITIONS SUMMARY**

This document was created as a permit compliance reference tool for District staff. The Best Management Practices (BMPs) have been altered from the originals evaluated during the CEQA and permitting processes to clarify content without changing regulatory requirements. These BMPs incorporate all permit conditions received for the Routine Operations & Maintenance Program, including the Biological Opinions from federal agencies (Table 1). Four new BMPs were developed to clarify permit conditions and incorporate other regulatory requirements related to erosion control, environmental training, and invasive aquatic species control. Also included for easy reference are: summaries of the "grandfathered" streambed alteration agreements incorporated by reference to the permits, summaries of endangered species additional conditions, and regulatory agency contact information.

**Table 1. Routine Operation & Maintenance Programmatic Permits**

<b>AGENCY</b>	<b>PERMIT NO.</b>	<b>DATE ISSUED</b>
U.S. Army Corps of Engineers	Regional General Permit No. 92	2/13/2013
U.S. Fish and Wildlife Service	Biological Opinion	12/12/2012
National Marine Fisheries Service	Biological Opinion	9/7/2012
California Department of Fish and Wildlife	Streambed Alteration Agreement No. 1600-2004-0512-R5	8/3/2009
Los Angeles Regional Water Quality Control Board	Section 401 Water Quality Certification File No. 08-148	8/17/2009

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**GRANDFATHERED STREAMBED ALTERATION AGREEMENTS: PAGE 14**

**ENDANGERED SPECIES ADDITIONAL CONDITIONS:    PAGE 17**

**REGULATORY AGENCY CONTACT INFORMATION:    PAGE 21**

**For inquiries regarding these permits or conditions, please contact:**

Pam Lindsey, Watershed Ecologist 805-654-2036 or

Zoë Carlson, Environmental Planner 805-654-2032

## **ENVIRONMENTAL BEST MANAGEMENT PRACTICES**

### **BMP 1: Avoid Channel Earthwork During the Rainy Season/Events.**

- Avoid earthwork in earthen and soft bottom channels from December 1 to April 1 unless water is absent.
- If work is considered critical, work in flowing water is acceptable, provided flow is diverted according to the Water Diversion Guide and sensitive aquatic species not present.
- No earthwork shall be conducted during rain events, or if 0.25 inches or more of rain is forecast within 12 hours of scheduled work.

### **BMP 2: Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning.**

- Prevent the discharge of silt-laden water or pollutants downstream when removing sediments, vegetation, algae, and trash from concrete channels.
- Install BMPs: silt barriers, sand bags, straw bales, as appropriate per Board Order No. 10-0108; NPDES Permit No. CAS004002, July 8, 2010.
- Follow the Water Diversion Guide if a flow diversion is installed.

### **BMP 3: Location of Temporary Stockpiles.**

- Temporary stockpiles in the channel bottom shall be limited to one working day and not overnight.
- Temporary stockpiles may be placed in channel bottoms or debris basins if they are placed in such a manner that they would not be exposed to flowing water.
- Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.

### **BMP 4: Survey for Habitat (nesting) Prior to Routine Maintenance Work.**

- A biological survey for nesting birds required prior to work from February 1 to September 15 if in or adjacent to suitable habitat.
- Nesting habitat defined as cattail patches, short and tall trees, and shrubby areas. Open gravel, bridges, culverts, and fence posts may also support nests.
- Work= mowing/disking, earth work, clean outs, access road work lasting more than one day, and repairs where nesting bird habitat is in work area or within 300 feet.
- If active bird nests are identified, work within 300 feet (500 feet for raptors) must be postponed until after September 15, unless the biologist determines the nest becomes inactive or a reduced buffer is approved by regulatory agencies.
- No bio survey needed for routine herbicide application in/on facilities to sparse, short (<3 foot) weedy vegetation (includes young (<1year old mule fat, willows or cattails).

**BMP 5/6: Survey for Steelhead Migration/Rearing Conditions and Sensitive Aquatic Species Prior to Routine Maintenance Work.**

- Applies to earthwork/repairs in surface water and within 100 feet of water:

<u><b>ZONE 1:</b></u> <ul style="list-style-type: none"><li>• Matilija Creek</li><li>• San Antonio Creek</li><li>• Thacher Creek</li><li>• Ventura River</li></ul>	<u><b>ZONE 2:</b></u> <ul style="list-style-type: none"><li>• Hopper Creek</li><li>• Piru Creek</li><li>• Pole Creek (unlined portions)</li><li>• Santa Clara River</li><li>• Santa Paula Creek</li><li>• Sespe Creek</li></ul>
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- Approved biologist must survey for steelhead migration or rearing conditions and other sensitive aquatic species prior to earthwork in or within 100 feet of surface water.
- If flows are deemed sufficient for steelhead migration, earthwork within or adjacent to the channel shall be postponed until after June 15 and before October 31.
- If rearing habitat is present, approved biologist shall determine if steelhead are present.
- If other sensitive species are found in the work area, work will stop while District environmental staff contact CDFW/USFWS. The approved biologist may be authorized to relocate these species to nearby suitable habitat.
- **Special authorization is required for water diversion** if flow conditions are suitable for steelhead or other aquatic species, even if the Water Diversion Guide is followed.
- Steelhead presence notification to NMFS at least 10 days prior to work by District environmental staff.
- If authorized by NMFS, an approved biologist shall isolate the work area with block nets and relocate any steelhead in the work area to suitable habitat with perennial surface water. The biologist shall continuously monitor during water diversion and any work within occupied steelhead habitat.
- Steelhead relocations or other impacts by flow diversion or dewatering shall be documented and reported to the NMFS within 30 days of completion of the maintenance work.
- Concrete, grout, brick & mortar or other cement products shall not be used to construct stream diversions when steelhead and other sensitive aquatic species are likely present.
- If steelhead are found dead or injured at the work site, environmental staff shall notify NMFS immediately.
- Any steep-walled excavations that may trap California red-legged frog that will be left overnight in areas within or adjacent to the Ventura River or San Antonio Creek shall be covered.

**BMP 7: Continue Existing Procedures for Sediment Removal and Vegetation Control for Specific Reaches in Calleguas Creek Watershed.**

- Conduct sediment removal and in-stream vegetation control along unimproved channels along Calleguas Creek, Conejo Creek, Revolon Slough, Arroyo Las Posas and generally throughout Zone 3 in accordance with previous Streambed Alteration Agreements.

See Attached "Grandfathered Streambed Alteration Agreement Conditions."

**BMP 8: Avoid Disturbance to Native Beach or Wetland Species.**

- Applies to facilities maintained in beach/coastal strand.
- Prior to beach access March 1 to September 15, approved biologist shall survey for western snowy plovers or California least terns nesting or roosting on beach. If present, maintenance work shall be postponed until after the breeding season, unless a species protection plan is prepared, approved by USFWS/CDFW, and implemented.
- Avoid driving over beach dune vegetation when accessing storm drain outlets.
- Minimize native beach plant removal during outlet maintenance.
- Prior to beach outlet maintenance, environmental staff shall determine if suitable habitat is present at the outlet for tidewater gobies. If suitable habitat is present, approved biologist shall conduct fish surveys. If present and maintenance work affects habitat, work shall be postponed until surface water is absent, unless a species protection plan is prepared, approved by USFWS, and implemented.

**BMP 9: Aquatic Pesticide Application.**

- Follow the most up-to-date Best Management Practices and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan.
- Comply with the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides, including working under the direction of a Qualified Applicator, using materials approved for aquatic use, following the manufacturer's application directions, avoiding application prior to forecasted storm events and ensuring wind conditions are suitable to avoid spray drift.

**BMP 10: Leave Vegetation on Upper Basin Slopes.**

- Leave native vegetation on the debris and detention basin slopes above the 20 percent capacity debris line unless any of the following apply:
  - Shrubs and trees are hazards to the stability and function of the basin
  - Sediment meets or exceeds the 20 percent capacity line
  - Slope re-grading is required to correct or prevent rill erosion or other damage
  - Vegetation is on engineered fill
  - Vegetation constitutes a fire hazard to nearby properties.



**BMP 11: Leave Patches of Vegetation in Channel Bottom.**

- Minimize vegetation removal or thinning in earthen or earthen bottom channels; remove the least amount necessary to achieve the specific maintenance objectives for the reach.
- Remove native vegetation in a non-continuous manner, leaving small patches intact, provided they will not adversely affect conveyance capacity.

**BMP 12: Leave Herbaceous Wetland Vegetation in Channel Bottom.**

- Minimize removal or thinning of emergent native vegetation rooted in or adjacent to the low flow channel or aquatic habitats, unless inconsistent with maintenance objectives or capacity requirements.

**BMP 13: Maximum 15-foot Vegetation-Free Zone at the Toe of the Bank.**

- Do not exceed a 15-foot wide vegetation-free zone at levee and bank toes when thinning or removing vegetation for inspection purposes.

**BMP 14: Avoid Road Base Discharge.**

- Do not place or spill road base, fill, sediments, and asphalt beyond the previously established road bed when working adjacent to channels and basin bottoms.

**BMP 15: Mitigate/Replace Temporary Impacts to Habitat.**

- Restore native vegetation in temporary work areas after completion of repair or reconstruction work. Prior to work, a vegetation restoration plan must be submitted to the regulatory agencies for approval.
- No habitat restoration sites shall be placed within the routine maintenance limits of the repaired structures.
- Habitat restoration shall only be required if the impacted area supports native wetland or riparian vegetation; no restoration is required for barren areas or areas dominated by non-native plants.

**BMP 16: Oak Tree Mitigation Ratio.**

- Replace native oak trees removed by maintenance activities if greater than 3 inches in diameter at breast height (dbh), or 2 inches dbh if multi-trunked.
- Oak tree replacement ratios:

TRUNK SIZE (dbh)	RATIO
4 to 6 inches	3:1
6 to 12 inches	5:1
12 to 24 inches	10:1
24 to 36 inches	15:1
>36 inches	20:1

- A tree replacement plan consistent with County Policy or permit requirements, whichever is greater, shall be prepared and submitted to the regulatory agencies prior to implementation.

**BMP 17: Concrete Wash-Out Protocols.**

- Fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin.
- Concrete wastes (liquid, dust, solids) shall be stockpiled separately from sediment and protected by erosion control measures to prevent discharge to the channel, basin, or waters of the State.
- Conduct appropriate waste management practices based on considerations of flow velocities, site conditions, suitability of erosion control materials, and construction costs.

**BMP 18: Water Diversion Guide.**

- Follow water diversion methods and procedures established in the District's Water Diversion Guide.
- Baseline water quality monitoring is required PRIOR to installation of any water diversion, daily for the first 5 days the diversion is in place, and weekly thereafter. Contact District environmental staff to contract for/conduct monitoring.
- Fish mortality associated with stream flow diversion or dewatering shall be reported by environmental staff to the California Department of Fish & Wildlife within 24 hours of discovery.

**BMP 19: Minimize Erosion from Stream Gauge Maintenance.**

- Cut interfering vegetation with chain-saw or hand tools to near ground surface. No herbicide application to stumps. No excavation of roots.
- Implement additional erosion control methods as needed, based on considerations of flow velocities, site conditions, availability of materials, construction costs, durability and maintenance requirements.

**BMP 20: Implementation of Integrated Pest Management Program.**

- Implement the approved Integrated Pest Management (IPM) program.
- Apply appropriate rodent control methods at each facility as appropriate for site conditions (rodent population, type of facility, season).
- Maintain uniform inspection records for each facility and all control efforts.
- Report IPMP activities to the regulatory agencies annually in the Annual Monitoring Report.

**BMP 21: Avoid Spills and Leaks.**

- Keep all equipment in good working condition and free of leaks.

- No equipment maintenance or refueling in a channel or basin bottom.
- Place drip pans under all stationary equipment such as motors, pumps, generators, compressors, and welders.
- Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse.
- Train all maintenance crews in spill containment and response.
- Immediately clean up all spills. Submit report to the Office of Spill Prevention and Response.

**BMP 22: Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance.**

- Biologists conducting surveys for tidewater goby, California red-legged frog, least Bell's vireo and southwestern willow flycatcher shall be approved by the U.S. Fish & Wildlife Service in writing.
- Prior to sediment removal, vegetation control, or repair work in earthen or earthen bottom facilities, an approved biologist shall survey for threatened, endangered, or sensitive species if suitable habitat occurs in or near work area. If such species are within or in close proximity to the work areas, the District shall reschedule the work when the species are not present.
- If it is necessary to conduct the work while sensitive species are present or in proximity to the work areas, a species protection plan shall be developed, approved by USFWS/NMFS/CDFW, then implemented.
- An approved biologist shall periodically monitor the work area during maintenance activities for wildlife and relocate species as needed to minimize mortality.
- Exotic fish, invertebrate, amphibian and reptile species shall be captured when feasible, dispatched and properly disposed by a qualified biologist.

**BMP 23: Invasive Plant Removal Protocols.**

- Remove invasive plant species in a manner that prevents propagation.
- Spray or mow plants before seeds ripen, when feasible.
- All cut/removed invasive vegetation shall be taken to a dump as a destruction load.
- Do not stockpile invasive vegetation (including mulch) where materials would wash downstream or allowed to propagate.
- For giant reed (*Arundo donax*), minimize ground disturbance and use foliar glyphosate treatment on smaller infestations, as feasible. Best to apply herbicide May 1 to October 1, if breeding birds absent. No grading to remove root masses unless earthwork is part of routine maintenance work.

**BMP 24: Air Quality (Dust Control).** The following measures shall be incorporated into maintenance activities to minimize fugitive dust emissions during grading, excavation, and construction activities.

- Minimize the areas disturbed at any one time by clearing, grading, earth moving, or excavation operations to prevent excessive dust.
- Water grading/excavation areas prior to and during work.
- Cover all truck loads; required by California Vehicle Code §23114.
- Prevent fugitive dust (via treatment) on all graded and excavated material, exposed soil areas, stockpiles, including unpaved parking and staging areas, and other active portions of the construction site.
- District staff shall weekly monitor contractor graded and/or excavated inactive areas of the construction site for dust stabilization.
- No grading/earth work during periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties) to prevent excessive fugitive dust.
- Use rumble strips or track out devices where vehicles enter and exit unpaved roads onto paved road.
- All on site construction roads that have a daily traffic volume of more than 50 daily trips shall be stabilized as to minimize transport of earthen material from the site.
- There shall be at least one qualified District staff on site each work day to monitor the provisions of the Fugitive Dust Mitigation Plan and any other applicable fugitive dust rules, ordinances, or conditions.
- Personnel involved in grading operations shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health Regulations.
- All project construction operations shall be conducted in compliance with all applicable APCD Rules and Regulations with emphasis on Rule 50 (Opacity) and Rule 51 (Nuisance).

**BMP 25: Construction Noise.**

- Noise-generating construction activities shall be restricted to the daytime (i.e., 7:00 AM to 7:00 PM, Monday through Friday).
- Minimize sustained construction noise adjacent to sensitive wildlife during the nesting season, as directed by the biological monitor.
- When construction noise is anticipated to affect sensitive wildlife, environmental staff shall consult with regulatory agencies regarding additional mitigation measures.

**BMP 26: Stabilize Exposed Soil.**

- To limit erosion, minimize soil disturbance work in channels and basins to that which can be stabilized prior to rain events.

**BMP 27: Native Tree Removal (see BMP 16 for oaks).**

- Prior to vegetation removal, a qualified biologist shall prepare an inventory of all native trees in the work area exceeding 4 inches dbh.

- Native trees in temporary impact areas shall be cut to ground level to facilitate regrowth, and not removed by heavy equipment.
- Native California black walnut, cottonwood and sycamore trees exceeding 4 inches dbh shall be replaced at a 10:1 ratio, if removed.
- Replacement trees shall attain a survival rate of 75 percent the first year and 100 percent thereafter, and monitored and maintained for a 5 years after planting.

**BMP 28: Environmental Training.**

- Prior to any sediment removal, vegetation control, or repair work in earthen or earthen-bottomed channels and basins that contain surface water or native vegetation, a qualified biologist familiar with the work site shall provide training to the work crew regarding potential species present, habitats to avoid, measures to implement to minimize impacts, and events/situations that require work to be stopped and the biologist to be contacted.

**BMP 29: Work in California Red-legged Frog Habitat.**

- Any steep-walled excavations that may trap California red-legged frogs that will be left overnight in suitable habitat (Ventura River, San Antonio Creek) shall be covered.
- Approved biologists handling California red-legged frogs shall not use gloves, unless they are well-rinsed and composed of vinyl.
- Approved biologists working in California red-legged frog habitat shall follow the Declining Amphibian Task Force Fieldwork Code of Practice.

**BMP 30: New Zealand Mudsnail Control Protocols**

The protocols have been developed to address the sixty work code activities described in the District's 2012-2013 Annual Work Plan. The work code activities have been lumped into general types of materials/activities to allow the assignment of protocols to be followed to minimize the spread of this invasive species (see Table 2). These protocols address three general modes of potential spread of New Zealand mudsnail; hand tools & boots, mobile equipment and vehicles, and reusable instream materials.

First, determine if the reach to be maintained supports New Zealand mudsnail by reviewing maps and the infested reach list (Table 3). If so, implement Part A.

Second, determine if the equipment to be used was borrowed from the Transportation Department OR last used in another Zone. If so, implement Part B.

**Table 2. New Zealand Mudsnail Protocols by Work Code**

Protocol	Work Codes
1	PS41, PS42, PT20, PT21, PT22, PT23, PT24, PT25, PT26, PT27, PT28, PT29, PT31, PT32, PT33, PT34, PT35, PT36, PT37, PT38, PT41, PT42, PT43, PT44, PT45, PT47, PT48, PT49, PT51, PT53, PT55, PT56, PT57, PT60, PT61, PT62, PT64, PT65, PT66, PT68, PT70, PT72, PT74, PT76, PT77, PT80, PT83, PT85, PT86, PT88, PT89, PT90, PT91, PT92, PT93
2	PS41, PS42, PT20, PT21, PT22, PT23, PT24, PT25, PT26, PT27, PT28, PT32, PT33, PT34, PT35, PT36, PT37, PT38, PT41, PT42, PT43, PT44, PT45, PT47, PT48, PT49, PT51, PT53, PT55, PT56, PT57, PT60, PT61, PT62, PT64, PT65, PT66, PT68, PT70, PT72, PT74, PT76, PT77, PT80, PT83, PT85, PT86, PT88, PT89, PT90, PT91, PT92, PT93
3	PS41, PS42, PT 22, PT 29, PT31, PT32, PT33, PT40, PT41, PT42, PT43, PT45, PT45, PT48, PT49, PT51, PT53, PT54, PT57, PT60, PT61, PT62, PT64, PT 66, PT68, PT80, PT83, PT85, PT86, PT88, PT89, PT90, PT91, PT92, PT93
4	PT20, PT21, PT23, PT24, PT25, PT26, PT27, PT28, PT34, PT35, PT36, PT37, PT38, PT44, PT51, PT53, PT68, PT70, PT72, PT74, PT76, PT77, PT80, PT85

**Part A (infested reaches):**

- Wash hand tools, boots and power tools that contact surface water using Protocol 1.
- Wash mobile equipment used in surface water that may have incidental soil attached (e.g., dozers, excavators, discing equipment, wheeled loaders and motor graders) using Protocol 2A (on-site power wash, on-site or off-site hot pressure wash).
- Wash equipment that infrequently crosses the wetted channel and does not have incidental soil attached (e.g., herbicide trailers, chipper, water pumps [hand carried and trailer-mounted], mowers and motor vehicles) using Protocol 3 (on-site or off-site hot or cold pressure wash).
- Wash hard surfaced instream materials that may be transported between work sites (e.g., K-rail, diversion pipe, water hoses and concrete forms) using Protocol 4 (on-site or off-site hot pressure wash).
- Discard sand bags (and other fibrous materials that could harbor mudsnails) which have been immersed in surface waters in a landfill. Do not re-use at other sites.

**Table 3. New Zealand Mudsnail Infested Reaches**

<b>ZONE</b>	<b>REACH NO.</b>	<b>NAME</b>
2	42011	Pacific Ocean to Harbor Blvd.
2	42012	Harbor Blvd. to Victoria Avenue
2	42151	Camarillo Hills Drain to Hwy 101
2	42152	Hwy 101 to Central Avenue
3	42154	Central Avenue to Wright Road
3	45241	Wright Road to U/S to Drop Structure #2
3	45243	Drop Structure #2
3	45245	Beardsley Wash Drop Structure #2 U/S to Triple Arch
3	45246	Connelly Triple Arch
3	45247	Connelly Triple Arch U/S to Milligan Barranca
3	46101	Arroyo Santa Rosa to Arroyo Conejo N.Fork
3	46102	Arroyo Conejo N. Fork to Arroyo Conejo South Branch
3	46103	Arroyo Conejo S. Branch to Hillcrest Drive
3	46104	Hillcrest Drive to Moorpark Road
3	46111	Arroyo Conejo to Ventu Park Road
3	46112	Ventu Park Road to Borchard Road
3	46161	Arroyo Conejo to Lynn Road
4	48061	L.A.County Line to Kanan Road
4	48071	L.A. County Line to Conifer Street
4	48072	Conifer Street to Oak Hills Drive
4	48073	Oak Hills Drive through Kanan Road
4	48076	Medea Creek @ Mile 1.2, U/S
4	48101	L.A. County Line U/S North
4	48107	Las Virgines Creek @ Mile 2.6, U/S

U/S: upstream

**Part B (borrowed equipment or used in other Zone):**

- Wash mobile equipment used in surface water that may have incidental soil attached (e.g., dozers, excavators, discing equipment, wheeled loaders and motor graders) using Protocol 2B (on-site or off-site hot pressure wash).
- Wash equipment that infrequently crosses the wetted channel and does not have incidental soil attached (e.g., herbicide trailers, chipper, water pumps [hand carried and trailer-mounted], mowers and motor vehicles) using Protocol 3 (on-site or off-site hot or cold pressure wash).

### **Protocol 1 - Hand Tools, Boots and Wetted Power Tools**

This control protocol involves cleaning any hand tools, boots and wetted portions of power tools (weed whipper, drill, concrete vibrator, etc.) that come in contact with potentially infected surface water prior to leaving the work site each day OR leaving these materials at the site until the work is complete. Hand tools, boots and wetted portions of power tools must be cleaned before leaving the site using the following procedure:

1. Remove any accumulated mud/soil from the article to be cleaned;
2. Fill a portable plastic tub (child's swimming pool, or equivalent) to a depth allowing complete submersion of the boots or tools with a 4 percent solution (5 fluid ounces per gallon) of a commercial disinfectant (GS High Dilution Disinfectant 256, Spartan Chemical Company);
3. Scrub all surfaces with a brush;
4. Let soak in the disinfectant for approximately 10 minutes;
5. Rinse with **potable** water; and
6. Dispose of the used disinfectant solution in a sewer or upland area where it cannot enter surface waters.

### **Protocol 2A – Instream Mobile Equipment (Infested Reaches)**

This Protocol applies to equipment that is used in the wetted channel and likely to have incidental soil attached, such as dozers, excavators, discing equipment, wheeled loaders and motor graders.

1. All attached soil must be removed at the project site using a pressurized water hose provided by a water truck (or equivalent pressurized water source);
2. Wash water must be contained and not allowed to run-off into a storm drain or drainage feature;
3. The equipment must be washed on-site using a portable hot pressure washer OR taken to the nearest O & M washing facility (Saticoy or Moorpark) for a hot pressure wash.
4. Care must be taken to pressure wash all surfaces with hot water that typically come in contact with surface water and/or wet sediments, such as wheels, tires, discs, dozer tracks, excavator and loader buckets, dozer and grader blades, undercarriage, hydraulic cylinders and hoses, and fenders.

### **Protocol 2B – Instream Mobile Equipment (All Other Reaches)**

This Protocol applies to equipment that is used in the wetted channel and likely to have incidental soil attached, such as dozers, excavators, discing equipment, wheeled loaders and motor graders.



1. The equipment must be washed on-site using a portable hot pressure washer OR taken to the nearest O & M washing facility (Saticoy or Moorpark) for a hot pressure wash.
2. Care must be taken to pressure wash all surfaces with hot water that typically come in contact with surface water and/or wet sediments, such as wheels, tires, discs, dozer tracks, excavator and loader buckets, dozer and grader blades, undercarriage, hydraulic cylinders and hoses, and fenders.

### **Protocol 3 – Other Mobile Equipment and Vehicles**

This Protocol applies to equipment that infrequently crosses the wetted channel and does not have incidental soil attached, such as herbicide trailers, chipper, water pumps (hand carried and trailer-mounted), mowers and motor vehicles.

1. The wheels, tires and undercarriage of this equipment must be pressure washed, either on-site or the nearest O & M washing facility (Saticoy or Moorpark).
2. If washed on-site, wash water must be contained and not allowed to run-off into a storm drain or drainage feature.

### **Protocol 4 - Reusable Instream Materials**

Materials that may be transported between work sites may include sand bags, K-rail, diversion pipe, water hoses and concrete forms (wood). Sand bags immersed in surface waters cannot be fully cleaned, and must be emptied of sand (on-site or the District's maintenance yard) and the bag deposited in a proper trash receptacle.

1. Wash hard surfaced materials on-site using a portable hot pressure washer OR take to the nearest O & M washing facility (Saticoy or Moorpark) for a hot pressure wash.
2. Care must be taken to remove all attached soil or sediment and fully contact all surfaces.

## **GRANDFATHERED STREAMBED ALTERATION AGREEMENT CONDITIONS**

### **SAA 5-270-92: REVOLON SLOUGH**

- Control vegetation (banks and bottom) annually after July 1 for 100 feet upstream, under, and 100 feet downstream of all bridges.
- Control vegetation (banks and bottom) annually after July 1 for 50 feet upstream and 50 feet downstream of all grade control structures.
- Sediment may be removed when deposition exceeds two feet above design grade.
- Vegetation control may be by hand, herbicide, or mechanical methods.

#### **Hwy 1 to Las Posas Road Bridge 45101:**

- Herbicide inside banks, maintain access road as needed during year.
- No bottom vegetation maintenance.

#### **Las Posas Road Bridge to Hueneme Road Bridge 45103:**

- Herbicide inside banks, maintain access road as needed during year.
- July 1 to February 1: on west side bottom allow 50 foot long by 15 foot wide pockets of riparian vegetation separated by 100 foot long vegetation management (non-native species removal) zones. Remove willows greater than 3 inches dbh in pockets.
- July 1 to February 1: Outside riparian pockets, allow 20 percent of bottom with vegetation for two out of three years.
- July 1 to February 1: Outside riparian pockets, all vegetation may be removed every third year.

#### **Hueneme Road Bridge to Wood Road Bridge 45105:**

- Herbicide inside banks, maintain access road as needed during year.
- July 1 to February 1: one west side bottom allow solid strip of riparian vegetation 15 feet wide. Remove willows greater than 3 inches dbh annually.
- July 1 to February 1: Outside riparian pockets, allow 20 percent of bottom to retain vegetation. Remove willows greater than 3 inches dbh annually.
- July 1 to February 1: Outside riparian pockets, all vegetation may be removed every other year from Hueneme Road to Etting Road. Remove willows greater than 3 inches dbh annually.

### **SAA 5-388-90: PORTIONS OF CALLEGUAS CREEK WATERSHED**

- Control vegetation (banks and bottom) annually July 1 to February 1 for 100 feet upstream, under, and 100 feet downstream of all bridges/culverts (except as noted below).
- Control vegetation (banks and bottom) annually July 1 to February 1 for 25 feet upstream and 25 feet downstream of all grade control structures (except as noted below).

- Vegetation control may be by hand, mechanical, or herbicide methods.

**Arroyo Simi from Beltramo Road to No. 2 Canyon 47013:**

- Herbicide inside banks, maintain access road as needed during year.
- July 1 to February 1: allow 10 foot wide strip of riparian vegetation at toe of each bank. Alternate removal of strips each year.
- July 1 to February 1: maintain up to 16 foot wide vegetation free pilot channel in center of creek bottom.

**Arroyo Simi Sycamore Canyon to Erringer Road 47021:**

- Herbicide inside banks, maintain access road as needed during year.
- Control vegetation (banks and bottom) as needed 100 feet upstream and 50 feet downstream of all bridges and grade control structures.
- Minimize maintenance activities March 1 to July 1.
- All willow and woody plant species may be controlled.
- Allow up to 25 percent cover of cattails/tules in channel bottom.

**Arroyo Simi Erringer Road to Royal Avenue 47021:**

- Herbicide inside banks, maintain access road as needed during year.
- July 1 to February 1: control all vegetation (banks and bottom) as needed.
- Vegetation control may be by hand, mechanical, or herbicide methods.

**SAA 5-540-91: CALLEGUAS CREEK**

- Control vegetation (banks and bottom) annually after July 1 for 100 feet upstream, under, and 100 feet downstream of all bridges/culverts.
- Vegetation control may be by hand, mechanical, or herbicide methods, unless specifically noted below.

**Calleguas Creek Highway 1 to Hueneme Road 45021/45023:**

- Herbicide inside banks and 25 feet from toe in bottom, maintain access road as needed during year. No other herbicide use in bottom.
- July 1 to February 1: each year allow a 10 foot wide (minimum) strip of riparian vegetation along one side of low flow channel. Alternate mechanical removal of strips each year.

**Calleguas Creek Hueneme Road to 850 ft Upstream of University Road 45025/45027:**

- Herbicide inside banks and 25 feet from toe in bottom, maintain access road as needed during year. No other herbicide use in bottom.
- July 1 to February 1: each year allow a 10 foot wide (minimum) strip of riparian vegetation along one side of low flow channel. Alternate mechanical removal of strips each year.

**Calleguas Creek Pleasant Valley Road to Seminary Road 45033/45035/45037:**

- Herbicide armored banks and 15 feet from toe in bottom, maintain access road as needed during year.
- No removal of native vegetation on natural (unarmored) banks of channel.
- Control vegetation (banks and bottom) annually July 1 to February 1 for 100 feet upstream, under, and 100 feet downstream of all bridges/culverts and stabilizers.
- Allow 20 percent cover of riparian vegetation in channel bottom each year, if feasible.

**SAA 5-541-91: ARROYO LAS POSAS CREEK**

Covers reaches: 1) Below Hitch Road 45065

2) From S. Grimes Canyon Road to the Moorpark WWTP 45063

3) Stabilizer upstream of Somis 45053

4) Junction of Seminary Road and Arroyo Las Posas 45051

- Vegetation control may be by hand, mechanical, or herbicide methods.
- Control vegetation (banks and bottom) annually July 1 to February 1 for 100 feet upstream, under, and 100 feet downstream of all bridges/culverts and stabilizers.
- Herbicide armored banks and 15 feet from toe in bottom (except established willows), maintain access road as needed during year.

**SAA 5-542-91: CONEJO CREEK (LINKED TO SAA 5-115-89)**

- Herbicide routinely cleared portions of banks, maintain access road as needed during year.
- Control vegetation (banks and bottom) annually July 1 to February 1 for 100 feet upstream, under, and 100 feet downstream of all bridges.
- Vegetation control may be by hand, herbicide, or mechanical methods, except as noted below.

**Conejo Creek -Calleguas Creek Confluence to Highway 101 46011/46012/46013/46014:**

- Permanently allow a strip of riparian vegetation along one side of low flow channel.

**Conejo Creek Highway 101 to Upland Drain 46015/46016:**

- Herbicide inside banks and 25 feet from toe in bottom, maintain access road as needed during year. No other herbicide use in bottom.
- July 1 to February 1: mechanical or hand removal of vegetation in other portions of bottom; allow two 20 foot wide vegetated strips or allow 20 percent of bottom vegetated. If practical, allow vegetated strips along low flow channel.
- July 1 to February 1: remove allowed vegetation the following year; allow new equivalent vegetated areas.

### **ENDANGERED SPECIES ADDITIONAL CONDITIONS**

Facilities and reaches with the potential for endangered species are mapped in the District's GIS system.

**GAMBEL'S WATERCRESS AND MARSH SANDWORT:** Conduct full (spring/summer 2014) surveys in 6.98 acres of facilities with suitable habitat. Opportunistically survey for these species during any field visits to facilities with suitable habitat.

**SOUTHERN STEELHEAD:** See BMP 5/6 above. For Calleguas Creek watershed, steelhead are generally not present, but an occasional stray may occur and we must stop work and notify NMFS and CDFW immediately.

**CALIFORNIA GNATCATCHER:** See survey triggers and protocols in table below. If species present, stop work and notify USACE and USFWS to determine course of action.

<b>WORK TYPE</b>	<b>SURVEYS NEEDED</b>
A. Heavy equipment more than 1 day adjacent to identified habitat per maps.	A. 3 bird surveys within 7 days prior to work.
B. Heavy equipment work more than 3 days adjacent to identified habitat per maps.	B. Morning bird survey prior to every third day of work.

**WESTERN SNOWY PLOVER:** Beach grooming at BEMP (near J St. Drain) during March 1 to September 15 requires nesting surveys and coordination with USFWS. Use lifeguard paths for access to minimize impacts to habitat. See also BMP 8.

**CALIFORNIA LEAST TERN:** Beach grooming at BEMP (near J St. Drain) during March 1 to August 15 requires nesting surveys and coordination with USFWS. Use lifeguard paths for access to minimize impacts to habitat. See also BMP 8.

**CALIFORNIA RED-LEGGED FROG:** USFWS Biological Opinion identified the following impact minimization measures. "Work" includes herbicide, earthwork, and other maintenance, except access road and fence maintenance. See also BMPs 6 and 29. Applies only in Zone 1.

MEASURE #	ACTION: Zone 1 only
CRLF-1	Approved biologist conducts daily pre-work surveys. Relocate all life stages potentially affected by work.
CRLF-2	Relocation site will be shortest distance to suitable habitat not affected by work.
CRLF-3	Biologist will maintain detailed descriptions of relocated individuals to determine if same individuals are recaptured.
CRLF-4	Biologist will train all O&M personnel and contractors regarding species and work type/boundaries.
CRLF-5	Biologist required to remain on site until all frogs have been relocated, worker education is complete, and vegetation removal has been completed.
CRLF-6	Biologist to permanently remove non-native aquatic species, when feasible.

**Take Limits:** Must report acreage of habitat affected by maintenance and mitigation each year in the Ventura River Watershed.

TAKE TYPE	ACRES/INDIVIDUALS ANNUALLY
Suitable habitat affected by maintenance and repair activities	2.5 acres per year
Expected take (relocation, harassment, etc) by maintenance and repair	25 individuals (eggs, tadpoles or frogs)
Suitable habitat affected by mitigation or restoration activities	10 acres per year
Expected take by mitigation	50 individuals per year (eggs, tadpoles, frogs)
Critical habitat affected by maintenance and repair activities	2.3 acres per year
Critical habitat affected by mitigation activities	10 acres per year

**TIDEWATER GOBY:** USFWS Biological Opinion identified the following impact minimization measures. "Work" includes earthwork, and other maintenance, except access road and fence maintenance. See also BMPs 8 and 22.

MEASURE #	ACTION
TWG-1	J St Drain downstream of Hueneme Road 42321 & Oxnard Industrial Drain just upstream and downstream of Hueneme Road 42302: channel cleanouts only when water naturally absent (no pumping or diversion of surface water)
TWG-2& 4	Sediment removal or dewatering in other facilities: biologist to use block nets and relocate gobies from work area to suitable nearby habitat per B.O.
TWG-3	Any pump intakes in occupied goby habitat must be screened.
TWG-5	Biologist required to remain on site to observe fish and potential turbidity levels during all dewatering activities; relocate fish as needed.
TWG-6	Block nets may be left overnight if inspected for efficacy..
TWG-7	Do not release gobies into areas scheduled for work on subsequent days.

**Take Limits:** Must report acreage of habitat affected by maintenance and mitigation each year in all watersheds.

TAKE TYPE	VENTURA	SANTA CLARA	ORMOND LAGOON	CALLEG CREEK	TOTAL
Suitable habitat affected by maintenance and repair	3 ac /year	0.1 ac./yr	0.1 ac/yr	2 ac/yr	5.2 ac/yr
Expected take (relocation, harassment, etc) by maintenance and repair	All individuals within affected area				Indeterminate
Suitable habitat affected by mitigation or restoration	0	0	0	0	0
Expected take by mitigation	0	0	0	0	0
Critical habitat affected by maintenance and repair	0.2 ac/yr	0	0	N/A	0.2 ac/yr
Critical habitat affected by mitigation or restoration	0	0	0	N/A	0

**LEAST BELL'S VIREO/SW WILLOW FLYCATCHER:** USFWS Biological Opinion identified the following impact minimization measures. "Work" includes earthwork, and other maintenance, except access road and fence maintenance. See also BMPs 4, 7, and 22.

MEASURE #	ACTION
LBV-1	If feasible, conduct work between Sept 16 to Feb 28 in facilities with LBV suitable habitat within 500 feet of work area.
LBV -2	March 1 to September 15: approved biologist conduct surveys for LBV/SWFL prior to work with habitat within 500 feet. (see list of facilities)
LBV -3	If LBV/SWFL nest detected, minimum 500 foot buffer between work and nest unless otherwise agreed to by USFWS. Biologist must monitor nest during work.
LBV -4	Mitigation/restoration projects in suitable LBV/SWFL habitat: avoid removal of willow and cottonwood trees >8 inch dbh..

**Take Limits:** Must report acreage of habitat affected by maintenance and mitigation each year in all watersheds.

TAKE TYPE LBV	VENTURA	SANTA CLARA	CALLEGUAS CREEK	TOTAL
Suitable habitat affected by maintenance and repair	3.5 ac/yr	4.6 ac/yr	17.4 ac/yr	25.5 ac/yr
Expected take by maintenance and repair	3 pairs	4 pairs	10 pairs	17 pairs
Suitable habitat affected by mitigation or restoration	10 ac/yr	15 ac/yr	10 ac/yr	35 ac/yr
Expected take by mitigation	6 pairs	9 pairs	6 pairs	21 pairs

(see SWFL limits next page)



<b>TAKE TYPE SWFL</b>	<b>VENTURA</b>	<b>SANTA CLARA</b>	<b>CALLEGUAS CREEK</b>	<b>TOTAL</b>
Suitable habitat affected by maintenance and repair	3.2 ac/yr	4.5 ac/yr	8.4 ac/yr	16.1 ac/yr
Expected take by maintenance and repair	1 pair	1 pair	1 pair	3 pairs
Suitable habitat affected by mitigation or restoration	10 ac/yr	15 ac/yr	10 ac/yr	35 ac/yr
Expected take by mitigation	1 pair	1 pair	1 pair	3 pairs
Critical habitat affected by maintenance and repair	3 ac/yr	3 ac/yr	N/A	6 ac/yr
Critical habitat affected by mitigation or restoration	10 ac/yr	15 ac/yr	N/A	25 ac/yr

#### **REGULATORY AGENCY CONTACT LIST**

Contact Pam Lindsey or Zoë Carlson BEFORE contacting regulatory personnel.

<b>AGENCY</b>	<b>NAME</b>	<b>PHONE</b>	<b>EMAIL</b>
USACE	Antal Szijj	805-585-2147	Antal.J.Szijj@usace.army.mil
USFWS	Jenny Marek Chris Dellith	644-1766 x325 644-1766 x227	Jenny_Marek@fws.gov Chris_Dellith@fws.gov
NMFS	Rick Bush Anthony Spina	562-980-3562 562-980-4045	Rick.Bush@noaa.gov Anthony.Spina@noaa.gov
CDFW	Jeff Humble Brock Warmuth	805-652-1868 805-484-1691	Jeff.Humble@wildlife.ca.gov Brock.Warmuth@wildlife.ca.gov
LARWQCB	Valerie Carrillo Zara	213-576-6759	Valerie.CarrilloZara@waterboards.ca.gov



RECEIVED  
SEP 02 2014  
WATERSHED PROTECTION DIST.



**Los Angeles Regional Water Quality Control Board**

Mr. Tully Clifford  
Ventura County Watershed Protection Dist.  
800 S. Victoria Ave.  
Ventura, CA 93009

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
No. 7012 3460 0001 6366 0878

**TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION FOR  
PROPOSED ROUTINE MAINTENANCE PROGRAM NO. 80030 PROJECT (Corps'  
Project No. 2008-00052-AJS), VARIOUS LOCATIONS THROUGHOUT VENTURA  
COUNTY (File No. 14-038)**

Dear Mr. Clifford:

Board staff has reviewed your request on behalf of Ventura County Watershed Protection District (Applicant) for a Clean Water Act Section 401 Water Quality Certification for the above-referenced project. Your application was deemed complete on April 30, 2014.

I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

**Please read this entire document carefully.** The Applicant shall be liable civilly for any violations of this Certification in accordance with the California Water Code. This Certification does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this Certification action, please contact Valerie Carrillo Zara, Lead, Section 401 Program, at (213) 576-6759.

  
Samuel Unger, P.E.  
Executive Officer

Aug. 27, 2014  
Date

## DISTRIBUTION LIST

Pam Lindsey (via electronic copy)  
Ventura County Watershed Protection District  
800 S. Victoria Ave.  
Ventura, CA 93009

Bill Orme (via electronic copy)  
State Water Resources Control Board  
Division of Water Quality  
P.O. Box 944213  
Sacramento, CA 94244-2130

Jeff Humble (via electronic copy)  
California Department of Fish and Wildlife  
Streambed Alteration Team  
3883 Ruffin Rd. Suite A  
San Diego, CA 92123-4813

Jenny Marek (via electronic copy)  
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75 Hawthorne Street  
San Francisco, CA 94105

Peter Brand (via electronic copy)  
Coastal Conservancy  
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Oakland, CA 94612

Brian Trautwein  
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906 Garden Street  
Santa Barbara, CA 93101

Jessie Allstatt (via electronic copy)  
Santa Barbara Channel Keeper  
714 Bond Street  
Santa Barbara, CA 93103

Antal Szijj (via electronic copy)  
U.S. Army Corps of Engineers  
Regulatory Branch, Ventura Field Office  
2151 Alessandro Drive, Suite 110  
Ventura, CA 93001

Diane Noda (via electronic copy)  
U.S. Fish and Wildlife Service  
2493 Portola Road, Suite B  
Ventura, CA 93003

## ATTACHMENT A

### Project Information File No. 14-038

1. Applicant:

Mr. Tully Clifford  
Ventura County Watershed Protection District  
800 S. Victoria Ave.  
Ventura, CA 93009

Phone: (805) 654-2040 Fax: (805) 654-3350

2. Applicant's Agent:

Ms. Pam Lindsey  
Ventura County Watershed Protection District  
800 S. Victoria Ave.  
Ventura, CA 93009

Phone: (805) 654-2036 Fax: (805) 654-3350

3. Project Name:

Routine Maintenance Program (District Project No. 80030)

4. Project Location:

Ventura County (various locations)

Within and adjacent to Watershed Protection District facilities in the Ventura River, Santa Clara River, Calleguas Creek, and Malibu Creek Watersheds, as described in *Final Program Environmental Impact Report Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program* Appendix C, and in subsequent Annual Work Plans, since 2009.

5. Type of Project:

Flood Control Facility Routine Maintenance Program

6. Project Purpose:

The mission of the Watershed Protection District (District) is to protect life, property, watercourses, watersheds, and public infrastructure from the dangers and damages associated with flood and storm waters. The District maintains various flood control facilities throughout Ventura County.

The primary objective of the proposed project is to maintain the proper operation of the District's flood control facilities. Maintenance preserves the capacity of the facility and prevents the accumulation of vegetation and sediments that could increase flood hazards. Maintenance and repair also preserve and restore the facility structural integrity. Maintenance may prevent damage to life, public property and infrastructure.

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Upon completion of the *Final Program Environmental Impact Report Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program* Appendix C, and in subsequent Annual Work Plans, in 2009, a Section 401 Certification for routine maintenance was issued by this Regional Board on August 17, 2009 (File No. 08-148). This Certification will supersede the original Certification and the project description has been revised accordingly.

#### 7. Project Description:

Maintenance typically involves removal of sediment and vegetation which reduce capacity of flood control channels and reduce capacity within storage basins. The proposed project includes implementation of environmental Best Management Practices (BMPs) as part of the long-term program for specific types of maintenance activities included within this Certification. These BMPs are included in this Certification, and are updated as necessary via the Annual Work Plan review process. The BMPs represent precautions and procedures to be used when planning and implementing maintenance activities that could affect sensitive environmental resources including wetlands, riparian habitat, aquatic habitat, threatened and endangered species, species of special concern, water quality, and hydraulic conditions in the watershed.

The District currently operates and maintains approximately 204 miles of linear channels, inlets, pipe and box culverts; four pump stations; and 54 debris and/or detention basins with dams. Detailed information about the facilities resides in the Catalog of Facilities; which has been amended via the Annual Work Plans. Summaries of facility types are listed in the *Final Program Environmental Impact Report: Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program* (State Clearinghouse No. 2002091107, May 2008) (Final Program EIR). Each of these types of facilities includes various fencing types, gates, access roads, and other appointments associated with security and access.

The proposed project includes the following 8 categories (A - H) of maintenance activities as described in the Final Program EIR.

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#### Category A: Channel and Basin Maintenance

This category includes the physical removal or "cleanout" of sediments, vegetation, rock, and trash that accumulate in debris and detention basins, as well as channel facilities, or any District maintained flood control infrastructure. Channel facilities may be fully or partially lined with rock or concrete, or may be earthen. These activities typically involve heavy equipment to excavate, push, pile, and load material into trucks to haul to appropriate stockpile or disposal locations. The majority of work will be conducted within the footprint of the existing facilities. Work may be conducted during any time of year during dry weather conditions. Temporary earthen access roads must be constructed in some facilities to allow for equipment and truck access. These will be composed of clean fill and will be removed when maintenance is completed.

All concrete-lined channels will be cleaned at least once per year, prior to the wet season, to remove all sediment, algae, undesirable vegetation, and trash in accordance with the provisions of the NPDES Stormwater Permit issued to the District by the Los Angeles Regional Water Quality Control Board (Order R4-2010-0108; NPDES Permit No. CAS004002, adopted on July 8, 2010 (Ventura County MS4 permit) Section G. I. 5.(f) Storm Drain Maintenance) or subsequent Ventura County MS4 permit valid during the period of this certification.

Channels, banks, dams, levees, and other facilities may be repaired and reshaped following erosion events. On-site or imported (clean) materials will be used to reshape and recompact engineered fills and slopes. Work areas within the District facilities will be returned to pre-existing (as-built) conditions, unless out-of-kind repairs are approved via the Annual Work Plan process.

#### Category B: Brush and Weed Control Activities

Herbicides, equipment, or manual labor will be used to remove or reduce obstructive vegetation that reduces channel or basin capacity by its mass or is likely to cause a build up of sediment in the future. In addition, vegetation will be removed if it could potentially undermine rock slope protection or levees through root action or prevent visual inspection of bank protection and other in-channel



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facilities.

The District will adhere to strict standards set forth in the following regulations:

- Federal Emergency Management Agency 44 CFR 65.10 (flood insurance programs).
- U.S. Army Corps of Engineers "Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures" Technical Letter No. 1110-2-571, April 9, 2009.
- CFR Title 33 Navigation and Navigable Waters Part 208-Flood Control Regulations (maintenance standards).
- CA Water Code Division 3 Dams and Reservoirs (maintenance standards)

Vegetation will be controlled for the following reasons:

- To allow for the proper inspection, surveillance, and monitoring of all structures and adjacent areas for seepage, cracking, sinkholes, settlement, displacement, and other signs of distress.
- To allow access for normal and emergency Operations and Maintenance activities.
- To prevent root-related damage to structures, such as shortened seepage paths through embankments and/or foundations; voids in embankments and/or foundations due to decayed roots or fallen trees; clogged seepage collector systems; and expansion of cracks or joints in concrete walls, spillway floors, and canal linings.
- To limit those habitat characteristics that encourage the creation of animal burrows.
- To allow full design-discharge capability of waterways, spillway inlet and outlet channels, outlet-works discharge channels, and other open conveyance channels.

A vegetation-free zone will be maintained at most facilities. The vegetation-free zone is a three-dimensional corridor surrounding all levees, floodwalls, embankment dams, and critical appurtenant structures. The primary purpose of the vegetation-free zone is to provide a reliable corridor of access to, and along, levees, floodwalls, embankment dams, and appurtenant structures. This

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corridor must be free of obstructions to assure adequate access by personnel and equipment for surveillance, inspection, maintenance, monitoring, and flood-fighting. The general rule is as follows: the minimum width of the corridor shall be the width of the levee, floodwall, or embankment dam, including all critical appurtenant structures, plus 15 feet on each side, measured from the outer edge of the outermost critical structure.

The vegetation-free zone serves a secondary purpose of reducing potential root impacts by providing distance between root systems and levees, floodwalls, embankment dams, and appurtenant structures, thereby moderating reliability risks associated with the following: (1) potential piping and seepage due to root penetration; and (2) structural damage (e.g., a hole in the ground surrounded by an area of disturbed earth) resulting from flood or wind-driven tree overturning.

Vegetation will be removed or reduced by herbicides in a 15-foot wide zone at the base of any bank protection (e.g., concrete, riprap) to provide an unobstructed view of the toe of the slope to allow for visual inspection. Also, vegetation will be removed or reduced by herbicides along both sides of access roads along channels (10-30 feet from edge of the road) for fire abatement purposes.

The District uses a variety of herbicides, all of which are approved by the Environmental Protection Agency (EPA). The District uses only those products approved for aquatic work by the EPA for maintenance work within the wetted bed and banks of channels and basins. Other products are used in dry portions of facilities. The District applies herbicides throughout the year in areas of concern to prevent or manage undesirable plant cover. It is the District's objective to keep the undesirable vegetation from becoming established through strategic pre-emergent and early growth stages spraying, rather than to treat mature plants.

As an alternative to herbicide treatment, the District removes undesirable plants in channel and basin bottoms by mechanical means (i.e., disking, mowing, or hydroaxe) or by hand crews. Disking and mowing are common weed control methods for basin and channel bottoms during the summer and fall when basins are dry enough for equipment to enter.



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In all cases of herbicide treatment, the District will comply with the IPM requirements of the Ventura County MS4 Permit, or subsequent Ventura County MS4 permit valid during the period of this certification.

#### Category C: Access Road Work Activities

The District maintains access roads associated with facilities on an as-needed basis. Most of the access roads have a compacted gravel surface which need periodic resurfacing due to normal deterioration from use and from erosion. Resurfacing roads generally will occur in the winter. Base aggregate will be placed on the road and compacted with heavy equipment. The District maintains a limited number of asphalt roads along channels and at basins, which will be repaired as needed. A majority of access road work will occur within previously designated road areas.

#### Category D: Facilities Repair and Maintenance for Structural Integrity

Facilities deteriorate over time and may require repair or reconstruction, particularly after a winter with high flood flows. This maintenance category includes gate and fence repair, the repair of bank protection damaged from flood flows, including grouted and ungrouted riprap, pipe and wire revetment, earthen slopes, and concrete sack walls.

Repair work will generally use in-kind materials within the original facility footprint. Proposals for minor modifications of repair materials and work footprints will be reviewed during the Annual Work Plan approval process. Various types of heavy equipment will be used and work will typically be conducted from both the top of the banks and the channel bottom.

The District also maintains and repairs (as necessary) concrete grade control structures that are located in the channel bottom. The maintenance zone upstream and downstream of grade control structures will be 15 feet each.

Repair work does not include creation of any new facilities, which

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would constitute a new capital project that would be planned, designed and permitted independently of this routine maintenance program.

#### Category E: Stream Gauge Maintenance

As part of the District's stream flow monitoring program, 14 stream gauge stations are maintained throughout the County. The stations consist of flow monitoring equipment mounted on bridges and/or other structures spanning several watercourses in the County. In order to obtain accurate flow readings, the flow beneath the monitoring equipment must be laminar (i.e., non-turbulent). Vegetation within the channel will be cleared to bank-full capacity (unless otherwise specified in notification) upstream and downstream of the gauging station or bridge to obtain accurate readings and prevent gauge damage. Vegetation clearing and debris removal from bridge piers will be conducted annually or every other year. Hand crews will be used whenever practical, and mechanized equipment (chain saws) will be used when large amounts of debris are being cut and hauled away. Stream gauge maintenance will occur between September 15 and March 1.

#### Category F: Storm Related Activity

During the winter season, District personnel continually monitor flow conditions in channels and inspect facilities. Urgent work conducted during and immediately after storm events is usually not routine maintenance, but instead, may be considered an emergency activity. However, many of the repairs are small in scope and would otherwise fit under the provisions of this permit. Therefore, non-emergency minor repairs during the winter season will be bundled and sent to the Los Angeles Regional Board per the notification protocol, below, for this permit for 30 day review.

Any project which is necessitated due to imminent threat to life or property would be subject to U.S. Army Corps of Engineers Regional General Permit (RGP 63).

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#### Category G: Rodent Control

Public safety standards require engineered fills to be free of burrowing rodent damage. California ground squirrels (*Spermophilus beecheyi*) and pocket gophers (*Thomomys bottae*) will be controlled per the District's Integrated Pest Management Program, as described in the EIR. This program minimizes the use of anticoagulant and other baits and reduces the potential for primary and secondary poisoning of non-target species.

#### Category H: Surface Water Diversion Plan

Routine maintenance and repairs as described in other Categories will sometimes occur while there is flowing water present in a channel or basin. This requires the diversion of water which can be done several ways: coffer dams, in-stream basins, or bypass systems. Because of the potential of the water diversion to affect water quality and aquatic life, appropriate BMPs shall be incorporated into the design and operation of the water diversion. The District has developed specific BMPs for water diversions, which are included in the Water Diversion Guide (attached to the Program EIR as Appendix E). The proposed project includes BMP 18, which will implement the Water Diversion Guide for applicable maintenance activities. The Surface Water Diversion Guide developed for these projects has been approved by this Regional Board. As long as water diversion activities are in compliance with this Certification, follow the Guide and implement the approved BMPs, no additional approval of water diversion plans will be needed for compliance with this permit.

#### Category I: Beach Elevation Management Plan

The District will periodically groom the natural beach sand berm between the Ormond Lagoon and the Pacific Ocean in accordance with the Beach Elevation Management Plan (BEMP) to prevent flooding to property adjacent to the Ormond Lagoon, including the Oxnard Waste Water Treatment Plant. The BEMP was approved by the Regional Board as part of the J Street Drain project (File No. 12-087), and is now considered a routine maintenance activity for the District.

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The BEMP defines a maximum safe beach height and allows for grooming the berm at a specific location within 72 hours prior to a predicted storm event. Grooming would occur only if all three of the following threshold conditions are met:

1. The Ormond Beach Lagoon is fully enclosed by the Ormond Beach sand berm;
2. The Ormond Beach sand berm elevation adjacent to the lagoon is observed to be above 6.5 feet NGVD (8.9 feet NAVD); and
3. A 72-hour prediction of a storm event of any magnitude affecting the watershed is received, which would likely cause the designed capacity of the J Street Drain to be exceeded if the lagoon water surface elevation cannot overtop the observed adjacent beach sand elevation.

The grooming would be performed by a tracked dozer at the designated location accompanied by District environmental staff. The dozer will shave the sand berm down to the maximum safe elevation along a distance measuring 100 feet parallel to the coastline. The removed sands would be placed on the beach adjacent to the groomed area. Grooming will be completed within several hours. Environmental BMPs would be implemented, as appropriate. The District may conduct grooming several times or not at all in any year depending on the site circumstances.

### Notification Protocol and Additional Review

The District will send an Annual Work Plan by April 1 of each year to the Regional Board documenting work planned for the following fiscal year, which runs July 1 to June 30. The District periodically sends additional work plan addenda for routine repair and maintenance work as the needs are discovered in the field. The Regional Board then will notify the District if a separate Certification will be required for certain activities or projects. Each year by August 1, the Annual Monitoring Report will be submitted to the Regional Board documenting all maintenance activities in waters of the United States and beach grooming work associated with the BEMP for the previous fiscal year period.

Every year, the District performs various routine work as described in the categories above. Maintenance work proceeds without

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specific pre-maintenance notification via the Annual Work Plan:

- if the work is routine and occurs in the same footprint within catalogued facilities (regardless of linear distance or acreage see note below),
- if the work only involves in-kind materials, or
- if the work has no new temporary or permanent impacts to waters of the United States.

Environmental BMPs are applied to this routine work, as appropriate. Monitoring reports and a summary of work performed per facility will be included in the Annual Monitoring Report.

The District will submit a project notification similar to a PCN in the Annual Work Plan or addendum for 401 Water Quality Certification review. On the basis of this review, the Regional Board will determine whether or not the proposed project(s) qualify under this Certification:

- if the work is outside the original footprint,
- if work involves out of kind material placement,
- if work involves any concrete-type product placement within the waters of the United States even if it is in kind replacement,
- if water diversion is required,
- if the Water Diversion Guide is not followed, or
- if the work has new temporary or permanent impacts to water of the US or compensatory mitigation is required.

The notification will include information as required by the Army Corps of Engineer's permit for this project, RGP 92, Special Condition 2 (Items a. through i.).

For projects triggering any of the BMPs requiring mitigation, the District will propose mitigation measures to compensate for loss of waters of the U.S. and wetland functions and services. BMP 15 and 16 outline the terms for mitigation, with ratios to be determined on a case by case basis. Mitigation proposed by the District will be reviewed by the Regional Board during a 60-day period following receipt of the notification package.

As the District builds or acquires new capital facilities, which require routine maintenance, the District will submit engineering design drawings (as-built), permit documentation, and a



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maintenance plan in the Annual Work Plan or addenda. By these submittals, and when the new or future facilities have addressed requirements of the California Environmental Quality Act (CEQA), the new facilities may be incorporated into the Catalog of Facilities and maintenance activities will be covered by this Certification, unless the District is otherwise notified by the Regional Board.

8. Federal Agency/Permit:

U.S. Army Corps of Engineers  
RGP 92  
Permit No. 2008-00052-AJS

9. Other Required  
Regulatory Approvals:

California Department of Fish and Wildlife  
Streambed Alteration Agreement (1600-2004-0512-R5)

U.S. Fish and Wildlife Service Biological Opinion (8-8-11-F/C-12)  
National Marine Fisheries Service Biological Opinion (2012/02834)

10. California  
Environmental Quality  
Act Compliance:

The Ventura County Watershed Protection District Board of Directors approved the Environmental Impact Report (SCH No. 2002091107) on May 13, 2008.

11. Receiving Water  
(Hydrologic Code):

Ventura River 180701010106  
Santa Clara River 180701020903  
Calleguas Creek 180701030107  
Malibu Creek 180701040104

12. Designated Beneficial  
Uses:

MUN, IND, PROC, AGR, GWR, FRSH, NAV, REC-1, REC-2,  
COMM, AQUA, WARM, COLD, EST, MAR, WILD, BIOL,  
RARE, MIGR, SPWN, SHELL, WET

13. Impacted Waters of the  
United States:

Impacts will occur at various locations throughout the various receiving waters listed above. All impacts will occur within previously existing facility footprints, unless otherwise approved as qualified under the thresholds for additional review (see Attachment A, No. 7). The Catalog of Facilities includes information on all facilities, including descriptions, location information and photographs and will be utilized as a guide to identify specific impact areas where work may take place within this Certification.

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#### 14. Dredge Volume:

None

#### 15. Related Projects Implemented/to be Implemented by the Applicant:

The District has conducted routine flood control maintenance for over 40 years. Certain maintenance activities may involve the discharge of dredge or fill material into "waters of the US" when removing sediment and obstructive vegetation. In the past, the District has acquired Clean Water Act Section 404 permits and Section 401 Water Quality Certifications for these activities on a case-by-case basis. In 2009, a Section 401 Water Quality Certification was issued to the District for the Routine Operations and Maintenance Program activities (File No. 08-148).

#### 16. Avoidance/ Minimization Activities:

In addition to the specific environmental BMPs developed during the Program EIR and subsequent permitting processes, the District implements standard BMPs during routine maintenance activities. Implementation of both the environmental and standard BMPs will continue. The following is a summary of the standard BMPs that the District currently uses during routine maintenance activities that will be continued under this permit.

- The minimum size/type of equipment is employed to complete the activity to minimize potential impacts.
- The minimum strength required to achieve the goal for each chemical product is used and staff follows specific pesticide protocols. Only products approved for aquatic use are applied within the wetted bed and banks of any channel or basin facility. Post-emergent products are applied only to plants via target application where plants are sparse.
- Gates, fences, and "no trespassing" signs are kept in working order to discourage dumping and vandalism.
- Silt fencing, k-rail, sandbag barriers, and straw wattles are routinely installed and maintained during work to prevent soil from leaving the work areas into the stream or channel.
- Silt fencing or other barriers are placed around temporary soil stockpile sites to contain material. Soil stockpiles are maintained free of vegetation to minimize weed dispersal.
- Water diversions are routinely used to prevent soil and concrete from entering surface waters adjacent to maintenance work areas.
- Plastic-lined sandbag concrete wash out pits stationed in

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uplands are required for each site where concrete pouring occurs.

- Pipe and pump station flushing activities are conducted with a vacuum system to avoid release of materials into channels or surface waters.
- Trash is screened and separated from trash racks and debris collected from channels and basin. Trash is then hauled to a County waste transfer facility.
- Rumble strips, street sweepers, and wattles over storm drain inlets are employed to prevent soil from entering streets and storm drains.
- Local fire abatement requirements are met by conducting annual brush clearance in District right of way adjacent to residential areas.
- In addition, the District developed the Operators Manual for Conducting Flood Control Activities in Ventura County Streams and Rivers (1981), which serves as an additional resource for training of operations and maintenance staff.

The District has formally developed environmental BMP's to reduce the environmental effects of its routine maintenance program for existing and new flood control facilities. The BMPs represent precautions and procedures that will be used when planning and implementing maintenance activities that could affect sensitive environmental resources including wetlands, riparian habitat, aquatic habitat, threatened and endangered species, species of special concern, water quality, and hydraulic conditions in the watershed.

The following BMPs are based on those developed during the Program EIR process, and incorporate conditions from each of the regulatory permits obtained following the EIR.

#### **ENVIRONMENTAL BEST MANAGEMENT PRACTICES:**

##### **BMP 1: Avoid Channel Earthwork During the Rainy Season/Events.**

- Avoid earthwork in earthen and soft bottom channels from December 1 to April 1 unless water is absent.
- If work is considered critical and sensitive aquatic species not present, work in flowing water is acceptable, provided flow is diverted according to the Water Diversion Guide.



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- No earthwork shall be conducted during rain events, or if 0.25 inches or more of rain is forecast within 12 hours of scheduled work.

#### **BMP 2: Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning.**

- Prevent the discharge of silt-laden water or pollutants downstream when removing sediments, vegetation, algae, and trash from concrete channels.
- Install BMPs: silt barriers, sand bags, straw bales, as appropriate per Board Order No. 10-0108; NPDES Permit No. CAS004002, July 8, 2010.
- Follow the Water Diversion Guide if a flow diversion is installed.

#### **BMP 3: Location of Temporary Stockpiles.**

- Temporary stockpiles may be placed in channel bottoms or debris basins if they are placed in such a manner that they would not be exposed to flowing water.
- Temporary stockpiles in the channel bottom shall be limited to one working day and not overnight.
- Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.

#### **BMP 4: Survey for Habitat (nesting) Prior to Routine Maintenance Work.**

- A biological survey for nesting birds will be required prior to work from February 1 to September 15 if in, or adjacent to, suitable habitat.
  - Nesting habitat is defined as cattail patches, short and tall trees, and shrubby areas. Open gravel, bridges, culverts, and fence posts may also support nests.
  - Mowing/disking, earth work, clean outs, access road work lasting more than one day, and repairs where nesting bird habitat is in work area or within 300 feet.
- If active bird nests are identified, work within 300 feet (500 feet for raptors) must be postponed until after September 15, unless the biologist determines the nest becomes inactive or a reduced buffer is approved by the regulatory agencies including, but not limited to, the California Department of Fish and Wildlife and the U.S. Fish & Wildlife Department.
- No biological survey is needed for routine herbicide application

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in/on facilities to sparse, short (<3 foot) weedy vegetation (includes young (<1 year old mule fat, willows or cattails).

#### **BMP 5/6: Survey for Steelhead Migration/Rearing Conditions and Sensitive Aquatic Species Prior to Routine Maintenance Work.**

- Applies to earthwork/repairs in surface water and within 100 feet of water:

Ventura River Watershed	Santa Clara River Watershed
<ul style="list-style-type: none"><li>▪ Matilija Creek</li><li>▪ San Antonio Creek</li><li>▪ Thatcher Creek</li><li>▪ Ventura River</li></ul>	<ul style="list-style-type: none"><li>▪ Hopper Creek</li><li>▪ Piru Creek</li><li>▪ Pole Creek (unlined portions)</li><li>▪ Santa Clara River</li><li>▪ Santa Paula Creek</li><li>▪ Sespe Creek</li></ul> <p>*Zones specific to steelhead and sensitive aquatic species</p>

- Approved biologist must survey for steelhead migration or rearing conditions and other sensitive aquatic species prior to earthwork in or within 100 feet of surface water.
- If flows are deemed sufficient for steelhead migration, earthwork within or adjacent to the channel shall be postponed until after June 15 and before October 31.
- If rearing habitat is present, approved biologist shall determine if steelhead are present.
- If other sensitive species are found in the work area, work will stop while District environmental staff contact CDFW/USFWS. The approved biologist may be authorized to relocate these species to nearby suitable habitat.
- **Special authorization is required for water diversion if flow conditions are suitable for steelhead or other aquatic species, even if the Water Diversion Guide is followed.**
- Steelhead presence requires notification to NMFS at least 10 days prior to work by District environmental staff.
- If authorized by NMFS, an approved biologist shall isolate the work area with block nets and relocate any steelhead in the work area to suitable habitat with perennial surface water. The biologist shall continuously monitor during water diversion and any work within occupied steelhead habitat.
- Steelhead relocations or other impacts by flow diversion or

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dewatering shall be documented and reported to the NMFS within 30 days of completion of the maintenance work.

- Concrete, grout, brick & mortar or other cement products shall not be used to construct stream diversions when steelhead and other sensitive aquatic species are likely present.
- If steelhead are found dead or injured at the work site, environmental staff shall notify NMFS immediately.
- Any steep-walled excavations that may trap California red-legged frog that will be left overnight in areas within or adjacent to the Ventura River or San Antonio Creek shall be covered.

#### **BMP 7: Continue Existing Procedures for Sediment Removal and Vegetation Control for Specific Reaches in Calleguas Creek Watershed.**

- Conduct sediment removal and in-stream vegetation control along unimproved channels along Calleguas Creek, Conejo Creek, Revolon Slough, Arroyo Las Posas, in accordance with previous Streambed Alteration Agreements. "Grandfathered Streambed Alteration Agreement Conditions" have been identified and are included in the application materials.

#### **BMP 8: Avoid Disturbance to Native Beach or Wetland Species.**

- Applies to facilities maintained in beach/coastal strand.
- Prior to beach access March 1 to September 15, approved biologist shall survey for western snowy plovers or California least terns nesting or roosting on beach. If present, maintenance work shall be postponed until after the breeding season, unless a species protection plan is prepared, approved by USFWS/CDFW, and implemented.
- Avoid driving over beach dune vegetation when accessing storm drain outlets.
- Minimize native beach plant removal during outlet maintenance.
- Prior to beach outlet maintenance, environmental staff shall determine if suitable habitat is present at the outlet for tidewater gobies. If suitable habitat is present, approved biologist shall conduct fish surveys. If present and maintenance work affects habitat, work shall be postponed until surface water is absent, unless a species protection plan is prepared, approved by USFWS, and implemented.

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#### **BMP 9: Aquatic Pesticide Application.**

- Follow the most up-to-date Best Management Practices and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan.
- Comply with the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides, including working under the direction of a Qualified Applicator, using materials approved for aquatic use, following the manufacturer's application directions, avoiding application prior to forecasted storm events and ensuring wind conditions are suitable to avoid spray drift.
- Comply with the applicable provisions of the Ventura County MS4 Permit regarding Public Agency activities and Integrated Pest Management (IPM).

#### **BMP 10: Leave Vegetation on Upper Basin Slopes.**

- Leave native vegetation on the debris and detention basin slopes above the 20 percent capacity debris line unless any of the following apply:
  - Shrubs and trees are hazards to the stability and function of the basin
  - Sediment meets or exceeds the 20 percent capacity line
  - Slope re-grading is required to correct or prevent rill erosion or other damage
  - Vegetation is on engineered fill
  - Vegetation constitutes a fire hazard to nearby properties.

#### **BMP 11: Leave Patches of Vegetation in Channel Bottom.**

- Minimize vegetation removal or thinning in earthen or earthen bottom channels; remove the least amount necessary to achieve the specific maintenance objectives for the reach.
- Remove native vegetation in a non-continuous manner, leaving small patches intact, provided they will not adversely affect conveyance capacity.

#### **BMP 12: Leave Herbaceous Wetland Vegetation in Channel Bottom.**

- Minimize removal or thinning of emergent native vegetation rooted in or adjacent to the low flow channel or aquatic habitats, unless inconsistent with maintenance objectives or capacity requirements.

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#### **BMP 13: Maximum 15-foot Vegetation-Free Zone at the Toe of the Bank.**

- Do not exceed a 15-foot wide vegetation-free zone at levee and bank toes when thinning or removing vegetation for inspection purposes.

#### **BMP 14: Avoid Road Base Discharge.**

- Do not place or spill road base, fill, sediments, and asphalt beyond the previously established road bed when working adjacent to channels and basin bottoms.

#### **BMP 15: Mitigate/Replace Temporary Impacts to Habitat.**

- Restore native vegetation in temporary work areas after completion of repair or reconstruction work. Prior to work, a vegetation restoration plan must be submitted to the regulatory agencies for approval.
- No habitat restoration sites shall be placed within the routine maintenance limits of the repaired structures.
- Habitat restoration shall be required if the impacted area supports native wetland or riparian vegetation; no vegetative restoration is required for barren areas or areas dominated by non-native plants. Any re-planting in areas of non-native removal shall be with native plants.

#### **BMP 16: Oak Tree Mitigation Ratio.**

- Replace native oak trees removed by maintenance activities if greater than 3 inches in diameter at breast height (dbh), or 2 inches dbh if multi-trunked.
- Oak tree replacement ratios:

TRUNK SIZE (dbh)	RATIO
4 to 6 inches	3:1
6 to 12 inches	5:1
12 to 24 inches	10:1
24 to 36 inches	15:1
>36 inches	20:1

- A tree replacement plan consistent with County Policy or permit requirements, whichever is greater, shall be prepared and submitted to the regulatory agencies prior to implementation.



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#### **BMP 17: Concrete Wash-Out Protocols.**

- Fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin.
- Concrete wastes (liquid, dust, solids) shall be stockpiled separately from sediment and protected by erosion control measures to prevent discharge to the channel, basin, or waters of the State.
- Conduct appropriate waste management practices based on considerations of flow velocities, site conditions, suitability of erosion control materials, and construction costs.

#### **BMP 18: Water Diversion Guide.**

- Follow water diversion methods and procedures established in the District's Water Diversion Guide.
- Baseline water quality monitoring is required PRIOR to installation of any water diversion, daily for the first 5 days the diversion is in place, and weekly thereafter.
- Fish mortality associated with stream flow diversion or dewatering shall be reported by environmental staff to the California Department of Fish & Wildlife within 24 hours of discovery.

#### **BMP 19: Minimize Erosion from Stream Gauge Maintenance.**

- Cut interfering vegetation with chain-saw or hand tools to near ground surface. No herbicide application to stumps. No excavation of roots.
- Implement additional erosion control methods as needed, based on considerations of flow velocities, site conditions, availability of materials, construction costs, durability and maintenance requirements.

#### **BMP 20: Implementation of Integrated Pest Management Program.**

- Implement the approved Integrated Pest Management (IPM) program.
- Apply appropriate rodent control methods at each facility as appropriate for site conditions (rodent population, type of facility, season).
- Maintain uniform inspection records for each facility and all control efforts.
- Report IPMP activities to the regulatory agencies annually in

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#### **the Annual Monitoring Report.**

#### **BMP 21: Avoid Spills and Leaks.**

- Keep all equipment in good working condition and free of leaks.
- No equipment maintenance or refueling in a channel or basin bottom.
- Place drip pans under all stationary equipment such as motors, pumps, generators, compressors, and welders.
- Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse.
- Train all maintenance crews in spill containment and response.
- Immediately clean up all spills. Submit report to the Office of Spill Prevention and Response.

#### **BMP 22: Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance.**

- Biologists conducting surveys for tidewater goby, California red-legged frog, least Bell's vireo and southwestern willow flycatcher shall be approved by the U.S. Fish & Wildlife Service in writing.
- Prior to sediment removal, vegetation control, or repair work in earthen or earthen bottom facilities, an approved biologist shall survey for threatened, endangered, or sensitive species if suitable habitat occurs in or near work area. If such species are within or in close proximity to the work areas, the District shall reschedule the work when the species are not present.
- If it is necessary to conduct the work while sensitive species are present or in proximity to the work areas, a species protection plan shall be developed, approved by USFWS/NMFS/CDFW, then implemented.
- An approved biologist shall periodically monitor the work area during maintenance activities for wildlife and relocate species as needed to minimize mortality.
- Exotic fish, invertebrate, amphibian and reptile species shall be captured when feasible, dispatched and properly disposed by a qualified biologist.

#### **BMP 23: Invasive Plant Removal Protocols.**

- Remove invasive plant species in a manner that prevents propagation.

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- Spray or mow plants before seeds ripen, when feasible.
- All cut/removed invasive vegetation shall be taken to a dump as a destruction load.
- Do not stockpile invasive vegetation (including mulch) where materials would wash downstream or allowed to propagate.
- For giant reed (*Arundo donax*), minimize ground disturbance and use foliar glyphosate treatment on smaller infestations, as feasible. Herbicide shall only be applied from May 1 to October 1, if breeding birds absent. There shall be no grading to remove root masses unless earthwork is part of routine maintenance work.

#### BMP 24: Air Quality (Dust Control).

The following measures shall be incorporated into maintenance activities to minimize fugitive dust emissions during grading, excavation, and construction activities.

- Minimize the areas disturbed at any one time by clearing, grading, earth moving, or excavation operations to prevent excessive dust.
- Water grading/excavation areas prior to and during work.
- Cover all truck loads; required by California Vehicle Code §23114.
- Prevent fugitive dust (via treatment) on all graded and excavated material, exposed soil areas, stockpiles, including unpaved parking and staging areas, and other active portions of the construction site.
- District staff shall weekly monitor contractor graded and/or excavated inactive areas of the construction site for dust stabilization.
- No grading/earth work during periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties) to prevent excessive fugitive dust.
- Use rumble strips or track out devices where vehicles enter and exit unpaved roads onto paved road.
- There shall be at least one qualified District staff on site each work day to monitor the provisions of the Fugitive Dust Mitigation Plan and any other applicable fugitive dust rules, ordinances, or conditions.

#### BMP 25: Stabilize Exposed Soil.

- To limit erosion, minimize soil disturbance work in channels and basins to that which can be stabilized prior to rain events.



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#### **BMP 26: Native Tree Removal (see BMP 16 for oaks).**

- Prior to vegetation removal, a qualified biologist shall prepare an inventory of all native trees in the work area exceeding 4 inches dbh.
- Native trees in temporary impact areas shall be cut to ground level to facilitate regrowth, and not removed by heavy equipment.
- Native California black walnut, cottonwood and sycamore trees exceeding 4 inches dbh shall be replaced at a 10:1 ratio, if removed.
- Replacement trees shall attain a survival rate of 75 percent the first year and 100 percent thereafter, and monitored and maintained for a 5 years after planting.

#### **BMP 27: Environmental Training.**

- Prior to any sediment removal, vegetation control, or repair work in earthen or earthen-bottomed channels and basins that contain surface water or native vegetation, a qualified biologist familiar with the work site shall provide training to the work crew regarding potential species present, habitats to avoid, measures to implement to minimize impacts, and events/situations that require work to be stopped and the biologist to be contacted.

#### **BMP 28: Work in California Red-legged Frog Habitat.**

- Any steep-walled excavations that may trap California red-legged frogs that will be left overnight in suitable habitat (Ventura River, San Antonio Creek) shall be covered.
- Approved biologists handling California red-legged frogs shall not use gloves, unless they are well-rinsed and composed of vinyl.
- Approved biologists working in California red-legged frog habitat shall follow the Declining Amphibian Task Force Fieldwork Code of Practice.

#### **BMP 29: New Zealand Mudsnail Control Protocols**

The protocols have been developed to address the sixty work code activities described in the District's 2012-2013 Annual Work Plan. The work code activities have been lumped into general types of materials/activities to allow the assignment of protocols to be followed to minimize the spread of this invasive species (see Table 2). These

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protocols address three general modes of potential spread of New Zealand mudsnail: hand tools & boots, mobile equipment and vehicles, and reusable instream materials.

First, determine if the reach to be maintained supports New Zealand mudsnail by reviewing maps and the infested reach list (Table 3). If so, implement Part A.

Second, determine if the equipment to be used was borrowed from the Transportation Department OR last used in another Zone. If so, implement Part B.

In some circumstances, both Part A and Part B may be implemented.

**Table 2. New Zealand Mudsnail Protocols by Work Code**

Protocol	Work Codes
1	PS41, PS42, PT20, PT21, PT22, PT23, PT24, PT25, PT26, PT27, PT28, PT29, PT31, PT32, PT33, PT34, PT35, PT36, PT37, PT38, PT41, PT42, PT43, PT44, PT45, PT47, PT48, PT49, PT51, PT53, PT55, PT56, PT57, PT60, PT61, PT62, PT64, PT65, PT66, PT68, PT70, PT72, PT74, PT76, PT77, PT80, PT83, PT85, PT86, PT88, PT89, PT90, PT91, PT92, PT93
2	PS41, PS42, PT20, PT21, PT22, PT23, PT24, PT25, PT26, PT27, PT28, PT32, PT33, PT34, PT35, PT36, PT37, PT38, PT41, PT42, PT43, PT44, PT45, PT47, PT48, PT49, PT51, PT53, PT55, PT56, PT57, PT60, PT61, PT62, PT64, PT65, PT66, PT68, PT70, PT72, PT74, PT76, PT77, PT80, PT83, PT85, PT86, PT88, PT89, PT90, PT91, PT92, PT93
3	PS41, PS42, PT 22, PT 29, PT31, PT32, PT33, PT40, PT41, PT42, PT43, PT45, PT45, PT48, PT49, PT51, PT53, PT54, PT57, PT60, PT61, PT62, PT64, PT 66, PT68, PT80, PT83, PT85, PT86, PT88, PT89, PT90, PT91, PT92, PT93
4	PT20, PT21, PT23, PT24, PT25, PT26, PT27, PT28, PT34, PT35, PT36, PT37, PT38, PT44, PT51, PT53, PT68, PT70, PT72, PT74, PT76, PT77, PT80, PT85

#### **Part A (infested reaches):**

- Wash hand tools, boots and power tools that contact surface water using Protocol 1.
- Wash mobile equipment used in surface water that may have incidental soil attached (e.g., dozers, excavators, disking equipment, wheeled loaders and motor graders) using Protocol 2A (on-site power wash, on-site or off-site hot pressure wash).
- Wash equipment that infrequently crosses the wetted channel and does not have incidental soil attached (e.g., herbicide trailers, chipper, water pumps [hand

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carried and trailer-mounted), mowers and motor vehicles) using Protocol 3 (on-site or off-site hot or cold pressure wash).

- Wash hard surfaced instream materials that may be transported between work sites (e.g., K-rail, diversion pipe, water hoses and concrete forms) using Protocol 4 (on-site or off-site hot pressure wash).
- Discard sand bags (and other fibrous materials that could harbor mudsnails) which have been immersed in surface waters in a landfill. Do not re-use at other sites.

**Table 3. New Zealand Mudsnail Infested Reaches**

ZONE	REACH	NAME
2	42011	Santa Clara River: Pacific Ocean to Harbor Blvd.
2	42012	Santa Clara River: Harbor Blvd. to Victoria Avenue
2	42151	Beardsley Wash: Camarillo Hills Drain to Hwy 101
2	42152	Beardsley Wash: Hwy 101 to Central Avenue
3	42154	Beardsley Wash: Central Avenue to Wright Road
3	45241	Beardsley Wash: Wright Road U/S to Drop Structure #2
3	45243	Beardsley Wash: Drop Structure #2
3	45245	Beardsley Wash: Drop Structure #2 U/S to Triple Arch
3	45246	Beardsley Wash: Connelly Triple Arch
3	45247	Beardsley Wash: Connelly Triple Arch U/S to Milligan Bar
3	46101	Arroyo Conejo: Arroyo Santa Rosa to Arroyo Conejo N. Fork
3	46102	Arroyo Conejo: Arroyo Conejo N. Fork to Arroyo Conejo South Branch
3	46103	Arroyo Conejo: Arroyo Conejo S. Branch to Hillcrest Drive
3	46104	Arroyo Conejo: Hillcrest Drive to Moorpark Road
3	46111	S. Branch Arroyo Conejo: Arroyo Conejo to Ventu Park Road
3	46112	S. Branch Arroyo Conejo: Ventu Park Road to Borchard Road
3	46151	Arroyo Conejo N. Fork: Arroyo Conejo to Lynn Road
4	48051	Lindero Crk: L.A. County Line to Kanan Road
4	48071	Medea Crk: L.A. County Line to Conifer Street
4	48072	Medea Crk: Conifer Street to Oak Hills Drive
4	48073	Medea Crk: Oak Hills Drive through Kanan Road
4	49076	W. Fork Medea Crk: Medea Creek @ Mile 1.2, U/S
4	49101	Las Virgenes Crk: L.A. County Line U/S North
4	48107	W. Las Virgenes Crk: Las Virgenes Creek @ Mile 2.6, U/S

U/S: upstream

#### **Part B (borrowed equipment or used in other Zone):**

- Wash mobile equipment used in surface water that may have incidental soil attached (e.g., dozers,

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excavators, discing equipment, wheeled loaders and motor graders) using Protocol 2B (on-site or off-site hot pressure wash).

- Wash equipment that infrequently crosses the wetted channel and does not have incidental soil attached (e.g., herbicide trailers, chipper, water pumps [hand carried and trailer-mounted], mowers and motor vehicles) using Protocol 3 (on-site or off-site hot or cold pressure wash).

#### **Protocol 1 - Hand Tools, Boots and Wetted Power Tools**

This control protocol involves cleaning any hand tools, boots and wetted portions of power tools (weed whipper, drill, concrete vibrator, etc.) that come in contact with potentially infected surface water prior to leaving the work site each day OR leaving these materials at the site until the work is complete. Hand tools, boots and wetted portions of power tools must be cleaned before leaving the site using the following procedure:

1. Remove any accumulated mud/soil from the article to be cleaned;
2. Fill a portable plastic tub (child's swimming pool, or equivalent) to a depth allowing complete submersion of the boots or tools with a 4 percent solution (5 fluid ounces per gallon) of a commercial disinfectant (GS High Dilution Disinfectant 256, Spartan Chemical Company);
3. Scrub all surfaces with a brush;
4. Let soak in the disinfectant for approximately 10 minutes;
5. Rinse with potable water; and
6. Dispose of the used disinfectant solution in a sewer or upland area where it cannot enter surface waters.

#### **Protocol 2A - Instream Mobile Equipment (Infested Reaches)**

This Protocol applies to equipment that is used in the wetted channel and likely to have incidental soil attached, such as dozers, excavators, discing equipment, wheeled loaders and motor graders.

1. All attached soil must be removed at the project site using a pressurized water hose provided by a water truck (or equivalent pressurized water source);
2. Wash water must be contained and not allowed to run-

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- off into a storm drain or drainage feature;
3. The equipment must be washed on-site using a portable hot pressure washer OR taken to the nearest O & M washing facility (Saticoy or Moorpark) for a hot pressure wash.
  4. Care must be taken to pressure wash all surfaces with hot water that typically come in contact with surface water and/or wet sediments, such as wheels, tires, discs, dozer tracks, excavator and loader buckets, dozer and grader blades, undercarriage, hydraulic cylinders and hoses, and fenders.

#### **Protocol 2B – Instream Mobile Equipment (All Other Reaches)**

This Protocol applies to equipment that is used in the wetted channel and likely to have incidental soil attached, such as dozers, excavators, discing equipment, wheeled loaders and motor graders.

1. The equipment must be washed on-site using a portable hot pressure washer OR taken to the nearest O & M washing facility (Saticoy or Moorpark) for a hot pressure wash.
2. Care must be taken to pressure wash all surfaces with hot water that typically come in contact with surface water and/or wet sediments, such as wheels, tires, discs, dozer tracks, excavator and loader buckets, dozer and grader blades, undercarriage, hydraulic cylinders and hoses, and fenders.

#### **Protocol 3 – Other Mobile Equipment and Vehicles**

This Protocol applies to equipment that infrequently crosses the wetted channel and does not have incidental soil attached, such as herbicide trailers, chipper, water pumps (hand carried and trailer-mounted), mowers and motor vehicles.

1. The wheels, tires and undercarriage of this equipment must be pressure washed, either on-site or the nearest O & M washing facility (Saticoy or Moorpark).
2. If washed on-site, wash water must be contained and not allowed to run-off into a storm drain or drainage feature.

#### **Protocol 4 – Reusable Instream Materials**

Materials that may be transported between work sites may include sand bags, K-rail, diversion pipe, water hoses and concrete



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forms (wood). Sand bags immersed in surface waters cannot be fully cleaned, and must be emptied of sand (on-site or the District's maintenance yard) and the bag deposited in a proper trash receptacle.

1. Wash hard surfaced materials on-site using a portable hot pressure washer OR take to the nearest O & M washing facility (Saticoy or Moorpark) for a hot pressure wash.
2. Care must be taken to remove all attached soil or sediment and fully contact all surfaces.
3. Waste water shall not re-enter any natural watercourse.

#### 17. Proposed Compensatory Mitigation:

The Applicant has proposed to implement the proposed project utilizing all applicable BMPs to ensure impacts are avoided and/or minimized. Impacts will take place within existing facility footprints, unless a specific project or activity is approved by the Regional Board following a pre-construction notification (Notification Protocol and Additional Review). Temporarily impacted areas will be restored to previously existing conditions and no additional mitigation will be required other than what has been specified in the BMPs section (Attachment A, No. 16).

For projects with new permanent impacts to waters of the United States, mitigation will be required on a case-by-case basis. See No. 18 (Required Compensatory Mitigation).

#### 18. Required Compensatory Mitigation:

The Regional Board may require compensatory mitigation for any impacts outside original project footprints.

The Regional Board will require a ratio of 1:1 for temporarily impacted areas, on-site and in kind. For new permanent impacts, the mitigation ratio will be dependent upon the type of habitat impacted and/or the type and location of the proposed mitigation. Mitigation will not be required for replacement of washed out rock or other materials in areas which are devoid of vegetation (within previously existing footprints).

In cases where additional mitigation for new permanent impacts may be required, the ratios may be developed within a range of 2:1 to 5:1; depending on specific impacts and project location conditions. The District will submit a Mitigation Plan for approval to this Regional Board for any new permanent impacts. The Mitigation Plan will specify location, methods, monitoring,

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performance criteria, reporting and any other pertinent information as required by this Regional Board.

See *Attachment B, Conditions of Certifications, Additional Conditions* for modifications and additions to the above proposed compensatory mitigation.

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#### STANDARD CONDITIONS

Pursuant to §3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and Article 6 (commencing with 23 CCR §3867).
2. This Certification action is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR Chapter 28 and owed by the Applicant.

#### ADDITIONAL CONDITIONS

Pursuant to 23 CCR §3859(a), the Applicant shall comply with the following additional conditions:

1. The Applicant shall submit to this Regional Board copies of any other final permits and agreements required for this project, including, but not limited to, the U.S. Army Corps of Engineers' (ACOE) Section 404 Permit and the California Department of Fish and Wildlife's (CDFW) Streambed Alteration Agreement. These documents shall be submitted prior to any discharge to waters of the State.
2. The Applicant shall adhere to the most stringent conditions indicated with either this Certification, the CDFW's Streambed Alteration Agreement, or the ACOE Section 404 Permit.
3. The Applicant shall comply with all water quality objectives, prohibitions, and policies set forth in the *Water Quality Control Plan, Los Angeles Region (1994)* as amended.
4. The Avoidance/Minimization (BMPs) activities proposed by the Applicant as described in Attachment A, No. 16, are incorporated as additional conditions herein.
5. As a condition of the 401 Certification File No. 08-148, the District developed, submitted and implemented a Hazard Analysis and Critical Control Points plan (HACCP) for



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prevention and control of aquatic nuisance species. The HACCP was submitted to the RWQCB on October 16, 2009 and has been implementing it since 2010. The District will continue to implement this plan through the term of this Certification.

6. The Applicant and all contractors employed by the Applicant shall have copies of this Certification, the approved maintenance plan, and all other regulatory approvals for this project on site at all times and shall be familiar with all conditions set forth.
7. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.
8. All excavation, construction, or maintenance activities shall follow best management practices to minimize impacts to water quality and beneficial uses. Dust control activities shall be conducted in such a manner that will not produce downstream runoff.
9. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State. Designated spoil and waste areas shall be visually marked prior to any excavation and/or construction activity, and storage of the materials shall be confined to these areas.
10. All waste and/or dredged material removed shall be relocated to a legal point of disposal if applicable. A legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith.
11. The Applicant shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. This Certification does not authorize the discharge by the applicant for any other activity than specifically described in the 404 Permit.
12. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.

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13. The Applicant shall allow the Regional Board and its authorized representative entry to the premises, including all mitigation sites, to inspect and undertake any activity to determine compliance with this Certification, or as otherwise authorized by the California Water Code.
14. Application of pesticides must be supervised by a certified applicator and be in conformance with manufacturer's specifications for use. Compounds used must be appropriate to the target species and habitat. All pesticides directed toward aquatic species must be approved by the Regional Board. Pesticide utilization shall be in accordance with State Water Resources Control Board Water Quality Order Nos. 2011-0002-DWQ and 2004-0009-DWQ.
15. The Applicant shall not conduct any construction activities within waters of the State during a rainfall event. The Applicant shall maintain one-day (1-day) clear weather forecast before conducting any operations within waters of the State.
16. Any routine maintenance activities will be phased to limit the exposed or working face such that the graded area can be stabilized within 96 hours after the first prediction of rain during the 5-day forecast or within 24 hours after final grading of the phased area.
17. The Applicant shall utilize the services of a qualified biologist with expertise in riparian assessments during any vegetation clearing activities. The biologist shall be available on site during construction activities to ensure that all protected areas are marked properly and ensure that no vegetation outside the specified areas is removed. The biologist shall have the authority to stop the work, as necessary, if instructions are not followed. The biologist shall be available upon request from this Regional Board for consultation within 24 hours of request of consultation.
18. No activities shall involve wet excavations (i.e., no excavations shall occur below the seasonal high water table). A minimum 5-foot buffer zone shall be maintained above the existing groundwater level. If construction or groundwater dewatering is proposed or anticipated, the Applicant shall file a Report of Waste Discharge (ROWD) to this Regional Board and obtain any necessary NPDES permits/Waste Discharge Requirements prior to discharging waste.
19. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. If surface water diversions are anticipated, the District will follow the approved Water Diversion Guide. Contingency measures shall be a part of this plan to address various flow discharge rates. The plan shall be submitted prior to any surface water diversions. If surface flows are present, then upstream and downstream monitoring for the following shall be implemented:

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- pH
- temperature
- dissolved oxygen
- turbidity
- total suspended solids (TSS)

Analyses must be performed using approved US Environmental Protection Agency methods, where applicable. These constituents shall be measured at least once prior to diversion and then monitored for on a daily basis during the first week of diversion and/or dewatering activities, and then on a weekly basis, thereafter, until the in-stream work is complete.

Results of the analyses shall be submitted to this Regional Board by the 15th day of each subsequent sampling month. A map or drawing indicating the locations of sampling points shall be included with each submittal. Diversion activities shall not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Downstream TSS shall be maintained at ambient levels. Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

20. The Applicant shall restore all areas of TEMPORARY IMPACTS to waters of the United States and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the State. Restoration shall include grading of disturbed areas to pre-project contours and revegetation with native species. Restored areas shall be monitored and maintained with native species as necessary for five years.
21. The Applicant shall provide COMPENSATORY MITIGATION to offset the proposed temporary loss of waters of the United States by creating or restoring riparian habitat at a minimum 1:1 area replacement ratio. The Applicant shall also provide compensatory mitigation for proposed permanent impacts within waters of the United States/Federal jurisdictional wetlands by creating or restoring riparian habitat/Federal jurisdictional wetland habitat with a ratio ranging between 2:1 and 5:1 depending upon specific project requirements. The District will submit a Mitigation Plan for approval to this Regional Board for any new permanent impacts. The boundary of the mitigation site shall be clearly identified on a map of suitable quality and shall be defined by latitude and longitude. This information shall be submitted to this Regional Board for approval prior to any disturbance within waters of the United States and shall include copies of any agreements made between the Applicant and a third party organization regarding compensatory mitigation efforts.
22. The Applicant shall submit to this Regional Board an Annual Work Plan and Annual Monitoring Report in conjunction with reports submitted to California Department of Fish

## **ATTACHMENT B**

### **Conditions of Certification File No. 14-038**

and Wildlife and U.S. Army Corps of Engineers. The reports shall be due April 1 and August 1, respectively each year following issuance of this 401 Certification or until project and mitigation activities have been achieved and documented. The Annual Monitoring Reports shall describe in detail all of the project/construction activities performed during the previous year and all restoration and mitigation efforts. Specific mitigation site annual monitoring reports may be submitted under separate cover. At a minimum the Annual Monitoring Reports shall include the following documentation and answered appropriately whether or not mitigation has been performed:

- (a) Color photo documentation of the pre- and post-project and mitigation site conditions;
- (b) Geographical Positioning System (GPS) coordinates in decimal-degrees format outlining the boundary of the project and mitigation areas;
- (c) The overall status of project including a detailed schedule;
- (d) Copies of all permits revised as required in Additional Condition 1;
- (e) Water quality monitoring results for each reach (as required) compiled in an easy to interpret format;
- (f) A certified Statement of "no net loss" of wetlands associated with projects with permanent impacts;
- (g) Discussion of any construction and mitigation monitoring activities and exotic plant control efforts; and
- (h) A certified Statement from the permittee or his/her representative that all conditions of this Certification have been met.

23. All applications, reports, or information submitted to the Regional Board shall be signed:

- (a) For corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates.
- (b) For a partnership, by a general partner.
- (c) For a sole proprietorship, by the proprietor.
- (d) For a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.



## ATTACHMENT B

### Conditions of Certification File No. 14-038

24. Each and any report submitted in accordance with this Certification shall contain the following completed declaration:

"I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)"

25. All communications regarding this project and submitted to this Regional Board shall identify the Project File Number 14-038. Submittals shall be sent to the attention of the 401 Certification Unit.
26. Any modifications of the proposed project may require submittal of a new Clean Water Act Section 401 Water Quality Certification application and appropriate filing fee.
27. The project shall comply with the local regulations associated with the Regional Board's **Municipal Stormwater Permit** issued to Ventura County and co-permittees under NPDES No. CAS004002 and Waste Discharge Requirements Order No. R4-2010-0108. This includes the Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) and all related implementing local ordinances and regulations for the control of stormwater pollution from new development and redevelopment. The project shall also comply with all requirements of the National Pollutant Discharge Elimination System (NPDES) **General Permit** for Storm Water Discharges Associated with Construction Activity, Order No. 2012-0011-DWQ. All stormwater treatment systems shall be located outside of any water of the State and shall not be used as a wetland or riparian mitigation credit.
28. Coverage under this Certification may be transferred to the extent the underlying federal permit may legally be transferred and further provided that the Applicant notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new Applicants containing a specific date of coverage, responsibility for compliance with this Certification, and liability between them.

## ATTACHMENT B

### Conditions of Certification File No. 14-038

29. The Applicant or their agents shall report any noncompliance. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
30. *Enforcement:*
- (a) In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
  - (b) In response to a suspected violation of any condition of this Certification, the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
  - (c) In response to any violation of the conditions of this Certification, the SWRCB or RWQCB may add to or modify the conditions of this Certification as appropriate to ensure compliance.
31. This Certification shall expire five (5) years from the date of this Certification. The Applicant shall submit a complete application at least 90 days prior to termination of this Certification if renewal is requested.



**DEPARTMENT OF FISH AND GAME**

South Coast Region  
4949 Viewridge Avenue  
San Diego, CA 92123  
(858) 467-4201



August 3, 2009

Ventura County Watershed Protection District  
Attn: Pam Lindsey  
800 South Victoria Avenue  
Ventura, CA 93009

Dear Ms. Lindsey:

Enclosed is Lake or Streambed Alteration Agreement # 1600-2004-0512-R5, that authorizes work on the Operations and Maintenance Program project impacting various watercourses in Ventura County. This action is authorized under Section 1602 of the Fish and Game Code and has been approved by the California Department of Fish and Game. Pursuant to the requirements of the California Environmental Quality Act (CEQA), the Department filed a Notice of Determination (NOD) on the project on August 3, 2009. Under CEQA regulations, the project has a 30-day statute of limitations on court challenges of the Department's approval.

The Department believes that the project fully meets the requirements of the Fish and Game Code and CEQA. However, if court challenges on the NOD are received during the 30-day period, then an additional review or even modification of the project may be required. If no comments are received during the 30-day period, then any subsequent comments need not be responded to. This information is provided to you so that if you choose to undertake the project prior to the close of the 30-day period, you do so with the knowledge that additional actions may be required based on the results of any court challenges that are filed during that period.

Please contact Jeff Humble at (805) 652-1868 if you have any questions regarding the Lake or Streambed Alteration Agreement.

Sincerely,

  
Helen R. Birss

for Environmental Program Manager

RECEIVED

AUG 06 2009

Enclosure

Revised 11/05

WATERSHED PROTECTION DIST.

**CALIFORNIA DEPARTMENT OF FISH AND GAME**

4949 Viewridge Avenue  
San Diego, CA 92123

July 7, 2009

Notification No. 1600-2004-0512-R5

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**ROUTINE MAINTENANCE AGREEMENT REGARDING  
PROPOSED STREAM OR LAKE ALTERATION**

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department, and the Ventura County Watershed Protection District, represented by the Director, (805) 654-2040, 800 South Victoria Avenue, Ventura, CA 93009 hereinafter called the District, defines, delineates and conditions a simplified regulatory review process to maintain proper operation of the District's flood control facilities to protect life and property while minimizing impacts to fish and wildlife resources.

WHEREAS, pursuant to Section 1602 of the California Fish and Game Code, the District, on the April 1, 2008, notified the Department about the availability of their Draft Program Environmental Impact Report (Program EIR) and that they intend to minimize impacts to the natural flow of, to minimize impacts to the bed, channel, or bank of, or minimize use of material from the streambed(s) of the following water(s): all waters within Ventura County, California, that are part of the District's flood control facilities as identified in their Program EIR (See Program EIR for details). The Program EIR includes best management practices (BMPs) to reduce or avoid effects of the following activities on the environment: 1) Routine Operations and Maintenance, 2) Water Diversion, 3) Stream Gauge Maintenance, and 4) Rodent Control Activities.

WHEREAS, the Department (represented by Dan Blankenship) has determined that such operations may substantially adversely affect existing fish and wildlife resources identified in the Program EIR without the use of BMPs and all other aquatic and wildlife resources in the area, including the riparian vegetation which provides valuable habitat for fish and wildlife.

THEREFORE, the Department hereby proposes a long-term agreement that supports the use of the BMPs identified in the Program EIR and the additional conditions in this Agreement to minimize impacts and to protect fish and wildlife resources during the District's work. The District hereby agrees to follow the BMPs developed in the Program EIR and specifically listed in the Agreement along with additional conditions in this agreement as part of the proposed work.

If the District's work changes from that stated in the Program EIR including routine maintenance and occasional repairs, this Agreement is no longer valid and a new notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this Agreement and with other pertinent code sections, including but not limited to Fish and Game Code Sections 5650, 5652, 5901, 5931, 5937, and 5948, may result in prosecution.

Nothing in this Agreement authorizes the District to trespass on any land or property, nor does it relieve the District of responsibility for compliance with applicable federal, state, or local laws or ordinances. A consummated Agreement does not constitute Department of Fish and Game endorsement of the proposed operation, or assure the Department's concurrence with permits required from other agencies.



## **Streambed Alteration Conditions For Notification Number: 1600-2004-0512-R5**

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This Agreement becomes effective the date of the Department's signature and the construction portion terminates on December 31, 2019. This Agreement shall remain in effect to satisfy the terms/conditions of this Agreement. Any provisions of the agreement may be amended at any time provided such amendment is agreed to in writing by both parties. Mutually approved amendments become part of the original agreement and are subject to all previously negotiated provisions.

Pursuant to Section 1600 et. seq., the District may request one extension of the Agreement; the District shall request the extension of this Agreement prior to its termination. The one extension may be granted for up to five years from the date of termination of the Agreement and is subject to Departmental approval. The extension request and fees shall be submitted to the Department's South Coast Office at the above address. If the District fails to request the extension prior to the Agreement's termination, then the District shall submit a new notification with fees and required information to the Department. Any construction impacts conducted under an expired Agreement are a violation of Fish and Game Code Section 1600 et. seq. For complete information see Fish and Game Code Section 1600 et. seq.

The following provisions, and those that are fully disclosed in the District's Program EIR, constitute the limit of activities agreed to and resolved by this Agreement. The signing of this Agreement does not imply that the District is precluded from doing other activities at the site. However, activities not specifically agreed to and resolved by this Agreement, shall be subject to separate notification pursuant to Fish and Game Code Sections 1600 et seq.

Copies of this Agreement and all required permits and supporting documents (Routine Operations and Maintenance EIR, May 2008) provided with the notification or referenced by this Agreement shall be readily available at the work site at all times during periods of active work.

The District certifies by signing this agreement that the project site(s) has been surveyed and shall not impact any rare, threatened or endangered species. Or the District certifies that such a survey is not required for the proposed project. If rare, threatened or endangered species occur within the proposed work area, or could be impacted by the work proposed, the District shall consult with the Department and obtain any required State and/or Federal permits.

### **MAINTENANCE ACTIVITES**

#### Description of Routine Operations and Maintenance Activities:

The primary objective of the Watershed Protection District's (District's) routine maintenance program is to maintain the proper operation of the District's flood control facilities to protect life and property. Maintenance preserves the appropriate conveyance capacity of the facilities and prevents the accumulation of obstructing vegetation and sediments that could increase existing flood hazards. By maintaining these facilities consistent with their original design, the District reduces or prevents flooding and erosion hazards that may result in damage to life, property, and infrastructure.

The current maintenance program is an ongoing program that began with the formation of the District in 1946. The program has grown over the years as new flood control facilities were constructed. As such, the program includes a wide range of facilities that were constructed (or

adopted from other public and private entities) over the past 60 years. New facilities to be maintained are added as the District completes or adopts new capital projects. The maintenance program constantly adapts to a wide variety of site conditions, project designs, and maintenance requirements.

The District does not propose to modify the objectives, geographic scope, activity guidelines, or fundamental methodologies of the current maintenance program. The District does not believe that it can reduce, curtail, or scale back any current maintenance work without hindering its responsibility for protecting life and property.

However, the District recognizes that some of its maintenance work can be performed in a more environmentally sensitive manner, or that certain precautions and protective measures can be implemented that would reduce environmental effects of its work.

The proposed project addressed in the Program EIR is to incorporate specific feasible environmental protection measures into the current maintenance program for existing facilities. These measures are called "environmental best management practices" (BMPs) in the Program EIR. The District is voluntarily proposing to adopt these measures as part of the routine maintenance program to reduce incidental effects of the routine maintenance on the environment, and to facilitate acquisition of long-term state and federal permits. The proposed "project," as defined under the California Environmental Quality Act (CEQA) Guidelines is the adoption of the environmental BMPs. This "project" is proposed to improve environmental protection during maintenance activities to the extent feasible without compromising the overall objectives of the maintenance program. Therefore, for this project, the District's objectives are to:

1. Reduce delays in operation and maintenance activities due to delays in permit response time.
2. Improve environmental protection during maintenance activities.
3. Maintain current levels of flood control protection within its jurisdiction to protect life and property.

**Maintenance of Future Flood Control Facilities and CEQA/Streambed Alteration Agreement:**

The District must conduct a CEQA environmental review for the construction of new flood control facilities. In the past, the District typically approved projects without a specific reference to the maintenance requirements for the facilities. It was generally understood that projects would be maintained as necessary to ensure their proper functioning. This practice has resulted in some uncertainty and confusion about the necessary maintenance requirements for existing facilities because there is no documentation from the design and environmental review processes. To avoid future confusion, the District is now including facility-specific maintenance requirements and methods in the environmental review and approval process for most new capital projects. Hence, the environmental impacts of maintenance of new flood control projects are now being addressed in the CEQA documents for the new projects. Through this process, environmental protection measures for the long-term maintenance of new facilities are now being adopted as part of the original project approvals by the District's Board of Directors.

The District Board of Director's approved the environmental BMPs addressed in the Program EIR, the BMPs will be applied to maintenance requirements of all future capital projects designed and constructed by the District to create uniformity among facilities. The applicability of

## **Streambed Alteration Conditions For Notification Number: 1600-2004-0512-R5**

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these BMPs for future projects will be determined in the CEQA review of the new projects. The proposed BMPs will be incorporated to future projects by reference. The BMPs may be supplemented by additional site- or facility-specific measures, if determined to be necessary based on the environmental impact analysis performed for the new project.

### **Environmental Best Management Practices:**

The District currently implements BMPs during routine maintenance activities. Implementation of these existing BMPs will continue in addition to the new BMPs developed in the Program EIR. The following is a summary of the existing BMPs that the District currently uses during routine maintenance activities that will be continued under this agreement.

- The minimum size/type of equipment is employed to complete the activity to minimize potential impacts.
- The minimum strength required to achieve the goal for each chemical product is used and staff follows specific pesticide protocols. Only products approved for aquatic use are applied within the bed and banks of any channel or basin facility. Post-emergent products are applied only to plants via target application where plants are sparse.
- Gates, fences, and "no trespassing" signs are kept in working order to discourage dumping and vandalism.
- Silt fencing, k-rail, sandbag barriers, and straw wattles are routinely installed and maintained during work to prevent soil from leaving the work areas into the stream or channel.
- Silt fencing or other barriers are placed around temporary soil stockpile sites to contain material. Soil stockpiles are maintained free of vegetation.
- Water diversions are routinely used to prevent soil and concrete from entering surface waters adjacent to maintenance work areas.
- Plastic-lined sandbag concrete wash out pits stationed in uplands are required for each site where concrete pouring occurs.
- Pipe and pump station flushing activities are conducted with a vacuum system to avoid release of materials into channels or surface waters.
- Trash is screened and separated from trash racks and debris collected from channels and basin. Trash is then hauled to a County waste transfer facility.
- Rumble strips, street sweepers, and wattles over storm drain inlets are employed to prevent soil from entering streets and storm drains.
- Local fire abatement requirements are met by conducting annual brush clearance in District right of way adjacent to residential areas.

In addition, the District developed the Operators Manual for Conducting Flood Control Activities in Ventura County Streams and Rivers (1981), which serves as an additional resource for training of operations and maintenance staff.

The District has formally developed 25 additional environmental BMPs to reduce the environmental effects of its routine maintenance program for existing and new flood control facilities. The BMPs represent precautions and procedures to be used when planning and implementing maintenance activities that could affect sensitive environmental resources including wetlands, riparian habitat, aquatic habitat, threatened and endangered species, species of special concern, water quality, and hydraulic conditions in the watershed. The BMPs have been designed to be feasible and practical. They will not curtail, reduce, or otherwise inhibit the District's maintenance requirements and activity guidelines. Implementation of the BMPs will become standard practice for the maintenance crews. The following BMPs are taken from the Program EIR with some additional clarification language added.

**BMP 1. Avoid Channel Work During the Rainy Season.** Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season December 1 to April 1 to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to the Program EIR.

**BMP 2. Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning.** The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 09-0057; NPDES Permit No. CAS004002, adopted on May 7, 2009). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.

**BMP 3. Location of Temporary Stockpiles.** Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from December 1 to April 1. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Temporary stockpiles in the channel bottom shall be for a duration for one working day and not over night.

**BMP 4. Survey for Habitat Prior to Routine Maintenance Work.** Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all native birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).

Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure during the period March 1 to August 1,

## **Streambed Alteration Conditions For Notification Number: 1600-2004-0512-R5**

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a District biologist or consulting biologist shall determine if suitable habitat is present for native breeding birds in or within 300 feet of the work area. Suitable habitat is generally defined as dense or moderately dense willow or mulefat scrub or woodland, but also includes moderately dense stands of non-native vegetation with sufficient density and vegetative structure to support nesting and foraging.

Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure that would disrupt foraging or nesting of raptors during the period February 1 to August 1, a District biologist or consulting biologist shall survey the 500 feet radius around the project site for raptor nest initiation or occupation.

Channel cleanout shall be postponed to August 1 if such habitat is present in the work area or within 300 to 500 feet of the work area, or until nestlings have fledged if the District determines that riparian bird or raptor nesting is occurring in the habitat area. This restriction does not apply if the nesting birds are English house sparrows or other introduced species. If any native migratory (passerine) birds are found nesting within the 300 feet or any raptors are found nesting within 500 feet survey radius, the District shall consult with CDFG to develop a conservation plan of action. If any federally or state listed birds are found within 500 feet of the work area, Threatened and Endangered Species BMPs 44-46 (page 17 of this agreement) will be implemented.

**BMP 5. Survey for Steelhead Migration Conditions and Sensitive Aquatic Species Prior to Routine Maintenance Work.** Prior to maintenance and repair activities in a channel during the period 1 December to 1 June that require the diversion of stream flow, work in flowing water, or work within 100 feet of flowing water on the Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Hopper Creek, Pole Creek (unlined portions), and Piru Creek, qualified District personnel shall determine if flow conditions (i.e., flow, depth, stream continuity) are potentially suitable for the upstream or downstream migration of southern steelhead in the work area. Surveys for all sensitive aquatic species that could potentially occur in the project area or could be impacted by the project (i.e. California red-legged frogs including egg masses and tadpoles, Arroyo chub, Arroyo toad, and Southwestern pond turtle) shall also be conducted by a qualified biologist during this same time period. The District shall immediately notify the Department for consultation on specific mitigation actions upon finding sensitive species within, immediately adjacent to any work area, in areas that may be impacted by the routine maintenance work. Channel cleanout shall be postponed to June 1 if flows are sufficient for steelhead migration in the work area or within 100 feet of the work area. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for any water diversion activities.

**BMP 6. Survey for Steelhead Rearing Habitat and Sensitive Aquatic Species Prior to Routine Maintenance Work.** Prior to maintenance and repair activities in a channel during the period December 1 to June 1 that requires the diversion of stream flow, work in flowing water, or work within 100 feet of flowing water on the Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Hopper Creek, Pole Creek (unlined portions), and Piru Creek, a District biologist or consulting biologist shall determine if suitable rearing habitat for steelhead is present in the work area or within 100 feet of the work area. If rearing habitat is present, District personnel shall determine if steelhead are present in the pools. If steelhead are not present, the work may proceed. If steelhead are present, the District shall follow avoidance and/or relocation procedures approved by NOAA Fisheries for such maintenance

## **Streambed Alteration Conditions For Notification Number: 1600-2004-0512-R5**

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work if the work will occur while fish are present. Surveys for all sensitive aquatic species that could potentially occur in the project area or could be impacted by the project (i.e. California red-legged frogs including egg masses and tadpoles, Arroyo chub, Arroyo toad, and Southwestern pond turtle) shall also be conducted by a qualified biologist during this same time period.

**BMP 7. Continue Existing Procedures for Sediment Removal and Vegetation Control for Calleguas Creek, Conejo Creek, and Revolon Slough.** The District shall continue its procedures for sediment removal and in-stream vegetation control along unimproved channels along Calleguas Creek, Conejo Creek, Revolon Slough, Arroyo Las Posas and generally throughout Zone 3 in accordance with previous Streambed Alteration Agreements 5-540-91, 5-542-91, 5-115-89, 5-270-92, 5-541-91, and 5-388-90 unless otherwise negotiated in the new long-term agreement. The terms of these agreements will supersede any conflicting conditions in other BMPs.

**BMP 8. Avoid Disturbance to Native Beach or Wetland Species.** The District shall avoid areas of beach dune vegetation when accessing storm drain outlets at the beach with vehicles for routine maintenance. The removal of native beach or wetland plants that are located at or near the beach outlet shall be minimized. Prior to the removal of obstructive sand or vegetation from a beach outlet, qualified District personnel shall determine if suitable habitat (i.e., a brackish waterbody) is present at the outlet for tidewater gobies, and if the species is present. In addition, qualified District personnel shall determine if suitable habitat is present along the vehicle access route across the beach for foraging or nesting snowy plovers and California least terns. If any of these sensitive species are present at the storm drain outlet or along the access route, the District will either postpone the routine maintenance work until these species are no longer present, or follow avoidance and/or relocation procedures approved by U.S. Fish and Wildlife Service (USFWS). This BMP shall not apply if there is a threat of a storm and the outlet is plugged. The District shall contact the Department and USFWS when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation.

**BMP 9. Aquatic Pesticide BMPs.** The District shall follow the most up-to-date Best Management Practices (BMPs) and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides.

**BMP 10. Leave Vegetation on Upper Basin Slopes.** The District shall not remove established vegetation on the basin slopes above the 20 percent capacity debris line except as follows: (1) the vegetation is non-native; (2) shrubs and trees become hazards to the stability and function of the basin; (3) the sediment meets or exceeds the 20 percent capacity line; (4) slope regrading is required to correct or prevent rill erosion or other damage, (5) the vegetation is located on engineered fill, or (6) vegetation constitutes a fire hazard to nearby properties.

**BMP 11. Leave Patches of Vegetation in Channel Bottom.** The District shall minimize vegetation removal or reduction from earthen or earthen bottom channels to the least amount necessary to achieve the specific maintenance objectives for the reach. Vegetation removal in the channel bottom shall be conducted in a non-continuous manner, allowing small patches of in-channel vegetation to persist provided it will not adversely affect conveyance capacity.



## **Streambed Alteration Conditions For Notification Number: 1600-2004-0512-R5**

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**BMP 12. Leave Herbaceous Wetland Vegetation in Channel Bottom.** Consistent with the maintenance objectives, the District shall avoid removal or reduction of emergent herbaceous wetland vegetation on the channel bottom that is rooted in or adjacent to the low flow channel or a pond in order to provide cover for aquatic wildlife. This same type of vegetation shall be protected during the removal of taller obstructive woody vegetation on the channel bottom.

**BMP 13. Maximum 15-foot Vegetation-Free Zone at the Toe of the Bank.** When reducing or removing vegetation from channel banks or bottoms for the sole purpose of visual access to inspect the toe of slopes with riprap or concrete, the District shall treat a maximum 15-foot wide zone from the base of the slope into the channel bottom.

**BMP 14. Avoid Road Base Discharge.** The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.

**BMP 15. Mitigate/Replace Temporary Impacts to Habitat.** For repair of in-channel structures and features that results in the temporary disturbance of native wetland or riparian vegetation adjacent to the facility, the District shall restore native wetland or riparian vegetation in the affected work areas after the repair or reconstruction work. Restoration shall include planting or seeding native plants that were present prior to the work and/or are compatible with existing riparian vegetation near the work area. The District shall prepare a restoration plan for each repair project that specifies the limits of restoration, planting mix and densities, performance criteria for survival and growth, and at least a three-year maintenance and monitoring procedures. Restoration sites shall be located outside the limits of the repaired structure. If no suitable restoration site is available near the work area or the creation of a restoration area near the work area would conflict with flood control needs, the District shall select another location on District right-of-way in close proximity. If suitable restoration sites are not available, the District shall provide funds to a third party (public agency or non-profit organization) to implement the required mitigation in the same watershed as the impact. Habitat restoration under this BMP shall only occur if the affected areas support native wetland or riparian vegetation; no restoration is required for barren areas or areas dominated by non-native plants. The District shall submit all habitat restoration plans to the Department prior to implementation.

**BMP 16. Oak Tree Mitigation Ratio.** For any repair of in-channel structures and features that requires the removal of native oak trees with diameters at breast height of 4 inches or more, the District shall replace the trees at the following ratios in or near the affected work areas after the repair or reconstruction work: Oak trees (rooted plants from local stock) 4 to 6 inches diameter at chest height (DBH) shall be replaced at 3:1; oak trees 6-12 inches DBH shall be replaced at 5:1; oak trees from 12 to 24 inch DBH shall be replaced at 10:1; oak trees from 24-36 inches shall be replaced at 15:1; and oak trees greater than 36 inches DBH shall be replaced at a ratio of 20:1. A tree replacement plan shall be developed for each repair project that specifies the tree replacement locations, performance criteria for survival and growth, and at least a five year maintenance and monitoring procedures and shall be submitted to the Department prior to implementation.

**BMP 17. Concrete Wash-Out Protocols.** The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to

concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel, basin, or waters of the State. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.

BMP 18. Water Diversion Guide. Water diversion activities undertaken as part of routine repair and maintenance operations in improved and unimproved channels as well as debris basins shall follow the BMP guidance established as the Water Diversion Guide found in the Program EIR.

BMP 19. Minimize Erosion from Stream Gauge Maintenance. During stream gauge maintenance activities, vegetation shall be cleared from channel banks by cutting with chain-saw only. The vegetation roots shall be left intact and not be sprayed with herbicide as a measure to minimize potential erosion of cleared channel banks. The District shall implement additional erosion control methods as needed, based on considerations of flow velocities, site conditions, availability of materials, construction costs, durability and maintenance requirements.

BMP 20. Implementation of Integrated Pest Management. The District shall inspect its critical and non-critical facilities regularly to document and identify the presence or absence of ground squirrels. The District shall implement the Integrated Pest Management (IPM) program developed for the Program EIR that identifies tolerance level, control thresholds and approved rodent control methods and/or combinations of methods at each District facility. Rodent control methods implemented at each facility shall be applied as needed and as appropriate for site conditions and the season. Methods implemented shall minimize potential primary and secondary hazards to non-target species. The District shall maintain a preventative IPM program with zero tolerance for ground squirrels for its critical facilities where failure would impact public safety. When rodent control becomes necessary at non-critical facilities, the District shall choose applicable, cost-effective treatment method(s) from the District's IPM program. Treatment options considered for each site shall include: trapping, habitat modification, alternative construction methods and materials, use of raptors, clean and rodenticide-treated bait stations, broadcast diphacinone and zinc phosphide with or without carcass collection, and other methods. As part of an ongoing monitoring program to determine the effectiveness of the squirrel control program, the District shall maintain uniform inspection records for each facility and all control efforts. The District shall conduct a staff training program that covers the IPM program including rodent issues, inspection and monitoring requirements, and treatment options. The District shall submit treatment records to the Department annually including control methods used and monitoring records.

BMP 21. Avoid Spills and Leaks. The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all maintenance crews working with heavy equipment shall be trained in spill containment and response. All spills shall be reported to the Department's Office of Spill Prevention and Response.



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BMP 22. Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance. Prior to any sediment removal, vegetation control (by herbicide application, mowing, or discing), or repair work in earthen or earthen bottom channels and basins that contain native aquatic, riparian, or wetland habitats suitable for sensitive fish and wildlife species, the District shall conduct appropriate field investigations to determine if any threatened, endangered, or sensitive species are present. If such species are determined to be present in or in close proximity to the work areas, the District shall reschedule the work when the species are not present. If it is necessary to conduct the work while the species are present or in proximity to the work areas, the District shall develop other avoidance or relocation measures in consultation with the Department, USFWS, or NOAA Fisheries prior to conducting the work. If the work could affect state or federally listed species or their habitat, the District would employ avoidance or relocation measures approved by USFWS, NOAA Fisheries, and the Department, as appropriate, for the maintenance program. This measure includes protection for the following threatened, endangered, or sensitive species that could occur at maintenance sites: tidewater goby, southern steelhead, trout, unarmored threespine stickleback, California red-legged frog, arroyo toad, least Bell's vireo, southwestern willow flycatcher, arroyo chub, southwestern pond turtle, two-striped garter snake, Cooper's hawk, sharp-shinned hawk, yellow warbler, yellow breasted chat, purple marlin, tri-colored blackbird, and long-eared owl and other sensitive species that could occur in the treatment area.

BMP 23. Invasive Plant Removal Protocols. Invasive plant species shall be removed in a manner that prevents propagation. Where this type of vegetation is routinely treated, maintenance personnel should spray or mow plants before seeds ripen. All cut/removed invasive vegetation should be taken to a dump as destruction load. Maintenance personnel should avoid letting cut stems or seed pods be washed downstream or be left behind to propagate. In the case of giant reed (*Arundo donax*) removal, the District shall minimize ground disturbance and use foliar glyphosate treatment on smaller infestations as much as possible. Stems shall be removed only when the plants are dead. Root masses should not be removed, as bank overhangs provide cover for wildlife, which may include sensitive fish species.

BMP 24. Air Quality BMPs. The following measures are part of the APCD's Model Fugitive Dust Mitigation Plan and shall be incorporated to maintenance activities as needed to further reduce the District's fugitive dust emissions during grading, excavation, and construction activities.

- The areas disturbed at any one time by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.
- Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during earthmoving, grading, and excavation activities.
- All trucks shall be required to cover their loads as required by California Vehicle Code §23114.
- All graded and excavated material, exposed soil areas, including unpaved parking and staging areas, and other active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.

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- Graded and/or excavated inactive areas of the construction site shall be monitored by the District's operation and maintenance staff at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be periodically treated with environmentally-safe dust suppressants.

- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either on site or off site. The District staff shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.

- Rumble strips or track out devices shall be installed where vehicles enter and exit unpaved roads onto paved road, or wash off trucks and any other equipment leaving the site.

- All on site construction roads that have a daily traffic volume of more than 50 daily trips shall be stabilized as to minimize transport of earthen material from the site.

- Open material stockpiles shall be roller compacted, periodically watered, or treated with appropriate dust suppressants.

- There shall be at least one qualified District staff on site each work day to monitor the provisions of the Fugitive Dust Mitigation Plan and any other applicable fugitive dust rules, ordinances, or conditions.

- Personnel involved in grading operations shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health Regulations.

- All project construction operations shall be conducted in compliance with all applicable APCD Rules and Regulations with emphasis on Rule 50 (Opacity) and Rule 51 (Nuisance).

BMP 25. Construction Noise BMPs. Noise-generating construction activities shall be restricted to the daytime (i.e., 7:00 AM to 7:00 PM, Monday through Friday). Sustained construction noise adjacent to sensitive wildlife nesting areas should be minimized during the nesting season. The District shall consult with the Department regarding mitigation measures when sensitive wildlife are located adjacent to construction site.

### Impacts:

Routine maintenance involves various activities in the bed, bank or channel of various facilities including lined channels, bank protection, pump stations, debris and detention basins, dams, grade stabilizers, etc.

Routine maintenance may involve the removal or reduction in obstructive vegetation, use of bank stabilization material such as rock riprap or concrete, use of herbicides, removal of sediment, and earthwork to repair eroded or damaged areas and facilities. Impacts to biological resources could occur as a result of these activities.

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Project Schedule:

Routine maintenance is ongoing and work occurs year-round.

1. The District's activities within stream courses shall be limited to dry conditions or when the stream is not actively flowing and no measurable rain is forecasted. If 0.25 inches or more of measurable rain is forecasted within 12 hours of scheduled maintenance activities, activities shall cease temporarily, and protective measures to prevent siltation/erosion shall be implemented and maintained.

Work Area Limits:

2. The entire work area shown on the repair/construction plans shall be flagged prior to initiation of work to identify its limits within stream(s). No activities shall be permitted outside of the flagged area. Flagging for routine maintenance activities in non-sensitive areas is not required.
3. Disturbance or removal of vegetation/aquatic organisms, etc. for the purpose of routine maintenance, temporary water diversion structures or channels, dewatering, excavation, access roads or ramps, settling basins, staging, storage or stockpile area shall not exceed the limits shown on the plans or facility limits. Temporarily disturbed areas outside facility limits shall be restored to the original condition, to the maximum extent feasible.

Access:

4. Access to the facility work site shall be via existing roads and access ramps as shown on the plans. If no ramps are available in the immediate area, a temporary ramp within the facility/project footprint of the project may be constructed. Any temporary ramp shall be removed upon completion of the project.
5. Staging/storage areas for equipment and materials shall be located outside of the stream/lake. Equipment and material storage shall be done in such a manner as to minimize disturbance to species that forage in the area and to not attract nuisance or predatory animals to the project area.
6. Vehicles may be driven on the stream/lake bed to traverse the distance to the work area and in the immediate vicinity (within 50 feet) of the work area as necessary to complete the authorized work. No vehicle shall be driven in flowing or ponded water, in water covered portions of a stream or lake, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as to complete the routine maintenance work described in the plans. All other equipment shall be operated in the dry portions of the stream.
7. No equipment shall be operated or parked within the dripline of native trees (e.g., oaks, sycamore, cottonwood, maple, California bay, not including willows) except where access roads already exist and routine maintenance work is required as part of the project. Fencing for protected trees shall be placed five (5) feet outside of the

dripline of the trees to prevent compaction of the root zone.

Water Diversion/Dewatering:

8. Water diversion activities associated with routine maintenance shall follow the guidelines provided in the District's Water Diversion Guide as described in the Program EIR, Appendix E. The following procedures may also be implemented to further reduce impacts to aquatic resources.
9. When work in a flowing stream is unavoidable, the entire stream flow shall be diverted around the work area. Construction of the diversion shall normally begin in the downstream area and continue in an upstream direction; the flow shall be diverted only when construction of the diversion structure is complete.
10. Water diversion structures shall be constructed of non-erodible materials unless first enclosed by sheet piling, rock riprap, or other protective material. All water diversion structures shall be removed from the project area when the work is completed. Removal shall normally proceed from downstream in an upstream direction.
11. Seepage of water into or from the work area shall be prevented to the maximum extent feasible.
12. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life. Flows shall be sufficient quality and quantity to support fish and other aquatic life both above and below the water diversion. Normal flows shall be restored to the stream immediately upon completion of work.

Siltation/Turbidity Control:

13. Precautions to minimize turbidity/siltation shall be determined during project planning and shall be installed prior to routine maintenance. The method(s) used to minimize turbidity/siltation shall be monitored and cleaned/repared weekly.
14. Silty/turbid water from dewatering or other activities shall not be discharged into the stream. Such water shall be settled, filtered, or otherwise treated prior to discharge.
15. Upon determination that maintenance-related activities could increase the turbidity/siltation and/or the temperature of flows; or could decrease dissolved oxygen (DO) in flows; or could substantially change pH of flows and thereby constitute a threat to aquatic life, the activity shall be halted until effective control devices are installed, or abatement procedures are initiated. Turbidity and temperature of inlet and outlet flows shall not exceed baseline conditions following installation or removal and stabilization of water diversion structure(s). Dissolved oxygen shall not be significantly below baseline conditions (1 ppm decrease) and pH shall not be significantly different than baseline conditions (1 unit of pH change) within inlet and outlet flows. Baseline conditions shall be established prior to construction activities.

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16. Off-stream siltation ponds shall be constructed in a location and a manner that prevents discharge of sediment into the stream during periods of high flows.
17. Siltation ponds shall be constructed of non-erodible materials.
18. All siltation pond materials and trapped sediments shall be removed from the stream immediately following completion of work. Removal and disposal of materials and sediment shall be done in a location and manner which prevents discharge of sediment into the stream.

**General Best Management Practices:**

19. A qualified biological monitor having the appropriate qualifications, shall be on site or on call periodically during routine maintenance activities operations. If any native wildlife species are found in the path of construction, the monitor shall relocate the species to a safe location. Protective measures shall be taken to prevent the migration into or the return of species into the work site where feasible and appropriate. Survey field notes shall be kept and submitted to the Department in the annual report.
20. Materials removed from the stream shall not be stockpiled in the streambed or on its banks overnight where it could be washed into the stream via rainfall or runoff. Stockpile site(s) shall be shown on the plans, and selected to ensure compliance with the other provisions of this Agreement. Where possible, brush (native plants only) piles may be left in upland areas to provide wildlife habitat.
21. All fill materials, including material used for sandbags, shall be obtained from weed free upland sources to the maximum extent feasible. Use of beach or dune sand for sandbags is prohibited.
22. Structures and associated materials not designed to withstand high water flows shall be moved to areas above high water mark before such flows occur.
23. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, construction waste, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any logging, construction, or associated activity of whatever nature shall be allowed to enter into or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake, except within designated trash receptacles.
24. The District shall comply with all litter and pollution laws. All contractors, subcontractors and employees shall also obey these laws and it shall be the responsibility of the District to insure compliance.
25. Any equipment or vehicles driven and/or operated within or adjacent to the stream/lake shall be checked and maintained daily, to prevent leaks of materials

that if introduced to water could be deleterious to aquatic life. Any and all heavy equipment shall be removed from the streambed at the end of each work day.

26. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream/lake shall be positioned over drip pans.
27. No equipment maintenance shall be done within or near any stream/lake margin where petroleum products or other pollutants from the equipment may enter these areas via rainfall or runoff.
28. Equipment shall not be operated in wetted areas (including but not limited to ponded, flowing, or wetland areas) except as to complete the project described in the plans.
29. The clean-up of all spills shall begin immediately. The Department shall be notified immediately by the District of any spills and shall be consulted regarding clean-up procedures.
30. Raw cement/concrete or washings thereof, asphalt, paint, construction waste, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter a stream or lake, by the District or any party working under contract, or with the permission of the District, shall be removed immediately.
31. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a stream/lake or take place in locations that may be subjected to high flows.
32. Rock, gravel, and/or other materials shall not be imported to, taken from or moved within the bed or banks of the stream, except to complete the project described in the project plans.
33. If vacuum trucks are used to clean up any spills or contamination, the vacuum hose shall be placed in a 3 to 4 square foot area, protected on all side by exclusionary fencing to prevent the uptake of any aquatic life. Appropriate screening shall be placed on the intake. Contact the Department fisheries biologist, Maurice Cardenas (805) 640-1852 for screen size requirements.
34. No herbicides shall be used when wind velocities are above 5 miles per hour.

## **RESOURCE PROTECTION**

35. All exotic fish, invertebrate, amphibian, and reptile species shall, upon positive identification, be dispatched and disposed of properly. Disposal options may include burial or disposal of the exotic species in a trash receptacle.

### Vegetation Removal:

36. No living native vegetation, with a diameter at breast height (DBH) in excess of 4 inches, shall be removed from the bed, bank or channel of the stream, except as approved as part of the routine operations and maintenance program.
37. In areas of temporary disturbance, where vegetation must be removed, native plants shall be cut to ground level with hand operated power tools rather than by grading. No replanting will be required for vegetation of this size if it is cleared in this manner.
38. A complete inventory of native trees in excess of 4 inches DBH which may be removed shall be shown on the plans and identified by species and DBH.
39. No herbicides shall be used outside facility limits unless specifically authorized, in writing, by the Department.
40. The District shall remove invasive vegetation (tree tobacco, castor bean, giant reed, ice plant, etc.) from facilities and shall dispose of it in a manner and a location which prevents reestablishment.
41. Whenever possible, invasive species shall be removed by hand or by hand-operated power tools rather than by chemical means. Where control of non-native vegetation is required within the bed, bank, or channel of the stream, the use of herbicides is necessary, and there is a possibility that the herbicides could come into contact with water, the District shall employ only those herbicides, such as Aqua Master (Glyphosate), which are approved for aquatic use. If surfactants are required, they shall be restricted to non-ionic chemicals, such as Agri-Dex, which are approved for aquatic use.
42. Giant reed (*Arundo donax*), if present, shall be cut to a height of 6 inches or less, and the stumps painted with an herbicide approved for aquatic use within 5 minutes of cutting. Herbicides shall be applied at least three times during the period from May 1 to October 1 to eradicate these plants. Where proposed methods for removing giant reed deviate from this procedure, the District shall present alternative methods, in writing, to the Department for review, prior to construction.

Wildlife:

43. Avoidance and relocation measures will be taken for all native wildlife that are observed in the work area during any project. All wildlife shall be relocated out of the work area by a qualified biologist with appropriate permits in order to not needlessly take any wildlife (Section 2000 Fish and Game Code).

Threatened and Endangered Species:

44. If threatened or endangered bird species are observed in the area, no work shall occur during the breeding season (March 1 to September 15) to avoid direct or

indirect (noise) take of listed species and State and/or Federal threatened/endangered species permits may be required prior to commencing project activities. This Agreement does not authorize the take of federal or state-listed threatened and/or endangered species.

45. If any threatened or endangered species are found within 500 feet of the work area, the District shall contact the Department immediately of the sighting and shall request an on site inspection by Department representatives (to be done at the discretion of the Department and within 24 hours of receipt of the request) to determine if work may begin/proceed. If work is in progress when sightings are made, the District shall cease all work within 500 feet of the area in which the sighting(s) occurred and shall contact the Department immediately, to determine if work may recommence.
46. Should any rare, threatened or endangered species occur in the area, the District shall submit, for Department review and approval, a plan to ensure that no rare, threatened or endangered species are disturbed during project implementation. The plan shall be approved by the Department prior to initiation of any work.
47. The District shall apply any herbicides in accordance with state and federal law. No herbicides shall be used where threatened or endangered species occur and may be adversely impacted.
48. An environmental education program shall be created and conducted for all personnel entering the work area where sensitive species occur. The educational program will show illustrations of the sensitive native species and their habitat, discuss measures to protect the species, and discuss the notification protocol if sensitive species are observed.

**Fish Passage:**

49. When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the dam/obstruction pursuant to Fish and Game Code section 5937.
50. If flowing or ponded water and sensitive aquatic wildlife is observed within the proposed work limits, the District shall telephone the Department, Dan Blankenship at (661) 259-3750, prior to commencing activities within the bed, bank, and channel of stream(s). The District shall leave his/her name, date and time called, telephone number, the stream name, work location, nature of planned activities and proposed schedule.
51. The District shall report all fish mortality to the Department, Dan Blankenship at (661) 259-3750. The report shall be made within 24 hours of discovery.
52. The District shall install an exclusionary fish screen on the upstream portion of any created diversion channel, until the turbidity/siltation decreases to pre-disturbance



- conditions; and the area downstream area has sufficient depth and temperature to support native fish species.
53. The District shall have a sufficient number of qualified fisheries biologists involved with the capture and relocation of all native fish, so as not to put unnecessary stress on the fish during the capture and relocation efforts.
  54. Dewatering pump intakes shall be screened. Dewatering of the work area shall occur in a manner which allows native fishes to be retrieved unharmed. All pumping equipment shall be placed in a portable, stable spill containment device. The intake screen shall meet the requirements of National Marine Fisheries Service and the Department of Fish and Game which require no greater than 3/8" mesh, and intake velocities less than 0.8 feet/second.
  55. The District shall check intake screens daily and remove excessive algae and debris from the screen surface. Maintenance shall not alter the screen mesh size or intake velocity.
  56. No work shall be conducted on the streambed within 100 feet of flowing or ponded water, which have potential to support steelhead. Adult steelhead are expected to be present during periods of high flow (January through March) and smolt are likely to be in the area during periods of receding flows (March through July). National Marine Fisheries Service Biologist shall be contacted to coordinate additional fish salvage and avoidance measures.
  57. Any California black walnut, cottonwood, or sycamore trees greater than 4 inches DBH that must be removed from the work area shall be replaced in kind. Replacement ratios shall be 10:1. All planted trees shall have a minimum of 75 percent survival (by species) the first year and 100 percent thereafter. If the survival requirements have not been met, the District is responsible for replacement planting to achieve these requirements. Replacement trees shall be monitored and maintained for a period of five (5) years.
  58. The District shall recontour the streambed to its pre-disturbance condition to the maximum extent feasible, including the re-creation of a low flow channel.
  59. Planting, maintenance, monitoring and reporting activities shall be overseen by a specialist familiar with restoration of native plants.
  60. All plants shall be planted in randomly spaced, naturally clumped patterns. Plantings shall include native species.

## **REPAIR**

61. Maintenance operations shall be conducted in accordance with all applicable Best Management Practices described in this Agreement.
62. If said maintenance deviates from that described in the Program EIR (May 2008),

and protected resources develop in the facility/structure, the District shall notify the Department of the existing condition of the work area prior to initiating maintenance activities to determine the extent and quality of resources. Following this coordination, the District may proceed with maintenance activities following receipt of Department concurrence that the activity would not adversely affect protected resources.

63. Excavated material and debris resulting from maintenance activities shall be disposed of in an appropriate manner and location. Disposal of excavated material and debris in rivers, streams, lakes, ponds, or other natural [upland] areas that support protected resources is prohibited.

## **ADMINISTRATION**

### CEQA and Permit Compliance:

A final certified CEQA document shall be provided prior to execution of this Agreement.

Copies of all permits required by the U.S. Army Corps of Engineers, California Coastal Commission, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and/or Los Angeles Regional Water Quality Control Board shall be provided to the Department prior to initiation of construction.

### Subsequent Department Approvals:

A copy of the water diversion/water control plan if it deviates from methods included in the Water Diversion Guide shall be submitted to the Department for review prior to construction.

A copy of the Mitigation, Monitoring and Reporting Plan shall be submitted to the Department for review and approval prior to facility maintenance that requires impacts to native vegetation as described in this Agreement.

The Department shall review all maintenance project or activity plans submitted subsequent to execution of this Agreement within 30 days of receipt. The Department shall provide written notification to the District if there are any comments on the plan or to indicate approval. Electronic mail notification will suffice as an appropriate means of communication between the Department and the District on post-Agreement approvals.

### Legal Notices:

All provisions of this Agreement remain in force throughout the term of the Agreement. Any provisions of the Agreement may be amended or the Agreement may be terminated at any time provided such amendment and/or termination is agreed to in writing by both parties. Mutually approved amendments become part of the original Agreement and are subject to all previously negotiated provisions.

If the District or any employees, agents, contractors and/or subcontractors violate any of the terms or conditions of this agreement, all work shall terminate immediately and shall not

proceed until the Department has taken all of its legal actions.

The District shall provide a copy of this Agreement, to all contractors, subcontractors, and the District's project supervisors. Copies of this Agreement and all required permits and supporting documents shall be readily available at the work site at all times during periods of active work, and must be presented to any Department personnel, upon demand. All contractors shall read and become familiar with the contents of this Agreement.

The District shall notify the Department, in writing, at least five (5) days prior to initiation of project activities and at least five (5) days prior to completion of project activities that may affect threatened or endangered resources as described in this Agreement. Notification shall be sent to the Department at 4949 Viewridge Avenue, San Diego 92123, Attn: ES. FAX Number (858) 467-4299, Notification No. 1600-2004-0512-R5. Concurrent notification to Dan Blankenship, P.O. Box 221480, Newhall, 91322-1480, 661-259-3750, is also requested.

The District herein grants to Department employees and/or their consultants (accompanied by a Department employee) the right to enter the project site at any time, to ensure compliance with the terms and conditions of this Agreement and/or to determine the impacts of the project on wildlife and aquatic resources and/or their habitats.

The Department reserves the right to cancel this Agreement, after giving notice to the District, if the Department determines that the District has breached any of the terms or conditions of the Agreement.

The Department reserves the right to suspend or cancel this Agreement for other reasons, including but not limited to, the following:

- a. The Department determines that the information provided by the District in support of this Agreement/Notification is incomplete or inaccurate;
- b. The Department obtains new information that was not known to it in preparing the terms and conditions of this Agreement;
- c. The condition of, or affecting fish and wildlife resources change; and
- d. The Department determines that project activities have resulted in a substantial adverse effect on the environment.

Before any suspension or cancellation of the Agreement, the Department will notify the District in writing of the circumstances which the Department believes warrant suspension or cancellation. The District will have seven (7) working days from the date of receipt of the notification to respond in writing to the circumstances described in the Department's notification. During the seven (7) day response period, the District shall immediately cease any project activities which the Department specified in its notification. The District shall not continue the specified activities until that time when the Department notifies the District in writing that adequate methods and/or measures have been identified and agreed upon to mitigate or eliminate the significant adverse effect.

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Reporting Requirements:

The District shall provide an Annual Work Plan to the Department by April 30 of each year describing the projects proposed under the Program for 30 day review by the Department. Additional proposed maintenance projects may be submitted for 30 day review periodically each year. By August 31<sup>st</sup> of each year, the District shall submit an Annual Monitoring Project Report describing the projects completed under the Program, areas affected, natural resource enhancements, modifications to the bed, bank, or channel, and gains to riparian or wetland areas. For projects where revegetation was a component, the report shall include a detailed description of the revegetation efforts in light of the defined performance criteria, representative photographs taken from designated photo-stations, problems encountered, and contingency measures used or planned if necessary to ensure revegetation success. Projects from previous years shall also be included in each annual report until revegetation success has been achieved.

Notices:

Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and be sent by first class mail, addressed as follows, or to such other address as either party shall designate by written notice to the other:

To District:

Director  
Ventura County Watershed Protection District  
800 South Victoria Avenue  
Ventura, CA 93009  
805-654-2040

To the Department:

California Department of Fish and Game  
Attn: Streambed Alteration Program/Dan Blankenship  
4949 Viewridge Avenue  
San Diego, CA 92123  
[dsblankenship@dfg.ca.gov](mailto:dsblankenship@dfg.ca.gov)

Fees:

California Code of Regulations, Title 14, Section 699.5, establishes fees for projects subject to Fish and Game Code Sections 1600 et seq. Fees applicable to activities undertaken pursuant to this Agreement will be those currently in effect at the time of the activity. The 2008 fees include a \$2,400 base fee for long term routine maintenance agreements, of which the District has paid \$1,390.50 in 2004, and agrees to pay the balance prior to the execution of this agreement. The District also agrees to pay the currently applicable fee for each maintenance project per calendar year (currently \$100 per project). The per project fee will be paid when the Annual Monitoring Project Report is submitted in August, after the end of the District's fiscal year, June 30. Appendix A, attached to this agreement lists the 98 maintenance project facilities included in this agreement.

Administrative:

**Streambed Alteration Conditions For Notification Number: 1600-2004-0512-R5**

Page 22 of 23

It is understood the Department has entered into this Streambed Alteration Agreement for purposes of establishing protective features for fish and wildlife. The decision to proceed with the project is the sole responsibility of the District, and is not required by this Agreement. It is further agreed all liability and/or incurred cost related to or arising out of the District's projects and the fish and wildlife protective conditions of this Agreement, remain the sole responsibility of the District. The District shall agree to hold harmless the State of California and the Department of Fish and Game against any related claim made by any party or parties for personal injury or any other damages.

Entire Agreement:

This Agreement constitutes the entire Agreement and understanding between the Department and the District. The District Program EIR contains the full analysis for the environmental protection measures developed for the ongoing routine Operations and Maintenance Program for the flood control channels and facilities throughout Ventura County. The BMPs applicable to this agreement and developed in the District Program EIR were used as the basis for the conditions in this agreement. Specific edits to the BMPs were made to clarify the mitigation necessary to minimize environmental impacts.

Other Environmental Laws, Statutes, and Regulations:

This Agreement does not constitute any form of authorization, permit, biological opinion, or compliance with the requirements and provisions of any other statute, regulation, requirement, or ordinance respecting the protection or conservation of fish and wildlife resources. Those statutes include, but are not limited to, the California Environmental Quality Act, the California Endangered Species Act and the Federal Endangered Species Act.

Concurrence:


This Agreement becomes effective on the Departments signature and the construction portion terminates on December 31, 2019. This Agreement shall remain in effect until the District satisfies the mitigation/maintenance terms/conditions of this Agreement. This agreement was prepared by Dan Blankenship.

Ventura County Watershed Protection District

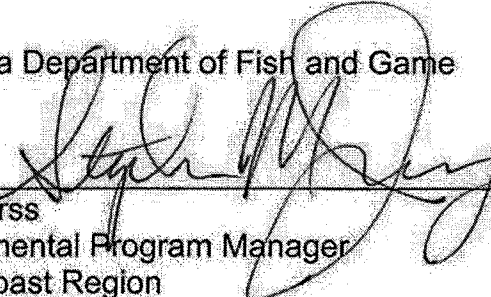
  
Name (signature)

  
Date

  
Name (printed)

  
Title

California Department of Fish and Game

  
\_\_\_\_\_  
Helen Birss  
Environmental Program Manager  
for South Coast Region

3 Jun 09  
\_\_\_\_\_  
Date

**STREAMBED ALTERATION AGREEMENT NO. 1600-2004-0512-R5**  
**VCWPD INDEX OF FACILITIES JUNE 23, 2009**

**Zone 1: Ventura River Watershed**

<b>List #</b>	<b>Facility Name</b>	<b>Reaches</b>
1	Cozy Dell/ McDonald Canyon/ Bypass & Dam	41311/ 41301, 41302, 41303/ 41911
2	Dent Drain/ Dent 2°/ Dent Debris Basin	41121, 41122, 41124/ 41721/ 41903
3	Fox Canyon	41421, 41422, 41423, 41424
4	Happy Valley Drain / Happy Valley Drain South	41281, 41282, 41283, 41284, 41285/ 41264
5	Howard Ave 2°	41717
6	Kenewa St. 2°	41716
7	Live Oak Creek Diversion & Dam	41217, 41218, 41904
8	Matilija Dam	41901
9	Matilija Hot Springs Gauge Maintenance	602
10	Mirror Lake Drain/ Tributary	41231, 41232/ 41241
11	North Fork Matilija Creek Stream Gauge	604
12	Oakview Drain	41205
13	Prince Barranca / San Jon Barranca	41561, 41562, 41563, 41564/ 41551, 41552, 41553, 41554
14	San Antonio Creek at Casitas Springs Stream Gauge	605
15	Skyline Drain / Felix Drive 2°	41221, 41222, 41223, 41224/ 41712
16	Stewart Canyon/ Stewart Debris Basin	41411, 41412, 41413, 41414/ 41902
17	Thacher Creek at Boardman Road Stream Gauge	669
18	Thatcher Creek	41443
19	Ventura River at Foster Park Stream Gauge	608
20	Ventura River Bank Protection downstream of Foster Park/ Vince St. 2° / Stanley Ave Drain/ Simpson St. 2°/ Ramona St. 2°/ Peking 2°/ Parkview Drive 2°/ Harrison 2°/ Fresno Canyon & Basin/ Freeway Side Drains 1-5/ Cal-Trans 2°/ Canada Larga/ Canada de San Joaquin/	41011, 41012, 41015/ 41732/ 41110/41731/ 41730/ 41729/ 41727/ 41751, 41752, 41753, 41754, 41755/ 41728/ 41152/ 41131, 41134/
21	Ventura River Bank Protection u/s of Foster Park/ Parkview Drive 2°/ Fresno Canyon & Basin	41021, 41023, 41031, 41032, 41041/ 41701/ 41181, 41182

2°= Secondary, an open or underground culvert draining to facility or river.

**Zone 2: Santa Clara River Watershed**

List #	Facility Name	Reaches
1	Adams Debris Basin	43906
2	Arundell Barranca/ Det. Basin/ Reservoir Barranca/ Barlow Barranca/ Mills Road Drain/ Telephone Road Drain	42401, 42402, 42403, 42404, 42405, 42406, 42407, 42408, 42409/ 42901/ 42441/ 42421/ 42411/ 42432
3	Bardsdale Ditch, Santa Clara River Levee	43161/ 42037
4	Basolo Ditch	43191
5	Beardsley Wash/ Camarillo Hills Drain/ Nyeland Drain, Nyeland Trib. Lateral A/ Santa Clara Ave. Drain & Diversion/ Revelon Slough/ Wright Road Drain/	42151, 42152, 42154/ 42131/ 42161, 42162, 42171/ 42191, 42192, 42193, 42181/ 42101, 42102, 42104/ 42201
6	Brown Barranca/ Saticoy Drain & 2°	42511, 42514/ 42521, 42522, 42702
7	Cavin Road Drain/ Debris Basin	43221, 43222/ 43902
8	Doris Drain	42381
9	Ellsworth Barranca	42552
10	Fagan Canyon/ Debris Basin	43051, 43052, 43053, 43054, 43055, 43056/ 43907
11	Franklin Barranca/ Debris Basin/ Wasson Barranca	42531, 42532, 42534/ 42902/ 42541/ 42542
12	Grimes Canyon	43181, 43182
13	Harmon Barranca/ Ondulando Barranca	42471, 42472, 42473, 42474, 42475, 42476, 42477, 42478/ 42482
14	Hueneme Drain/ Hueneme Pump Station/ J St. Drain	42332/ 42331/ 42321, 42322
15	Oxnard Industrial Drain/ Rice Road Drain	42301, 42302, 42303, 42304/ 42311, 42312, 42313, 42314, 42317, 42318, 42319
16	Oxnard West Drain/ West Wooley Road Drain	42351, 42352, 42353, 42354, 42355/ 42361, 42362
17	Peck Road Drain	43041, 43042, 43043
18	Piru Storage & Stockpile	43009
19	Pole Creek / Debris Basin	43201, 43202, 43203, 43204/ 43905
20	Real Canyon/ Debris Basin/ Warring Wash/ Warring Wash South/ & Basin	43251, 43252, 43253, 43254, 43255/ 43903/ 43261, 43262, 43263/ 43271/ /43904
21	Santa Clara River at 12 <sup>th</sup> St. Bridge Stream Gauge	720
22	Santa Clara River at UWCD Freeman Diversion Stream Gg.	724
23	Santa Clara River at Victoria Avenue Bridge Stream Gauge	723



**Zone 2: Continued**

List #	Facility Name	Reaches
24	Santa Clara River Levee Harbor Blvd. to Freeman Diversion/ Central Avenue Drain/ Clark Barranca/ Sudden Barranca/ Victoria Ave. Drain/ North El Rio Drain/ El Rio Drain/ Moon Ditch/ Montalvo Golf Course	42012, 42017, 42018, 42021, 42025, 42031/ 42205, 42206/ 42491, 42492, 42493, 42494/ 42501, 42502, 42504, 42505, 42506/ 42704/ 42395/ 42391/ 42461, 42462, 42463/ 42701
25	Santa Clara River Levee upstream of Freeman Div.	42035, 42036, 42037
26	Santa Paula Creek	43061, 43062, 43065
27	Santa Paula Creek at Mupu Bridge Stream Gauge	709
28	Saticoy Storage & Stockpile	42009
29	Sespe Creek, Levee/ Jepson Wash/ Jepson Basin/ Keefe Ditch	43308, 43305, 43306/ 43351, 43352/ 43901/ 43361, 43362
30	Silver Strand Drain & Pump Station	42342, 42346, 43249
31	Todd Barranca at Telegraph Rd Bridge Stream Gauge	738
32	Willard Road Drain 2°	43701

2°= Secondary, an open or underground culvert draining to facility or river.

**Zone 3: Calleguas Creek Watershed**

<b>List #</b>	<b>Facility Name</b>	<b>Reaches</b>
1	Arroyo Colorado/ Beardsley Wash	45271/ 45241, 45243, 45245, 45247, 45248
2	Arroyo Conejo N Fork & Trib./ Waverly Channel/ Castano Channel & Tributary/ Olsen Channel/	46161, 46164, 46165, 46167, 46171, 46172/ 46202, 46203/ 46181, 46182, 46183, 46191, 46192/ 46151, 46152, 46153
3	Arroyo Conejo/ Park Drain/ Thousand Oaks N Drain/ Lynn Ranch 2 <sup>o</sup> / Erbes Road Drain/ Los Robles Drain/ Cm Dos Rios 2 <sup>o</sup>	46103, 46104, 46105, 46106, 46107, 46108/ 46211/ 46231, 46232, 46233, 46234, 46235/ 46749/ 46241/ 46251, 46252/ 46752
4	Arroyo Las Posas	45051, 45053, 45063, 45065
5	Arroyo Santa Rosa u/s Conejo Ck confluence/ Blanchard Road Drain, Arroyo Santa Rosa Stream Gauge at Blanchard Rd/ Rotsler Ditch 2 <sup>o</sup> / Duval Rd. Drain 2 <sup>o</sup> / Santa Rosa Road Deb. Basin	46072, 46073, 46074, 46075, 46076, 46077/ 46702/ 46081, 46083, 46084, 46086/ 838 / 46701/ 45703/46901, 46902
6	Arroyo Santa Rosa d/s Conejo Cr. confluence	46071
7	Arroyo Simi/ Stream Gauge at Hitch/ Brea Canyon/ Castro Williams Channel, Basin/ Moorpark #1 2 <sup>o</sup>	47011, 47012, 47013, 47014, 47015, 47016, 47017, 47021, 47022, 47024, 47025, 47027, 47031, 47033, 47035, 47037, 47038/ 841/ 47311/ 47161, 47902/ 47701
8	Arroyo Simi/ Piedra Canyon/ Santa Susana Knolls Drain 2 <sup>o</sup> / Black Canyon 2 <sup>o</sup>	47039/ 841/ 47571/ 47760/ 47750
9	Bus Canyon/ Bus Canyon Tributary	47351, 47352, 47353, 47354, 47355/ 47361, 47362, 47363, 47364
10	Calleguas Creek/ Stream Gauge at CSUCI/ Stream Gauge at Hwy 101 Stream Gauge/ Long Canyon	45021, 45023, 45025, 45027, 45033, 45035, 45037/ 805/ 806/
11	Camarillo Hills Drain/ Edgemore Debris Basin/ Edgemore Drain/ Edgemore Tributary 2 <sup>o</sup> / Anacapa Drain/ W. Camarillo Hills Debris Basins E & W Branch/ W. Cam. Hills Drain/ Mission Drain/ Ponderosa Drain/ Las Posas Estates Det. Basin/ Las Posas Estates Drain/ Las Posas Estates Diversion/ N. Ramona Place Drain/ Arneill Drain/ Crestview Drain/ Crestview Basin/ Ramona Det. Basin	45141, 45143, 45144, 45145, 45147, 45148/ 45902/ 45161, 45163/ 45701/ 45211/ 45904, 45903/ 45171, 45173, 45175/ 45181, 45183/ 45191, 45192/ 45906/ 45224, 45225/ 45226/ 45231/ 45201/ 45151, 45153, 45155/ 45901/ 45907

**Zone 3: Continued**

<b>List #</b>	<b>Facility Name</b>	<b>Reaches</b>
12	Conejo Creek/ Mission Oaks Drain/ East Camarillo Drain/ Upland Road Drain	46011, 46012, 46013, 46014, 46015, 46016/ 46041, 46042/ 46031, 46037/ 46501
13	Conejo Mountain Creek/ Debris Basins #1 - #5	46121, 46906, 46907, 46908, 46909, 46910
14	Coyote Canyon/ Coyote Basin/ Puerta Zuela Barranca & Basin	45522/ 45911/45531, 45912
15	Dry Canyon Channel /Tributary	47381, 47382, 47383, 47384, 47385, 47386, 47387/ 47391
16	Erringer Road Drain/ Basin	47371,47373, 47375/ 47904
17	Ferro Ditch/ Ferro Basin	45301/ 45908
18	Flood Street	49059
19	Fox Barranca/ Debris Basin	45503, 45505, 45910
20	Gabbert Canyon/ Debris Basin/ Moorpark Storm Drain #1 & #2/ Walnut Canyon	47101, 47102, 47103/ 47901/ 47141, 47151/ 47111, 47112, 47114, 47116
21	Groves Place Drop Structure	45913
22	Happy Camp Canyon	47172, 47174
23	Home Acres Dam/ Home Acres Drain/ Peach Hill Wash-Basin	47909/ 47131, 47133/ 47121, 47123
24	Honda Barranca/ E. Fork/ Honda West Basin/ Santa Clara Ave Drain/ Milligan Barranca	45251, 45252, 45255/ 45261, 45262/ 45909/ 45293/ 45282, 45285, 45286
25	Hummingbird Creek/ White Oak Creek	47561, 47562, 47563/ 47551, 47552, 47553, 47554
26	Lang Creek/ Debris & Detention Basins	46221, 46222, 46223, 46224, 46225,46226/ DB3-31, DD3-31
27	Las Lajas Canyon/ Las Lajas Canyon Dam / Marr Diversion/ Kadota Fig Drain	47511, 47512, 47513/ 47908/ 47531, 47532/ 47521, 47522, 47523
28	Lewis Road Drain	45431, 45432, 45433, 45434
29	Long Canyon	45567
30	No.2 Canyon, Basin	47201, 47202/ 47203
31	North Simi Drain	47341, 47342, 47343, 47344, 47345
32	Pleasant Valley Rd. Drain	45133
33	Revelon Slough	45101, 45103, 45105
34	Runkle Canyon/ Debris Basin/ Storage & Stockpile Area/ Appleton Road Drain	47401, 47402, 47403, 47404/ 47907/ 47009/ 47411
35	Santa Susana W Drain/ Line C Det. Basin	47501, 47502, 47503/ DD3-30
36	Somis Drain/ Somis Drain East Tributary/ West Tributary	45451, 45452, 45453, 45454/ 45471/ 45461

**Zone 3: Continued**

<b>List #</b>	<b>Facility Name</b>	<b>Reaches</b>
37	South Branch Arroyo Conejo/ (Reino) Debris Basin/ Newbury Park S.O. No. 1, 2/ Conejo Valley 2°/ Jenny Drive 2/ South Potrero Det & Debris Basin	46111, 46112, 46113, 46114, 46115, 46118, 46124/ DB3-22/ 46141, 46142, 46143, 46131, 46133/ 46801/ 46800/ DD3-24
38	Strathearn Canyon	47182, 47184
39	Sycamore Canyon, & Dam/ Oak Canyon	47321, 47322, 47325/ 47903/ 47331
40	Tapo Canyon	47421, 47422, 47423, 47424, 47425
41	Tapo Hills Diversions Diversion / Basins #1 & #2	47421, 47432, 47433/ 47905, 47906

2°= Secondary, an open or underground culvert draining to facility or river.

**Zone 4: Malibu Creek Watershed**

<b>List #</b>	<b>Facility Name</b>	<b>Reaches</b>
1	Lake Eleanor Creek	48031
2	Medea Creek	48071, 48072
3	Potrero Creek/ Instream Basin	48021, 48023, 48025/ DB4-01
4	Schoolhouse 2	48041, 48042

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DEPARTMENT OF THE ARMY  
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
VENTURA FIELD OFFICE  
2151 ALESSANDRO DRIVE, SUITE 110  
VENTURA, CA 93001

DECEMBER 4, 2014

Tully Clifford, Director  
Ventura County Watershed Protection District  
800 South Victoria Avenue  
Ventura, California 93009-1610

Attn: Pam Lindsey

**DEPARTMENT OF THE ARMY NOTICE TO PROCEED**

Dear Mr. Clifford:

I am responding to your requests (File No. SPL-2014-00262-AJS) dated July 31 and September 16, 2014, for a Department of the Army Permit to discharge fill material into waters of the U.S., in association with the VCWPD 2014-2015 Operation and Maintenance Annual Work Plan, Addendum No. 1 and No. 2. The proposed work would take place in Calleguas Creek, the Ventura River, Lewis Drain Channel, Santa Clara River Side Drain No. 1 and Beardsley Wash in Ventura County, California.

Based on the information you have provided, the U.S. Army Corps of Engineers (Corps) has determined the following proposed activities comply with the terms and conditions of Regional General Permit (RGP) No. 92-*Ventura County Watershed Protection District Routine Maintenance Activities*: Beardsley Wash Drop Structure No. 1, Lewis Drain Channel Outlet Rehabilitation, and the Santa Clara River Side Drain No. 1 Rehabilitation Project.

Two projects described in Addendum No. 1, the Ventura River Invasive Plant Removal and Ecosystem Restoration Project (V-11) and the Calleguas Creek at Upland Road Bridge In-stream Debris Basin, are not authorized at this time. The V-11 project requires an amendment to the biological opinion (BO) for RGP 92 issued by the U.S. Fish & Wildlife Service to allow use of additional herbicides and to revise the acreage limitation on vegetation impacts for habitat enhancement activities such as the V-11 project. We requested the amendment on August 26, 2014 and it remains pending at this time. Once the BO is amended we can reconsider use of RGP 92 to authorize the V-11 project.

We acknowledge the inclusion of the Calleguas Creek In-stream Basin among the list of facilities where maintenance activities are eligible for authorization under RGP 92; however, due to non-compliance with mitigation obligations associated with previous clean-outs and a bank stabilization project in this reach, we will not authorize additional sediment removal activities until this non-compliance issue is resolved. Specifically, restoration of a total of 3.95 acres of riparian habitat was required in association with Corps permit nos. SPL-2000-1733-SDM and

SPL-2002-764-JWM (also reiterated in SPL-2004-1359-AJS). Although exotic vegetation removal has been implemented, no revegetation has occurred to date as specified in the restoration plan and required by the above-referenced permits. At a minimum, initial planting of the entire restoration area per the Habitat Mitigation and Monitoring Plan dated October 2004 must be completed before any additional impacts can be authorized in this reach of Calleguas Creek. This would also include any additional mitigation requirements that may be required for future sediment removal activities.

The remaining maintenance activities are authorized provided you comply with the general permit conditions of RGP No. 92 and special conditions described below. Specifically, you are authorized to conduct the following regulated activities:

1. Construct repairs to the Beardsley Wash Drop Structure and 70 linear feet of associated bank stabilization which has become undermined. The project would result in temporary impacts to approximately 0.13 acre of waters within Beardsley Wash, including construction of a temporary access ramp and surface water diversion.
2. Construct repairs to the Lewis Drain Channel Outlet at the confluence with Calleguas Creek. The project would include the replacement of degraded bank stabilization including 25 linear feet of ½-ton grouted rock riprap around the outfall and 30 linear feet of ungrouted rock riprap extending upstream and downstream of the grouted rock would also be added with concrete cut-off walls at each terminus and approximately 25 linear feet of grading to match existing embankment contours. The project would result in approximately 0.07 acre of permanent impacts to waters of the U.S. resulting from grouted and ungrouted rock placement outside the existing footprint.
3. Restore design parameters to the Santa Clara River Side Drain No. 1 to address deficiencies identified in the Corps' Periodic Inspection Report for the Santa Clara River Levee. Work would involve reconnecting the side drain to the existing outlet channel to the Santa Clara River by installing a 41-foot-long, 42-inch-diameter corrugated metal pipe culvert under the SP Milling access road to replace a blocked trapezoidal channel. An earlier version of this project involving reconstruction of the trapezoidal channel was originally submitted as part of the 2013-14 annual work plan, but not completed. The project would result in 270 square feet of impact to maintained earthed drainage channel within Side Drain No. 1A for the placement of ungrouted riprap at the point where the new CMP will discharge.

Furthermore, you must comply with the following non-discretionary Special Conditions:

1. The Permittee has proposed to mitigate for impacts to waters of the U. S., through implementation of the "Eastern Thousand Oaks Riparian Invasive Removal Plan" (dated December 3, 2012, and prepared by VCWPD). According to the draft mitigation plan, responsible parties would be as follows: a) Implementation: VCWPD; b) Performance: VCPWD. The Permittee retains ultimate legal responsibility for meeting the requirements of the final mitigation plan. Detailed mitigation objectives, performance standards, and monitoring requirements are described in the above mitigation plan.

2. Prior to initiating construction in waters of the U.S., the Permittee shall submit to the Corps a final mitigation plan prepared in accordance with the Corps' Los Angeles District Mitigation Guidelines and Monitoring Requirements, dated April 19, 2004 and the Mitigation Rule (33 C.F.R. Part 332; 73 FR 19670-19687 (April 10, 2008)). The final mitigation plan shall address the 0.06 acre of permanent impact to waters of the U.S. through enhancement of 0.15 acre of waters of the U.S. All maps and drawings shall be in compliance with the Final Map and Drawing Standards for the South Pacific Division Regulatory Program dated August 6, 2012 (<http://www.spd.usace.army.mil/Portals/13/docs/regulatory/standards/map.pdf>). No work in waters of the U.S. is authorized until the Permittee receives, in writing (by letter or e-mail), Corps approval of the final mitigation plan. The Permittee shall complete site preparation and planting and initiate monitoring as described in the final, approved mitigation plan within 60 days of discharging any fill material in waters of the U.S. Your responsibility to complete the required compensatory mitigation as set forth in this Special Condition will not be considered fulfilled until you have demonstrated compensatory mitigation project success and have received written verification of that success from the U.S. Army Corps of Engineers.

**MONITORING:** You shall submit monitoring reports for all compensatory mitigation sites as described in the final, approved mitigation plan by August 31 of each year following the construction of mitigation. To assure compensatory mitigation success, you shall monitor the mitigation area(s) for at least five (5) consecutive growing seasons after construction or until the Corps determines the final performance standards are met (monitoring shall be for a minimum of 5 years unless the Corps agrees earlier that success has been reached and maintained for a sufficient time period, or, if success is not demonstrated to the Corps' satisfaction after the 5th year of monitoring, additional monitoring may be required by the Corps as determined at that time). The monitoring period shall commence upon completion of the construction of the mitigation site(s). Additionally, you shall demonstrate continued success of the compensatory mitigation site(s), without human intervention, for at least two consecutive years during which interim and/or final performance standards are met. The compensatory mitigation project will not be deemed successful until this criterion has been met.

**GIS DATA:** Within 60 days following permit issuance for Standard Individual Permits or within 60 days following written Corps approval of the mitigation plan for General Permits, you shall provide to this office GIS data (polygons only) depicting the boundaries of all compensatory mitigation sites, as authorized in the final mitigation plan referenced above. All GIS data and associated metadata shall be provided on a digital medium (CD or DVD) or via file transfer protocol (FTP), preferably using the Environmental Systems Research Institute (ESRI) shapefile format. GIS data for mitigation sites shall conform to the Mitigation\_SPD.xlsx data table, as specified in the Final Map and Drawing Standards for the South Pacific Division Regulatory Program dated August 6, 2012

(<http://www.spd.usace.army.mil/Portals/13/docs/regulatory/standards/map.pdf>), and shall include a text file of metadata, including datum, projection, and mapper contact information. Within 60 days following completion of compensatory mitigation construction activities, if



any deviations have occurred, you shall submit as-built GIS data (polygons only) accompanied by a narrative description listing and explaining each deviation.

A general permit does not grant any property rights or exclusive privileges. Also, it does not authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project. Furthermore, it does not obviate the need to obtain other Federal, State, or local authorizations required by law.

Thank you for participating in the regulatory program. If you have any questions, contact me at 805-585-2147 or via e-mail at [Antal.J.Szijj@usace.army.mil](mailto:Antal.J.Szijj@usace.army.mil). Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey).

Sincerely,

A handwritten signature in black ink, appearing to be 'Antal Szijj', written in a cursive style.

Antal Szijj  
Senior Project Manager  
North Coast Branch

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
320 West 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013

FACT SHEET  
WASTE DISCHARGE REQUIREMENTS  
FOR

VENTURA COUNTY WATERSHED PROTECTION DISTRICT  
J STREET STORM DRAIN EXPANSION PROJECT  
(ORDER NO. R4-2013-0095)  
NPDES NO. CAG994004, SERIES NO.0150  
CI-9921

**FACILITY ADDRESS**

J Street & Hueneme Road  
Oxnard, CA 90028

**FACILITY MAILING ADDRESS**

800 South Victoria Avenue  
Ventura, CA 93009

**PROJECT DESCRIPTION:**

Ventura County Watershed Protection District (Discharger) proposes to discharge groundwater from the storm drain construction project located at the intersection of J street and Hueneme Road in the City of Oxnard. The Discharger is planning to expand the storm drain system to accommodate excess storm water runoff from the surrounding area. Shallow groundwater will be encountered during construction project. The Discharger proposes to discharge maximum of 3 million gallons per day (mgd) of groundwater from the project site for a period of 10 months during construction phase of the project. High volume of groundwater discharges are necessary to facilitate construction activities. The Discharger is authorized to discharge a maximum of 3.0 mgd of groundwater from each discharge location during construction phase not exceeding 6 months period and thereafter discharge is limited to a maximum of 1.0 mgd during remainder of the construction dewatering phase.

**VOLUME AND DESCRIPTION OF DISCHARGE:**

A maximum of 3.0 million gallons per day (mgpd) of groundwater will be discharged to each discharge location Pacific Ocean at Discharge Point M-001 (Latitude: N34°08'21", Longitude: W119°11'27"), Perkins Drain Point M-002 (Latitude: N34°08'26", Longitude: W119°11'15") and Ormond Lagoon at Discharge Point M-003 (Latitude: N34°08'24", Longitude: W119°11'15"). All discharges flows to Coastal Streams of the Pacific Ocean a water of the United States. The site location map is shown in Figure 1.

**APPLICABLE EFFLUENT LIMITATIONS**

Based on the information provided in the NPDES Application Supplemental Requirements the Regional Board has determined that the constituents listed in the Table 1 below, show

reasonable potential to exist in the discharge. Therefore, effluent limitations contained Part V, Table 1 of Order No. R4-2013-0095 are applicable to the discharge, as listed in Table 1 below. The discharge flows to the Pacific Ocean. Therefore, the mineral effluent limitations in the effluent limitations in Attachment B of the Order R4-2013-0095 are not applicable to your discharge. The Discharger must comply with all other parts of the Order, including, but not limited, to narrative effluent and receiving water limitations.

**Table 1:** The Discharger is required to comply with these effluent limitations during its enrollment under Order No. R4-2013-0095.

Constituents	Units	Discharge Limitations	
		Daily Maximum	Monthly Average
Total Suspended Solids	mg/L	75	50
Turbidity	NTU	150	50
BOD <sub>5</sub> 20°C	mg/L	30	20
Oil and Grease	mg/L	15	10
Settleable Solids	ml/L	0.3	0.1
Residual Chlorine	mg/L	0.1	---
Sulfides	mg/L	1.0	---
Phenols	mg/L	1.0	---
Methylene Blue Active Substances (MBAS)	mg/L	0.5	---

#### FREQUENCY OF DISCHARGE:

The discharge of groundwater will be intermittent and last for 10 months during storm drain construction project.

#### FEASIBILITY OF CONSERVATION, REUSE, AND/OR ALTERNATIVE DISPOSAL METHODS OF WASTEWATER:

The Discharger submitted a feasibility study to the Regional Board analyzing the water conservation, reuse, and/or alternative disposal options for the discharge.

On Site Irrigation: In the immediate vicinity of the project site, there are no landscaped areas that require irrigation using the groundwater discharge.

Groundwater for Dust Control Purposes: Since the groundwater quality is of brackish nature and high in sulfate and chloride, groundwater for dust control purposes is not an option.

Sanitary Sewer Discharge Option: Due high volume of groundwater generated at the site discharges to sanitary sewer system is not a viable option.

Since reuse of the discharge are not feasible, the Discharger proposes to discharge the groundwater to a nearby storm drain (that discharges to the Pacific Ocean and Ormond Lagoon) in compliance with the requirements of the attached Order No. R4-2013-0095.

SAMPLE

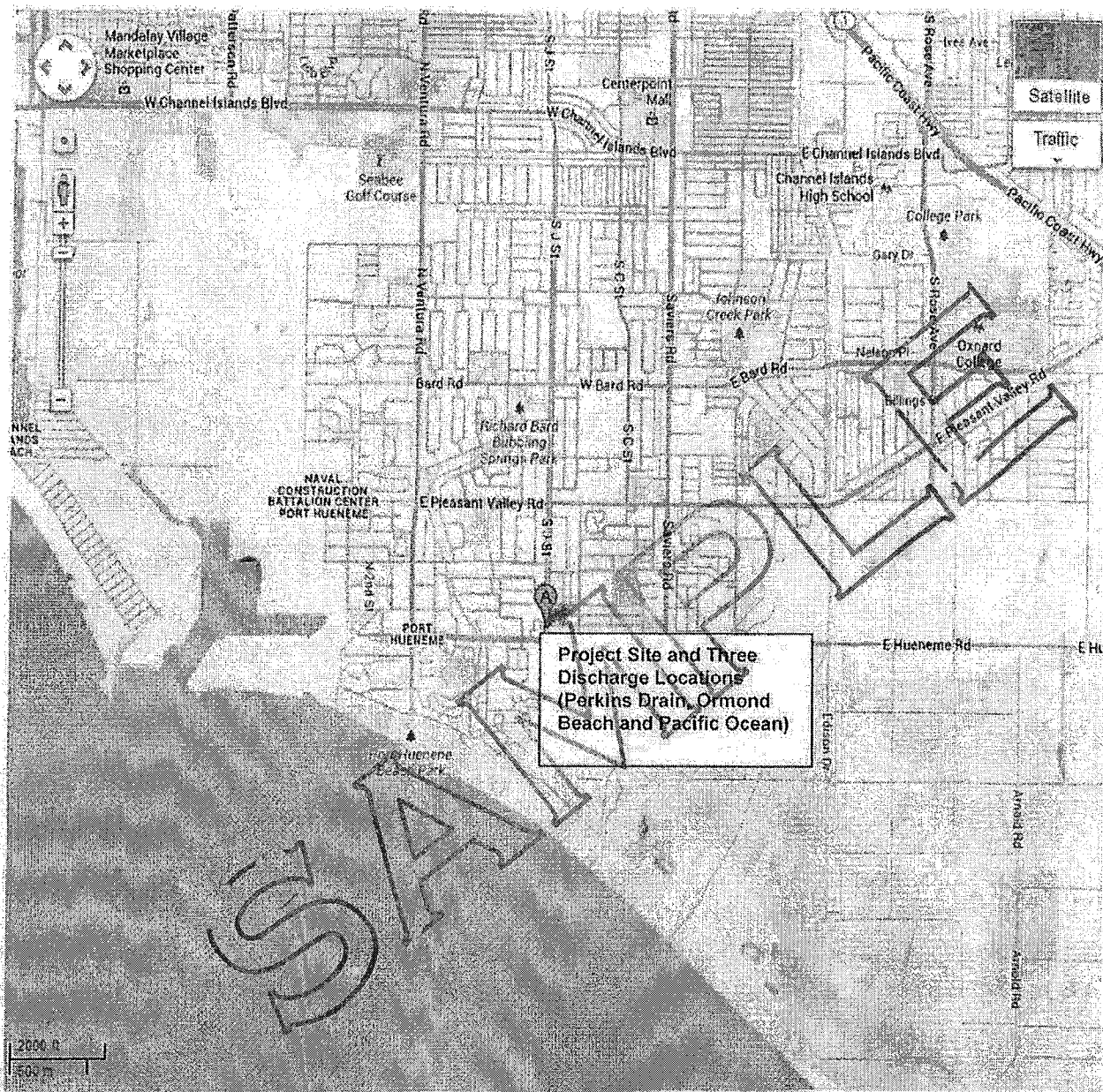


Figure 1. Site Location

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

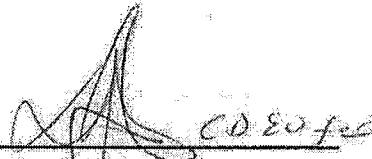
MONITORING AND REPORTING PROGRAM NO. CI-9921  
FOR  
DISCHARGES OF GROUNDWATER FROM CONSTRUCTION AND PROJECT DEWATERING  
TO SURFACE WATERS  
IN  
COASTAL WATERSHEDS OF LOS ANGELES AND VENTURA COUNTIES

FOR  
VENTURA COUNTY WATERSHED PROTECTION DISTRICT

(GENERAL NPDES PERMIT NO. CAG994004, SERIES NO.: 0150)

This Order was adopted by the Regional Water Board on:	June 6, 2013
This Order shall become effective on:	February 24, 2014
This Order shall expire on:	July 6, 2018
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified this discharge as a minor discharge.	

Ordered By:

  
Samuel Unger, P.E.  
Executive Officer

Date:

February 24, 2014

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## **Attachment E – Monitoring and Reporting Program (MRP)**

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

- A. An effluent sampling station shall be established for Discharge Points M-001, M-002 and M-003 and shall be located where representative samples of that effluent can be obtained. Provisions shall be made to enable visual inspections before discharge. In the event of presence of oil sheen, debris, and/or other objectionable materials or odors, discharge shall not commence until compliance with the requirements is demonstrated. All visual observations shall be included in the monitoring report.
- B. This Regional Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- C. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- D. Pollutants shall be analyzed using the analytical methods described in 40 CFR §§136.3, 136.4, and 136.5 (revised March 12, 2007); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.
- E. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include QA/QC data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
- F. For any analyses performed for which no procedure is specified in the USEPA guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
- G. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program".
- H. The monitoring reports shall specify the analytical method used, the MDL, and the ML for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:



1. An actual numerical value for sample results greater than or equal to the ML; or
2. "DNQ" if results are greater than or equal to the laboratory's MDL but less than the ML; or,
3. "ND" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.

Current MLs (Attachment G) are those published by the State Water Resources Control Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, March 2, 2000.

- I. Where possible, the MLs employed for effluent analyses shall be lower than the permit limitations established for a given parameter. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

The Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Attachment G to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment G;
2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR Part 136 (revised March 12, 2007);
3. When the Discharger agrees to use an ML that is lower than that listed in Attachment G;
4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment G, and proposes an appropriate ML for their matrix; or,
5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

- J. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR §136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
- K. All analyses shall be accompanied by the chain of custody, including but not limited to date and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- L. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.
- M. The analytical laboratory shall have an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
- N. When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
- O. For parameters that both monthly average and daily maximum limitations are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the monthly average limitation, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the monthly average limitation has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the monthly average limitation.
- P. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:
  - 1. Types of wastes and quantity of each type;
  - 2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

3. Location of the final point(s) of disposal for each type of waste.

If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.

- Q. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

All monitoring reports shall include the discharge limitations in the Order, tabulated analytical data, the chain of custody form, and the laboratory report (including but not limited to date and time of sampling, date of analyses, method of analysis and detection limits).

- R. Sample collection requirements (as appropriate)

1. Daily samples shall be collected each day.
2. Weekly samples shall be collected on a representative day of each week.
3. Monthly samples shall be collected on a representative day of each month.
4. Quarterly samples shall be collected in February, May, August, and November.
5. Semi-annual samples shall be collected in May and November.
6. Annual samples shall be collected in November.

- S. Before commencing a new discharge, a representative sample of the effluent shall be collected and analyzed for toxicity and for all the constituents listed in Fact Sheet, and the test results must meet all applicable limitations of Order No. R4-2008-0032.

## II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table 1. Monitoring Location

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Discharge Point 1	M-001	Wastewater effluent before contact with the receiving water and/or dilution by any other water or waste.
Discharge Point 2	M-002	If more than one discharge point is authorized under the General Permit, compliance monitoring locations shall be named M-002, M-003, etc. and shall be located so as to allow collection of wastewater effluent before contact with receiving water and/or dilution by any other water or waste.

### III. EFFLUENT MONITORING REQUIREMENTS

- A. The Discharger shall monitor the effluent at Discharge Point M-001, M-002 and M-003 as follows:

**Table 2. Monitoring Constituents**

Constituent	Unit	Type of Sample	Minimum Frequency of Analysis
Total Waste Flow	gal/day	totalizer	monthly
pH	pH unit	grab	monthly
Temperature	°F	grab	monthly
Total Suspended Solids	mg/L	grab	monthly
Turbidity	NTU	grab	monthly
BOD <sub>5</sub> 20°C	mg/L	grab	monthly
Oil and Grease	mg/L	grab	monthly
Settleable Solids	ml/L	grab	monthly
Sulfides	mg/L	grab	monthly
Phenols	mg/L	grab	monthly
Total Residual Chlorine	mg/L	grab	monthly
Methylene Blue Active Substances (MBAS)	mg/L	grab	monthly
Acute Toxicity	% survival	grab	annually

### IV. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

#### A. Definition of Toxicity

##### Acute Toxicity

The MRP requires an annual test for acute toxicity which measures primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

#### B. Acute Toxicity Effluent Monitoring Program

- The Discharger shall conduct acute toxicity tests on effluent grab samples by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821-R-02-012) or a more recent edition to ensure compliance in 100 % effluent.

2. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. The method for topsmelt is found in USEPA's *Short-term Method for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, First Edition, August 1995 (EPA/600/R-95/136), or a more recent edition.
3. In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 48 hours of the chronic toxicity test as the results of the acute toxicity test.
4. Accelerated Toxicity Monitoring: If the results of the toxicity test yield a survival of less than 90%, then the frequency of analyses shall increase to monthly until at least three test results have been obtained and full compliance with effluent limitations has been demonstrated, after which the frequency of analyses shall revert to annually. Results of toxicity tests shall be included in the first monitoring report following sampling.
5. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

#### C. Reporting

1. The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported as % survival for acute toxicity test results with the self monitoring reports (SMR) for the month in which the test is conducted.
2. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, then those results also shall be submitted with the SMR for the period in which the investigation occurred.
  - a. The full report shall be submitted on or before the end of the month in which the SMR is submitted.
  - b. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit.
3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:
  - a. Sample date(s);
  - b. Test initiation date;
  - c. Test species;

- d. End point values for each dilution (e.g., number of young, growth rate, percent survival);
  - e. Any applicable charts; and,
  - f. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
4. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from all samples collected during that year.

The Discharger shall notify by telephone or electronically, this Regional Water Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

#### **V. LAND DISCHARGE MONITORING REQUIREMENTS**

Not Applicable.

#### **VI. RECLAMATION MONITORING REQUIREMENTS**

Not Applicable.

#### **VII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER**

Not Applicable.

#### **VIII. OTHER MONITORING REQUIREMENTS**

Not Applicable.

#### **IX. REPORTING REQUIREMENTS**

##### **A. General Monitoring and Reporting Requirements**

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.



3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

**B. Self Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP. The Discharger shall submit SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table 3. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	February 24, 2014	All	Submit with quarterly SMR
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	Submit with quarterly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 <sup>st</sup> day of calendar month through last day of calendar month	Submit with quarterly SMR
Quarterly	Closest of January 1, April 1, July 1, or	January 1 through March 31, April 1 through June	45 days from the end of the

	October 1	30. July 1 through September 30. October 1 through December 31	monitoring period
Annually	January 1	January 1 through December 31	45 days from the end of the monitoring period

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy ( $\pm$  a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.
5. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular



format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

#### **C. Notification**

1. The Discharger shall notify the Executive Officer in writing prior to discharge of any chemical that may be toxic to aquatic life. Such notification shall include:
  - a. Name and general composition of the chemical,
  - b. Frequency of use,
  - c. Quantities to be used,
  - d. Proposed discharge concentrations, and,
  - e. EPA registration number, if applicable.

No discharge of such chemical shall be made prior to obtaining the Executive Officer's approval.

2. The Discharger shall notify the Regional Board via telephone and/or fax within 24 hours of noticing an exceedance above the effluent limits in Order No. R4-2009-0068. The Discharger shall provide to the Regional Board within 14 days of observing the exceedance a detailed statement of the actions undertaken or proposed that will bring the discharge into full compliance with the requirements and submit a timetable for correction.

#### **D. Monitoring Frequencies Adjustment**

Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if the Discharger requests same and the request is backed by statistical trends of monitoring data submitted.

#### **E. Discharge Monitoring Reports (DMRS)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal

requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit SMRs in accordance with the requirements described below.

2. SMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original SMR to the address listed below:

California Regional Water Quality Control Board  
Los Angeles Region  
320 W. 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013  
Attention: Information and Technology Unit.

SAMPLE



EDMOND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

ORDER NO. R4-2013-0095  
GENERAL NPDES PERMIT NO. CAG994004  
WASTE DISCHARGE REQUIREMENTS  
FOR  
DISCHARGES OF GROUNDWATER FROM CONSTRUCTION AND PROJECT DEWATERING  
TO SURFACE WATERS  
IN  
COASTAL WATERSHEDS OF LOS ANGELES AND VENTURA COUNTIES

This Order was adopted by the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) on:	June 6, 2013
This Order shall become effective on:	July 6, 2013
This Order shall expire on:	July 6, 2018
The U.S. Environmental Protection Agency and the Regional Water Board have classified discharges covered under this General Permit as a minor discharge.	

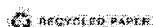
IT IS HEREBY ORDERED, that Order No. R4-2008-0032 is superseded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Samuel Unger, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 6, 2013.

Samuel Unger  
Samuel Unger, P.E.  
Executive Officer

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | [www.waterboards.ca.gov/losangeles](http://www.waterboards.ca.gov/losangeles)



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## I. FACILITY/DISCHARGE INFORMATION

This Order (hereafter also referred to as "this General Permit") is intended to authorize discharges of treated or untreated groundwater generated from permanent, temporary dewatering operations or other applicable wastewater discharges not specifically covered in other general or individual NPDES permits. Discharges from facilities to waters of the United States that do not cause, have the reasonable potential to cause, or contribute to an in-stream excursion above any applicable state or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water are authorized discharges in accordance with the conditions set forth in this Order.

## II. NOTIFICATION REQUIREMENTS

### A. Eligibility Criteria

1. This Order covers discharges to surface waters of groundwater from dewatering operations and other types of wastewaters as deemed appropriate.
2. To be covered under this Order, a discharger must:
  - a. Demonstrate that the discharges shall not cause or contribute to a violation of any applicable water quality objective/criteria for the receiving waters, or any other Discharge Prohibition in Part IV of this Order;
  - b. Demonstrate that the discharge shall not exceed the effluent limitations or discharge specifications in Part V and Attachment B of this Order, and there shall be no reasonable potential to cause or contribute to an excursion above the applicable water quality objectives/criteria for the receiving water.
  - c. Perform reasonable potential analysis using a representative sample of groundwater or wastewater to be discharged. The sample shall be analyzed and the data compared to the water quality screening criteria for the constituents listed on Attachment E.
    - i. If the analytical test results exceed the water quality screening criteria listed on Attachment E, then a reasonable potential for discharge of toxics shall be considered to exist.
    - ii. If the analytical test results of the discharge show that any toxic exceeds the water quality screening criteria listed on Attachment E, then the Discharger will be enrolled under this General Permit and treatment of the wastewater will be required for discharge.
    - iii. If the analytical test results of the discharge show that toxics are below the screening levels in Attachment E, then the Discharger will be enrolled under this General Permit and treatment of the wastewater for toxics will not be required for discharge.
  - d. The discharge shall not cause acute nor chronic toxicity in receiving waters;
  - e. If necessary, the discharge shall pass through a treatment system designed and operated to reduce the concentration of contaminants to meet the effluent limitations of this Order; and
  - f. The Discharger shall be able to comply with the terms or provisions of this General Permit.
3. New discharges and existing discharges regulated under existing general or individual permits, which meet the eligibility criteria, may be regulated under this Order.

4. For the purpose of renewal of existing individual NPDES permits with this General Permit, provided that all the conditions of this General Permit are met, renewal is effective upon issuance of a notification by the Executive Officer and issuance of a new monitoring program.
5. When an individual NPDES permit with more specific requirements is issued to a discharger, the applicability of this Order to that discharger is automatically terminated on the effective date of the individual permit.

**B. Ineligibility**

The discharge of wastewater containing toxic pollutants, where there are no effluent limitations for such toxic pollutants in this General Permit, are not eligible for enrollment under this General Permit.

**C. Authorization**

To be authorized to discharge under this Order, the Discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part D of this Order. Upon receipt of the application, the Executive Officer shall determine the applicability of this Order to such a discharge. If the discharge is eligible, the Executive Officer shall notify the Discharger that the discharge is authorized under the terms and conditions of this Order and prescribe an appropriate monitoring and reporting program. For new discharges, the discharge shall not commence until receipt of the Executive Officer's written determination of eligibility for coverage under this General Permit or until an individual NPDES permit is issued by the Regional Water Board.

**D. Notice of Intent**

**1. Deadline for Submission**

- a. Renewal of permits of existing dischargers covered under individual permits that meet the eligibility criteria and have submitted a NOI will consist of a letter of determination from the Executive Officer of coverage under this Order.
- b. Existing dischargers covered under Order No. R4-2008-0032 will be sent a NOI form that must be completed and returned to the Regional Water Board within 60 days of receipt; otherwise permit coverage may be revoked. Existing dischargers enrolling under this Order are required to collect a representative groundwater/wastewater sample and analyze it for all the constituents listed on Attachment E. Dischargers shall conduct this analysis and submit the result with a NOI, otherwise the existing authorization may be terminated. Existing discharges that has been enrolled under the existing permit within the last one year can re-submit the analytical data used for their initial enrollment with their NOI.
- c. New dischargers shall file a complete application at least 45 days before commencement of the discharge.

**2. Forms for Report of Waste Discharge**

- a. Dischargers shall use the NOI Form.
- b. The Discharger, upon request, shall submit any additional information that the Executive Officer deems necessary to determine whether the discharge meets the criteria for coverage under this Order, to prescribe an appropriate monitoring and reporting program, or both.
- c. The Discharger must obtain and analyze (using appropriate methods) a representative sample of the groundwater to be treated and discharged under this

Order. The analytical method used shall be capable of achieving a detection limit at or below the minimum level, otherwise, a written explanation shall be provided. The analytical result shall be submitted with the NPDES application. The data shall be tabulated and shall include the results for every constituent listed on Attachment E.

- d. Pursuant to section 2, Article X of the California Constitution, and section 275 of the California Water Code on preventing waste and unreasonable use of waters of the state, this Regional Water Board encourages, wherever practical, water conservation and/or reuse of wastewater. To obtain coverage under this Order, the Discharger shall first investigate the feasibility of conservation, reuse, injection of the groundwater, and/or alternative disposal methods of the wastewater.
- e. The following should be included with the NOI Form:
  - i. The feasibility study on conservation, reuse, and/or alternative disposal methods of the wastewater;
  - ii. Description of the treatment system;
  - iii. The type of chemicals that will be used (if any) during the operation and maintenance of the treatment system;
  - iv. Flow diagram of the influent to the discharge point; and
  - v. Preventive maintenance procedures and schedule for the treatment system.
  - vi. **Creekside construction dewatering operations.** Creekside construction dewatering operations for the purposes of this General Permit are defined as the dewatering of groundwater (1) where the dewatering is necessary during construction operations, and (2) where the groundwater has a direct hydrologic connection with, and similar mineral chemistry for TDS, chloride and sulfate to, the surface waterbody to which it will be discharged. For creekside construction dewatering operations, the following additional information shall be submitted with a Report of Waste Discharge (ROWD).
    - (1). Best Management Practices (BMPs) for preventing degradation of water quality or impairment of receiving water beneficial uses,
    - (2). Demonstration of direct hydrologic connection and similar water chemistry between the groundwater and the surface water body must be substantiated with hydrogeological and analytical data, and certified by registered hydrogeologist. Water isotope tracing and other geophysical techniques may be used to demonstrate hydrologic connectivity. In addition, when feasible evidence of the physical connection between the groundwater and the surface water body could be demonstrated by stream depletion or drawdown by test well dewatering operation,
    - (3). The treatment system to be used for removing toxic compounds from the wastewater (if applicable),
    - (4). A demonstration that the Discharger has considered sewerage, infiltration, re-use, or other discharge options and that it is infeasible to discharge to the sanitary sewer system, to re-use the dewatered groundwater/wastewater, or to otherwise lawfully discharge the dewatered groundwater/wastewater.
- f. Section 2200 (Annual Fee Schedules) of Title 23 of the California Code of Regulations (CCR) requires that all discharges subject to waste discharge requirements shall pay an annual fee.



#### **E. Notice of Termination**

Dischargers shall submit a Notice of Termination or Transfer (NOTT) when coverage under this General Permit is no longer needed. An NOTT contains the Waste Discharge Identification Number (WDID), the name and address of the owner of the facility, and is signed and dated by the owner certifying that the Discharger associated with Permit No. CAG994004 have been eliminated or that there has been a change in ownership. Upon submission, the Discharger is no longer authorized to discharge wastewater associated with this General Permit.

#### **F. Change of Ownership**

Coverage under this Order may be transferred in case of change of ownership of land or discharge facility provided the existing discharger notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new dischargers containing a specific date of transfer of coverage, responsibility for compliance with this Order, and liability between them.

### **III. FINDINGS**

The Regional Water Board finds:

**A. Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on federal and state laws and regulations, information submitted as part of previous NOIs and monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G are also incorporated into this Order.

#### **B. Background**

1. On June 5, 2008, the Regional Water Board adopted Order No. R4-2008-0032, General NPDES Permit No. CAG994004, Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters. Order No. R4-2008-0032 expired on June 5, 2013, but was administratively extended. Approximately 208 dischargers are enrolled under Order No. R4-2008-0032. This Order renews the requirements of Order No. R4-2008-0032.
2. On September 22, 1989, the United States Environmental Protection Agency (USEPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the regional water boards, the authority to issue general National Pollutant Discharge Elimination System (NPDES) permits pursuant to parts 122 and 123 of Title 40 of the Code of Federal Regulations (40 CFR).
3. 40 CFR section 122.28 provides for issuance of general NPDES permits to regulate a category of point sources if the sources:
  - a. Involve the same or substantially similar types of operations;
  - b. Discharge the same type of waste;
  - c. Require the same type of effluent limitations or operating conditions;
  - d. Require similar monitoring; and
  - e. Are more appropriately regulated under a general permit rather than individual permits.

4. General waste discharge requirements and NPDES permits enable Regional Water Board staff to expedite the processing of requirements, simplify the application process for dischargers, better utilize limited staff resources, and avoid the expense and time involved in repetitive public noticing, hearings, and permit adoptions.

**C. Facility and Discharge Description**

1. Discharges covered under this General Permit include groundwater generated from permanent or temporary dewatering operations or other appropriate wastewater discharge not specifically covered in other general or individual NPDES permits. In addition, this General Permit covers discharges from cleanup of contaminated sites where other project specific general permits may not be appropriate, such as groundwater impacted by metals and/or other toxic compounds. This General Permit also covers discharges from dewatering operations in the vicinity of creeks where surface waters and groundwaters are hydrologically connected and have similar water chemistry. Creekside discharges that qualify under this General Permit will not be required to comply with the waterbody specific limitations for total dissolved solids (TDS), sulfate or chloride. The purpose of this approach to regulating creekside discharges is to avoid requiring a discharger to treat a surface waterbody to lower than naturally occurring, background, mineral content. In such circumstance, cycling the extracted creekside water back into the waterbody would not cause any decrease in the quality of the waterbody or degradation.
2. Wastewater discharge from permanent or temporary dewatering activities include, but are not limited to, the following:
  - a. Treated or untreated wastewater from permanent or temporary construction dewatering operations
  - b. Groundwater pumped as an aid in the containment and/or cleanup of contaminant plume
  - c. Groundwater extracted during short-term and long-term pumping/aquifer tests
  - d. Groundwater generated from well drilling, construction or development and purging of wells
  - e. Equipment decontamination water
  - f. Subterranean seepage dewatering
  - g. Incidental collected stormwater from basements
3. Other wastewater discharges covered by this General Permit include process and non-process wastewater that meet the eligibility criteria and could not be covered under other specific general NPDES permits.
4. This Regional Water Board adopted: (1) Order No. R4-2012-0175, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach [NPDES No. CAS004001] on November 8, 2012; (2) Order No. R4-2010-0108, Waste Discharge Requirements for Storm Water (Wet Weather) and Non-Storm Water (Dry Weather) Discharges from the MS4s within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein [NPDES No. CAS004002] on July 8, 2010; and (3) Order No. 99-060, Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges Within the City of Long Beach [NPDES No. CAS004003] on June 30, 1999. These permits generally prohibit non-stormwater discharges to MS4s unless they are covered by a separate

general or individual NPDES permit or are within a category of conditionally exempt discharges, provided the discharge is not itself a source of pollutants and meets all required conditions. This prohibition, in general, does not apply to natural flows, such as rising groundwater where groundwater seepage is not otherwise covered by a NPDES permit and uncontaminated groundwater infiltration. Conditionally exempt non-storm water discharges shall not cause or contribute to an exceedance of applicable water quality objectives/standards and/or water quality based effluent limitations.

#### IV. DISCHARGE PROHIBITIONS

1. Discharges of any waste at a location different from that authorized by the Executive Officer of the Regional Water Board are prohibited.
2. Discharges of any waste other than those that meet eligibility requirements in Part II.A of this Order are prohibited, unless the Discharger is regulated for such discharges by another NPDES permit or discharges into a permitted facility.
3. Discharges of wastewater in excess of the flow rates authorized by the Executive Officer of the Regional Water Board are prohibited.
4. Discharges of any waste that exceed applicable effluent limitations are prohibited.
5. Discharges that contain any substances in concentrations toxic to human, animal, plant, or aquatic life are prohibited.
6. Discharges that cause or contribute to a violation of any applicable water quality objective/criteria for the receiving water are prohibited.
7. Pollution, contamination, or nuisance as defined by section 13050 of the CWC, which are created by the treatment or the discharge of pollutants authorized under this Order, are prohibited.
8. Discharges of any radiological, chemical, or biological warfare agent or high level radiological waste are prohibited.
9. Bypass or overflow of untreated or partially treated contaminated groundwater to waters of the State either at the treatment system or from any of the collection or transport systems or pump stations tributary to the treatment system is prohibited.

#### V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

##### A. Effluent Limitations

1. Discharge of effluent from the outfall location(s) listed in the enrollment authorization fact sheet in excess of the following effluent limitations is prohibited. In the authorization letter, when a Discharger is enrolled under this General Permit, the Executive Officer shall list in the fact sheet each constituent from the appropriate effluent limitation table(s) below that is applicable to the Discharger's effluent.

a. Limits (Tables 1 and 2 ) applicable to discharges to freshwater or saltwater bodies

**Table 1. Effluent Limitations Applicable to All Discharges**

Parameters	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Total Suspended Solids	mg/L	75	50
Turbidity	NTU	150	50
BODs 20°C	mg/L	30	20
Oil and Grease	mg/L	15	10
Settleable Solids	ml/L	0.3	0.1
Sulfides	mg/L	1.0	
Phenols	mg/L	1.0	
Residual Chlorine	mg/L	0.1	
Methylene Blue Active Substances (MBAS)	mg/L	0.5	

**Table 2. Organic Compounds Effluent Limitations**

Constituent	Units	Discharge Limitations			
		Other Waters		MUN <sup>1</sup>	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Volatile Organic Compounds					
1,1,2,2-tetrachloroethane	µg/L	1		0.34	0.17 <sup>2</sup>
1,1,2-trichloroethane	µg/L	5		1.2	0.6
1,1,1-trichloroethane	µg/L	200		200	
1,1-dichloroethane	µg/L	5		5	
1,1-dichloroethylene	µg/L	6	3.2	0.11	0.057 <sup>2</sup>
1,2-dichloroethane	µg/L	0.50		0.50	0.38 <sup>2</sup>
1,2-dichloropropane	µg/L	5		1.1	0.52 <sup>2</sup>
1,2-trans-dichloroethylene	µg/L	10		10	
1,3-dichloropropylene	µg/L	0.5		0.5	
Acrolein	µg/L	100		100	
Acrylonitrile	µg/L	1.7	0.66	0.12	0.059 <sup>2</sup>
Acetone	µg/L	700		700	
Benzene	µg/L	1.0		1.0	
Bromoform	µg/L	720	360	8.6	4.3
Carbon tetrachloride	µg/L	0.5		0.5	0.25

<sup>1</sup> MUN refers to discharges to those waterbodies designated MUN (Municipal and Domestic Supply) identified in the Basin Plan with an "E" or and "I" designation.

<sup>2</sup> If the reported detection level is greater than the effluent limit for this constituent, then a non-detect using ML detection is deemed to be in compliance.

Constituent	Units	Discharge Limitations			
		Other Waters		MUN <sup>1</sup>	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Chlorobenzene	µg/L	30		30	
Chlorodibromomethane	µg/L	68	34	0.81	0.40 <sup>2</sup>
Dichlorobromomethane	µg/L	92	46	1.1	0.56
Chloroethane	µg/L	100		100	
Chloroform	µg/L	100		100	
Methyl ethyl ketone	µg/L	700		700	
Ethylbenzene	µg/L	700		700	
Ethylene dibromide	µg/L	0.05		0.05	
Methyl tertiary butyl ether (MTBE)	µg/L	5		5	
Methylbromide	µg/L	10		10	
Methylchloride	µg/L	3		3	
Methylene chloride	µg/L	3,200	1,600	9.5	4.7
Tetrachloroethylene	µg/L	5.0		1.6	0.8
Toluene	µg/L	150		150	
Trichloroethylene	µg/L	5.0		5.0	2.7
Vinyl chloride	µg/L	0.5		0.5	
Xylenes	µg/L	1750		1750	
<b>Pesticides and PCBs</b>					
4,4'-DDD	µg/L	0.0017	0.00084	0.0017	0.00083 <sup>2</sup>
4,4'-DDE	µg/L	0.0012	0.00059	0.0012	0.00059 <sup>2</sup>
Aldrin	µg/L	0.00028	0.00014	0.00027	0.00013 <sup>2</sup>
alpha-BHC	µg/L	0.026	0.013	0.0079	0.0039 <sup>2</sup>
beta-BHC	µg/L	0.092	0.046	0.028	0.014
Endosulfan Sulfate	µg/L	480	240	220	110
Endrin Aldehyde	µg/L	1.6	0.81	1.5	0.76
Gamma-BHC	µg/L	0.12	0.063	0.039	0.019 <sup>2</sup>
PCBs	µg/L	0.00034	0.00017	0.00034	0.00017 <sup>2</sup>
<b>Semi-Volatile Organic Compounds</b>					
1,2 Dichlorobenzene	µg/L	600		600	
1,2-Diphenylhydrazine	µg/L	1.1	0.54	0.081	0.040 <sup>2</sup>
1,3 Dichlorobenzene	µg/L	5,200	2,600	800	400
1,4 Dichlorobenzene	µg/L	5		5	
2,4,6-Trichlorophenol	µg/L	13	6.5	4.3	2.1 <sup>2</sup>
2,4-Dichlorophenol	µg/L	1600	790	190	93
2,4-Dimethylphenol	µg/L	4,600	2,300	1100	540
2,4-Dinitrophenol	µg/L	28,000	14,000	140	70
2,4-Dinitrotoluene	µg/L	18	9.1	0.23	0.11 <sup>2</sup>
2-Chloronaphthalene	µg/L	8,600	4,300	3,400	1,700
2-Chlorophenol	µg/L	800	400	241	120
2-Methyl-4,6-Dinitrophenol	µg/L	1540	765	26.9	13.4

Constituent	Units	Discharge Limitations			
		Other Waters		MUN <sup>1</sup>	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
3,3-Dichlorobenzidine	µg/L	0.16	0.077	0.088	0.04 <sup>2</sup>
Acenaphthene	µg/L	5,400	2,700	2,400	1,200
Anthracene	µg/L	220,000	110,000	19,000	9,600
Benzidine	µg/L	0.0011	0.00054	0.00025	0.00012 <sup>2</sup>
Benzo(a)Anthracene	µg/L	0.098	0.049	0.0089	0.0044 <sup>2</sup>
Benzo(a)Pyrene	µg/L	0.098	0.049	0.0089	0.0044 <sup>2</sup>
Benzo(b)Fluoranthene	µg/L	0.098	0.049	0.0089	0.0044 <sup>2</sup>
Benzo(k)Fluoranthene	µg/L	0.098	0.049	0.0089	0.0044 <sup>2</sup>
Bis(2-Chloroethyl)Ether	µg/L	2.8	1.4	0.063	0.031 <sup>2</sup>
Bis(2-Chloroisopropyl)Ether	µg/L	340,000	170,000	2,800	1,400
Bis(2-Ethylhexyl)Phthalate	µg/L	11	5.9	3.7	1.8 <sup>2</sup>
Butylbenzyl Phthalate	µg/L	10,000	5,200	6,000	3,000
Chrysene	µg/L	0.098	0.049	0.0089	0.0044 <sup>2</sup>
Dibenzo(a,h)Anthracene	µg/L	0.098	0.049	0.0089	0.0044 <sup>2</sup>
Diethyl Phthalate	µg/L	240,000	120,000	46,000	23,000
Dimethyl Phthalate	µg/L	5,800,000	2,900,000	629,000	313,000
Di-n-Butyl Phthalate	µg/L	24,000	12,000	5,400	2,700
Fluoranthene	µg/L	740	370	600	300
Fluorene	µg/L	28,000	14,000	2,600	1,300
Hexachlorobenzene	µg/L	0.0016	0.00077	0.0015	0.00075 <sup>2</sup>
Hexachlorobutadiene	µg/L	100	50	0.89	0.44 <sup>2</sup>
Hexachlorocyclopentadiene	µg/L	34,000	17,000	480	240
Hexachloroethane	µg/L	18	8.9	3.8	1.9
Indeno(1,2,3-cd) Pyrene	µg/L	0.098	0.049	0.0088	0.0044 <sup>2</sup>
Isophorone	µg/L	1200	600	17	8.4
Naphthalene	µg/L	21		21	
Nitrobenzene	µg/L	3,800	1,900	34	17
N-Nitrosodimethyl amine (NDMA)	µg/L	16	8.1	0.0014	0.00069 <sup>2</sup>
N-Nitrosodi-n-Propylamine	µg/L	2.8	1.4	0.011	0.005 <sup>2</sup>
N-Nitrosodiphenylamine	µg/L	32	16	10	5.0
Phenol	µg/L	1,000	no limit	1,000	no limit
Pyrene	µg/L	22,000	11,000	1930	960
<b>Miscellaneous</b>					
Asbestos	fib/L	no limit	no limit	14,000,000	7,000,000
Di-isopropyl ether (DIPE)	µg/L	0.8	0	0.8 <sup>2</sup>	
1,4-Dioxane	µg/L	3		3	
Perchlorate	µg/L	6		6	
2,3,7,8-TCDD (Dioxin)	µg/L	0.000000028	0.000000014	0.000000026	0.000000013 <sup>2</sup>
Tertiary butyl alcohol (TBA)	µg/L	12		12	
Total petroleum hydrocarbons	µg/L	100		100	



- b. Limits (Tables 3, 4, and 5) applicable to discharges to freshwater and saltwater waterbodies where no TMDLs has been established (All metal limitations in the Order, including Tables 3, 4, and 5 are in the form of total recoverable or TR, for short, whether they are specified or otherwise.

**Table 3. Hardness-Dependent Metals Effluent Limitations**

Constituent	Unit	Hardness (mg/L)					
		up to 200		200 – 300		300 and above	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Cadmium	µg/L	5	2.8	5	4.1	5	5
Copper	µg/L	20.8	10.4	33.3	16.6	44.4	22.1
Lead	µg/L	8.7	4.4	16.7	8.3	25.6	12.8
Nickel	µg/L	100	60	100	90	100	100
Silver	µg/L	8.1	4.0	20	10	41	20
Zinc	µg/L	170	86	260	130	350	170

**Table 4. Other Compounds Effluent Limitations**

Constituent	Units	Discharge Limitations			
		Other Waters		MUN	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Metals					
Antimony	µg/L	6		6	
Arsenic	µg/L	10		10	
Beryllium	µg/L	4		4	
Chromium III	µg/L	50		50	
Chromium VI	µg/L	16	8	16	8
Cyanide	µg/L	8.5	4.2	8.5	4.2
Mercury	µg/L	0.1	0.05 <sup>2</sup>	0.1	0.05 <sup>2</sup>
Selenium	µg/L	8	4	8	4
Thallium	µg/L	13	6	3.4	1.7
Organic Compounds					
Pentachlorophenol	µg/L	1.5	0.73	0.56	0.28 <sup>2</sup>
Chlordane	µg/L	0.0012	0.00059	0.0012	0.00057 <sup>2</sup>
4,4'-DDT	µg/L	0.0012	0.00059	0.0012	0.00059 <sup>2</sup>
Dieldrin	µg/L	0.00028	0.00014	0.00028	0.00014 <sup>2</sup>
alpha-Endosulfan	µg/L	0.092	0.046	0.092	0.046 <sup>2</sup>
beta-Endosulfan	µg/L	0.092	0.046	0.092	0.046 <sup>2</sup>
Endrin	µg/L	0.059	0.029	0.059	0.029 <sup>2</sup>
Heptachlor	µg/L	0.00042	0.00021	0.00042	0.00021 <sup>2</sup>
Heptachlor Epoxide	µg/L	0.00022	0.00011	0.00020	0.00010 <sup>2</sup>
Toxaphene	µg/L	0.0015	0.00075	0.0015	0.00073 <sup>2</sup>

**Table 5. Effluent Limitations applicable to discharges to saltwater waterbodies**

Constituents	Units	Discharge Limitations	
		Max. Daily	Avg. Monthly
Metals			
Antimony	µg/L	6	
Arsenic	µg/L	10	5
Beryllium	µg/L	4	
Cadmium	µg/L	5	
Chromium III	µg/L	50	
Chromium VI	µg/L	82	41
Copper	µg/L	5.8	2.9
Cyanide	µg/L	1.0	0.50 <sup>2</sup>
Lead	µg/L	14	7
Mercury	µg/L	0.1	0.05 <sup>2</sup>
Nickel	µg/L	14	6.7
Selenium	µg/L	120	58
Silver	µg/L	2.2	1.1
Thallium	µg/L	13	6
Zinc	µg/L	95	47
Organic Compounds			
Pentachlorophenol	µg/L	13	6.4
Chlordane	µg/L	0.0012	0.00059 <sup>2</sup>
4,4'-DDT	µg/L	0.0012	0.00059 <sup>2</sup>
Dieldrin	µg/L	0.00028	0.00014 <sup>2</sup>
Alpha-Endosulfan	µg/L	0.014	0.0071 <sup>2</sup>
Beta-Endosulfan	µg/L	0.014	0.0071 <sup>2</sup>
Endrin	µg/L	0.0038	0.0019 <sup>2</sup>
Heptachlor	µg/L	0.00042	0.00021 <sup>2</sup>
Heptachlor Epoxide	µg/L	0.00022	0.00011 <sup>2</sup>
Toxaphene	µg/L	0.00033	0.00016 <sup>2</sup>



- c. Limits (Table 6 through 26) based on Wasteload Allocations specified in corresponding TMDLs

**Table 6. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL Wasteload Allocations (WLAs), Dry Weather<sup>3</sup>**

Reach	Units	Copper, TR		Lead, TR		Zinc, TR		Selenium, TR	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Reach 5 & 6 & Bell Creek	µg/L	49	25	31	16			8.2	4.1
Reach 4	µg/L	43	21	16	8.2				
Reach 3 above LA-Glendale WRP and Verdugo	µg/L	38	19	20	9.8	---	---	---	---
Reach 3 below LA-Glendale WRP	µg/L	43	21	20	9.8	---	---	---	---
Burbank Western Channel (above Burbank WRP)	µg/L	43	21	23	11	---	---	---	---
Burbank Western Channel (below Burbank WRP)	µg/L	31	16	15	7.4	---	---	---	---
Reach 2 & Arroyo Seco	µg/L	36	18	18	9	---	---	---	---
Reach 1	µg/L	38	19	20	9.8	---	---	---	---
Compton Creek	µg/L	31	16	15	7.3	---	---	---	---
Rio Hondo Rch. 1	µg/L	21	11	8.2	4.1	210	110	---	---

**Table 7. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Wet Weather<sup>4</sup>**

Constituents	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Cadmium, TR	µg/L	3.1	1.5
Copper, TR	µg/L	17	8.5
Lead, TR	µg/L	62	31
Zinc, TR	µg/L	160	79

<sup>3</sup> For purposes of this General Permit, discharges occurring from April 15<sup>th</sup> through November 14<sup>th</sup> are considered dry weather discharges.

<sup>4</sup> For purposes of this General Permit, discharges occurring from November 15<sup>th</sup> through April 14<sup>th</sup> are considered wet weather discharges.

**Table 8. WQBELs based on Basin Plan section 7-39 - Los Angeles River Watershed Bacteria TMDL WLAs**

Constituents	Units	Effluent Limitations	
		Geometric Mean	Single Sample
<i>E.coli</i> density	MPN/100 mL	126	235

**Table 9. WQBELs based on Basin Plan section 7-12 - Ballona Creek Metals TMDL WLAs**

Constituents	Units	Effluent Limitations			
		Dry Weather		Wet Weather	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Copper, TR	µg/L	39	20	18	9
Lead, TR	µg/L	21	11	59	29
Selenium, TR	µg/L	8.2	4.1	5	2.5
Zinc, TR	µg/L	304	151	119	59

**Table 10. WQBELs based on Basin Plan section 7-14 - Ballona Creek Estuary Toxic Pollutants TMDL WLAs in Sediment**

Constituents	Units	Effluent Limitations*
Cadmium	mg/kg dry	1.2
Copper	mg/kg dry	34
Lead	mg/kg dry	46.7
Silver	mg/kg dry	1.0
Zinc	mg/kg dry	150
Chlordane	µg/kg dry	0.5
DDTs	µg/kg dry	1.58
Total PCBs	µg/kg dry	22.7
Total PAHs	µg/kg dry	4,022

\*: See Section VIII. H. for compliance determination.

**Table 11. WQBELs based on USEPA's Los Cerritos Channel Metals TMDL**

Constituents	Units	Effluent Limitations			
		Dry Weather		Wet Weather	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Copper, TR	µg/L	31	16	9.8	4.8
Lead, TR	µg/L			59	28
Zinc, TR	µg/L			96	48

**Table 12. WQBELs based on Basin Plan section 7-30 – Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL WLAs, Portion of Sediment Toxicity**

Constituents	Units	Effluent Limitations*
Chlordane	µg/kg dry	0.50
Dieldrin	µg/kg dry	0.02
Lead	µg/kg dry	46,700.00
Zinc	µg/kg dry	150,000.00
PAHs	µg/kg dry	4,022.00
PCBs	µg/kg dry	22.70
DDT	µg/kg dry	1.58

\* See Section VIII. H. for compliance determination.

**Table 13. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs (for the Freshwater Segment of Dominguez Channel) Wet Weather**

Constituent	Units	Effluent Limitations	
		Max. Daily	Avg. Monthly
Copper, TR	µg/L (water, unfiltered)	9.7	4.8
Lead, TR	µg/L (water, unfiltered)	43	21
Zinc, TR	µg/L	70	35

**Table 14. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs (for the Dominguez Channel Estuary Segment and the Harbors)**

Constituent	Units	Dominguez Channel Estuary		Greater Harbor Waters	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
Copper, TR	µg/L	6.1	3	6.1	3
Lead, TR	µg/L	14	7	14	7
Zinc, TR	µg/L	140	70	140	70
PAHs	µg/L	0.098	0.049		
Chlordane	µg/L	0.0012	0.00059	---	---
4,4'-DDT	µg/L	0.0012	0.00059	0.0012	0.00059
Dieldrin	µg/L	0.00028	0.00014	---	---
Total PCBs	µg/L	0.00034	0.00017	0.00034	0.00017

**Table 15. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs in Sediment**

Waterbody	Effluent Limitations (mg/kg)*		
	Lead	Zinc	PAHs
Long Beach Outer Harbor (inside breakwater)	46.7	150	4.022
Los Angeles Outer Harbor (inside breakwater)	46.7	150	4.022
Los Angeles River Estuary	46.7		4.022
Los Angeles Harbor–Inner Cabrillo Beach Area	46.7		4.022

\*: See Section VIII. H. for compliance determination.

**Table 16. WQBELs based on Basin Plan section 7-18 - Marina del Rey Harbor Toxic Pollutants TMDL WLAs in Sediment**

Constituent	Units	Effluent Limitations*
Copper	mg/kg	34
Lead	mg/kg	46.7
Zinc	mg/kg	150
Chlordane	µg/kg	0.5
Total PCBs	µg/kg	22.7

\*: See Section VIII. H. for compliance determination.

**Table 17. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Dry Weather**

Reaches	Units	Copper, TR		Selenium, TR	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
SJC R-1, 2 <sup>1</sup>	µg/L			8.2	4.1
SGR R-1 <sup>2</sup>	µg/L	30	15		
SGR R 2 <sup>3</sup>	µg/L				
Coyote Creek	µg/L	33	16		
Estuary	µg/L	5.1	2.5		

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

**Table 18. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Wet-Weather**

Reaches	Units	Copper, TR		Lead, TR		Zinc, TR	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
SJC R-1, 2 <sup>1</sup>	µg/L						
SGR R-1 <sup>2</sup>	µg/L						
SGR R 2 <sup>3</sup>	µg/L			166	83		
Coyote Creek	µg/L	15	7.5	87	43	125	62
Estuary	µg/L						

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

**Table 19. WQBELs based on Basin Plan section 7-9 – Santa Clara River Nitrogen Compounds TMDL**

Reaches	Ammonia Effluent Limitations (mg/L)	
	Maximum Daily	Average Monthly
Reach 3 (Between A Street, Fillmore and Freeman Diversion)	4.2	2.0
Reach 7 (Between Lang gaging station and Bouquet Canyon Road Bridge)	5.2	1.75

**Table 20. WQBELs based on Basin Plan section 7-16 - Calleguas Creek Watershed Toxicity TMDL WLAs**

Parameters	Units	Effluent Limitations		
		Max. Daily	Avg. Monthly	Toxicity Limit
Chlorpyrifos	µg/L	0.025	0.014	
Diazinon	µg/L	0.10	0.10	
Toxicity	TUc			1

**Table 21. WQBELs based on Basin Plan section 7-17 - Calleguas Creek Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation TMDL WLAs**

Constituents	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Chlordane	ng/L	1.2	0.59
4,4-DDD	ng/L	1.7	0.84
4,4-DDE	ng/L	1.2	0.59
4,4-DDT	ng/L	1.2	0.59
Dieldrin	ng/L	0.28	0.14
PCBs	ng/L	0.34	0.17
Toxaphene	ng/L	0.33	0.16

**Table 22. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed  
Metals and Selenium TMDL WLAs – Dry and Wet Weather**

Constituents	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Mercury	µg/L	0.1	0.051

**Table 23. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed  
Metals and Selenium TMDL WLAs – Dry Weather**

Reaches	Units	Copper <sup>1,2</sup>		Nickel <sup>3</sup>		Selenium	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
1-Mabu Lagoon	µg/L	6.1	3.0	13.5	6.7	-----	-----
2-Calleguas Creek South	µg/L	6.1	3.0	13.5	6.7	-----	-----
3-Revolon Slough	µg/L	44	22	244	122	-----	-----
4-Calleguas Creek North	µg/L	6.1	3.0	13.6	6.8	8.2	4.1
5-Beardsley Channel	µg/L	6.1	3.0	13.6	6.8	8.2	4.1
9-Conejo Creek	µg/L	48	24	262	131	-----	-----
10-Hill Canyon reach of Conejo Creek	µg/L	48	24	262	131	-----	-----
11-Arroyo Santa Rosa	µg/L	48	24	262	131	-----	-----
12-North Fork Conejo Creek	µg/L	48	24	262	131	-----	-----
13-Arroyo Conejo (S.Fork Conejo Cr)	µg/L	48	24	262	131	-----	-----

**Notes:**

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by the Regional Water Board for Reach1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

**Table 24. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs –Wet Weather**

Reaches	Units	Copper <sup>1,2</sup>		Nickel <sup>3</sup>		Selenium	
		Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly	Max. Daily	Avg. Monthly
1-Mabu Lagoon	µg/L	5.8	2.9	74	37	----	-----
2-Calleguas Creek South	µg/L	5.8	2.9	74	37	----	-----
3-Revolon Slough	µg/L	27.4	13.7	858	427	----	-----
4-Calleguas Creek North	µg/L	5.8	2.9	75	37	289	144
5-Beardsley Channel	µg/L	5.8	2.9	75	37	289	144
9-Conejo Creek	µg/L	31	15	956	477	----	-----
10-Hill Canyon reach of Conejo Creek	µg/L	31	15	956	477	----	-----
11-Arroyo Santa Rosa	µg/L	31	15	956	477	----	-----
12-North Fork Conejo Creek	µg/L	43	21	1294	645	----	-----
13-Arroyo Conejo (S.Fork Conejo Cr)	µg/L	43	21	1294	645	----	-----

Notes:

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by the Regional Water Board for Reach 1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

**Table 25. WQBELs based on Basin Plan section 7-37 – McGrath Lake PCBs, Pesticides and Sediment Toxicity TMDL WLAs, Portion of Sediment Toxicity**

Constituents	Units	Effluent Limitations*
Chlordane	µg/kg dry	0.50
Dieldrin	µg/kg dry	0.02
Lead	µg/kg dry	46,700.00
Zinc	µg/kg dry	150,000.00
PAHs	µg/kg dry	4,022.00
PCBs	µg/kg dry	22.70
DDT	µg/kg dry	1.58

\*: See Section VIII. H. for compliance determination.



**Table 26. WQBELs based on Basin Plan section 7-10 Malibu Creek and Lagoon, section 7-11 Los Angeles Harbor (Inner Cabrillo Beach and Main Ship Channel), section 7-5 Marina del Rey Harbor Mothers' Beach and Back Basin, section 7-28 Harbor Beaches of Ventura County (Kiddie Beach and Hobie Beach), section 7-36 Santa Clara River Estuary and Reaches 3,5,6, and 7, and USEPA's Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL WLAs**

Parameters	Units	Effluent Limitations	
		Geometric Mean	Single Sample
Total Coliform (T)	MPL/100 mL	1,000	10,000
Fecal Coliform (F)	MPL/100 mL	200	400
Enterococcus	MPL/100 mL	35	104
If ratio of F/T > 0.1	MPL/100 mL	---	1,000

2. The pH of the discharge shall at all times be within the range of 6.5 and 8.5.
3. The temperature of the discharge shall not exceed 86°F.
4. Attachment B establishes the applicable effluent limitations for mineral and nitrogen constituents for discharges covered by this Order. The discharge of mineral and nitrogen constituents in excess of applicable limitations established in Attachment B is prohibited. In the letter of determination, the Executive Officer shall indicate the watershed/stream reach limitations in Attachment B applicable to the particular discharge. Creekside construction dewatering discharges covered under Part D.2.d.vi are determined to have hydrologic connection and/or similar water chemistry between groundwater and surface water. Therefore, since the groundwater and surface water are essentially the same, discharges qualified under creekside dewatering as approved by Executive Office are not required to comply with Attachment B (TDS, sulfate, chloride) except for nitrogen and boron.
5. Pass-through or uncontrollable discharges of PCBs shall not exceed daily average concentrations of 14 ng/L into fresh waters or 30 ng/L into estuarine waters.
6. The acute toxicity of the effluent shall be such that the average monthly survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test less than 70% survival.
7. The discharge shall meet effluent limitations and toxic and effluent standards established pursuant to sections 301, 302, 304, 306, and 307 of the CWA, and amendments thereto.

**B. Land Discharge Specifications (Not Applicable)**

**C. Reclamation Specifications (Not Applicable)**

## VI. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives/criteria contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the receiving waterbody.

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.2 units in bays and estuaries or 0.5 units in inland surface waters.
2. Surface water temperature to rise greater than 5° F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80° F as a result of waste discharged.
3. The waste discharged shall not cause the log mean limits of bacteria to be exceeded in Table 27 for freshwater receiving water and in Table 28 for saltwater receiving water with REC-1 designated beneficial use.

**Table 27. Freshwater Bacteria Limitations**

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
E. coli	MPN/100 mL	126	235
E. coli* (Ballona Creek only)	MPN/100 mL	126	576

\*: E. coli limitations for Ballona Creek with designated beneficial use of Limited Contact Recreation (LREC-1).

**Table 28. Saltwater Water Bacteria Limitations**

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
Total Coliform	MPN/100 mL	1,000	10,000
Fecal Coliform	MPN/100 mL	200	400
Enterococcus	MPN/100 mL	35	104
If Fecal/Total Coliform > 0.1	MPN/100 mL	---	1,000

4. The discharge shall not cause the following to occur in the receiving waters:
  - a. The dissolved oxygen to be depressed below:
 

WARM <sup>1</sup> designated waters	5 mg/L
COLD <sup>1</sup> designated waters	6 mg/L
COLD and SPWN <sup>1</sup> Designated waters	7 mg/L

<sup>1</sup> Beneficial Uses: WARM - Warm Freshwater Habitat; COLD - Cold Freshwater Habitat; SPWN - Spawning, Reproduction, and/or Early Development.

5. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
6. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
7. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
8. Toxic or other deleterious substances in concentrations or quantities that cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
9. Accumulation of bottom deposits or aquatic growths.
10. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
11. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
12. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
13. Alteration of turbidity, or apparent color beyond present natural background levels.
14. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
15. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
16. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
17. Create nuisance, or adversely affect beneficial uses of the receiving water.
18. Violation of any applicable water quality objective/criteria for receiving waters adopted by the Regional Water Board, State Water Board, or USEPA. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

**B. Groundwater Limitations (Not Applicable)**

**VII. PROVISIONS**

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR sections 122.41 and 122.42, are included in this Order. The Discharger must comply with all Standard Provisions and with those additional conditions that are applicable under 40 CFR section 122.42. The Regional Water Board has also provided in this Order special provisions applicable to the Dischargers authorized by this Order. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

**A. Standard Provisions**

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order. If there is any conflict between provisions stated herein and the Standard Provisions in Attachment D, the provisions stated herein prevail.
2. The Discharger shall comply with the following provisions:
  - a. The Executive Officer may require any discharger authorized under this Order to apply for and obtain an individual NPDES permit with more specific requirements. The Executive Officer may require any discharger authorized to discharge under this Order to apply for an individual permit only if the Discharger has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the Discharger to file the application, and a statement that on the effective date of the individual permit, the authority to discharge under this Order is no longer applicable.
  - b. Prior to application, the Discharger shall submit for Executive Officer's approval the list of chemicals and proprietary additives that may affect the discharge, including rates/quantities of application, compositions, characteristics, and material safety data sheets, if any.
  - c. Oil or oily materials, chemicals, refuse, or other materials that may cause pollution in storm water and/or urban runoff shall not be stored or deposited in areas where they may be picked up by rainfall/urban runoff and discharged to surface waters. Any spill of such materials shall be contained, removed and cleaned immediately.
  - d. This Order neither exempts the Discharger from compliance with any other laws, regulations, or ordinances that may be applicable, nor legalizes the waste disposal facility.
  - e. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
  - f. Any discharge authorized under this Order may request to be excluded from the coverage of this Order by applying for an individual permit.

**B. Monitoring and Reporting Program Requirements**

The Executive Officer is hereby authorized to prescribe a Monitoring and Reporting Program for each authorized discharger. The Discharger shall comply with the MRP accompanying the transmittal for enrollment under this General Permit, and future revisions thereto. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

**C. Enforcement**

1. Violation of any of the provisions of this Order may subject the Discharger to any of the penalties described herein or in Attachment D of this Order, or any combination thereof, at the discretion of the prosecuting authority.
2. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges authorized by this Order, may subject the Discharger to administrative or judicial civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

3. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.
4. California Water Code section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to California Water Code section 13385(h)(2), a "serious violation" is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to California Water Code section 13385.1(a)(1), a "serious violation" is also defined as "a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations."
5. California Water Code section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
6. Pursuant to California Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, "effluent limitation" means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.

#### **D. Special Provisions**

##### **1. Reopener Provisions**

- a. This Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order.
- b. Pursuant to 40 CFR sections 122.62 and 122.63, this Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order. In addition, if receiving water quality is threatened due to discharges covered under this General Permit, this General

Permit will be reopened to incorporate more stringent effluent limitations for the constituents creating the threat. TMDLs have not been developed for all the parameters and receiving waters on the CWA section 303(d) list. When TMDLs are developed this General Permit may be reopened to incorporate appropriate limits. In addition, if a TMDL identifies that a particular discharge covered under this General Permit is a load that needs to be reduced; this General Permit will be reopened to incorporate appropriate TMDL based limit and/or to remove any applicable exemptions.

**E. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)**

**F. Best Management Practices of Pollution Prevention**

All Dischargers are encouraged to implement Best Management Practices and Pollution Prevention Plans to minimize pollutant concentrations in the discharge.

**G. Construction, Operation and Maintenance Specifications**

All owners or operators authorized to discharge under this General Permit shall maintain and update, as necessary, a Groundwater Treatment System Operation and Maintenance (O&M) Manual to assure efficient and effective treatment of contaminated groundwater (pollutants concentrations above water quality criteria and goals). At a minimum, the O&M Manual shall address the following:

1. The O&M manual shall specify both normal operating and critical maximum or minimum values for treatment process variables including influent concentrations, flow rates, water levels, temperatures, time intervals, and chemical feed rates.
2. The O&M manual shall specify an inspection and maintenance schedule for active and reserve system and shall provide a log sheet format to document inspection observations and record completion of maintenance tasks.
3. The O&M manual shall include a Contingency and Notification Plan. The plan shall include procedures for reporting personnel to assure compliance with this General Permit, as well as authorization letters from the Executive Officer.
4. The O&M manual shall specify safeguards to prevent noncompliance with limitations and requirements of the General Permit resulting from equipment failure, power loss, vandalism, or ten-year return frequency rainfall.

**H. Engineering Design Report**

For all new dischargers and existing dischargers where significant changes have made since prior submittals to the Regional Water Board, the NOI shall be accompanied by treatment flow schematic diagram and a certification, which demonstrates that the treatment process and the physical design of the treatment components will ensure compliance with the prohibitions, effluent limitations, and other conditions of the General Permit.

**I. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)**

**J. Other Special Provisions**

**1. Expiration and Continuation of this Order**

This Order expires on July 6, 2018; however, for those dischargers authorized to discharge under this Order, it shall continue in full force and effect until the Regional Water Board adopts a new order. Notwithstanding Provision 8.a. (Expiration Date and Continuation of this Order) of Order No. R4-2008-0032, discharges regulated under Order No. R4-2008-0032 on or before the sixtieth day of notification of adoption of this



Order, that has submitted a completed NOI may continue to be regulated under Order No. R4-2008-0032 until enrolled under this General Permit.

**2. Reauthorization**

Upon reissuance of a new order, dischargers authorized under this Order shall file a Notice of Intent or a new Report of Waste Discharge within 60 days of notification by the Executive Officer.

**3. Superseding**

Except for enforcement purposes, Order No. R4-2008-0032, adopted by this Regional Water Board on June 5, 2008, is superseded by this Order effective July 6, 2013.

**K. Compliance Schedules (Not Applicable)**

**VIII. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in Part IV of this Order will be determined as specified below:

**A. General.**

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Appendix A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

**B. Multiple Sample Data.**

When determining compliance with an Average Monthly Effluent Limitation or Maximum Daily Effluent Limitation for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

**C. Average Monthly Effluent Limitation (AMEL).**

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of

compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**D. Average Weekly Effluent Limitation (AWEL).**

If the average < (or when applicable, the median determined by subsection B above for multiple sample data)> of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance on days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**E. Maximum Daily Effluent Limitation (MDEL).**

If a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**F. Instantaneous Minimum Effluent Limitation.**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**G. Instantaneous Maximum Effluent Limitation.**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

**H. Limitations Based on Sediment TMDLs.**

Where sediment based effluent limitations is applicable discharger are allowed to demonstrate compliance with sediment TMDL limitations by complying with the TSS effluent limitation and CTR based toxic effluent limitation for the sediment based TMDL toxics of concern.

If the effluent analysis satisfies condition A or B as listed below, the Discharger has demonstrated compliance with the sediment limitations. Therefore, no further sediment monitoring is required.

**Condition A:** Does not exceed TSS effluent limits and the CTR values of the sediment TMDL priority pollutants (Sediment-CTR Values). Table showing the CTR values of the priority pollutants targeted in the TMDLs covered in this Order is in the Appendix B of the Order;

**Condition B:** Exceeds TSS effluent limits, but does not exceed the Sediment-CTR Values.



When both TSS and the Sediment-CTR Values are exceeded, an accelerated monitoring program for TSS and the exceeded priority pollutant(s) shall be implemented in the following week when the exceedances are observed.

If two consecutive effluent sampling events show exceedance for both TSS and the Sediment-CTR value(s), the Discharger is determined to be non-compliance with sediment based effluent limitation. Thereafter, sediment based effluent monitoring shall be implemented as prescribed in the Monitoring and Reporting Program for the rest of the permitting cycle.

However, if two successive sampling events show compliance with TSS and the sediment-CTR value(s), the discharge shall continue with regular effluent monitoring in accordance with the MRP.

SAMPLE

## APPENDIX A

### SWRCB Minimum Levels in ppb (µg/L)

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Bromomethane	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

\*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,2 Benzantracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
3,4 Benzoofluoranthene		10	10	
4 Chloro-3-methylphenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene(3,4 Benzopyrene)		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

\* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

\*\* Phenol by colorimetric technique has a factor of 1.

Table 2c - INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DOP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

\* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2d - PESTICIDES - PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
a-Hexachloro-cyclohexane	0.01
Aldrin	0.005
b-Endosulfan	0.01
b-Hexachloro-cyclohexane	0.005
Chlordane	0.1

d-Hexachloro-cyclohexane	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Lindane(g-Hexachloro-cyclohexane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

\* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

**Techniques:**

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR - Colorimetric

**APPENDIX- B**

**Effluent Limitations based on CTR and SIP procedures for the those Metals and Organics Listed in TMDLs; Ballona Creek Estuary Toxics TMDLs, Dominguez Channel Estuary, Los Angeles and Long Beach Harbors TMDLs and Marina Del Rey Harbor Toxics TMDLs that Requires sediment analysis<sup>5</sup>**

Constituents	Units	Effluent Limitations	
		Daily Max.	Monthly Avg.
Cadmium	µg/L	5	---
Copper	µg/L	5.8	2.9
Lead	µg/L	14	7
Silver	µg/L	2.2	1.1
Zinc	µg/L	95	47
Chlordane	µg/L	0.00126	0.00059
4,4'-DDT	µg/L	0.00126	0.00059
4,4'-DDT	µg/L	0.00126	0.00059
4,4'-DDD	µg/L	0.0017	0.00084
Total PCBs	µg/L	0.00034	0.00017
Total PAHs	µg/L	NA	NA

<sup>5</sup> Compliance for TSS and the toxics pollutants in the effluent must be demonstrated to satisfy the compliance requirements for sediment Waste Load allocations for toxic pollutants listed in the respective TMDLs.

**COUNTY OF VENTURA  
PUBLIC WORKS AGENCY**

**PREVAILING RATES OF WAGES**

As provided in Subsection 7-2.2 of these specifications, and in accordance with Section 1770 et. seq. of the California Labor Code, determinations of the generally prevailing wages for various classes of workers in Ventura County have been made by the California Director of Industrial Relations as required by the California Labor Code.

As required by California Labor Code Section 1777.5, properly indentured apprentices shall be employed on the work. Travel and subsistence shall be paid in accordance with California Labor Code Section 1773.8.

The determinations made by the State are available on the Internet at <http://www.dir.ca.gov/DLSR/PWD/Index.htm> and are on file in the office of the Public Works Agency. A copy will be furnished without cost to the successful bidder.

The Contractor shall post a copy of the wage rates at each jobsite at a location readily available to the workers.





## Excerpts from the California Labor Code

AS of April 1, 2015.

These excerpts from the Labor Code include the sections listed in specification Section 7.2.2.2 that are required by Labor Code 1775(b)(1) to be included in all subcontracts. These excerpts also include sections recommended by the CA Department of Industrial Relations that contain information on the contractor registration requirements. These sections are furnished for the convenience of the contractor and in no way limit the required compliance with all laws.

1725.5. A contractor shall be registered pursuant to this section to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1) Beginning July 1, 2014, register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of three hundred dollars (\$300) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' Compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation Insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period of disqualification shall be waived if both of the following are true:

(i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.

(ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).

(b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.

(d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:

(1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.

(2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.

(3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2) of this subdivision.

(e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work, as defined in this chapter, entered into on or after April 1, 2015.

1771. Except for public works projects of one thousand dollars (\$1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

1771.1. (a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015.

1771.4. (a) All of the following are applicable to all public works projects that are otherwise subject to the requirements of this chapter:

(1) The call for bids and contract documents shall specify that the project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

(2) The awarding body shall post or require the prime contractor to post job site notices, as prescribed by regulation.

(3) Each contractor and subcontractor shall furnish the records specified in Section 1776 directly to the Labor Commissioner, in the following manner:

(A) At least monthly or more frequently if specified in the contract with the awarding body.

(B) In a format prescribed by the Labor Commissioner.

(4) The department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements.

(b) The Labor Commissioner may exempt a public works project from compliance with all or part of the requirements of subdivision (a) of this section if either of the following occurs:

(1) The awarding body has enforced an approved labor compliance program, as defined in Section 1771.5, on all public works projects under its authority, except those deemed exempt pursuant to subdivision (a) of Section 1771.5, continuously since December 31, 2011.

(2) The awarding body has entered into a collective bargaining agreement that binds all contractors performing work on the project and that includes a mechanism for resolving disputes about the payment of wages.

(c) (1) The requirements of paragraph (1) of subdivision (a) shall only apply to contracts for public works projects awarded on or after January 1, 2015.

(2) The requirements of paragraph (3) of subdivision (a) shall only apply to the following projects:

(A) Projects that were subject to a requirement to furnish records to the Compliance Monitoring Unit pursuant to Section 16461 of Title 8 of the California Code of Regulations, prior to the effective date of this section.

(B) Projects for which the initial contract is awarded on or after April 1, 2015.

(C) Any other ongoing project in which the Labor Commissioner directs the contractors or subcontractors on the project to furnish records in accordance with paragraph (3) of subdivision (a).

(D) All projects, whether new or ongoing, on or after January 1, 2016.

1775. (a) (1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2) (A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B) (i) The penalty may not be less than forty dollars (\$40) for each calendar day, or

portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections 1771, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

1776. (a) Each contractor and subcontractor shall 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 public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(c) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f) (1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided non-redacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract

stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

1777.5. (a) Nothing in this chapter shall prevent the employment of properly registered apprentices upon public works.

(b) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

(1) The apprenticeship standards and apprentice agreements under which he or she is training.

(2) The rules and regulations of the California Apprenticeship Council.

(d) When the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program.

"Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Prior to commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program that can supply apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates where the contractor agrees to be bound by those standards, but, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed

by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1 to 5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1 to 5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1 to 5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(1) When an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1 to 5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m) (1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2) At the conclusion of the 2002-03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The funds shall be distributed as follows:

(A) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(B) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(C) All training contributions not distributed under subparagraphs (A) and (B) shall

be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship standards and requirements under this code.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director.

1813. The contractor or subcontractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty-five dollars (\$25) for each worker employed in the execution of the contract by the respective contractor or subcontractor for each calendar day during which the 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 this article. In awarding any contract for public work, the awarding body shall cause to be inserted in the contract a stipulation to this effect. The awarding body shall take cognizance of all violations of this article committed in the course of the execution of the contract, and shall report them to the Division of Labor Standards Enforcement.

1815. Notwithstanding the provisions of Sections 1810 to 1814, inclusive, of this code, and notwithstanding any stipulation inserted in any contract pursuant to the requirements of said sections, work performed by employees of contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of 8 hours per day at not less than 1 1/2 times the basic rate of pay.



COUNTY OF VENTURA  
PUBLIC WORKS AGENCY  
VENTURA COUNTY WATERSHED PROTECTION DISTRICT

ZONE 3  
ARROYO SIMI UPSTREAM OF MADERA ROAD  
GRADE STABILIZER REPAIR  
IN THE CITY OF SIMI VALLEY

INDEX TO SHEETS

SHEET NO.	TITLE
1.	GENERAL PLAN
2.	PLAN AND PROFILE
3.	DETAILS
4.	CROSS SECTIONS

VICINITY MAP  
N.T.S.

GENERAL NOTES

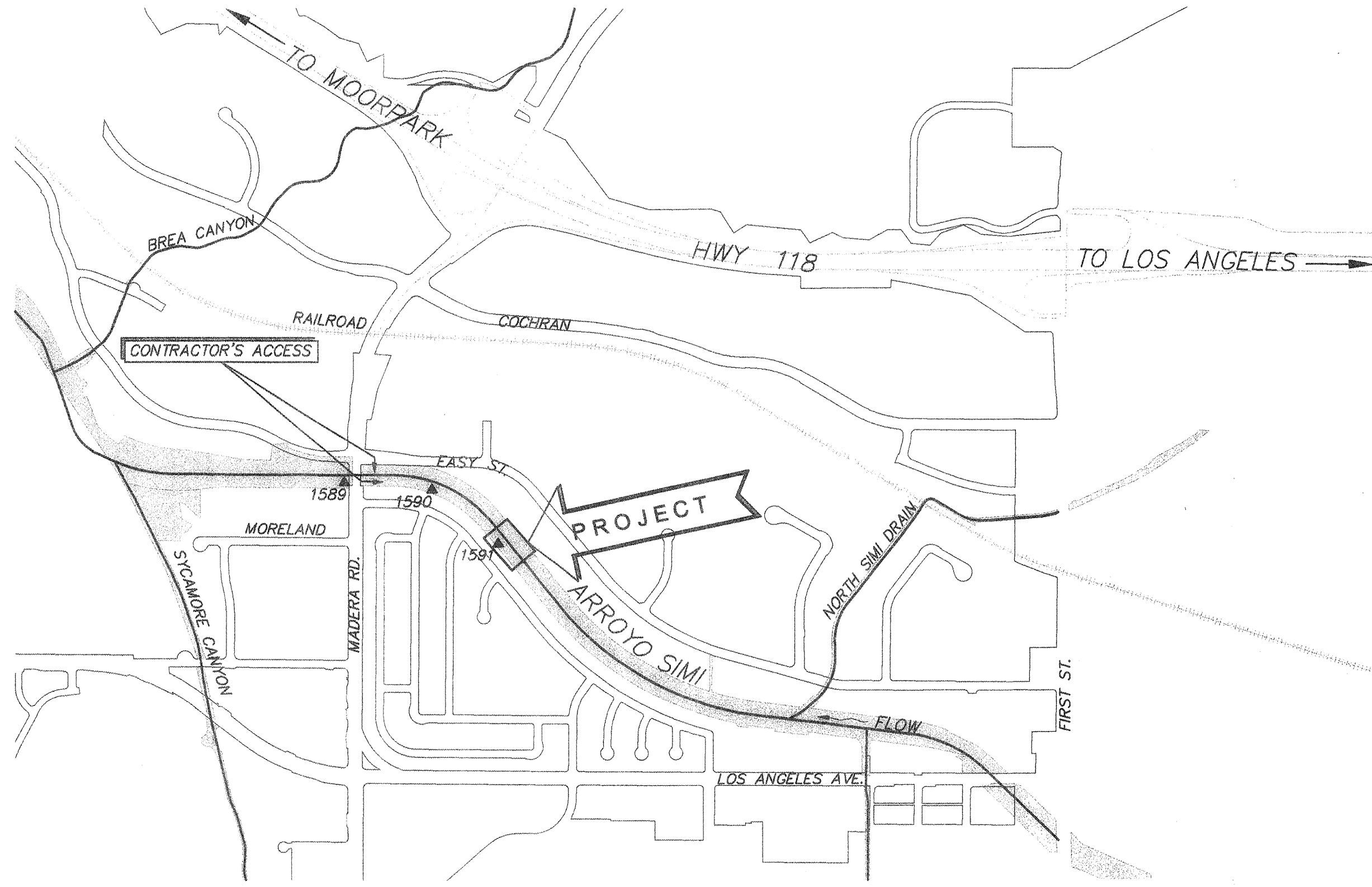
- ELEVATIONS SHOWN ARE IN US FEET, NAVD 1988, NGS PUB 1995, UNIT-FOOT
- STATIONS SHOWN ON DRAWINGS ARE ALONG CENTERLINE OF STRUCTURE.
- NUMBERS IN  $\square$  INDICATE BID ITEMS UNDER WHICH PAYMENT WILL BE MADE.
- LETTERS AND NUMBERS IN  $\oplus$  INDICATE THE DETAIL CALL-OUT AND SHEET ON WHICH REFERENCE DETAIL IS SHOWN.
- NUMBERS IN  $\triangle$  REFER TO NOTES ON THE SAME SHEET UNLESS OTHERWISE NOTED.
- TREES DESIGNATED BY  $\odot$  SHALL BE REMOVED. ALL OTHERS SHALL BE PROTECTED IN PLACE.
- TOPOGRAPHY AND CROSS SECTIONS FOR THIS PROJECT WERE TAKEN FROM A SURVEY PERFORMED IN AUGUST 2015.
- EXISTING IMPROVEMENTS WITHIN THE RIGHT OF WAY AND WORK AREAS SHALL REMAIN AND SHALL BE PROTECTED UNLESS OTHERWISE NOTED. DAMAGED IMPROVEMENTS SHALL BE REPLACED IN KIND TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.
- UTILITIES ARE SHOWN AS KNOWN TO EXIST AT TIME OF SURVEY. UTILITIES MAY HAVE BEEN OMITTED, MISPLACED, AND/OR RELOCATED. CONTRACTOR SHALL EXERCISE CARE IN EXCAVATION AND SHALL PROTECT ALL UTILITIES.
- SYMBOL  $\blacktriangle$  INDICATES THE LOCATION OF THE HORIZONTAL AND VERTICAL CONTROL POINTS WHICH WILL BE FURNISHED BY THE AGENCY FOR THE CONTRACTOR'S USE.

SURVEY CONTROL POINTS

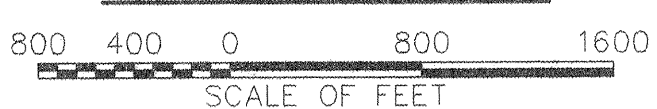
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1589	1924395.67	6321002.70	714.6
1590	1924342.26	6321655.24	719.94
1591	1923939.02	6322149.09	725.34

- CONTRACTOR SHALL NOTIFY UTILITY OWNERS A MINIMUM OF 48 HOURS PRIOR TO STARTING WORK IN AREAS AFFECTING THEIR FACILITIES:

UNDERGROUND SERVICE ALERT  
1-800-422-4133  
CALL USA/SC  
FOR UNDERGROUND LOCATION  
2 WORKING DAYS BEFORE YOU DIG



GENERAL PLAN



PLOT DATE: 9/11/15

SAVE DATE: 9/11/15 106664 K:\PROJECTS\ZONE3\ARROYOSIMI\87007\_ARROYO\_SIMI\_US\_MADERA\_RD\_GRADE\_STABILIZER\_REPAIR\DESIGN\DESIGNDRAWINGS\90\_PERCENT\_PLANS\ARS\_MADERA-SH11.DWG

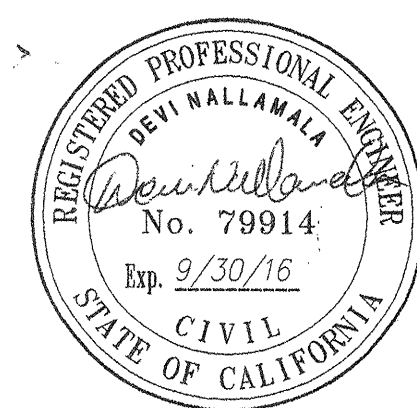
REVISION	DESCRIPTION	APP.	DATE
D			
C			
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DEPUTY DIRECTOR  
Judy Clifton  
DISTRICT SUPERVISOR  
9/14/15  
9/15/2015  
9/16/15

COUNTY OF VENTURA  
PUBLIC WORKS AGENCY  
WATERSHED PROTECTION DISTRICT

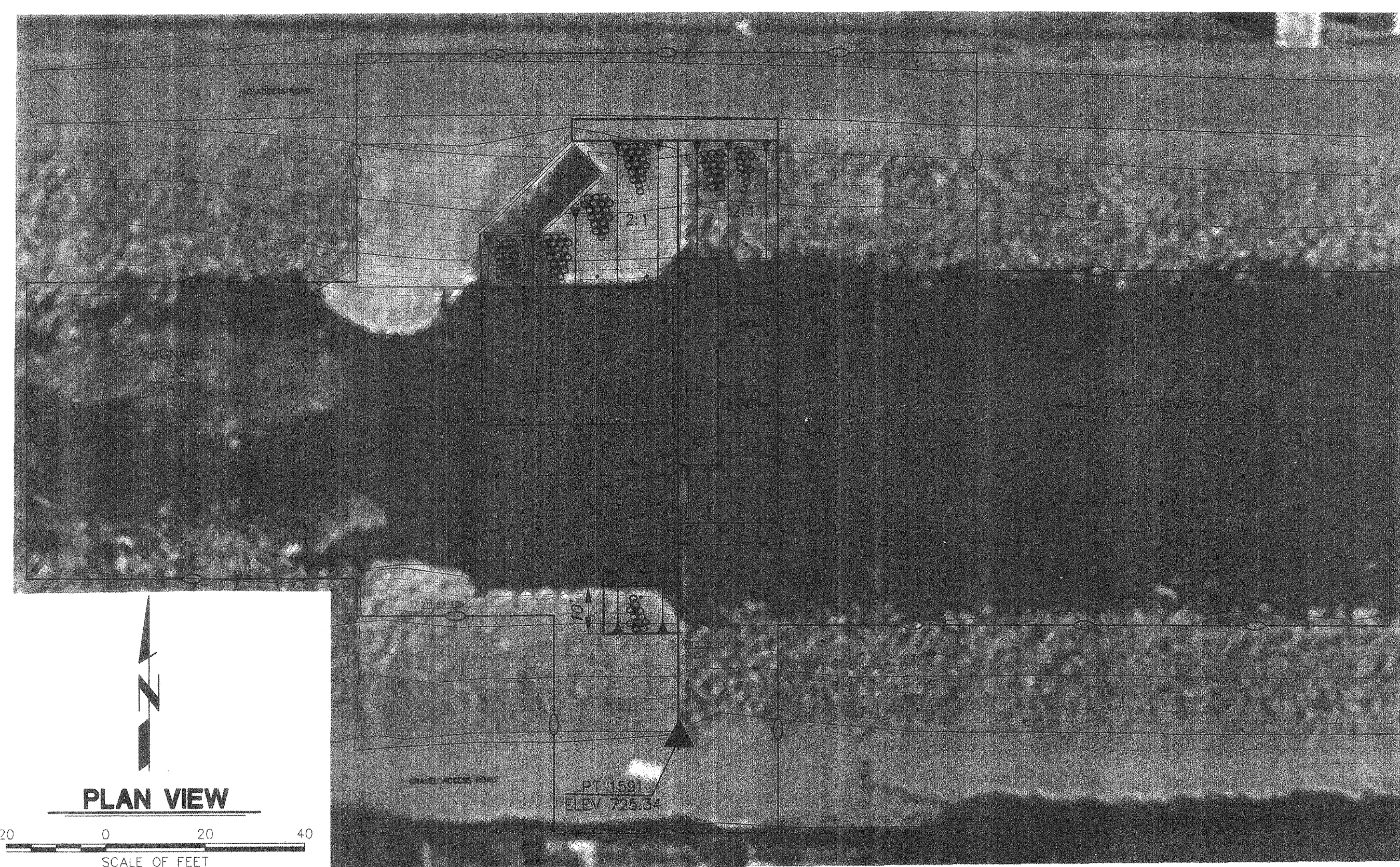
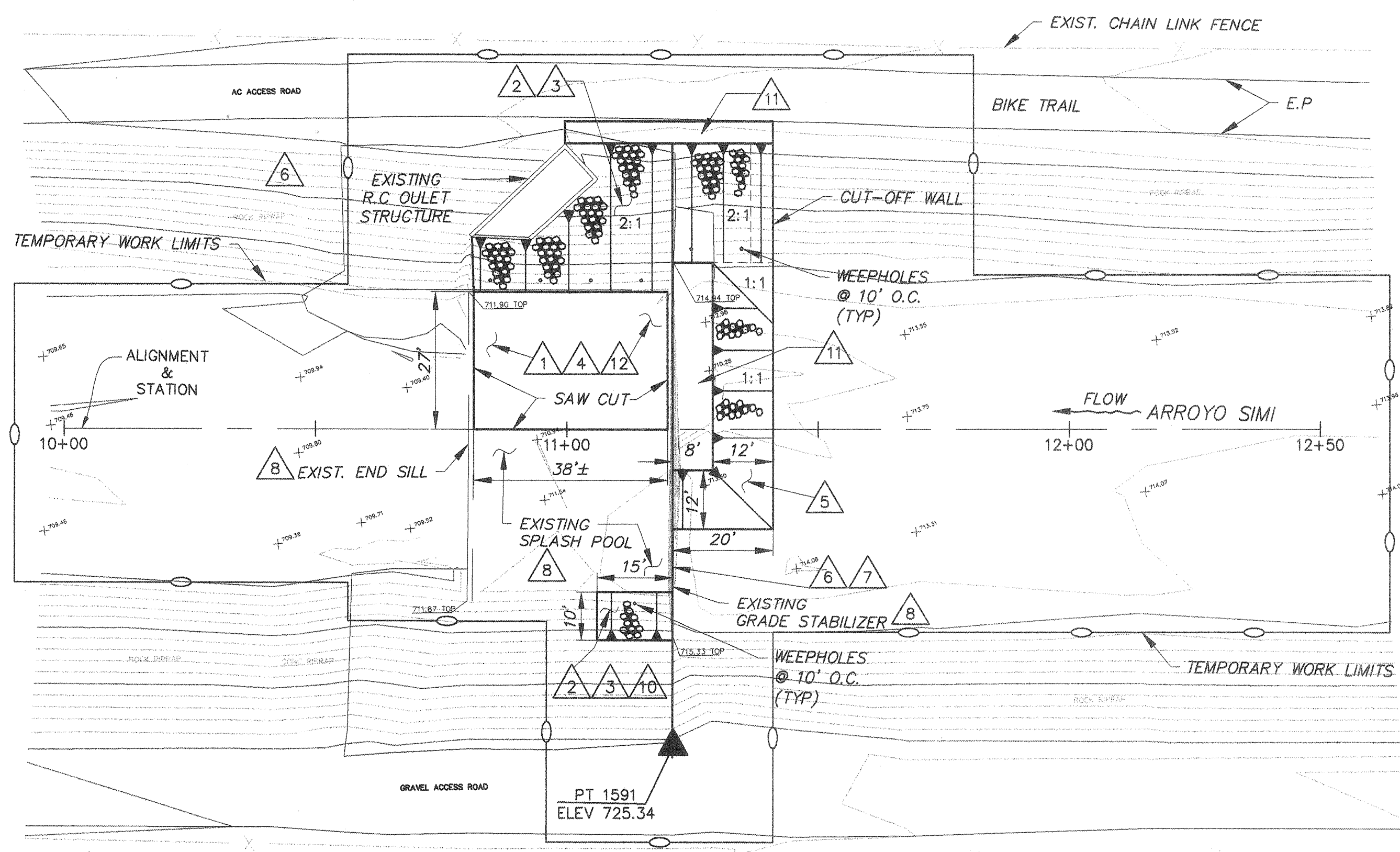
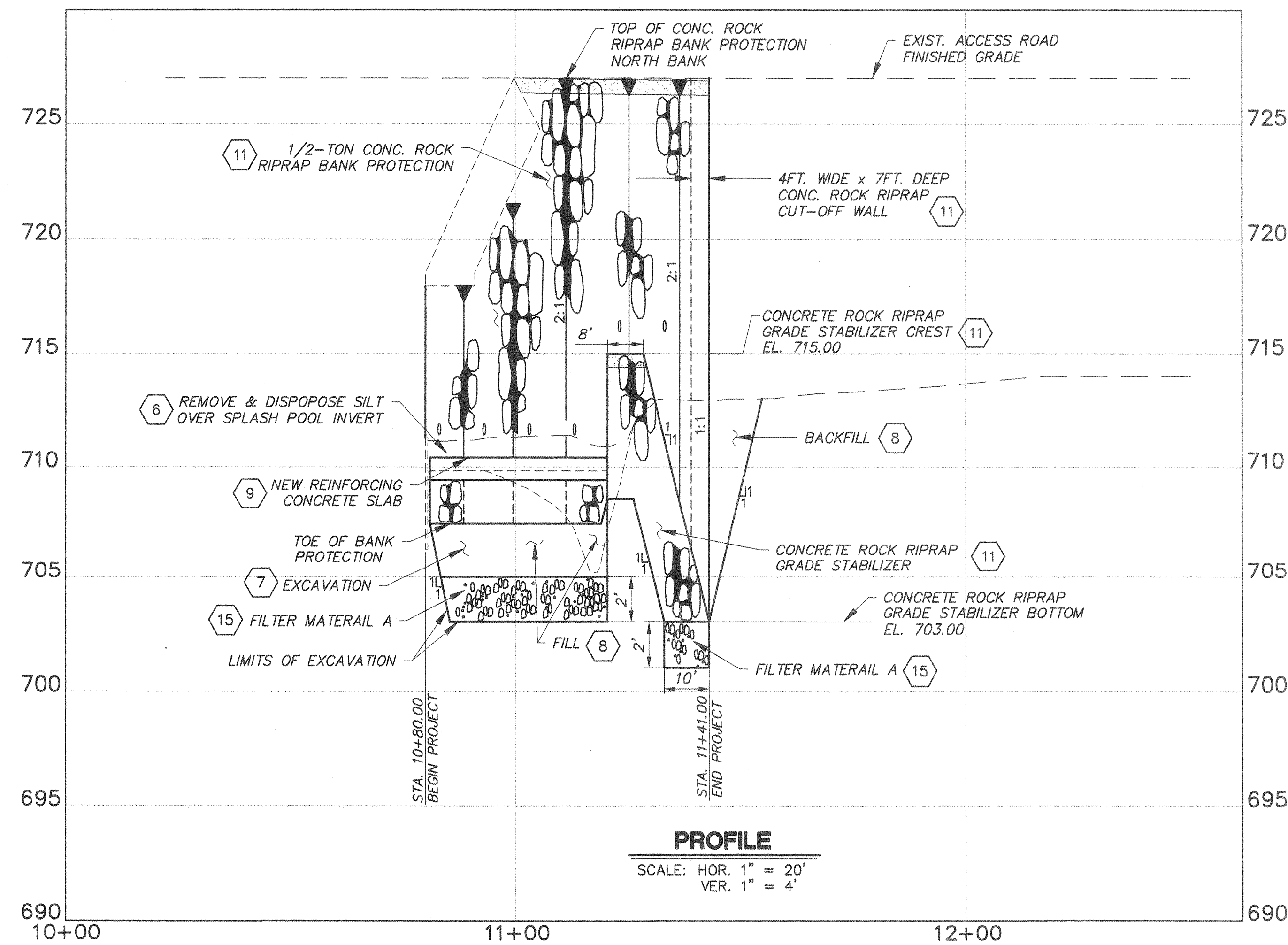
SPEC. NO.  
WP16-03  
PROJ. NO.  
87007

ARROYO SIMI UPSTREAM OF MADERA ROAD  
GRADE STABILIZER REPAIR  
GENERAL PLAN



SHEET 1  
OF 4  
DRAWING NO.  
Y-3-5050





# NOTES

1. SAW-CUT, REMOVE & DISPOSE OF EXISTING REINFORCE CONCRETE SLAB SPLASH POOL.
2. REMOVE & DISPOSE OF EXISTING RIPRAP AND CONC. RIPRAP BANK PROTECTION.
3. INSTALL 1/2-TON CONCRETED ROCK RIPRAP BANK PROTECTION.
4. INSTALL REINFORCE CONCRETE SLAB SPLASH POOL. SAVE EXISTING REBAR AND LAP 31 INCHES INTO THE NEW CONC. SLAB OR DOWELS REBAR PER DETAIL ON SHEET 3.
5. INSTALL 1/2-TON CONCRETED ROCK RIPRAP GRADE STABILIZER.
6. REMOVE & DISPOSE GRADE STABILIZER STEEL ARMOR.
7. INSTALL STEEL ARMOR.
8. EXISTING GRADE STABILIZER STRUCTURES, AC ACCESS RD., FENCE, GATE, RC OUTLET STRUCTURE SHALL BE PROTECTED IN-PLACED. ANY DAMAGE TO THE EXISTING STRUCTURES SHALL BE REPAIRED/REPLACED IN KIND TO THE DISTRICTS SATISFACTION AT THE CONTRACTORS OWN EXPENSE.
9. TEMPORARY WORK AREA LIMITS SHALL BE STAKED AND ALL EQUIPMENT SHALL BE OPERATED WITHIN THE TEMPORARY WORK AREA LIMITS. TEMPORARY FENCING SHALL BE PLACED AS NECESSARY TO PREVENT PUBLIC ACCESS TO THE SITE.
10. FILL VOID WITH TWO SACK SLURRY.
11. CONTRACTOR SHALL PLACE ROCK RIPRAP 6 INCHES BELOW FINISHED SURFACE AND TOP 3.5 FT. OF 1/2-TON CONCRETED ROCK RIPRAP SHALL HAVE FULL CONCRETE PENETRATION. THE FINISHED SURFACE SHALL HAVE 6 INCHES THICK DRIVABLE CONCRETE CAP.
12. SAW-CUT LINE TO BE DETERMINED IN THE FIELD.

PLOT DATE: 9/14/15

SAVE DATE: 9/14/15 105664

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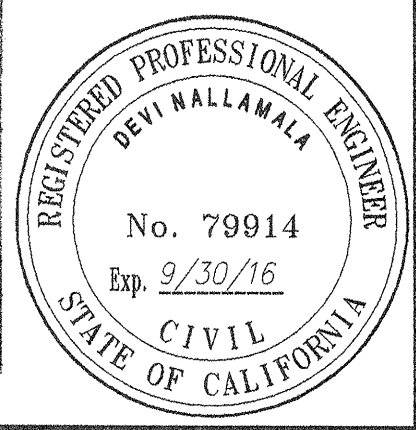
REVISION	DESCRIPTION	APP.	DATE
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MASOOD JILANI	DESIGNED	9/14/2015
RENE PUNO	DRAWN	9/14/15
DEVI NALLAMALA	CHECKED	9/15/2015

COUNTY OF VENTURA  
 PUBLIC WORKS AGENCY  
 WATERSHED PROTECTION DISTRICT

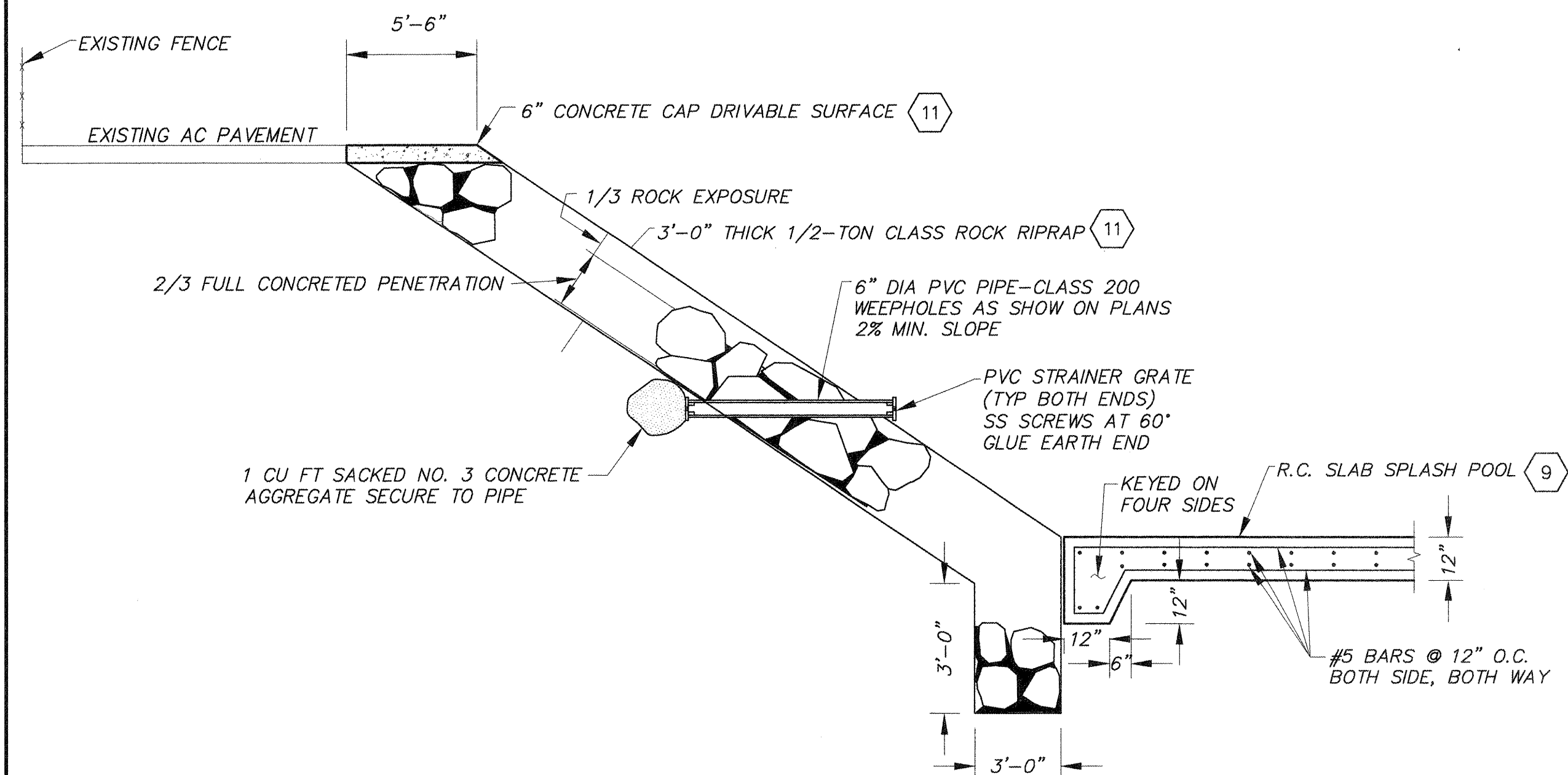
SPEC. NO.	WP16-03
PROJ. NO.	87007

ARROYO SIMI UPSTREAM OF MADERA ROAD  
 GRADE STABILIZER REPAIR  
 PLAN AND PROFILE

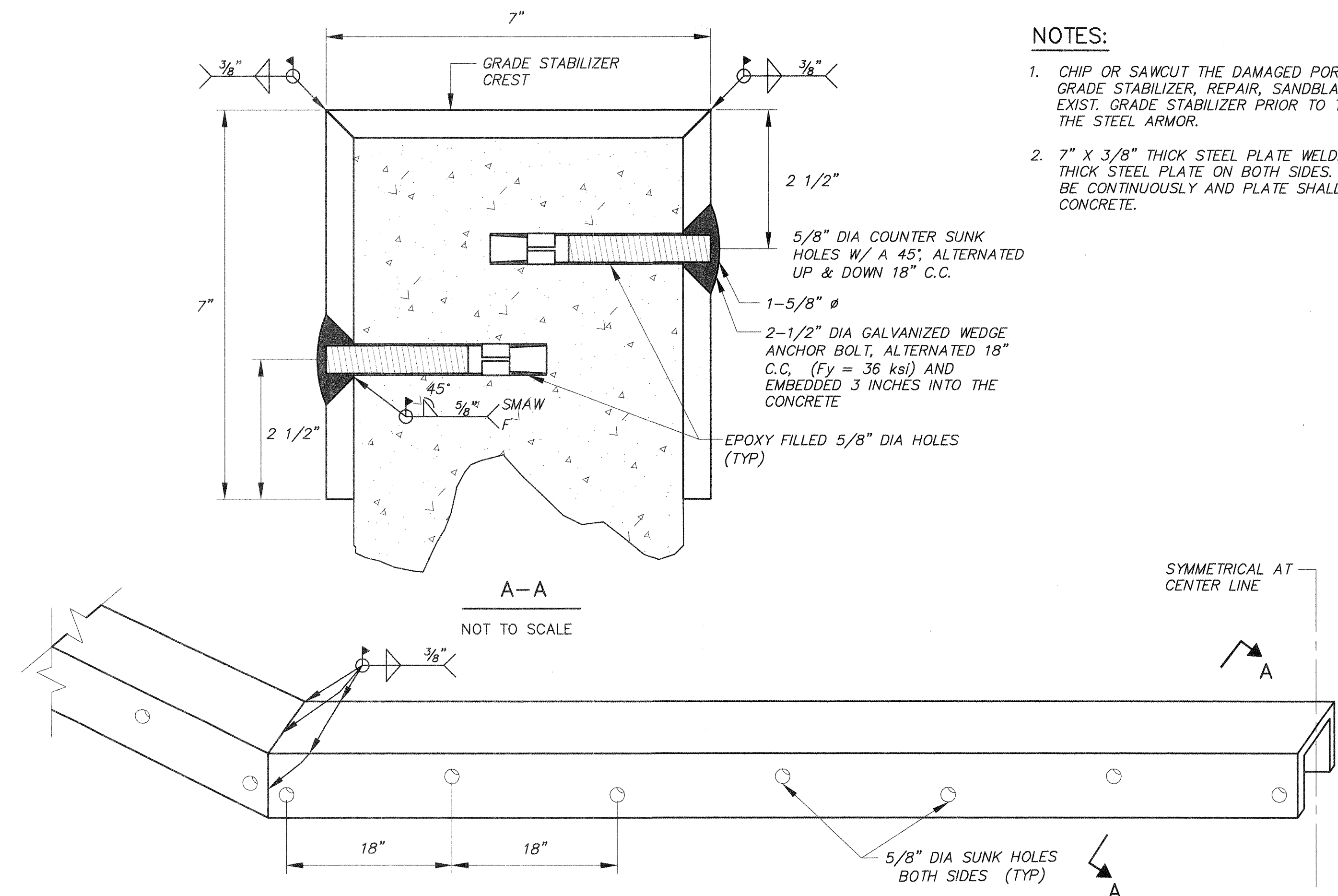


SHEET	2
OF	4
DRAWING NO.	Y-3-5051

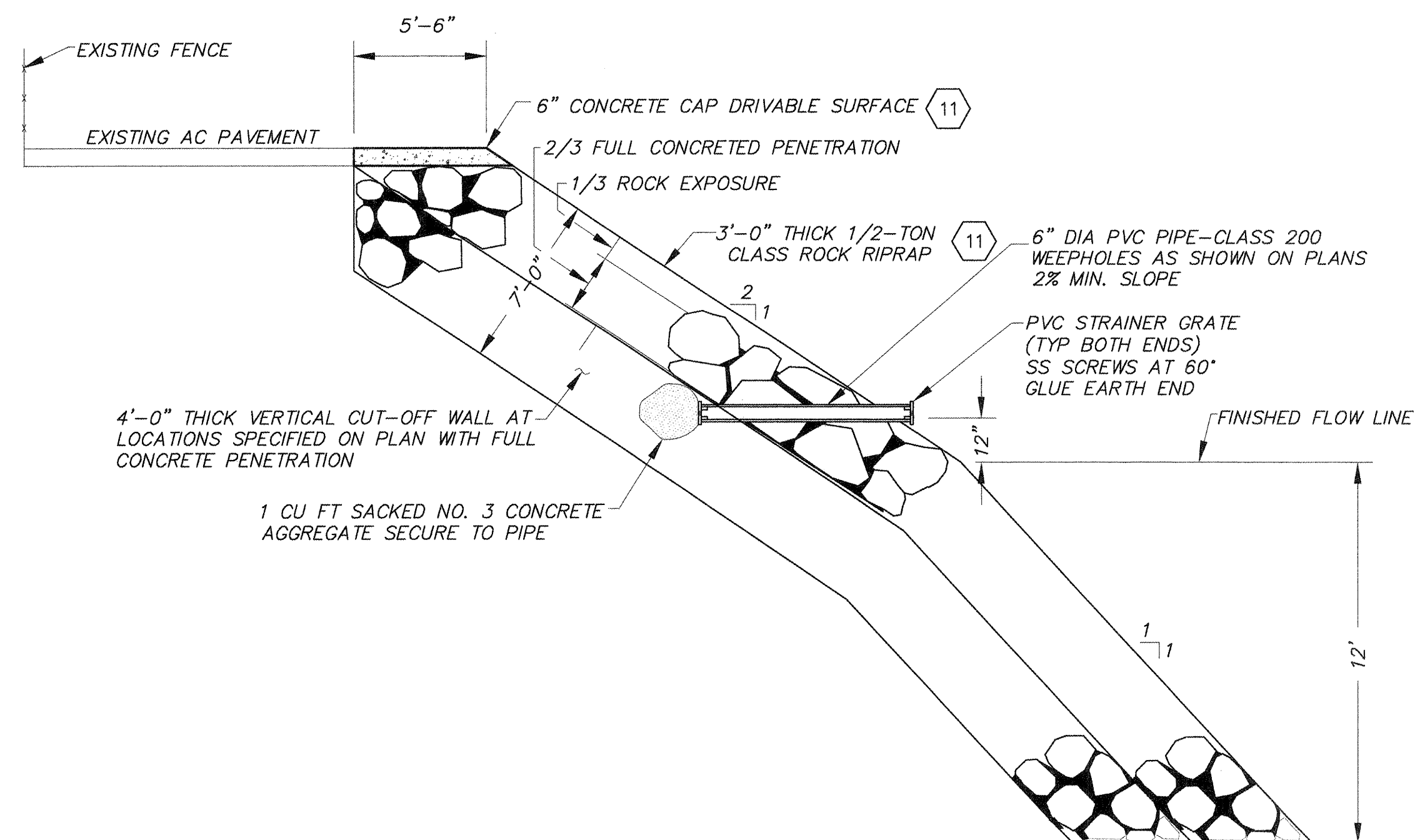




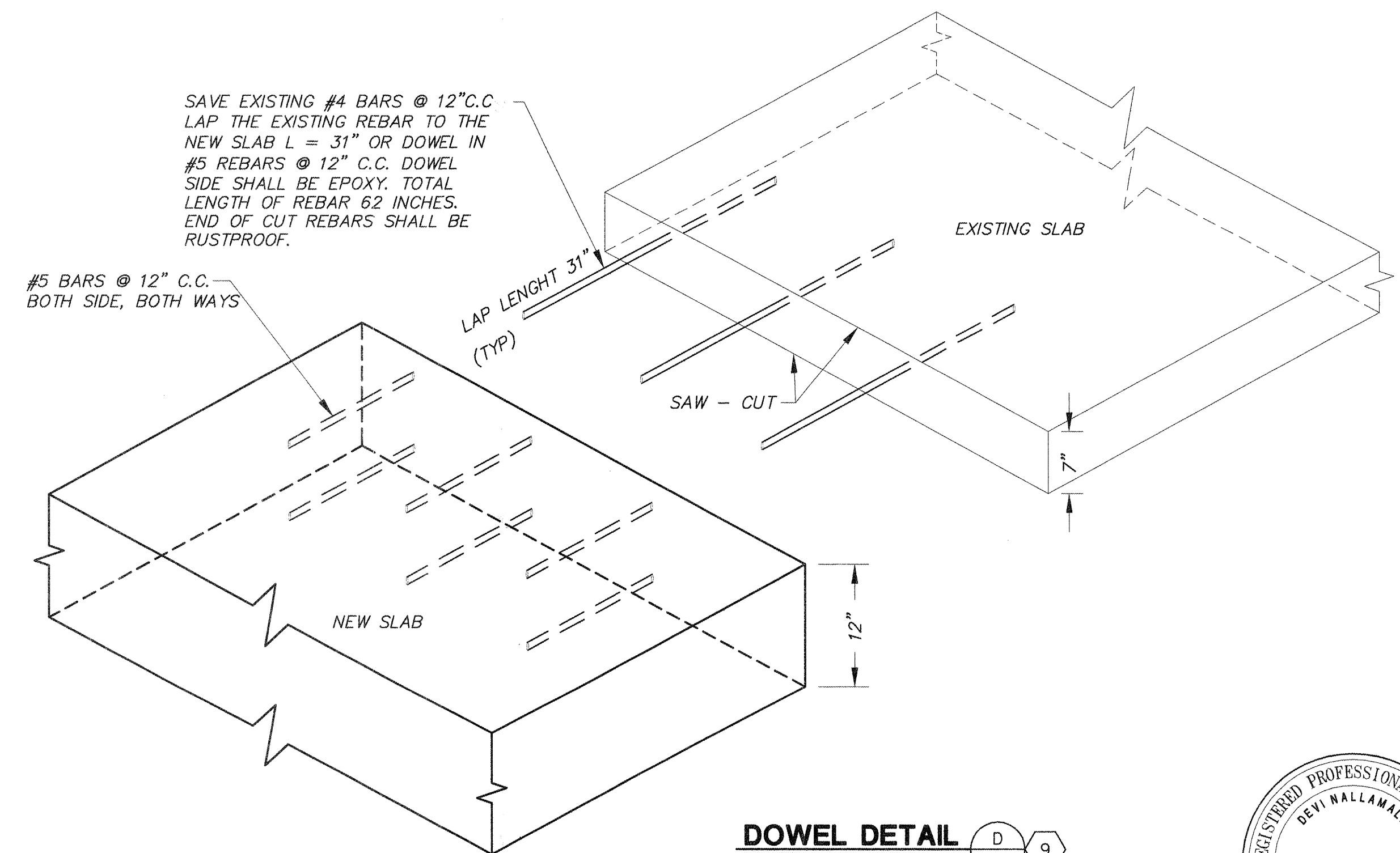
**CONCRETED ROCK RIPRAP BANK PROTECTION DETAIL** (A) 6  
STA. 10+80.00 TO 11+20.00  
N.T.S.



**ARMOR PLATE DETAIL** (C) 10  
NOT TO SCALE



**CONCRETED ROCK RIPRAP BANK PROTECTION DETAIL** (B) 6  
STA. 11+29.00 TO 11+41.00  
N.T.S.



**DOWEL DETAIL** (D) 9  
N.T.S.

**NOTES:**

1. CHIP OR SAWCUT THE DAMAGED PORTION OF THE EXIST. GRADE STABILIZER, REPAIR, SANDBLAST AND CLEAN THE EXIST. GRADE STABILIZER PRIOR TO THE PLACEMENT OF THE STEEL ARMOR.
2. 7" X 3/8" THICK STEEL PLATE WELDED TO 7" X 3/8" THICK STEEL PLATE ON BOTH SIDES. ALL WELD SHALL BE CONTINUOUSLY AND PLATE SHALL BE FLASHED WITH CONCRETE.

PLT DATE: 9/14/15

SAVE DATE: 9/14/15 106664 K:\PROJECTS\2006\ARROYO SIMI\2007 ARROYO SIMI US MADERA RD GRADE STABILIZER REPAIR\DESIGN\DRAWINGS\80 PERCENT PLANS\ARROYO SIMI MADERA-SHT 3.DWG

REVISION	DESCRIPTION	APP.	DATE
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MASOOD JILANI  
DESIGNED  
AR,RP  
DRAWN  
DEVI NALAMALA  
CHECKED

Devi Nallamala 9/14/15  
PROJECT MANAGER  
DATE  
9/14/15  
DATE  
9/15/2015  
DATE

COUNTY OF VENTURA  
PUBLIC WORKS AGENCY  
WATERSHED PROTECTION DISTRICT

SPEC. NO.  
WP16-03  
PROJ. NO.  
87007

ARROYO SIMI UPSTREAM OF MADERA ROAD  
GRADE STABILIZER REPAIR  
DETAILS

SHEET 3  
OF 4  
DRAWING NO.  
Y-3-5052

