



BID DOCUMENTS

FOR

**VASCO CAVES REGIONAL PRESERVE
(BYRON VERNAL POOLS)
SOUZA II WETLANDS RESTORATION PROJECT
BYRON, CA**

CONTRACT NUMBER: 05-09-140

PROJECT NUMBER: 145400

NOTES:

- Bids are due before 2:00 p.m., Thursday, July 2, 2009 at the District Headquarters.
- A **mandatory** on-site pre-bid meeting is scheduled for Tuesday, June 23, 2009, at 10:30 a.m. Meet on Armstrong Road at the Contractor Access Point, as shown on Sheet SA-1.
- To review published construction project information such as Addendums, Plan Holder's List and Bid Results visit www.ebparks.org and click on "Construction Projects" at the bottom of the page. Bid Results will be posted for 30 days from Bid Due Date.
- This project subject to California labor compliance regulations.

Plans and Specifications Prepared by:

ICF Jones & Stokes
630 K Street, Suite 400
Sacramento, CA 95814

East Bay Regional Park District
2950 Peralta Oaks Court
Oakland, CA 94605
Telephone: (510) 544-2301

East Contra Costa County
Habitat Conservancy
651 Pine Street, 4th Floor, North Wing
Martinez, CA 94553

**VASCO CAVES REGIONAL PRESERVE (BYRON VERNAL POOLS)
SOUZA II WETLANDS RESTORATION PROJECT
BYRON, CALIFORNIA**

CONTENTS

	<u>NO. OF PAGES</u>
NOTICE TO BIDDERS.....	1
INFORMATION FOR BIDDERS.....	4
FORMAL BID PROPOSAL	7
AGREEMENT	4
PERFORMANCE BOND	2
LABOR AND MATERIALS PAYMENT BOND.....	2
INSURANCE REQUIREMENTS	1
GENERAL CONDITIONS	20
SUPPLEMENTARY CONDITIONS	12
DESCRIPTION OF BID ITEMS.....	3
INDEX – TECHNICAL SPECIFICATIONS	1
TECHNICAL SPECIFICATIONS	27

NOTICE TO BIDDERS

EAST BAY REGIONAL PARK DISTRICT

NOTICE IS HEREBY GIVEN that the EAST BAY REGIONAL PARK DISTRICT is inviting bids for the project referred to and described as follows:

PROJECT: Vasco Caves Regional Preserve (Byron Vernal Pools)
Souza II Wetlands Restoration Project, Byron, CA

PROJECT DESCRIPTION: Grading, planting, berm and rock weir installation for habitat restoration, fencing, well destruction and articulated concrete mat installation.

CONTRACT NUMBER: 05-09-140

COMPLETION: Earthwork - 50 working days (to begin after bid award);
Planting - 45 working days (to begin after November 1, 2009).

PROJECT COST ESTIMATE: \$586,000

LICENSE REQUIRED: A and C27(C27 may be a subcontractor)

Each bid shall be made in accordance with the Contract Documents on file and available for inspection beginning on Thursday, June 11, 2009 at the District offices located at 2950 Peralta Oaks Ct., Oakland, CA.

Prospective bidders may review copies of original bid documents for information purposes only (**NOT FOR BIDDING**) at the following locations designated below:

Builder's Exchange of Ala. Co.
San Leandro, CA 94577

Contra Costa Builders Exchange
Concord, CA 94520

Builders' Exchange
San Francisco, CA 94110

Marin Builders' Association
San Rafael, CA 94903

Daily Pacific Builder
Dublin, CA 94568

Placer County Builders' Exchange
Roseville, CA 94678

Valley Builders' Exchange
Modesto, CA 95351

Peninsula Builders' Exchange
San Carlos, CA 94070

Builders' Exchange of Stockton
Stockton, CA 95210

Reed Construction Data
Norcross, GA 30092

Santa Clara Builders' Exchange
Santa Clara, CA 95050

Solano-Napa Builders' Exchange
Napa, CA 94558

Northcoast Builders' Exchange
Santa Rosa, CA 95407

Prospective bidders may review electronic copies of original bid documents for information purposes only (**NOT FOR BIDDING**) at www.ebparks.org by clicking on "Construction Projects" at the bottom of the web page.

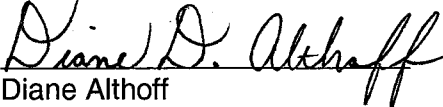
This project is subject to CA labor compliance regulations.

Only those prospective bidders WHO HAVE PURCHASED BID DOCUMENTS DIRECTLY FROM THE DISTRICT may bid on this contract. Copies of the Contract Documents may be purchased at the District office for a non-refundable charge of \$45 per set, or will be sent Fed Ex for a non-refundable charge of \$45 per set with your Fed Ex number, or \$55 using U.S. Mail. Send checks to East Bay Regional Park District, Attn: Patti Zierman, 2950 Peralta Oaks Ct., Oakland, CA 94605. We do not accept credit cards or faxed copies of checks.

A mandatory on-site pre-bid meeting is scheduled for Tuesday, June 23, 2009, at 10:30 a.m. See bid documents for meeting location.

Sealed bids shall be delivered to the District's Design office at the above address, directed to the attention of Chief, Design and Construction Department, **before 2:00 p.m., on Thursday, July 2, 2009.** Bids will be publicly opened at the same location at that time.

Any questions, call Patti Zierman, Design and Construction Department, at (510) 544-2301.


Diane Althoff

Chief, Design/Construction

June 3, 2009

Date

INFORMATION FOR BIDDERS

EAST BAY REGIONAL PARK DISTRICT

1. GENERAL REQUIREMENTS.

- (a) Examination of Site and Contract Documents. Attention is directed to bidder's obligations under ARTICLE 13 of the General Conditions. Any questions, call Diane Althoff, Chief, Design and Construction Department, at (510) 544-2304.

NOTE: The General Conditions have been revised as of June, 2002.

- (b) Addenda. Addenda will only be issued in writing. The District will make reasonable efforts to deliver (via facsimile or expedited mail service) addenda to all bidders who are known by the District to have purchased a complete set of contract documents and who have provided a current street address and fax number for receipt of addenda.

Each Bidder shall be responsible for ascertaining, prior to submitting its bid, that it has received all issued addenda. District makes no guarantee that all Bidders will receive all the addenda. Copies of addenda will be made available for inspection at the office where contract documents are on file for inspection, as indicated on the Notice to Bidders.

Addenda withdrawing the Notice to Bidders or postponing the bid deadline may be issued anytime prior to the bid deadline. However, if any Addenda result in a material change (addition or deletion) to the contract documents, the bid deadline shall be extended by the District by not less than 72 hours, pursuant to California Public Contract Code section §4104.5.

Each Bidder shall acknowledge receipt of all Addenda on the Formal Bid Proposal. Failure to acknowledge receipt of addenda may render the bid non-responsive.

- (c) Licensing. Attention is directed to the requirements of sections §7000 through §7145 of the California Business and Professions Code, known as the "Contractor's License Law". Contractors bidding on this project must possess an appropriate license which is current and valid at the time of Bid submittal and throughout the term of the Contract.
- (d) Prevailing Wages. As required by law, the Contractor shall pay all workers California prevailing wages for each trade or classification on the job during the term of the Contract. These rates include employer payments for health and welfare, pension, vacation, travel time, subsistence pay and apprenticeship or training.
- (e) Affirmative Action. The successful bidder and its subcontractors must comply with all applicable state equal employment opportunity and affirmative action laws throughout the term of the Contract.

- (f) Low Bid. The low bid shall be determined by the aggregate amount of the bidder's base bid.
- (g) Right to Reject Bids. The District reserves the right to reject any or all bids, to waive any informality in bids and to accept or reject any items of a bid.
- (h) Withdrawal of Bids. Bids may be withdrawn prior to the opening of bids only by signed, written notice received by the District Design Department to such effect. After the bid opening, bid commitments are relieved only as provided in PARAGRAPH 4 of the Formal Bid Proposal.
- (i) Bid Protest Procedures (Bid Documents).

Any protest of the proposed award of bid to the bidder deemed the apparent lowest responsible bidder must be submitted in writing to the District no later than 5:00 p.m. on the third (3rd) business day following the date of the bid opening. Any bid protest submitted after the 3rd business day time is untimely. The written bid protest shall be accompanied by a non-refundable bid protest fee of \$500.00 via certified cashier's check made payable to "East Bay Regional Park District" to reimburse the District's costs in reviewing and investigating the protest. Any untimely protest or protest submitted without the requisite bid protest fee will be returned to the protestor without further action.

The initial bid protest must contain a complete statement of the basis for the protest. The protest must state the facts and refer to the specific portion of the document or the specific statute that forms the basis for the protest. The protest must include the name, address, and telephone number of the person representing the protesting party. The party filing the protest must concurrently transmit a copy of the initial protest to the bidder deemed to be the apparent low bidder. The protest must be signed and submitted under penalty of perjury under the laws of the State of California.

The party filing the protest must have actually submitted a bid on the project. A subcontractor of a party filing a bid on this project may not submit a bid protest. A party may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest.

The procedure and time limits set forth in this section are mandatory and are the bidder's sole and exclusive remedy in the event of a bid protest. The bidder's failure to fully comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing of a challenge of the award pursuant to the California Public Contracts Code, filing of a claim pursuant to the California Government Code, or filing of any other legal proceedings.

The District shall review all timely protests prior to formal award of the bid. The District shall not be required to hold an administrative hearing to consider a timely protest, but may do so at the sole option of the Assistant General Manager for Planning, Stewardship and Development ("AGM"), or if otherwise legally required. The AGM or his/her designee shall consider the merits of any timely protests and take action thereon. The AGM has the authority to issue a final determination on all bid protests.

Nothing in this section shall be construed as a waiver of the District Board's right to reject all bids. The District reserves the right to waive any bid irregularities not affecting the amount of the bid, except where such waiver would give the low bidder an advantage or benefit not allowed other bidders.

2. **FORMAL BID PROPOSAL.**

- (a) **Form and Delivery.** The bid must be submitted on an unaltered copy of the Formal Bid Proposal form supplied with these instructions. **Every blank should be filled in. Either cross out or insert "N/A" in the blanks that are not applicable.** The Formal Bid Proposal must be delivered (with enclosures, if any) in a sealed envelope marked:

East Bay Regional Park District
Attn: Chief, Design and Construction Department
2950 Peralta Oaks Court
P. O. Box 5381
Oakland, CA 94605-0381

Proposal for Project Referred to as:

Vasco Caves Regional Preserve (Byron Vernal Pools)
Souza II Wetlands Restoration Project
Byron, California

Any bid not delivered to the above address before the time set for the opening of bids in the Notice to Bidders will be returned unopened. Bids will be received at no other place. If the bid is mailed, it must be sent by certified or registered mail, return receipt requested, and actually be received by the District Design Department within the time deadline.

- (b) **Completion.** Incomplete Bid Proposals may result in Bid rejection.
- (c) **Signatures on Formal Bid Proposal.** The Formal Bid Proposal must be signed by an authorized person for the bidder. If the bidder is a partnership, a general partner must sign. If the bidder is a corporation, an authorized officer of the corporation must sign.
- (d) **Bid Guarantee.** No Bid will be considered unless accompanied by a guarantee in the amount of ten percent (10%) of the total bid (including all alternates), which shall be either a **BID BOND** in the form attached to the Formal Bid Proposal written by a surety satisfactory to the District in its sole discretion, a certified or cashier's check made payable to the District, or a cash deposit.
- (e) **Performance and Labor/Materials Payment Bonds.** Each bid shall include all charges for furnishing a Performance Bond (100% of the bid) and a Labor/Materials Payment Bond (100% of the bid). The successful bidder shall furnish the bonds as described in PARAGRAPH 3(d) below.
- (f) **Insurance.** Each bid shall include all charges for the required insurance coverages.

3. POST-BID PROCEDURE.

- (a) Award of Contract. At the time stipulated in the Notice to Bidders the sealed Formal Bid Proposals will be publicly opened and read. The bids will be reported to the Board of Directors of the District at a later date, and the Board will take formal action at that time.
- (b) Notification of Bid Award. Immediately after Board action, the District Representative will notify the Contractor in writing and mail three copies of the Agreement for signatures. A preconstruction meeting date shall also be established.
- (c) Preconstruction Meeting. Within fifteen (15) calendar days after the Award of Contract, a meeting will be held to receive all required submittals and discuss Contract and construction procedures and issues.
- (d) Bonds. The successful bidder shall procure and submit one fully executed copy of each Bond required under ARTICLE 7 of the General Conditions at the preconstruction meeting. Attorneys-in-fact must attach a current, certified copy of their power of attorney to each bond.
- (e) Insurance. The successful bidder shall procure the insurance coverage and provide evidence thereof in accordance with ARTICLE 5 of the Agreement and ARTICLE 9 of the General Conditions prior to commencing work.
- (f) Commencement of the Work. The Contractor shall commence work as set forth in the written Notice to Proceed from the District Representative given not later than seventy-five (75) calendar days from the Award of Contract, per ARTICLE 3 of the Agreement.
- (g) Bid Guarantee.
 - (1) In the event a successful bidder fails to satisfy all conditions for accepting the award within the above time limits, the District may declare the bidder's Bid Guarantee in default. Bidder acknowledges that the amount of actual damages the District would suffer in such event is extremely difficult and impractical to determine at this time by reason of the uncertainties, lapse of time, expense and loss of likely bidders resulting from the probable need to readvertise and call for new bids. Bidder agrees that the amount of such Bid Guarantee shall be kept by the District as liquidated damages and agrees that the District may then award the work to any other bidder or may call for new bids.
 - (2) All Bid Guarantees will be held until after an award is made and complied with, at which time they will be returned.

Diane Althoff
Chief, Design and Construction Department

FORMAL BID PROPOSAL

EAST BAY REGIONAL PARK DISTRICT

TO: Chief, Design and Construction Department
2950 Peralta Oaks Court
P. O. Box 5381
Oakland, CA 94605-0381

IMPORTANT: Only those prospective bidders who have purchased bid documents directly from the District may bid on this contract.

NAME OF CONTRACTOR _____

In compliance with your Notice to Bidders and the Contract Documents relating to the project referred to as:

Project Name: Vasco Caves Regional Preserve (Byron Vernal Pools)
Souza II Wetlands Restoration Project; Byron, CA

Contract No.: 05-09-140 the undersigned submits this Bid and hereby declares as follows:

1. **BID.** The undersigned has read and agrees to all of the terms of this Formal Bid Proposal and of the Contract Documents, including Addenda:
 - (a) None , or
 - (b) Nos. ___ dated , _____ 20___ , respectively, and has carefully examined the Plans and Specifications and conditions at the site. The undersigned hereby proposes to furnish all labor, materials, and equipment required to complete the work as follows:

BASE BID (See Description of Bid Items for full description)

Item No.	Description	Unit	Amount
1.	Mobilization and Demobilization	LS	\$
2.	Erosion Control	LS	\$
3.	Demolition	LS	\$
4.	Well Destruction	LS	\$
5.	Earthwork	LS	\$
6.	Pond Construction	LS	\$
7.	Boulder Weirs	LS	\$
8.	Concrete Mat	LS	\$
9.	Planting	LS	\$
10.	Barb Wire Fencing	LS	\$
11.	Planting Maintenance	LS	\$
TOTAL BASE BID			\$

UNIT PRICES. Shall be used for adding or deleting work at the sole discretion of the District Representative without the necessity of remobilizing. (See Description of Bid Items for full description.)

Item No.	Description	Amount	Qty	Unit
1.	Remove barbed wire fencing	\$	10	LF
2.	Remove downed utility pole	\$	1	EA
3.	Clear and Grub	\$	100	SQFT
4.	Install temporary protection fencing	\$	10	LF
5.	Install fiber rolls	\$	10	LF
6.	Loosen soil with flared-end shank	\$	100	SQFT
7.	Install stream boulder	\$	1	EA
8.	Install concrete mat with sub-base & fabric	\$	1	SQFT
9.	Hand broadcast seed	\$	100	SQFT
10.	Install plug plantings	\$	8	EA
11.	Install container planting	\$	1	EA
12.	Plant maintenance	\$	1	WEEK
13.	Install barb wire fencing	\$	10	LF
14.	Install vehicle gate	\$	1	EA

2. **SUBCONTRACTORS.** In compliance with State of California Public Contract Code §4104 and ARTICLE 12 of the GENERAL CONDITIONS, the undersigned submits the following information concerning subcontractors:

Example:

Name / Work / Amount	Lic. Type / # / Expiration*	Address*/Telephone*
John Doe Constr. Co., Inc. Grading and Paving \$10,000.00	A & C-12 0000000 & 0000012 7/2000 & 7/2001	11500 Skyline Blvd. Oakland, CA 94619 (510)531-9300

(List is is not continued on an additional page, which is attached and incorporated herein by this reference.)

* **License Expiration, Address, and Telephone** information may be provided after submittal of bid. Subcontractor **Name, Work, Amount, License Type, and License Number** must be included at the time of bid.

3. **EXPERIENCE** :

a. The undersigned submits the following information concerning qualifying experience as described in Section 01.29 Contractor and Subcontractor Qualifications in the Supplementary Conditions; including job name, year completed, acreage, and names, and **current** telephone numbers of contract officers:

<u>Job</u>	<u>Name</u>	<u>Current Telephone</u>
<u>Earthwork Construction</u>		
1. _____ Job Name (year)	_____ Contact Name	_____ Contact Phone No.

<u>Job</u>	<u>Acreage</u>	<u>Name</u>	<u>Current Telephone</u>
<u>Seeding/Planting and Vegetation Management</u>			
Work performed by: <input type="checkbox"/> Contractor, or			
<input type="checkbox"/> Listed C27 Subcontractor, Name: _____			
1. _____ Job Name (year)	_____ Acres	_____ Contact Name	_____ Contact Phone No.

b. The undersigned has has not performed work for the District within two years prior to the date of the Notice to Bidders. If not, the undersigned represents as follows

(1) Five most recent jobs; contract amount, names and **current** telephone numbers of contract officers:

<u>Job</u>	<u>Amount</u>	<u>Name</u>	<u>Telephone</u>
1. _____	\$ _____	_____	_____
2. _____	\$ _____	_____	_____
3. _____	\$ _____	_____	_____
4. _____	\$ _____	_____	_____
5. _____	\$ _____	_____	_____

(2) Five largest jobs within the last five years; contract amount; names and **current** telephone numbers of contract officers:

	<u>Job</u>	<u>Amount</u>	<u>Name</u>	<u>Telephone</u>
1.	_____	\$ _____	_____	_____
2.	_____	\$ _____	_____	_____
3.	_____	\$ _____	_____	_____
4.	_____	\$ _____	_____	_____
5.	_____	\$ _____	_____	_____

4. **BID NON-REVOCABLE.** In consideration of District's reliance on and investigation and consideration of the Bid of the undersigned, the undersigned agrees that such Bid shall be irrevocable and shall not be withdrawn for sixty (60) calendar days following the bid opening even though an award is made to another bidder. However, such Bid shall be automatically relieved, without notice of any kind, seventy-five (75) days following the bid opening or upon issuance of Notice to Proceed by District to another bidder, whichever occurs first.
5. **AGREEMENT AND BONDS.** If awarded the Contract, the undersigned agrees to complete, execute and deliver the Agreements and the Bonds within the time and as otherwise provided in PARAGRAPH 3(b) and 3(d) of the Information for Bidders.
6. **INSURANCE.** The undersigned agrees to obtain and maintain in full force, workers compensation insurance (California Labor Code §1860 and §1861) and other insurance as required per **ARTICLE 5** of the Agreement.
7. **CERTIFICATION.** The undersigned certifies that this Formal Bid Proposal is genuine and not a sham or collusive. It is not made in the interest or on behalf of any person not herein named. The undersigned has not directly or indirectly induced or solicited any person, firm or corporation to submit a sham bid or to refrain from bidding. The undersigned has not directly or indirectly sought by agreement or communication with anyone to fix or influence the amount of any other bid or to ascertain the amount of any other bid prior to the opening of the bids. The only persons or parties interested in this bid as principals are those named below. The undersigned has not divulged the bid price herein or any part thereof to any person who does not have a direct financial interest in bidder's general business or is not employed by bidder.
8. **BID GUARANTEE.** No Bid will be considered unless accompanied by a guarantee per PARAGRAPH 2(d) of the Information for Bidders.

9. **DISCLOSURE.** The names of all persons financially interested in the foregoing Formal Bid Proposal as principals are as follows:

IMPORTANT NOTICE: If bidder or any partner in bidder is a corporation, give legal name of corporation, state of incorporation and the names and addresses of the President, Secretary and three principal shareholders; if a partnership, give name of the firm and names and addresses of all individual co-partners; if an individual, give first and last name and address.

<u>Name</u>	<u>Title</u>	<u>Address</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

I make the above Bid and declare under penalty of perjury that the statements made in this Formal Bid Proposal are true and correct.

FULLY EXECUTED at _____, CA as of _____
(date)

Contractor

Signature

Print Name

Address _____

Telephone _____

Fax _____

License Number(s): _____

Type of License(s): _____

Expiration Date(s): _____

Federal I.D. Number: _____

BID BOND

EAST BAY REGIONAL PARK DISTRICT

(NOTE: BIDDER MUST USE THIS FORM IF BID GUARANTEE IS A BOND.)

KNOW ALL PERSONS BY THESE PRESENTS:

THAT _____
(hereinafter called the Principal), as Principal, and _____
a corporation organized and doing business under and by virtue of the laws of the State of _____
and duly licensed for the purpose of making, guarantying or becoming sole surety upon bonds or
undertakings required or authorized by the laws of the State of California, as Surety, are held and firmly
bound unto the East Bay Regional Park District, a California Special District, (hereinafter called the
Obligee) in the just and full sum of _____ Dollars (\$ _____)
lawful money of the United States of America, for the payment of which we hereby bind ourselves and
each of our successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, WHEREAS, the Principal is about to hand
in to the Obligee a Bid for the project known as: _____ in
accordance with the Contract Documents filed in the office of the Obligee and under the notice inviting
proposals therefore.

NOW, THEREFORE, if the Bid as submitted by said Principal shall be accepted, and the contract for
such work or supplies be awarded to the Principal, and the said Principal shall fail, neglect or refuse to
enter into a contract to perform said work or deliver said supplies, and furnish good and sufficient bond
therefore, then the amount of this bond shall be declared to be forfeited to the Obligee, East Bay Regional
Park District.

IN WITNESS WHEREOF, Principal and Surety have caused these presents to be duly signed and sealed
this _____ day of _____, 20____.

Principal

Signature

Surety

Attorney-in-Fact

STATE OF CALIFORNIA, COUNTY OF _____ ss.

On _____, 20____, before me _____
A Notary Public, personally appeared _____ known to me to be the person
whose name is subscribed to the within instrument as the Attorney-in Fact of and for _____
____, and acknowledged to me that he/she subscribed the name of _____
therefore as Surety, and his/her own name as Attorney-in-Fact.

WITNESS my hand and official seal.

Signature

Seal

AGREEMENT

EAST BAY REGIONAL PARK DISTRICT

PROJECT:	Vasco Caves Regional Preserve (Byron Vernal Pools) Souza II Wetlands Restoration Project Byron, California	CONTRACT:	05-09-140
		PROJECT NO.:	145400
DISTRICT:	East Bay Regional Park District P. O. Box 5381 Oakland, CA 94605-5369	CONTRACTOR:	
PHONE:	(510) 544-2360	PHONE:	

ARTICLE 1. SCOPE OF WORK:

The Contractor agrees to furnish all labor, materials, services and equipment as required by the Contract Documents to accomplish the following:

Grading, planting, berm and rock weir installation for habitat restoration, fencing, well destruction and articulated concrete mat installation.

ARTICLE 2. CONTRACT PRICE:

As full compensation, the District agrees to pay the Contractor \$.00, based on the Formal Bid Proposal. Payment requests shall be submitted on District forms. The District shall withhold a ten percent (10%) retention from each payment which may be requested thirty-five (35) days after completion and formal acceptance of the work. Partial payment shall not constitute final acceptance or approval of any work or relieve the Contractor of any of its obligations. The Contractor agrees to delete or add work not covered by ADD-ON ALTERNATES or UNIT PRICES by methods provided in SECTION VIII of the General Conditions.

ARTICLE 3. TERM:

The term of this Agreement shall commence on the date The Board Resolution is adopted as shown below and shall end upon formal acceptance of the work by the District Representative.

ARTICLE 4. BEGINNING AND COMPLETION OF WORK, DAMAGES:

Time is of the essence of this Contract. The Contractor agrees to submit all written documents required by the Contract Documents within fifteen (15) working days from the date of written Notice of Award of Contract. Earthwork shall be fully completed to the District Representative's satisfaction within 50 working days from the date of the subsequent written Notice to Proceed. Planting shall be fully completed to the District Representative's satisfaction within 45 working days from November 2, 2009. **The Contractor shall not start any work until the Notice to Proceed is issued.** Issuance is dependent upon the District Representative's receipt of all documents required in the original Notice of Award of Contract. If the Contractor fails to complete the work within the specified time plus any extensions thereof, made in accordance with the General Conditions, the Contractor shall become liable to the District for damages in the amount of **\$500.00** for each calendar day beyond the time specified. Nothing in this paragraph shall be construed to preclude the District from the recovery of damages for causes other than delay by the Contractor.

ARTICLE 5. INSURANCE:

The Contractor shall provide and maintain statutory coverage for Workers' Compensation Employer's Liability (**\$500,000 per accident**), General Liability (**\$1,000,000 per occurrence**), Automobile Liability (**\$1,000,000 per occurrence**). Builder's Risk or Special Hazards coverage may be required. Workers' Compensation shall comply with California Labor Code §3700 and contain a waiver of subrogation in favor of the District. The General and Automobile Liability policies must be endorsed to name the District as additional insured and must be primary insurance.

ARTICLE 6. INDEMNIFICATION:

The Contractor agrees to indemnify, hold harmless, defend, and protect the District, its employees and agents from any and all claims and expenses (including all reasonable attorneys' fees) arising from the Contractor's performance of this Agreement. (See ARTICLE 8 of the General Conditions.)

ARTICLE 7. LICENSING:

Attention is directed to the requirements of the California Business and Professions Code, known as the "Contractor's License Law", §7000 through §7145. The Contractor must possess an appropriate license which is current and valid at the date of the bid and throughout the term of this Agreement.

ARTICLE 8. LABOR CODE COMPLIANCE:

As required by law, the Contractor shall pay all workers California prevailing wages for each trade or classification on the job during the term of this Agreement. These rates include employer payments for health and welfare, pension, vacation, travel time, subsistence pay and apprenticeship or training.

ARTICLE 9. EQUAL EMPLOYMENT AND AFFIRMATIVE ACTION:

The Contractor and its subcontractors will comply with all applicable state equal employment opportunity and affirmative action laws throughout the term of this Agreement.

ARTICLE 10. BONDS: (See attached forms)

The Contractor agrees to furnish, at the Contractor's expense, the following bonds with sureties approved by the District within fifteen (15) working days from the date of written Notice of Award of Contract.

- a. Performance Bond in the amount of the Contract Price. (Required only if progress payments are to be requested.)
- b. Labor and Materials Payment Bond in the amount of the Contract Price.

ARTICLE 11. CONTRACT DOCUMENTS:

Together with this Agreement, the following constitute the "Contract Documents" and the entire Contract between the parties:

- a. Information for Bidders (pp 1-4);
- b. Formal Bid Proposal (pp 1-7), dated _____;
- c. Performance and Labor and Materials Payment Bonds;
- d. General Conditions (total 20 pages);
- e. Plans prepared by ICF Jones and Stokes and the East Bay Regional Park District, consisting of Sheet Nos. C-1 thru D-3 (23 sheets total) Dated June 8, 2009;
- f. Supplementary Conditions (pp 1-12);
- g. Description of Bid Items (pp 1-3);
- h. Technical Specifications (pp 1-1 thru 9-7), total 27 pages;
- i. Addenda No's _____, dated _____, respectively.

Unless otherwise noted, items **c** and **d** above are the District's standard forms. The Contract Documents are complementary. Any inconsistencies in them shall be resolved by reference to such documents in the following order or priority: **i, h, g, f, e, d, c**, this Agreement, **b & a**.

ARTICLE 12. EXAMINATION OF SITE AND CONTRACT DOCUMENTS:

By signing this Agreement, the Contractor acknowledges having examined the work site; compared the site with the Plans and Specifications; determined any site variation that affects the bid; and investigated the conditions of existing clearance, restrictions or limitations that affect access to the work. The Contractor's failure to do any and all of the above shall not become a basis for claim of additional monies or extension of time. No allowance shall be made on behalf of the Contractor due to neglect, failure or error in acquainting itself with the project or any and all of the Contract Documents. (See ARTICLE 13 of the General Conditions.)

ARTICLE 13. PROTECTION OF HISTORIC RESOURCES AND HUMAN REMAINS:

The Contractor shall, during all work, be alert for indicators of historic resources (i.e., bivalve shells or fragments, stone tools, old china objects or fragments, old glass objects or fragments, old foundations and old privy deposits) and human remains. If such indicators are uncovered, all work within 50 feet shall be halted and the District Inspector immediately notified. The District will have the find evaluated by the proper authorities or professionals. Only the balance of that work day shall be compensated by the District if the Contractor cannot perform work elsewhere on the project. Recommendations from the qualified authorities or professionals may result in a change of work and a change order may be issued.

ARTICLE 14. PRECONSTRUCTION

A preconstruction meeting attended by the Contractor, the District Representative, and others as appropriate, will be held within fifteen (15) days of Award of Contract to discuss the work. Submit all required documents, requests, and proposals at this meeting for discussion. (See ARTICLE 14 of the General Conditions.)

ARTICLE 15. SAFETY AND PUBLIC CONVENIENCE:

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs. All work shall conform to the requirements of the California Administrative Code, Title 8, Industrial Relations, Division of Industrial Safety. (See ARTICLE 24 of the General Conditions.)

ARTICLE 16. FINAL INSPECTION AND ACCEPTANCE.

At the final inspection, the work may be substantially completed and accepted with a "minor punch list" as determined by the District Representative. The punch list items are to be completed within the 35-day retention period, otherwise the Contractor waives any and all rights to the retention monies withheld by the District necessary to complete these items. The District Representative may hire another contractor or District crews to complete the work. All costs, including administrative costs, will be charged against the monies withheld and deducted from the contract price. (See ARTICLE 58 of the General Conditions.)

ARTICLE 17. DISTRICT REPRESENTATIVE:

During the term of this Agreement, the District's Manager of the Construction Department, or his designee, is fully authorized to represent the District in all contractual matters. The District Representative shall make all final decisions as to the intent of the Plans and Specifications; the amount and quality of work performed and/or materials furnished; the manner and rate of work performed; the fulfillment of the Contract; and any compensation due the Contractor.

CONTRACTOR:

Name and title (please print)

Signature

Date

Federal Employer I.D. No.

License No.

Expiration

FULLY EXECUTED at Oakland, California.
EAST BAY REGIONAL PARK DISTRICT:

Pursuant to Board Resolution

No.: 2009-_____

General Manager

Adopted _____, 2009.

Date: _____

PERFORMANCE BOND

EAST BAY REGIONAL PARK DISTRICT

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ as Principal, hereinafter called Contractor, and _____ as Surety of Sureties, hereinafter called Surety, are held firmly bound unto the East Bay Regional Park District, as Obligee, herein after called District, in the sum of _____ (\$ _____), for which payment Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, a certain written Agreement, dated _____, 20__, was made and executed by and between the District, as Owner, and the Contractor, which agreement is hereinafter called the Contract and is by reference made a part hereof.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Contractor shall well and faithfully keep and perform **all** the covenants and agreements of Contract, and all alterations, modifications and extensions thereof, by the Contractor to be kept and performed, and shall fully complete all of the work described in the Contract, and all alterations, modifications and extensions thereof, and shall save and hold harmless the District from any and all loss of damage arising out of the failure of the Contractor and/or any and all subcontractors, to fulfill the Contract, and all alterations, modifications and extensions thereof, and shall fully reimburse and pay to the District all outlay and costs which the District may incur in making good any default of the Contractor and/or subcontractors, and in replacing and/or making good any defective material or faulty material or workmanship in the work of the Contractor and/or any and all subcontractors, which may be discovered within one (1) year subsequent to the completion and acceptance of the work provided for in the Contract, then the above obligation shall be void; otherwise, it shall be and remain in full force and effect.

It is expressly covenanted and agreed by and between the Contractor and the Surety that the liability of the Contractor and the Surety shall at all times, and under all circumstances, be co-extensive, and that the Surety shall not be discharged, released or exonerated from liability under this bond, in whole or in part, by an alteration and/or modification of the Contract, whether notice thereof is given the Surety or not, and that the Surety shall be bound thereby, and also bound by any departure or deviation on the part of the District from the terms of the Contract.

It is further expressly covenanted and agreed that in the event that more than one Surety is obligated hereunder, then, in that event, the co-Sureties, bind themselves in the above stated sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of them, and for all other purposes each Surety binds itself, jointly and severally with the Contractors for the payment of such above stated sum only to the extent of the amount set forth opposite the Surety's name in Appendix A to this bond, which Appendix A is attached hereto and by this reference made a part hereof.

No change or alteration or modification of the Contract or of the work required thereunder shall release or exonerate any Surety or Sureties on the bond.

This bond shall remain in full force and effect notwithstanding that the Contract or any applicable law or statute of the State of California shall be held to be invalid.

IN WITNESS WHEREOF, the Contractor and the Surety or Sureties have hereunto signed their names this ____ day of _____, 20__.

Contractor

Signature

Surety

Attorney-in-Fact

LABOR AND MATERIALS PAYMENT BOND

EAST BAY REGIONAL PARK DISTRICT

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ as Principal, hereinafter called Contractor, and _____, as Surety, hereinafter called Surety, are held and firmly bound unto the East Bay Regional Park District as Obligee, hereinafter called District, for the use and benefit of all persons and laborers of every class performing any work or labor upon or bestowing skill or other necessary services or furnishing materials, provisions, provender or other supplies to be used or consumed in, or furnishing equipment or power contributing to the work described in the agreement hereinafter mentioned, or in any alteration, modification or extension thereof, which persons and laborers are hereinafter called Claimants, in the amount of _____, (\$ _____), for which payment, well and truly to be made, Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, a certain written agreement hereinafter called the Contract, dated _____, 20__, was made and executed by and between the District, as Owner, and the Contractor, which agreement is hereinafter called the Contract and is by reference made a part hereof.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Contractor shall promptly make payment to all Claimants for all labor and material used or reasonably required for use in the performance of the Contract, or any alteration, modification or extension thereof, whether the Contract, or any alteration, modification or extension thereof, is determined to be void, voidable or otherwise, or for any amount due under the Unemployment Insurance Act of the State of California with respect to such work or labor, or for any amounts required to be deducted, withheld, and paid over to the California Franchise Tax Board from the wages of employees of the Contractor and/or any and all subcontractors pursuant to California Revenue and Taxation Code Section 18806 with respect to such work or labor, then this obligation shall be void; otherwise, it shall be and remain in full force and effect.

The Contractor and Surety hereby jointly and severally agree with the District that every Claimant who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last said Claimant's work or labor was done or performed or materials were furnished by such Claimant, may sue on this bond for the use of such Claimant, prosecute the suit to final judgment for such sum or sums as may be justly due Claimant, and have execution thereon. The District shall not be liable for payment of any costs or expenses of any such suit. No suit or action shall be commenced hereunder by any Claimant:

(a) Unless Claimant, other than a Claimant having a direct contract with the Contractor, shall have given written notice to any two of the following: The Contractor, the District or the Surety, within ninety (90) days after such Claimant did or performed the last of the work or labor,

or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered or certified mail, postage prepaid in an envelope addressed to the Contractor, District, or Surety, at any place where its office is regularly maintained for the transaction of business, or by personal service.

(b) After the expiration of seven months from the date of recordation of a Notice of Completion or Notice of Cessation if such notice is recorded pursuant to Civil Code Sections 3092 or 3093; or, if no such Notice of Completion or Notice of Cessation is recorded, after nine months from the date of completion or cessation of the work.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith herewith, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claims for the amount of such lien be presented under and against this bond.

It is further expressly covenanted and agreed that in the event that more than one Surety is obligated hereunder, then, in that event, the co-Sureties bind themselves in the above stated sum only to the extent of the amount set forth opposite each Surety's name in Appendix A to this bond, which Appendix A is attached hereto and by this reference made a part hereof.

IN WITNESS WHEREOF, the Contractor and the Surety and/or Sureties have hereunto signed their names this ____ day of _____, 20__.

Contractor

Signature

Surety

Attorney-in-Fact

Insurance Requirements

ATTENTION CONTRACTORS

See Supplementary Conditions for additionally insured requirements. See Agreement for levels of insurance required.

Use the industry standard form (known as "Acord" form) and endorsement pages provided by your insurance carrier which meets the above requirements.

If you have questions, call Kim Warden, Construction Department at 510-544-2360.

GENERAL CONDITIONS

EAST BAY REGIONAL PARK DISTRICT

TABLE OF CONTENTS

SECTION I: GENERAL	1
ARTICLE 1. LAWS APPLICABLE TO DISTRICT INCORPORATED.....	1
ARTICLE 2. DEFINITIONS.....	1
ARTICLE 3. PERMITS AND REGULATIONS	1
ARTICLE 4. AUTHORITY OF THE DISTRICT REPRESENTATIVE.....	1
ARTICLE 5. AUTHORITY OF THE DISTRICT INSPECTOR	1
ARTICLE 6. SEPARATE CONTRACTS	1
SECTION II: BONDS, INDEMNIFICATION AND INSURANCE	2
ARTICLE 7. GUARANTEE BONDS	2
ARTICLE 8. CONTRACTOR'S INDEMNIFICATION	2
ARTICLE 9. INSURANCE REQUIREMENTS	2
SECTION III: OBLIGATIONS OF CONTRACTOR	
ARTICLE 10. CONTRACTOR'S RESPONSIBILITY - GENERAL	3
ARTICLE 11. SUPERINTENDENT.....	3
ARTICLE 12. SUBCONTRACTORS	3
ARTICLE 13. PRE-BID EXAMINATION OF SITE AND CONTRACT DOCUMENTS	4
ARTICLE 14. PRECONSTRUCTION	4
ARTICLE 15. WORK SCHEDULE	5
ARTICLE 16. MUTUAL RESPONSIBILITY OF CONTRACTORS	5
ARTICLE 17. CASH ALLOWANCES.....	5
ARTICLE 18. JOINING, CUTTING, PATCHING AND DIGGING; DEFECTS	5
ARTICLE 19. USE OF PREMISES.....	5
ARTICLE 20. PROJECT CLEANLINESS.....	6
ARTICLE 21. WATER AND AIR POLLUTION.....	6
ARTICLE 22. PROTECTION OF HISTORIC RESOURCES AND HUMAN REMAINS.....	6
ARTICLE 23. HAZARDOUS MATERIALS.....	6
ARTICLE 24. SAFETY AND PUBLIC CONVENIENCE.....	7
ARTICLE 25. FIRE HAZARDS AND PREVENTIONS.....	7
ARTICLE 26. UTILITIES.....	7
ARTICLE 27. PROTECTION OF WORK AND PROPERTY	8
ARTICLE 28. ASSUMPTION OF RISK	8
ARTICLE 29. CONTRACTOR'S ABANDONMENT	8
SECTION IV: PLANS, SPECIFICATIONS, BOUNDARIES AND SURVEY	8
ARTICLE 30. EXECUTION AND CORRELATION OF DOCUMENTS.....	8
ARTICLE 31. SPECIFICATION REFERENCES	9
ARTICLE 32. COPIES FURNISHED	9
ARTICLE 33. SHOP DRAWINGS.....	9
ARTICLE 34. WORK SITE PLANS AND SPECIFICATIONS	9
ARTICLE 35. OWNERSHIP OF PLANS, SPECIFICATIONS, MODELS AND SAMPLES.....	9
ARTICLE 36. BOUNDARIES.....	9
ARTICLE 37. SURVEY AND LAYOUT	9

SECTION V: MATERIALS	10
ARTICLE 38. SAMPLES.....	10
ARTICLE 39. MATERIALS	10
ARTICLE 40. MATERIALS LIST.....	10
ARTICLE 41. UNAVAILABLE OR LATE MATERIALS	10
SECTION VI: TIME LIMITS ON WORK	10
ARTICLE 42. WORK HOURS	10
ARTICLE 43. EXTENSIONS, DELAYS, SUSPENSION OF WORK	10
SECTION VII: LABOR AND WAGES	11
ARTICLE 44. EMPLOYEES, WORK DAY, APPRENTICESHIP AND NONDISCRIMINATION.....	11
ARTICLE 45. WAGE SCALE	11
SECTION VIII: CHANGE ORDERS	12
ARTICLE 46. WORK CHANGES.....	12
ARTICLE 47. CLAIMS FOR EXTRAS	13
SECTION IX: PAYMENT PROVISIONS	13
ARTICLE 48. CONTRACT PRICE BREAKDOWN	13
ARTICLE 49. PAYMENT REQUESTS	13
ARTICLE 50. PAYMENTS.....	14
ARTICLE 51. PAYMENTS WITHHELD	14
ARTICLE 52. CLAIMS	14
SECTION X: INSPECTION; TESTING; CORRECTIONS; GUARANTEE	15
ARTICLE 53. INSPECTION.....	15
ARTICLE 54. TESTING/INSPECTION SERVICES.....	15
ARTICLE 55. CORRECTION OF WORK	15
ARTICLE 56. DEDUCTIONS FOR UNCORRECTED WORK.....	15
ARTICLE 57. AS-BUILT DOCUMENTS	15
ARTICLE 58. FINAL INSPECTION AND ACCEPTANCE OF WORK.....	16
ARTICLE 59. GUARANTEE; CORRECTION OF WORK AFTER FINAL PAYMENT	16
SECTION XI: TERMINATION; ABANDONMENT	17
ARTICLE 60. TERMINATION FOR DEFAULT AND ACTS OF NATURE.....	17
ARTICLE 61. ABANDONMENT.....	17
ARTICLE 62. ATTORNEYS' FEES.....	17
SECTION XII: MISCELLANEOUS	17
ARTICLE 63. ASSIGNMENT.....	17
ARTICLE 64. EMERGENCIES	18
ARTICLE 65. TAXES	18
ARTICLE 66. FEDERAL MANUFACTURER'S EXCISE TAX.	18
ARTICLE 67. ROYALTIES AND PATENTS	18
ARTICLE 68. AGREEMENT TO ASSIGN	18
ARTICLE 69. TITLES AND HEADINGS	18

GENERAL CONDITIONS

EAST BAY REGIONAL PARK DISTRICT

SECTION I: GENERAL

ARTICLE 1. LAWS APPLICABLE TO DISTRICT INCORPORATED.

This Contract is subject to all Federal, State and local laws, regulations, ordinances, and governing codes, controlling, or affecting the East Bay Regional Park District. All of these laws, regulations, ordinances, and codes are made a part of this Contract.

ARTICLE 2. DEFINITIONS.

- (a) **Contract Documents.** See ARTICLE 11 of the Agreement.
- (b) **Contractor.** Person, persons, firm, partnership, corporation, assignees, licensed by the State of California, Department of Consumer's Affairs, named as such in the Agreement.
- (c) **Subcontractor.** Person, persons, firm, partnership, corporation, assignees, licensed by the State of California, Department of Consumer's Affairs, listed on the Bid Proposal and having an Agreement with the Contractor to perform specific work.
- (d) **District.** East Bay Regional Park District.
- (e) **District Representative.** Person designated in the Agreement, the District's Manager of the Construction Department.
- (f) **District Inspector.** Person designated by the District Representative to assure that the Contractor's work conforms to the Contract Documents.
- (g) **Working Day.** Any day, except Saturday, Sunday, legal holiday or inclement condition day. The District Representative shall be the sole judge of a Working Day.
- (h) **Legal Holidays.** The District recognizes the following thirteen and a half legal holidays: New Year's Day, Martin Luther King, Jr. Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Admission Day, Columbus Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve (4 hours), and Christmas Day.
- (i) **Inclement Condition Day.** Any day that because of weather or site conditions the Contractor cannot work with more than seventy-five percent (75%) of Contractor's labor and equipment force for at least five (5) hours.
- (j) **Liquidated Damages.** The amount listed in ARTICLE 4 of the Agreement to be paid to the District or deducted from any payments due the Contractor for each day's delay in completing the Contract in the time allowed.

ARTICLE 3. PERMITS AND REGULATIONS.

Unless otherwise specified in the contract, the Contractor shall give all notices and pay for all fees; obtain and pay for all permits, licenses, municipal and/or special inspections, and certificates of inspection required by any governmental authority having jurisdiction over any part of the work. The Contractor shall comply with all applicable laws, ordinances, rules, and regulations. Before the final payment request is authorized by the District Representative, the Contractor shall deliver to the District Representative all licenses, permits, certificates of inspection, or other documents as may be required.

ARTICLE 4. AUTHORITY OF THE DISTRICT REPRESENTATIVE.

The District Representative shall make all final decisions as to the intent of the Contract Documents; the amount and quality of work performed and/or materials furnished; the manner and rate of work performed; the fulfillment of the Contract; and any compensation due the Contractor.

ARTICLE 5. AUTHORITY OF THE DISTRICT INSPECTOR.

The District Inspector shall be the only communicator in the field giving instructions to the Contractor during construction. The District Inspector has the authority to condemn any work or material that does not conform with the Contract Documents and to suspend any and all work deemed necessary at no cost to the District. The Inspector is empowered to require the Contractor to immediately correct any unsafe or unsuitable condition or work not meeting standards of workmanship to the District's satisfaction at the Contractor's expense. The District Inspector may furnish additional instructions necessary for the proper execution of the work. The District Inspector has the authority to require minor field adjustments in the work not involving extra cost. The Contractor shall not deviate from the Contract Documents without the District Inspector's specific approval.

ARTICLE 6. SEPARATE CONTRACTS.

The District reserves the right to let other contracts in connection with or in the vicinity of this work. The Contractor shall allow other contractors reasonable opportunity for storage of their materials, access to their work sites and execution of their work, and shall properly connect and coordinate work under this Contract and theirs. Any dispute arising under the obligations imposed by this ARTICLE 6 shall be resolved as provided in ARTICLE 16.

SECTION II: BONDS, INDEMNIFICATION AND INSURANCE

ARTICLE 7. GUARANTEE BONDS.

- (a) **Performance and Payment Bonds.** The Contractor shall furnish a bond in the amount of the Contract price to the District, guaranteeing the faithful performance of all obligations of the contract, and a bond in the amount of the Contract price, guaranteeing the payment of claims of subcontractors, suppliers of materials or labor, and others. Bonds shall be on the forms attached to the Information for Bidders with Sureties approved by the District. All bond premiums shall be paid by the Contractor.
- (b) **Approval of Sureties.** Any surety company which at the time of execution of this Contract is listed in the latest published U. S. Treasury Department list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies," is hereby deemed approved.

ARTICLE 8. CONTRACTOR'S INDEMNIFICATION OF THE DISTRICT.

The Contractor agrees to indemnify, hold harmless, defend and protect the District, its officers, directors, agents and employees from any and all claims, losses, damages, demands, liabilities, suits, costs, expenses (including all reasonable attorney's fees), penalties, judgments or obligations whatsoever in connection with any injury, death, or damage to any person or property or pecuniary or monetary loss that results from, arises out of, or in any way relates to the activities of the Contractor both on and off the project, including but not limited to claims related to the presence, use or disposal of hazardous materials as defined in ARTICLE 23.

In the event a claim is made against the District, its officers, directors, agents and/or employees or they and/or the District is named a co-defendant in any action concerning the Contract, the Contractor shall immediately notify the District. The District shall either retain legal counsel at the Contractor's sole expense or the Contractor shall reimburse the District for all legal expenses, including all reasonable attorney's fees, expended in representing the District.

In the event that an apportionment of liability between the District and the Contractor is made by the judge in a court of competent jurisdiction, neither the District nor the Contractor shall request that apportionment of liability be determined by a jury. The Contractor shall be responsible to indemnify and hold harmless the District as set forth above, unless the court determines that the injury or damage resulted from the sole negligence or intentional and willful misconduct of the District.

The Contractor hereby waives all claims and recourse against the District, including the right of contribution for loss or damage to property, and releases the District from any liability related to or in any way connected to the Contractor's activities or the Contractor's use of the project site, premises or facilities.

The Contractor and its subcontractors shall have sole responsibility for the safeguard of their equipment, property and personnel (i.e., employees, agents, officers) from any and all injury, death or damage.

ARTICLE 9. INSURANCE REQUIREMENTS.

The Contractor shall procure and keep in full force and effect during the term of the Agreement, at the Contractor's cost and expense, the following policies of insurance with companies licensed to do business in the State of California which are acceptable to the District. The Contractor shall, within ten (10) calendar days from the date of Award of Contract, supply the District with the Certificate showing that such insurance is in force. The District reserves the right to cancel the contract if these requirements are not met within 30 calendar days of the Notice of Acceptance of Bid.

All policies shall contain a provision that they shall not be canceled or materially changed without thirty (30) calendar days' prior written notice to the District. No cancellation provision in any insurance policy shall be construed in derogation of the continuous duty of licensee to furnish the required insurance during the term of the Agreement.

- (a) **Workers' Compensation.** The Contractor shall provide Workers' Compensation insurance as required by law. The Contractor is aware of the provisions of the California Labor Code ' 3700, 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 will comply with such provisions before commencing the work.
- (b) **Comprehensive or Commercial General Liability.** Coverage includes Bodily Injury and Property Damage as required by the Agreement.
- (c) **Automobile Liability.** Coverage includes owned, non-owned and hired vehicles as required by the Agreement.
- (d) **Special Hazards.** The Supplementary Conditions may require the Contractor to provide coverage against any special hazards which may be encountered in the performance of this Contract.
- (e) **Builder's Risk.** The Supplementary Conditions may require the Contractor to insure all work and materials supplied against loss or damage by fire, malicious mischief or vandalism.

All policies taken out by the Contractor insuring work and materials supplied shall list the District as additionally insured and be payable to the Contractor and the District. Policies shall be kept in full force and effect by the Contractor until final acceptance of the work by the District.

- (f) Subcontractor(s) Insurance Requirements. The Contractor shall either: (1) require each subcontractor to procure and maintain during the life of its subcontract all insurance of the type and in the amounts specified in the Agreement or (2) insure the activities of subcontractor(s) in its own policy.

SECTION III: OBLIGATIONS OF CONTRACTOR

ARTICLE 10. CONTRACTOR'S RESPONSIBILITY - GENERAL.

The Contractor shall complete all work in accordance with the Contract Documents and subsequent Change Orders, and written Field Directives. The Contractor shall do all work and furnish all labor, materials, tools, appliances, equipment, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, all other facilities, and incidentals necessary to furnish, perform, test, start-up, and complete the work within the term period stipulated in the Agreement; except as otherwise specifically expressed within the Contract.

The right of general supervision by the District shall not make the Contractor an agent or employee of the District, and the liability of the Contractor for all damages to persons or to public or private property arising from the contractor's execution of the work shall not be lessened because of such general supervision.

Neither the presence of any District Officer, director, agent, employee, consultant, or independent testing/inspection service hired by the District, nor their general review or approval of any work shall relieve the Contractor from its obligations to perform the work in accordance with the Contract Documents.

ARTICLE 11. SUPERINTENDENT.

The Contractor shall submit the name and the qualification resume of the competent superintendent who shall have the authority to represent and act for the Contractor and shall attend the preconstruction meeting. The superintendent (or competent assistant approved by the District Inspector) shall be on the project at all times while work is in progress. The superintendent shall be changed only upon written consent of the District Representative or if the superintendent ceases to be in the Contractor's employ. Any replacement must have the approval of the District Representative. The superintendent and assistant shall be able to communicate with the District Inspector in English, as necessary for the safe and efficient execution of the work.

ARTICLE 12. SUBCONTRACTORS.

- (a) Listing of Subcontractors. Each bidder shall set forth in the Formal Bid Proposal the name, address, phone number, type and cost of work, and proof of required license for each subcontractor who will perform work or render services in any amount exceeding one-half percent (1/2%) of the total bid according to provisions of the California Public Contract Code '4100 through '4113. Each subcontractor shall be licensed by the State of California Department of Consumer Affairs for the portion of work they perform in accordance with the Contractor's License Law. List only one subcontractor per portion.
- (b) Failure to Specify. If the Contractor fails to specify a subcontractor, the Contractor must be fully qualified and licensed and shall perform that work.

The Contractor shall not sublet or subcontract any portion of work that was not designated to a subcontractor in the original bid. If the Contractor subcontracts any portion of work after Award of Contract, the Contractor shall be subject to penalties according to the California Public Contract Code '4110.

- (c) Substitution of Subcontractors. The Contractor shall not substitute any subcontractor listed in the original bid documents without the written consent of the District Representative. Consent may be granted in any of the following situations:
- (1) The Contractor demonstrates to the District that the subcontractor listed was the result of an inadvertent clerical error, subject to the provisions of the California Public Contract Code '4107.5.
 - (2) The subcontractor listed refuses to execute a written contract with the Contractor.
 - (3) The subcontractor fails or refuses to perform his or her subcontract.
 - (4) The subcontractor listed is not licensed or is licensed but not in good standing pursuant to the Contractor's License Law.
 - (5) The subcontractor fails or refuses to meet bond and/or insurance requirements of the Contractor.
 - (6) The subcontractor becomes bankrupt or insolvent.
 - (7) The subcontractor is substantially delaying or disrupting the progress of the work.
 - (8) The District Representative determines that work performed by the subcontractor is substantially unsatisfactory and not in accordance with the Contract Documents.
 - (9) The listed subcontractor is ineligible to work on a public works project pursuant to Section 1777.1 or 1777.7 of the Labor Code.

Prior to substitution of a subcontractor, the District Representative shall give written notice to the listed subcontractor of the Contractor's request to substitute and the reasons for that request. Written notice shall be served by certified or registered mail to the last known address of the listed subcontractor. The subcontractor shall have five (5) working days to file with the District written objections to the substitution. Failure to file written objections shall constitute the listed subcontractor's consent to substitution.

If written objections are filed, the District shall give five (5) working days written notice to the Contractor and subcontractor of a hearing by the District on the Contractor's request for substitution.

The Contractor shall not permit a subcontractor to assign, transfer or convey the performance of work to another subcontractor without the written consent of the District Representative.

- (d) Violation of ARTICLE 12 (a), (b) or (c); Penalty. In accordance with California Public Contract Code ' 4110, the District may consider the violation of any portion of ARTICLE 12 (a), (b) or (c) a breach of contract and cancel this Contract or penalize the Contractor ten percent (10%) of the subcontract money involved. The Contractor shall be entitled to a public hearing as described above. The District will give written notice of the hearing five (5) days in advance. All recovered funds shall be paid to the District's General Fund.
- (e) Contractor's Responsibility-Subcontractors. The Contractor agrees to be fully responsible to the District for the acts and omissions of any and all subcontractors and for persons either directly or indirectly employed by them. The Contractor shall coordinate all subcontractors to complete all the work in accordance with the Contract Documents.
- (f) Non-Contractual Relationship. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the District.

ARTICLE 13. PRE-BID EXAMINATION OF SITE AND CONTRACT DOCUMENTS.

- (a) Examination of Site. By executing the Formal Bid Proposal, the Contractor acknowledges having examined the work site; compared the site with the Plans and Specifications; determined any site variation that affects the Bid; and investigated the conditions of existing clearances, restrictions, or limitations that affect access to the work. The Contractor's failure to do any and all of the above shall not become a basis for claim of additional monies or extension of time.
- (b) Transportation/Access. The Contractor shall investigate the conditions of the existing public and private roads for clearances, restrictions, and other limitations to transportation, and the ingress/egress at the job site. The unavailability of transportation facilities or limitations thereon shall not become a basis for claims against the District or extension of time for the completion of work.
- (c) Examination of Contract Documents. The Contractor shall examine the Contract Documents to verify that there are no missing pages or sheets and shall obtain and examine any and all missing material prior to submitting the Bid. The District shall not allow any claim based on errors in the Contract Documents which the Contractor has reason to recognize, unless the Contractor gives prompt notice of the error to the District Representative in writing.
- (d) Contractor's Failure to Examine. No allowance shall be made on behalf of the Contractor due to neglect, failure or error in acquainting itself with the project and existing conditions or any and all of the Contract Documents.
- (e) Contractor's Notice to Subcontractors. The Contractor's failure to provide all subcontractors with all information received during the pre-bid period shall not become a basis for monetary claim, extension of time or to change contract requirements.

ARTICLE 14. PRECONSTRUCTION.

- (a) Preconstruction Meeting. A preconstruction meeting attended by the Contractor, the District Representative, and others as appropriate, will be held within fifteen (15) days of Award of Contract to discuss the work. Submit all required documents, requests, and proposals at this meeting for discussion.
- (b) Review Work Site and Contract Documents. Upon award of contract, the Contractor shall carefully compare work site conditions, all drawings, specifications, and other instructions and shall report in writing to the District Representative any error, inconsistency or omission at the preconstruction meeting.
- (c) Submittals. Submittals for substitution of materials, methods of work, or as otherwise may be required by the contract shall be submitted to the District at or before the preconstruction meeting. Submittals shall include all descriptive data, engineering data, specifications, samples, or other information as may be required for proper analysis by the District for conformance to plans and specifications.
- (d) Survey Requirements. When the District is responsible for surveying, the Contractor shall propose desired staking and layout schedule along with offsets, intervals, etc., at the preconstruction meeting. The District's Surveyor will review the Contractor's proposal and establish the surveying program best suited for all parties.
- (e) Trenching and Excavation Plan. The Contractor shall submit a shoring plan for review and acceptance by the District at the preconstruction meeting for all work that may require excavations five feet deep or deeper. The responsibility for adequacy and safety remains the sole responsibility of the Contractor. The shoring plan shall conform to all applicable safety orders (ARTICLE 24 (c)).
- (f) Project Reference Points. The Contractor shall locate any and all project monument points and survey stakes and take measures to prevent their dislocation or destruction before the Contractor starts work.
- (g) Use of Equipment. No equipment shall move onto the project without approval from the District Inspector. All equipment shall remain within the project boundaries as set forth by the District Inspector and/or contract documents.

ARTICLE 15. WORK SCHEDULE.

The Contractor shall prepare a Work Schedule acceptable to the District Representative to be discussed at the preconstruction meeting, fixing the dates at which the various phases of the work will be performed. The Contractor's work schedule shall not supersede the working days period stated in the Agreement.

No payment request will be made by the District to the Contractor until the Work Schedule has been approved by the District Representative. Any changes that affect the Work Schedule shall be made by the Contractor and immediately submitted to the District Representative for review and approval. Failure to make Work Schedule adjustments shall be cause for the District to delay payment request payments. Work Schedule changes shall not affect the completion date established in ARTICLE 4 of the Agreement.

ARTICLE 16. MUTUAL RESPONSIBILITY OF CONTRACTORS.

When the Contractor causes damage to or willfully delays another contractor or subcontractor, the Contractor is obliged to settle with that contractor or subcontractor by agreement. If a contractor or subcontractor serves written notice to the District of the Contractor's failing to meet this obligation, the District shall notify the Contractor in writing of a pending claim. The Contractor shall defend itself (and the District if included) at the Contractor's expense. The Contractor shall pay all costs incurred by the District as a result of any judgment for another contractor.

ARTICLE 17. CASH ALLOWANCES.

The Contractor declares that the Contract price includes all expenses and profit. The Contractor shall make no demand for additional expenses and/or profit for work in this Contract.

ARTICLE 18. JOINING, CUTTING, PATCHING AND DIGGING; DEFECTS.

- (a) Joining of Parts. The Contractor shall cut, fit or patch Contractor's work as required to make its several parts come together properly with the work of other contractors and shall do all that is necessary in the joining of all parts in a neat and workmanlike manner to the satisfaction of the District Inspector. The Contractor shall not damage or endanger any portions of work fully or partially completed.
- (b) Consent Required. The Contractor shall not cut, dig or otherwise alter the work of another contractor without the consent of the District Inspector.
- (c) Defects. If the Contractor's work depends upon the work of another contractor, the Contractor shall inspect and promptly report to the District Inspector any defects that could prevent proper performance. The Contractor's failure to inspect and report shall constitute acceptance of the other contractor's work. No claim by the Contractor of prior defects affecting the work will be considered after work has started. The Contractor will make all corrections at own expense. Prior defects affecting the Contractor's work discovered after starting shall be reported immediately to the District Inspector.
- (d) Measurement of Work in Place. The Contractor shall measure work already in place and shall report promptly in writing to the District Inspector any discrepancy between existing work and the Plans and Specifications.
- (e) Costs. Any costs resulting from defective or out of sequence work shall be borne by the Contractor.

ARTICLE 19. USE OF PREMISES.

- (a) Physical Limits of Materials, Operations. The Contractor shall confine its apparatus, storage of materials and the operations of Contractor's workers to limits indicated by law, ordinances, permits or directions of the District Inspector and shall not unreasonably encumber the premises with materials.
- (b) Temporary Storage. The Contractor shall not use the project site or any area set aside as a temporary construction yard as a site for the temporary storage of equipment, appliances, vehicles, materials, etc., that are not or will not be used in the work.
- (c) Dangerous Loads. The Contractor shall not load or permit any part of the work to be loaded with a weight that will create a potentially dangerous situation.
- (d) Signs, Advertisement. The Contractor shall comply with and enforce the District Representative's instructions regarding signs and advertisements. Advertising signs or name labels of any description shall not be placed on or near the premises without the District Representative's written consent.
- (e) District Occupancy Prior to Acceptance. The District reserves the right to occupy or use any part, parts, or the entirety of the work when the District Representative deems it safe. The exercising of this right shall in no way constitute an acceptance of any part of the work, nor shall it in any way affect the dates and times when payments become due the Contractor; nor shall it in any way prejudice the District's rights in the Contract. The Contract shall be deemed completed only when all the work contracted for is accepted by the District Representative in writing.
- (f) Field Office. If a job site office or storage yard is used, it and its location must meet the approval of the District Inspector.

ARTICLE 20. PROJECT CLEANLINESS.

The Contractor shall keep the project site and the surrounding areas free from accumulations of waste material and rubbish generated by employees and subcontractors. The Contractor shall remove daily all rubbish, tools, equipment and surplus materials leaving the work "broom clean" at the completion of each day, unless a different nature of cleanup or repair is specified elsewhere in the Contract Documents.

If the Contractor fails to clean up or there is a dispute between the Contractor and other contractors as to responsibility for removal of rubbish, etc., the District may remove the rubbish, etc., and charge the cost to a contractor as the District Representative determines to be reasonable.

ARTICLE 21. WATER AND AIR POLLUTION.

- (a) Water Pollution. The Contractor shall exercise every precaution to protect streams and bodies of water from pollution by fuels, oils, salts or other hazardous materials as defined in ARTICLE 23. The Contractor shall minimize muddying and silting of any stream or body of water. The Contractor shall, at the Construction Inspector's direction, perform work in small units or use modified construction procedures when necessary, to provide effective water pollution control. The Contractor's operations shall at all times be subject to the California Department of Fish and Game codes and other applicable statutes relating to the prevention or abatement of water pollution and to requirements for erosion control.

At the preconstruction meeting, the Contractor shall submit to the District Representative in writing, a program to control water pollution and/or erosion. The Contractor shall provide, at no cost to the District, temporary dikes, basins, ditches, straw, seed, etc., when, in the opinion of the District Inspector, they become necessary as a result of the Contractor's operations. The District Representative may require the Contractor to revise project operations and the Work Schedule at no additional cost to the District if the Contractor's water pollution control measures are ineffective.

- (b) Dust Control. Dust resulting from the Contractor's performance of the work shall be controlled by the Contractor either by applying water or a dust palliative without additional costs to the District. The District Inspector has full authority to suspend work wholly or in part should the Contractor fail to perform to the satisfaction of the District Inspector.

ARTICLE 22. PROTECTION OF HISTORIC RESOURCES AND HUMAN REMAINS.

The Contractor shall, during all work, be alert for indicators of historic resources (i.e.; bivalve shells or fragments, stone tools, old china objects or fragments, old glass objects or fragments, old foundations and old privy deposits) and human remains. If such indicators are uncovered, all work within 50 feet shall be halted and the District Inspector immediately notified. The District will have the find evaluated by the proper authorities or professionals. Only the balance of that work day shall be compensated by the District if the Contractor cannot perform work elsewhere on the project. Recommendations from the qualified authorities or professionals may result in a change of work and a change order may be issued.

ARTICLE 23. HAZARDOUS MATERIALS.

- (a) Definition. As used herein, hazardous materials shall include all items listed in any statute, ordinance or publication defining hazardous materials including, but not limited to, common household items containing substances now or subsequently listed as a hazardous material or substance, chemicals, drugs, any materials used for laboratory analysis, nuclear and/or radioactive materials, toxic substances, hazardous substances, hazardous wastes, contaminated or polluting substances, materials or waste toxic, caustic, corrosive, gaseous or flammable substances that may cause injury, illness or death to living organisms.

- (b) Approval. The Contractor shall not use any hazardous material in connection with this project without the prior written approval of the District Representative. Ten (10) working days prior to using a hazardous material, the Contractor shall submit to the District Representative complete Material Safety Data Sheet (MSDS) information, product specifications, and a document stating the application rate and method and including the name of the manufacturer's local representative and emergency telephone numbers. All materials shall be properly labeled in accordance with applicable laws.

The District Representative's response to the Contractor's request for approval of hazardous materials use shall not affect the Contractor's obligation to comply with the provisions of this section.

- (c) Application. In using hazardous materials, the Contractor shall:
1. Notify the District Inspector of the application schedule at least five (5) working days in advance.
 2. Comply with all applicable federal, state, and local laws, regulations, and ordinances relating to the use and disposal of hazardous materials and containers, environmental protection, industrial hygiene, worker and public safety.
 3. Supply protective clothing or equipment as required by applicable federal or state law for all persons handling hazardous materials, and for the District Inspector as required for inspection of the work.
 4. Be responsible for the notification of all concerned parties adjacent to or effected by said hazardous material and as directed by the District Inspector.

- (d) Special Situations. In the event the Contractor encounters material on the site reasonably believed to be asbestos, polychlorinated biphenyl (PCB) or any other hazardous or toxic substance, the Contractor shall immediately stop work in the areas affected and report the condition to the District Representative. If in fact the material is asbestos, polychlorinated biphenyl (PCB) or any other hazardous or toxic substance which has not been rendered harmless, the work in the affected area shall not be resumed except by written agreement between the District Representative and the Contractor. The work in the affected area otherwise shall only be resumed when asbestos, polychlorinated biphenyl (PCB) and other hazardous or toxic substances have been removed or rendered harmless.

ARTICLE 24. SAFETY AND PUBLIC CONVENIENCE.

- (a) Responsibility for Safety. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs. All work shall conform to the requirements of the California Administrative Code, Title 8, Industrial Relations, Division of Industrial Safety. The Contractor alone shall be responsible for responding to and for the final satisfaction of any and all claims of personal injury or property damage.
- (b) Safety Equipment and Workers. The Contractor shall take all reasonable measures as required by existing conditions and performance of the Contract to protect the public and their property. The Contractor shall provide adequate barricades, fences, signs, warning lights, watchpersons, flagpersons, etc., to protect the public and their property. Safety devices and workers shall comply with the current State of California "Manual for Warning Signs, Lights and Devices for Use in Performing Work Upon Highways", as a minimum standard. All lighting shall be electric powered and left on from sunset to sunrise.
- (c) Trench and Excavation Safety. As required by the California Labor Code '6705, whenever any portion of the work involves excavating or trenching five feet or deeper, the Contractor shall submit for acceptance by the District, a detailed plan showing the design of shoring, bracing, sloping, etc., to protect the Contractor's workers, District personnel, and the public at large. If the plan varies from standard shoring systems established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor. All costs for trenching, excavation safety, including engineering, shall be included within the Contract Bid.
- (d) Unauthorized Vehicles. When required by this Contract or the District Inspector, the Contractor shall take measures to prevent unauthorized vehicular traffic.
- (e) Material and Equipment Transportation. Trucks hauling material or equipment shall not exceed vehicle or posted load and speed limits.
- (f) Public Convenience. The Contractor shall conduct the work so as to ensure the least possible obstruction to traffic or inconvenience to the general public.
- (g) Failure to Provide for Safety. If in the opinion of the District Inspector, the Contractor fails to adequately provide for safety, the District Inspector may:
1. Suspend construction within the area.
 2. Order and/or place any additional warning devices, barriers, or protective equipment deemed necessary.
 3. Do both 1 and 2.

The District shall not assume the Contractor's responsibilities by this action and does not release the Contractor's obligations. The Contractor will be liable for all costs the District incurs in acting under this section and shall reimburse the District for double the District's costs. This action shall not become a basis for any claim for time or money against the District.

ARTICLE 25. FIRE HAZARDS AND PREVENTIONS.

- (a) The Contractor will be held responsible for fire ignited by the Contractor's employees, subcontractors, or equipment. Employees shall not be allowed to start fires. No open flames shall be permitted.
- (b) The Contractor shall take necessary precautions to guard against and eliminate fire hazards that may cause damage to construction work, building materials, equipment, public, and private property, including grassland, brush, and trees.
- (c) Flammable materials shall not be poured into drain lines, but shall be disposed of in a manner approved by the Fire Marshal's office and District Representative.
- (d) Fire hydrants shall be kept accessible to fire-fighting equipment at all times.

ARTICLE 26. UTILITIES.

- (a) Existing Utilities. The Contractor's attention is directed to the existence of utilities shown or not shown on the Plans. The location of known utilities are approximate. It is the Contractor's responsibility to investigate and locate existing utilities. The Contractor shall call Underground Service Alert (1-800-642-2444) for assistance. The Contractor will immediately report to the District Inspector any utility that varies significantly from the Plans.

The Contractor shall remove and/or replace any known existing structures, pipes, conduits, pavements, etc., as required for the performance of the work at no cost to the District.

- (b) Work on Utilities. When it is necessary for the Contractor to remove, relocate or protect any utility in the execution of this Contract, the Contractor shall remove, relocate, or protect that utility or notify the owner and make arrangements for coordinating the removal, relocation or protection of that utility with his work. There shall be no claim for additional compensation or time by the Contractor for this work. The Contractor shall repair all areas surrounding utility work to the District Inspector's and utility owner's satisfaction according to California Government Code ' 4215.
- (c) Utilities Not Identified in Plans and Specifications. When any utility on the project must be removed, relocated, protected or repaired by the Contractor and the utility is not identified in the Plans and Specifications, the District shall compensate the Contractor for the cost of that utility work. The Contractor shall be compensated by the District for equipment idled by work on unidentified utilities. The Contractor is held to have used reasonable care in his work to prevent damage to any unknown utility. The District shall not charge the Contractor for delay of work due to any unidentified utility. The Contractor shall notify the District Representative and the utility owner in writing, whenever the Contractor discovers an unidentified utility according to California Government Code ' 4215.
- (d) Right to Enter Reserved. The District and any and all utility companies have the right to enter the project to make repairs and changes that become necessary in the performance of this Contract.
- (e) Certificate of Satisfaction. The Contractor shall, at Contract completion, produce written certification provided by any utility affected by the Contractor's work stating that the utility is satisfied with the Contractor's work.
- (f) Temporary Utilities and Facilities. The Contractor shall provide all temporary utilities and sanitary facilities unless otherwise stated in the Contract Documents. All of these must be approved by the District Inspector before installation. The Contractor shall immediately remove temporary items upon completion of Contract or at the direction of the District Inspector.

ARTICLE 27. PROTECTION OF WORK AND PROPERTY.

- (a) The Contractor shall protect from damage or loss the Contractor's work and existing District, private or public properties. The Contractor shall make good any such damage or loss to the satisfaction of the District Inspector and owner.
- (b) When the Contractor is working in or around existing vegetation, the Contractor shall provide protective devices and take measures to preserve vegetation that is to remain. Care shall be taken not to debark trees, break limbs, or cause unnecessary damage to root systems. Damage shall be repaired by the Contractor to the satisfaction of the District Inspector. There shall be no cost to the District for the repair work. The District may require the full replacement of damaged materials.

ARTICLE 28. ASSUMPTION OF RISK.

- (a) Injury, Damage to Work. The Contractor assumes all risks of injury or damage to the work and materials arising from fire, storm, or other causes prior to the acceptance of the work. The Contractor shall repair and/or replace any work or materials lost for any cause.
- (b) Exception. The Contractor shall not assume risk of injury or damage to work when damage exceeding five percent (5%) of the total Contract is caused by natural catastrophe as proclaimed by the District. The Contractor shall not assume risk of injury or damage not required by SECTION II of these General Conditions. In event of any of the above, the District may terminate this Contract upon reasonable notice to the Contractor and upon payment of any amount owed under SECTION IX of these General Conditions.

ARTICLE 29. CONTRACTOR'S ABANDONMENT.

The Contractor's abandonment, failure to supply sufficient material and/or workers or comply with the California Public Contract Code ' 10262 for a period of more than three (3) working days after receipt of written notification of these deficiencies from the District shall be grounds for terminating the Contractor's control of the work. The District may assume the work and charge the Contractor any and all costs and expenses for finishing the work. The withholding of payment shall be as set forth in ARTICLE 60(d).

SECTION IV: PLANS, SPECIFICATIONS, BOUNDARIES AND SURVEY

ARTICLE 30. EXECUTION AND CORRELATION OF DOCUMENTS.

- (a) Order of Precedence. In resolving disputes resulting from conflicts, errors, or discrepancies within the Contract documents, the order of precedence shall be as follows:
 - 1. Field Directives
 - 2. Change Orders
 - 3. Addenda
 - 4. Technical Specifications
 - 5. Referenced Specifications
 - 6. Supplementary Conditions
 - 7. Contract Drawings and Details
 - 8. General Conditions
 - 9. Performance and Labor/Material Payment Bonds
 - 10. Formal Bid Proposal
 - 11. Information for Bidders

- (b) Order of Precedence - Drawings. The order of precedence for drawings shall be as follows:
1. Figures govern over scaled dimensions.
 2. Detail drawings govern over general drawings.
 3. Addenda/Change Order drawings govern over Contract Drawings
 4. Shop drawings govern over Contract Drawings.
- (c) The Plans and Specifications are complementary. Work shown on the Plans and not mentioned in the Specifications, or vice versa, is to be executed as if in both. The Contractor shall coordinate the contract documents to assure the performance of all work to full completion.

ARTICLE 31. SPECIFICATION REFERENCES.

- (a) Any material or method specified by reference to the number, symbol or title of a specific standard such as a Commercial Standard, a Federal Specification, a trade association standard or similar standards, shall comply with the requirements in the latest revision thereof, and any amendments or supplements thereto in effect on the date of Advertisement for Bids, except as limited as to type, class or grade or modified in such reference.
- (b) Reference to "Standard Specifications" means the State of California, Department of Transportation Standard Specifications, current edition, except that where "Engineer" is mentioned in the Standard Specifications, it shall mean "District Representative". Sections referred to in the Standard Specifications shall have full force and effect as though printed in full in these specifications except when modified by these specifications.

ARTICLE 32. COPIES FURNISHED.

The District shall furnish the Contractor with up to five (5) complete sets of the Plans, Specifications and any Addenda. The Contractor may request additional copies from the District Representative, for which there may be additional costs to the Contractor.

ARTICLE 33. SHOP DRAWINGS.

Shop drawings are not change orders. No extra cost to the District shall result from their approval. Where required, the Contractor shall promptly submit five (5) copies of any shop drawings to the District Representative early enough for review and processing by the District so as not to cause work delays. The Contractor shall make all required corrections and resubmit five (5) corrected copies for review. The Contractor shall not begin work on any shop drawing item without approved shop drawings. If deviations, discrepancies and conflicts between shop drawings and Contract Documents are discovered after shop drawings are approved by the District, the shop drawings shall prevail. The District Representative's approval of shop drawings shall not relieve the Contractor of responsibility for completing all work in the Plans and Specifications and for correcting any errors or problems created by the shop drawings.

ARTICLE 34. WORK SITE PLANS AND SPECIFICATIONS.

The Contractor shall at all times keep a complete and accurate set of all Plans, Specifications, Addenda, Change Orders and shop drawings on the work site (in good order) for use by the District Inspector.

ARTICLE 35. OWNERSHIP OF PLANS, SPECIFICATIONS, MODELS AND SAMPLES.

All Plans, Specifications, Models, and Samples furnished to the Contractor are the property of the District. Plans, Specifications and Models are not to be used by the Contractor on any other work. They shall be returned to the District upon request.

ARTICLE 36. BOUNDARIES.

The District shall, if deemed necessary, establish project boundaries in the field whether or not shown on the Plans.

ARTICLE 37. SURVEY AND LAYOUT.

- (a) When the District is responsible for surveying, the District shall lay out the work by establishing one set of construction stakes and bench marks (i.e., offsets, intermediate stations, grades, cuts/fills) for construction use after clearing and grubbing.
- (b) The Contractor shall notify the District Inspector (in writing) not less than five working days prior to the need for initial layout specifying offset and staking intervals desired; and not less than two working days prior to the need for any subsequent staking.
- (c) The Contractor shall protect and maintain from damage or dislocation all monuments and survey stakes. The Contractor shall transfer (with due care and accuracy) grades and reference stakes that must be relocated during construction. The Contractor shall be responsible for all errors or omissions that result from transference. If it becomes necessary for the District to reestablish any dislocated or destroyed stake(s), the Contractor shall notify the District Inspector two working days in advance. The Contractor shall reimburse the District for all restaking costs. This cost will be shown as a deduct on a change order at the reasonable rate established by the District Representative.
- (d) The Contractor shall insure that all lines, elevations, grades, and alignments comply with the Contract Documents.

- (e) The Contractor shall preserve all stakes established by the District Surveyor that the Contractor believes to be in error. The District Surveyor will verify the location and/or grade of any stake(s) in dispute. The Contractor shall make no claim for monies or time concerning the correctness of any stake(s) that have been dislocated or destroyed.
- (f) The District reserves the right to perform quality control surveys to insure conformance with contract documents, such as checking forms prior to pouring concrete or checking sub-grade prior to paving, as deemed necessary or appropriate by the District Surveyor or District Inspector. Should discrepancies be found, the Contractor shall reimburse the District for this survey cost in the same manner as for restaking costs.

SECTION V: MATERIALS

ARTICLE 38. SAMPLES.

Samples are physical examples provided for testing or examination which demonstrate materials, equipment or workmanship that meet or establish standards by which the work will be judged. The Contractor shall submit samples to the District Representative promptly so as not to delay the work and to allow a reasonable time for District review of such samples prior to execution of the affected work. The Contractor and/or supplier(s) shall cooperate by allowing access to or providing any samples required by the District. The work shall be in accordance with approved samples. Samples shall be provided at no cost to the District. Samples may only be removed from the work site upon approval of the District Inspector.

ARTICLE 39. MATERIALS.

- (a) **Quality.** All materials furnished by the Contractor shall be new and meet all standards of quality and workmanship of their kind unless otherwise specified in the Contract Documents. All materials are at any time subject to inspection, sampling, testing, approval or rejection by the District Inspector. When required by the District Representative, the Contractor shall furnish acceptable documented evidence of the kind and quality of materials used. The words "or equal" in the Plans and Specifications mean "or equal in the opinion of the District Representative".
- (b) **Substitutions.** The District Representative's approval of a substitute material shall not relieve the Contractor of responsibility for total compliance with the Plans and Specifications. The Contractor shall pay all costs for modifications resulting from the approved substitution of material. There shall be no cost to the District resulting from any substitute material.
- (c) **Substitution Request.** Request for a material substitution shall be submitted promptly to the District Representative in writing at least ten (10) working days prior to the day approval is required so as not to delay the work.

ARTICLE 40. MATERIALS LIST.

When requested by the District Representative or District Inspector, the Contractor shall submit at least five (5) copies of catalog cuts, engineering data, etc., of materials which are proposed for the work. The materials list submitted shall include a description of the materials and their suppliers. No payment request shall be processed before the District Representative or District Inspector reviews and accepts the materials list.

ARTICLE 41. UNAVAILABLE OR LATE MATERIALS.

It is the responsibility of the Contractor to order and schedule delivery of materials in time to avoid construction delays. If any item is unavailable or will be delivered late, the Contractor shall immediately notify the District Representative. The Contractor must substantiate that materials were ordered in a timely manner. The District Representative may grant a contract time extension or consider a suitable material substitution for continuing the work.

SECTION VI: TIME LIMITS ON WORK

ARTICLE 42. WORK HOURS.

No work or equipment shall be started on a workday before 7 a.m. nor continue beyond 7 p.m. except when permitted by the Contract Documents, or agreed upon at the preconstruction meeting. Illegal work outside of these hours or on weekends and holidays shall be subject to a fine at double the rate of Liquidated Damages at the sole discretion of the District Representative. Regulations of local jurisdictions may alter these working hours.

ARTICLE 43. EXTENSIONS, DELAYS, SUSPENSION OF WORK.

- (a) **Written Application for Extension.** The Contractor may make written request to the District Representative for an extension of time to complete the Contract promptly following an occurrence of any one or more of the following:
 - (1) Delay due to work by the District or another contractor.
 - (2) Delay in delivery or availability of material, equipment, etc., if the Contractor can document that the material, equipment, etc., has been ordered with enough lead time for the manufacture or acquisition of the item.
 - (3) Labor dispute beyond the Contractor's control that affects work progress.
 - (4) A natural disaster that the District Representative concludes substantially damages completed work or stored material (provided the Contractor's neglect did not contribute to the damage).

- (5) **Unusual Inclement Conditions.** The Contractor shall submit the accumulated record mean values from climatological data filed by the U. S. Department of Commerce as part of the Contractor's claim for time extension due to inclement conditions, if an extended inclement weather season causes contract work delay.

The District Representative shall have sole discretion in the approval or denial of Contract time extensions.

- (b) **Liquidated Damages.** If the Contractor fails to complete the Contract within the Contract time plus approved extensions, the Contractor shall be liable to the District for the amount stated in ARTICLE 4 of the Agreement as liquidated damages and not as a penalty. This amount is agreed by all parties to be fair and reasonable. It is expressly agreed that it would be impracticable to fix the actual amount of damages.

Any money due the Contractor may be retained by the District to cover liquidated damages. Should retained money not be sufficient to cover damages, the District shall have the right to recover the balance from the Contractor or its sureties.

- (c) **Authorized Suspension.** Should the District Representative authorize a work suspension, the suspension time shall be added to the Contract time. Work suspended by the District shall not be deemed a waiver of the District's right to damages for non-completion.
- (d) **Delay Caused by District.** In the event the Contractor is delayed in the work by the District, the Contractor's compensation shall be limited solely to an extension of time. The Contractor agrees that in no event shall the Contractor be entitled to a monetary payment over and beyond that specified in the Contract plus approved change orders.
- (e) **Additional Work to Correct Delays.** If, in the opinion of the District Representative, the Contractor is not proceeding with the work as scheduled, upon written direction from the District Representative, the Contractor shall work (at no additional cost to the District) such overtime, additional shifts, Saturdays, Sundays or holidays required to correct delays. The Contractor shall, by the diligent pursuit of the work, ensure that the work will be completed within the Contract time.

SECTION VII: LABOR AND WAGES

ARTICLE 44. EMPLOYEES, WORK DAY, APPRENTICESHIP AND NON-DISCRIMINATION.

- (a) **Skilled Workers.** The Contractor and all subcontractors shall employ only workers skilled in the work.
- (b) **Character of Workers.** Anyone employed on the project by the Contractor or any subcontractor who in the opinion of the District Inspector is incompetent, disorderly, or acts improperly shall be, upon written notification, dismissed from the project and not employed on any part of the work.
- (c) **Lawful Working Day.** No worker shall labor more than eight (8) hours during any one (1) calendar day and more than forty (40) hours during any one (1) calendar week. Longer employment is permitted under the law and then only upon such terms, conditions and requirements as provided and fixed by law. For violation of this provision, as provided in California Labor Code ' 1813, the Contractor shall forfeit twenty-five dollars (\$25.00) for each worker employed in the execution of the Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work in violation of this provision.
- (d) **Apprenticeship Standards.** The Contractor shall comply fully with the requirements of California Labor Code ' 1777.5 regarding employment of registered apprentices. If the Contractor willfully fails to comply with this code section, the Contractor shall be denied the right to bid on any District contract for a period of one (1) year from the date of non-compliance determined by the California Administrator of Apprenticeship. When the District receives notice that the Contractor is not in compliance with apprenticeship standards, the District shall withhold from Contract payments fifty dollars (\$50) for each day the Contractor is not in compliance, which funds may be released to the Contractor upon order of the Administrator or upon completion of the Contract.
- (e) **Non-Discrimination.** The Contractor hereby certifies that it will not unlawfully discriminate in its employment with regard to race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, sex, sexual preference, or age; that all federal, state and local directives and executive orders regarding non-discrimination in employment will be complied with; and that the principle of equal opportunity in employment will be demonstrated positively and aggressively. The Contractor further certifies that it shall require the compliance of its subcontractors on the work with all of the provisions of this ARTICLE 44(e). The Contractor hereby acknowledges its understanding that this Contract may be canceled, terminated or suspended in whole or in part and the Contractor and/or its subcontractors declared ineligible for future contracts with the District, in the event the Contractor and/or its subcontractors are found in non-compliance with the terms hereof.

ARTICLE 45. WAGE SCALE.

- (a) **General Prevailing Wage Rates.** The current issue of the Director of the Department of Industrial Relations for the State of California GENERAL PREVAILING WAGE RATES for straight time, overtime, Saturday, Sunday, and holidays is herein incorporated as part of this Contract. These rates include employer payments for health and welfare, pension, vacation, travel time, subsistence pay and apprenticeship or training. Any and all revisions to the

GENERAL PREVAILING WAGE RATES that take effect during the Contract shall be adopted as part of this Contract. A copy of the GENERAL PREVAILING WAGE RATES is available for review at the office of the District Representative.

For those crafts or job classifications requiring special prevailing wage determinations, please contact the Division of Labor Statistics and Research, Prevailing Wage Unit, P.O. Box 603, San Francisco, CA 94101, (415) 703-4281.

Holiday wage rates shall apply to holidays recognized in the collective bargaining agreement of the particular craft or classification concerned.

The Contractor shall post Prevailing Wage Rates on job site.

The District will not recognize any claim for additional compensation because of payment by the Contractor of any wage above the prevailing wage rate. The possibility of wage increases is an element to be considered by the Contractor in determining its bid, and will not under any circumstance be considered as the basis for claims against the District.

- (b) Contractor and Subcontractors Compliance. The Contractor and each subcontractor shall pay general prevailing per diem wages (including holiday and overtime pay) to all of their workers on the project.
- (c) Penalty. The Contractor shall forfeit as penalty to the District five hundred dollars (\$500.00) for each calendar day or part day for each worker who is paid less than the general prevailing wage rates. The Contractor shall pay any worker who was paid less than general prevailing wage rate an amount equal to the difference between the prevailing wage rate and the amount paid to the worker per California Labor Code ' 1775.
- (d) Payroll Record Requirements. The Contractor and each subcontractor shall keep accurate payroll records showing the name, address, social security number, work classification, straight time and overtime hours worked each day and the actual per diem wages paid to each journeyman, apprentice or helper employed on the project per California Labor Code ' 1776. Payroll records shall be available for inspection at all reasonable hours by the District Representative and a copy shall be available to the employee, the employee's representative, the California Division of Labor Standards Enforcement and the California Division of Apprenticeship Standards. If a complaint is filed with the District or the Division of Labor Standards Enforcement alleging that the Contractor or subcontractor has paid less than prevailing wage on the project, the District shall withhold from payment requests to the Contractor an amount equal to one hundred and twenty-five percent (125%) of the amount claimed until the allegation is settled.

The Contractor and all subcontractors shall submit on forms approved by the District Representative a certified copy of their payroll records along with any and all payment request(s). Certified payrolls shall be current to within one (1) week of the payment request. No payment request shall be made by the District without current, complete and accurate certified payroll records on file with the District Representative. The District shall retain a copy of certified payroll records for ninety (90) calendar days after completion of the Contract. The District may charge a reasonable fee for copying any records.

SECTION VIII: CHANGE ORDERS

ARTICLE 46. WORK CHANGES.

- (a) District Right to Require Changes. The District reserves the right to require alterations, additions to and/or deletions from the work. If the District Representative determines that a change ordered by the District cause an increase or decrease in the Contractor's costs or time required for completing the Contract, appropriate adjustments to the Contract price and/or time shall be made. The Contractor shall not be entitled to any compensation for extra work or time to finish the Contract without a written directive from the District Representative or District Inspector. Failure to agree on an adjustment of the Contract price or time extension shall not excuse the Contractor from proceeding with the work as changed.
- (b) Contract Price Adjustments. Contract price adjustments for work covered by a change order shall be made as follows:
 - (1) Extra work compensation shall be computed on the basis of one or more of the following:
 - a. Unit prices, as shown on the Formal Bid Proposal.
 - b. Lump sum, as agreed upon by the District and the Contractor based on the estimated cost of the extra work plus fixed fees as follows.
 - 1. The estimated cost is the sum of the following:
 - A. Labor - Gross wages or salaries (including authorized overtime) of the Contractor and/or subcontractor employees directly employed on the extra work.
 - B. Labor Fringe Benefits - Additional direct labor expenses of workers (i.e., health & welfare, pension, vacation/holidays and training, and all benefits required by collective bargaining agreements).
 - C. Labor Surcharge - Additional Social Security and unemployment taxes as required by State and Federal laws (maximum 17.0% allowed).
 - D. Materials - Contractor furnished materials permanently incorporated by the extra work (including sales tax). The Contractor shall not gain from District furnished materials.
 - E. Miscellaneous - Specialized tools, appliances, implements, utilities, royalties, permits, inspections, fees, etc., exclusive to the extra work.
 - F. Equipment - On site equipment and rental equipment used in the extra work.
 - G. Bonds - Costs to cover additional payment and performance bond charges (maximum 1% allowed).

2. The "fixed fee" shall be a percentage of the estimated costs and shall constitute full compensation for all costs and expenses not listed above. These charges for overhead and profit shall not exceed the following:
 - A. Twenty percent (20%) of the estimated cost of labor.
 - B. Fifteen percent (15%) of the estimated cost of materials and miscellaneous costs.
 - C. Ten percent (10%) of the estimated cost of owned or rented equipment.
 3. The limits upon overhead and profit shall be as follows:
 - A. Overhead and profit for the Contractor or any subcontractor who has the work performed by a subcontractor or second tier subcontractor shall not exceed five percent (5%) of the extra work cost.
 - B. Overhead and profit for all contract tiers shall never exceed fifteen (15%) of the actual extra work.
 - C. The responsibility of distributing extra work overhead and profit among contractor tiers rest solely with the Contractor.
 4. Upon Award of Contract, at the Preconstruction Meeting, the Contractor may request in writing, the District Representative to approve higher costs for Labor Surcharge and Bonds. The District Representative shall review the required costs and promptly notify the Contractor of his decision. The District Representative's determination of allowable costs shall be final and binding.
- c. Time and Materials, as observed and agreed upon, on a daily basis by the District Inspector and the Contractor for labor, materials and equipment used to accomplish the extra work. This daily log shall be signed by both parties and will be the basis for a subsequent change order. The District Representative's determination of allowable costs shall be final and binding. Labor rates to be prevailing wages.

(2) For work deleted, the reduction in the Contract price shall be computed as follows:

- a. Unit price(s).
- b. A lump sum agreed upon by the Contractor and the District Representative based on the estimated cost of the deleted work. No fixed fee shall be added to the estimated cost.
- c. If the parties are unable to agree on the reduction in the Contract price, the District Representative shall make a final and binding determination of the reduction in price based upon the estimated cost savings to the Contractor.

(c) Contract Time Adjustments. Adjustments in time allowed for completion of the work due to change orders shall be made by one of the following:

- (1) Agreed time extension or reduction.
- (2) If the parties are unable to agree on the time extension or reduction, the District Representative shall make a final and binding determination of the time extension or reduction allowed for the change.

ARTICLE 47. CLAIMS FOR EXTRAS.

If the Contractor claims that any instructions received from the District involve extra cost or time, the Contractor shall give the District Representative written claim for extra work before proceeding with the work. No oral statement of any person whomsoever shall in any manner or degree modify or otherwise affect the terms of this Contract.

SECTION IX: PAYMENT PROVISIONS

ARTICLE 48. CONTRACT PRICE BREAKDOWN.

The Contractor shall submit to the District Representative a Contract Price Breakdown, itemizing the estimated cost of each division of work together with the Contractor's allowance for profit, insurance and overhead expense. The total shall equal the Contract price. The breakdown, when approved by the District Representative, shall be the basis for determining the value of work performed for the purpose of executing monthly payment requests. Should the Lump Sum Bid be sufficiently itemized, it may serve as the Price Breakdown.

ARTICLE 49. PAYMENT REQUESTS.

The Contractor shall submit three (3) copies of a monthly payment request based upon ARTICLE 48, Contract Price Breakdown to the District Representative on forms provided by the District. Data substantiating the Contractor's right to payment may be required. Payment requests shall be made for work completed and materials delivered and properly stored at the site during the month. Payment for materials stored at the site shall be supported by documentation from the Contractor establishing District's title to the materials. Contractor shall obtain approval of payment amounts from District Inspector prior to submittal of payment request.

ARTICLE 50. PAYMENT

- (a) **Monthly Payment Requests.** When the Contractor submits a monthly payment request, the District Representative shall issue payment to the Contractor for the amount the District Representative agrees is properly due.
- (b) **Monthly Payment Request Not Acceptance of Work.** Monthly payment requests shall not be considered as acceptance by the District of the whole or any part of the work done up to that payment.
- (c) **10% Retention.** Following approval by the District Representative of the Contractor's payment request, the District shall retain as security for the fulfillment of the Contract, ten percent (10%) of the approved amount of the payment request.
- (d) **Substitute Securities.** The Contractor may elect to substitute securities for monies withheld by the District to ensure the performance of the Contractor. The evaluation, handling, and deposition of substituted securities shall be as set forth in the California Public Contract Code '22300.
- (e) **Final Retention Payment.** After acceptance of the work, the Contractor shall submit to the District Representative a request for the retained funds. The retained funds of the total Contract price shall be paid (except as otherwise provided in these Contract Documents) thirty-five (35) calendar days after the date of the District's formal Notice of Acceptance of all work under the Contract and the receipt of all waivers and releases from subcontractors and suppliers.
- (f) **Agreement to Assign.** In compliance with the California Government Code '4552 and the California Public Contract Code '7103.5, the text of those codes are herein reproduced in full (understand the terms "Owner" and/or "Awarding Body" within this text is interpreted to mean the District.):

GC ' 4552--Submission of Bids: Agreement to Assign: In accordance with Section 4552 of the Government Code, Bidder shall conform to the following requirements. In submitting a bid to the Owner, Bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 USC Sec.15) or under the Cartwright Act [Chapter 2 (commencing with Section 16700) Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods, materials, or services by the Bidder for sale to the Owner pursuant to the bid. Such assignment shall be made and become effective at the time the Owner tenders final payment to the Bidder.

PCC ' 7103.5--In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to 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 USC Sec.15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

ARTICLE 51. PAYMENTS WITHHELD.

- (a) **Protection of Loss to District.** The District Representative may withhold or nullify the whole or part of any payment request to protect the District from loss on account of:
 - (1) Defective work not remedied.
 - (2) Third party claims filed or reasonable evidence indicating probable filing of claims.
 - (3) Failure of the Contractor to make payments properly owed subcontractors for materials, equipment or labor.
 - (4) Reasonable evidence that the Contract cannot be completed for the unpaid balance.
 - (5) Damage to the District or to another contractor.
 - (6) Default of the Contractor in the performance of terms of the Contract.
 - (7) Violation by the Contractor of the apprenticeship requirements or the prevailing wage rate described in SECTION VII of these General Conditions.
 - (8) Reasonable evidence that the work will not be completed within the Contract time.
- (b) **Claim by Subcontractor, Worker, Etc.** Any subcontractor, supplier of material or labor, worker or anyone having any claim against the Contractor for work done or material furnished on the work may give notice of such claim to the District, who may withhold up to 125% of the claim from payments due the Contractor until the claim is settled. The provisions of this ARTICLE 51(b) shall not lessen or diminish the right or duty of the District to withhold payments under the provisions of the laws of the State of California.

ARTICLE 52. CLAIMS.

- (a) **Evidence of Payments.** The Contractor agrees that upon request of the District Representative the Contractor shall submit a sworn statement setting forth the work done or material furnished by subcontractors and suppliers, and the amount due and to become due to each. Before the final payment the Contractor shall, if requested, submit to the District Representative a complete set of lien releases or vouchers showing payments made for materials and labor used in the work.
- (b) **Releases; Receipts.** When required, the Contractor shall deliver a copy of receipts to the District Representative and an affidavit that the receipts include all labor and material for which a claim could be filed. Neither the final payment nor the retained percentages will be due the Contractor before all required receipts are received. If any subcontractor refuses to furnish a receipt in full, the Contractor may furnish a bond satisfactory to the District that indemnifies the District against any claim, cost or damage, including all legal fees. The Contractor shall refund to the District all monies that the District may be compelled to discharge for any unsatisfied claim, including all costs and reasonable attorney's fees.

- (c) Claims Resolution. Claims between the Contractor and the District arising from contracts valued at \$375,000.00 or less, shall be governed by the provision of the California Public Contract Code § 20104 et seq. which provides special rules for meet and confer, mediation, and arbitration.

SECTION X: INSPECTION; TESTING; CORRECTIONS; GUARANTEE

ARTICLE 53. INSPECTION.

- (a) District Access. The District and its duly authorized agent(s) shall have unrestricted access to the work whether it is in preparation or in progress. The District and its duly authorized agent(s) shall at all times reserve the right to inspect and/or test for compliance with the Contract Documents any or all materials and/or work provided to or installed in the work. The Contractor shall provide safe and proper facilities for access and inspection.
- (b) Required Inspections and Testing. If any law, regulation, ordinance, public authority, specification or the District Representative requires any part of the work to be specially inspected or tested, the Contractor shall notify the District Inspector three (3) working days prior to the work's readiness for testing or inspection.
- (c) Inspection of Phases. The Contractor shall notify the District Inspector two (2) working days in advance of each phase set forth in the Plans or Specifications for inspection.
- (d) Work, Examination; Re-examination. The District Inspector may order and the Contractor shall comply with the examination or re-examination of work. The Contractor shall not cause any work to be covered or enclosed without approval of the District Inspector. Any work enclosed or covered before approval shall be uncovered. After inspection the Contractor shall restore all work to original condition at the Contractor's expense.
- (e) Overtime Inspection. The Contractor may request from the District Inspector to work on a Saturday, Sunday, legal holiday or past normal working hours as established at the preconstruction meeting, two (2) working days in advance. If approved, the Contractor shall pay all District expenses for providing this special inspection at the rate set by the District Representative. A minimum of eight (8) hours shall be charged for working on these special days, and they will be charged against the Contract time.

ARTICLE 54. TESTING/INSPECTION SERVICES.

- (a) District. The District Representative may require specialized test(s) and/or inspection(s) performed by an independent testing/inspecting service of its choice. The District shall pay for initial specialized test/inspection. The Contractor shall pay for any re-test/re-inspection that results from failing test or inspection due to nonconformity with Contract requirements.
- (b) Contractor. When the Contractor is required by Contract or regulation of government authority having jurisdiction over the work to provide certification by an independent testing/inspection service, the Contractor shall assume all costs. Any independent testing/inspection service proposed by the Contractor must be approved by the District Representative prior to employment. All tests required by the Contract shall be made promptly so as not to delay the work. The Contractor shall furnish three (3) copies of all resulting testing/inspection reports.

ARTICLE 55. CORRECTION OF WORK.

- (a) Removal, Replacement. The Contractor shall promptly remove from the site all materials or work rejected by the District Inspector. The Contractor shall promptly replace material or work without expense to the District and shall make good all work destroyed or damaged by removal of condemned work.
- (b) District Right to Remove Material, Deduct. If the Contractor does not remove rejected work or materials within a time prescribed by the District Inspector, the District may remove and store salvageable work or materials at the Contractor's expense. If the Contractor does not pay the expense of removal within five (5) calendar days, the District may after providing ten (10) calendar days' written notice, sell work or materials at auction or private sale. The District shall give an accounting of the net proceeds from the sale after deducting all costs and expenses including auction or sale expenses.

ARTICLE 56. DEDUCTIONS FOR UNCORRECTED WORK.

If the District determines not to require corrective work, the Contract price shall be reduced by an amount equal to the estimated cost of making the work conform to the Contract Documents as determined by the District Representative, plus an administrative fee of fifteen percent (15%) of that cost.

ARTICLE 57. AS-BUILT DOCUMENTS.

- (a) The Contractor shall maintain a complete and up-to-date set of As-Built drawings and supplementary documents which shall be corrected daily and show every change from the original drawings and specifications, as well as the exact locations, sizes and kinds of equipment as actually installed. This set of drawings and documents shall be kept on site and shall be used as a record set.
- (b) These drawings shall also serve as work progress sheets, and neat and legible annotations shall be made daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for inspection and shall be kept at the site in a location designated by the District Inspector.
- (c) Projects which are large and/or complex as determined by the District Inspector, or are largely underground such as utilities and

irrigation projects, and whose locations cannot be verified by reference to previous staking, shall be professionally surveyed, at Contractor's expense, when trenches are open and when locations and appurtenances can be positively identified, as approved by District Inspector.

- (d) The Contractor will meet on a regular basis with the District Inspector to confirm the correctness and completeness of As-Built documents. Under no circumstances shall trenches be backfilled until the As-Built plans have been verified by the District Inspector. If, in the sole opinion of the District Inspector, the contractor fails to provide accurate and verifiable information, a survey crew may be called in at the Contractor's expense.
- (e) No payment request will be processed until the District Inspector verifies that the As-Built documents are current and correct by initialing and dating said documents.
- (f) Before the date of the final inspection, the corrected and completed information shall be transferred to a clean, reproducible transparency provided by the District Inspector. This drawing shall be professionally drawn with good draftsmanship standards employed. Features which the As-Built entries are to replace shall be removed from the original transparencies and the resultant drawing shall contain only the information (alignments, grades, features, etc.) that details the work as actually constructed or installed.
- (g) Both the record set and reproducible sets shall be submitted to the District Inspector for review. Final payment shall be withheld until As-Built documents are accepted.

ARTICLE 58. FINAL INSPECTION AND ACCEPTANCE OF WORK.

- (a) When the work is complete and site cleaned of all debris and construction material, the Contractor shall request the final inspection from the District Inspector. The District shall make the final inspection within ten (10) calendar days, weather permitting. If it is determined that the Contract has been completed, the District Representative shall formally accept the work in writing. Upon acceptance, the Contractor shall be relieved of maintaining and protecting the work unless required otherwise by the Contract Documents. If the District determines that the work is not complete, the Contractor shall be notified in writing of the deficiencies and the procedure for final inspection shall again be initiated by the Contractor after the deficiencies are corrected.
- (b) The work may be substantially completed and accepted with a "minor" punch list as determined by the District Representative. The punch list items are to be completed within the 35 day retention period, otherwise the Contractor waives any and all rights to the retention monies withheld by the District necessary to complete these items. The District Representative may hire another contractor or District crews to complete the work. **All costs, including inspection costs and administrative costs for punch list items, will be charged against the monies withheld and deducted from the contract price.**

ARTICLE 59. GUARANTEE; CORRECTION OF WORK AFTER FINAL PAYMENT.

- (a) In addition to any guarantees required by the Plans and Specifications, the Contractor guarantees all work and materials furnished under this Contract against defects for one (1) year from the date of final acceptance. The Contractor shall be liable for all damages and income lost resulting from defects. The Contractor shall, within seven (7) calendar days from receipt of written notice, repair and/or replace any defects (ordinary wear and tear excepted) and any resulting damage at the Contractor's sole expense. In the event the Contractor fails to remedy any defects within seven (7) calendar days from receipt of written notice, the District may have defects remedied at the Contractor's expense. The Contractor shall pay the District for all costs, including an administrative fee of fifteen percent (15%) of that cost.

Nothing in this Contract shall relieve the Contractor from responsibility for latent defects, departures from the Contract, fraud or gross mistakes and damage resulting from any of the above.

- (b) When required by the Contract Documents, guarantees shall be in the form of the following, on the Contractor's own letterhead:

"GUARANTY-WARRANTY FOR _____"

We hereby warrant and guaranty that the _____ installed in the _____ has been done in accordance with the Plans and Specifications and that the work as installed will fulfill the requirements of the guaranty-warranty included in these specifications.

We agree to reimburse the District for any income lost and to repair or replace any or all of our work together with any other work which may be displaced by so doing, that may prove to be defective in workmanship or material within one (1) year from the date of acceptance of the above-named project by the District, without any expense whatsoever to the District, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with the abovementioned conditions within seven (7) calendar days after being notified in writing by the District, we, collectively and separately, do hereby authorize the District to have such defects repaired and made good at our expense, and will honor and pay all costs and charges, including the District's administrative fee of fifteen percent (15%) of the total cost, therefore upon demand.

Signed: _____

Subcontractor

Countersigned: _____

Contractor

SECTION XI; TERMINATION; ABANDONMENT

ARTICLE 60. TERMINATION FOR DEFAULT AND ACTS OF NATURE.

- (a) **Grounds.** The District may terminate this Contract for any of the following causes of Default or Acts of Nature:
- (1) The Contractor breaches any provision of the Contract.
 - (2) The Contractor makes an assignment to creditors.
 - (3) The Contractor files for bankruptcy.
 - (4) Appointment of a receiver due to the Contractor's insolvency.
 - (5) In the sole opinion of the District Representative the Contractor fails to supply adequate or proper workers, materials, tools and equipment.
 - (6) The Contractor disregards written instructions from the District Inspector.
 - (7) In the sole opinion of the District Representative the Contractor refuses or fails to prosecute the work with the diligence that assures completion of work within the contracted time period.
 - (8) The work is damaged by earthquake or tidal wave as provided in ARTICLE 28(b).
- (b) **Notice.** The District shall give the Contractor and its sureties written notice when grounds for termination by Default exists. The notice shall set forth the Default and a time for correction. The Contractor's right to do the work shall automatically terminate if the Default is not corrected within the set time.
- (c) **District's Remedies.** Upon termination the District may: (1) require the Contractor's sureties to complete the work; or (2) take over the work and/or employ another contractor to complete the work. The District may use any and all materials, tools, equipment and appliances belonging to the Contractor which are on the project site and needed to complete the work.
- (d) **Payment after Termination.** If the District terminates the Contractor for Default, the Contractor shall not receive any payment before the entire work is complete and accepted by the District Representative. The District may assume and finish the work or hire another contractor to finish the work. The District will pay the Contractor any monies of the Contract (less retention) that remain after deducting for all damages and the full cost of finishing the work plus ten percent (10%) of said cost. The Contractor and/or the Contractor's sureties shall be liable to the District for all damages and cost plus ten percent (10%) of damage and cost above the Contract price.
- (e) Actions pursuant to this ARTICLE 60 shall not prejudice the District's other rights or remedies.

ARTICLE 61. ABANDONMENT.

- (a) **District's Right.** The District has the right to abandon or indefinitely postpone any part or all of the Contract at any time. The District Representative will give the Contractor written notice of abandonment specifying the extent and date of termination.
- (b) **Contractor's Obligation.** Unless otherwise directed in writing by the District Representative the Contractor shall after receipt of Notice of Abandonment:
- (1) Stop work under the Contract to the extent and date specified;
 - (2) Place no further orders for materials, services, or facilities except as required to complete the work not abandoned;
 - (3) Terminate and settle all orders and subcontracts that relate to the work abandoned;
 - (4) Settle all outstanding liabilities and claims arising out of abandonment to the satisfaction of the District Representative;
 - (5) Transfer title to the District and deliver as directed by the District Representative: all fabricated or unfabricated parts, works in process or complete, supplies, and all other materials produced or acquired in connection with the work abandoned; and complete or partly complete plans, drawings, information, and all other property required to be furnished to the District;
 - (6) Complete the work not abandoned;
 - (7) Protect and preserve property related to this Contract in the possession of the Contractor which the District has or may acquire; and
 - (8) Submit an application for final payment to the District Representative.
- (c) **Payment.** The District Representative shall issue payment to the Contractor for all work performed and materials provided plus any retention withheld up to the effective date of abandonment. Payment shall constitute the full amount due the Contractor by the District.

ARTICLE 62. ATTORNEYS' FEES.

Should either the District or the Contractor institute an action to enforce any of its rights hereunder, the prevailing party shall be entitled to reasonable attorneys' fees and the costs of said action as determined by the Court.

SECTION XII: MISCELLANEOUS

ARTICLE 63. ASSIGNMENT.

The Contractor shall not assign its rights or obligations under this Contract without the prior written consent of the District Representative, which consent shall not be unreasonably withheld. The Contractor shall not assign any monies due the Contractor without the written consent of the District. Any assignment or delegation without the written consent of the other party shall be void.

ARTICLE 64. EMERGENCIES.

In an emergency affecting the safety of life, the work or adjoining property, the Contractor shall take all necessary and proper steps to prevent any loss, injury or death. The Contractor shall make every effort to communicate with the District Inspector or the District Representative and may be guided by the directions and/or advice of the District Inspector or the District Representative. If the character of the emergency is such as to require action within a short time or circumstances render communication with the District impractical, the Contractor shall act independently and upon its own. The Contractor's emergency procedures will be subject to the direction and control of the District as soon as it is practical.

ARTICLE 65. TAXES.

The Contractor agrees and states that all taxes incidental to this Contract shall be paid by the Contractor and are included in the Contract price.

ARTICLE 66. FEDERAL MANUFACTURER'S EXCISE TAX.

The District is exempt from Federal Manufacturer's Excise Tax. The manufacturers of items subject to that tax are entitled to a refund or credit for such tax on presentation of the District's exemption certificate for items furnished exclusively to the District. The Contractor shall not be entitled to claim any additional monies for taxes paid where this exemption is available.

ARTICLE 67. ROYALTIES AND PATENTS.

The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims of infringement of any patent rights or trademarks and shall save the District harmless from all loss thereof.

ARTICLE 68. AGREEMENT TO ASSIGN.

- (a) The Contractor and Subcontractors offer and agree to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act or under the Cartwright Act, arising from purchases of goods, services, or materials. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgment by both parties.
- (b) If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under California Government Code § 4550 et seq., the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

ARTICLE 69. TITLES AND HEADINGS.

Titles and headings to Sections and Articles in the Contract Documents are introduced for convenience only and shall not be taken as a correct or complete segregation of the several units of materials and labor. No responsibility either direct or implied will be assumed by the District for omissions or duplications to the Contractor or any subcontractors due to real or alleged error in arrangement of material in the Contract Documents.

SUPPLEMENTARY CONDITIONS

01.1 General

- .1 The purpose of the Supplementary Conditions is to establish certain conditions particular to the control and execution of the work of this project. The priority of these Supplementary Conditions shall be as stated in Article 11 of the Agreement.
- .2 The General Conditions and the Supplementary Conditions shall apply to all the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

01.2 Summary of Work

- .1 In general, the work consists of the furnishing of labor, equipment, materials, transportation and services necessary, required, or properly incidental to:
 - a. Mobilization/Demobilization
 - b. Demolition
 - c. Well Destruction
 - d. Clearing and Grubbing
 - e. Earthwork
 - f. Pond Construction
 - g. Installation of Boulder Weirs
 - h. Installation of an Articulated Concrete Mat
 - i. Planting
 - j. Planting Maintenance
 - k. Installation of Fencing and Gates

01.3 Additional Definitions

- .1 Add to General Conditions, Article 2. Definitions, the following:
 - a. Engineer – any duly authorized engineer representing the East Bay Regional Park District, including a staff engineer or authorized consultant.

- b. Project Manager – The Project Architect, Landscape Architect, or Engineer. Authority of the Project Manager shall be to assure that all design issues are addressed and to meet with the Contractor and the District Inspector on site.

01.4 Permits and Regulations

- .1 Agencies having jurisdiction over the project include:
 - a. The District will obtain a grading permit from the Contra Costa County Department of Conservation and Development. Contractor shall comply with the conditions of the permit.
 - b. Contractor will obtain a permit from the Contra Costa County Environmental Health Department to remove and/or perforate the well casing and seal the existing abandoned well. Contractor shall comply with the conditions of the permit.
 - c. State of California, Department of Fish and Game. The District has submitted a “Notification of a Lake or Streambed Alteration” and requested a Lake and Streambed Alteration Agreement. Contractor shall comply with the conditions of the Agreement.
 - d. U.S. Army Corps of Engineers. The District has applied for a permit under Section 404 of the Clean Water Act. Contractor shall comply with the conditions of the permit.
 - e. San Francisco Bay Regional Water Quality Control Board. The District has applied for a permit under Section 401 of the Clean Water Act. Contractor shall comply with the conditions of the permit.
- .2 Contractor shall coordinate with the District to ensure that these conditions are met prior to initiation of construction.

01.5 Applicable Codes and Standards

- .1 The following Codes and Standards shall be adhered to in the fabrication and installation of facilities described in these drawings and specifications. In the event of a conflict between pertinent codes and regulations and the referenced standards of these specifications, the provisions of the more stringent shall govern.
 - a. California Department of Transportation Standard Specifications. (Caltrans), latest edition. The system of measurements that will apply to this contract shall be the United States Standard Measures.

- b. Additional requirements of local, county, state and federal governments.

01.6 Indemnification

- .1 The following agencies shall be added to Article 8, "Contractor's Indemnification of the District", of the General Conditions, and whenever the District is named, so shall these agencies be named:
 - a. East Contra Costa County Habitat Conservancy

01.7 Insurance Requirements

- .1 The following agencies shall be required to be included as additional insured in accordance with Article 9, "Insurance Requirements", of the General Conditions, and whenever the District is named, so shall these agencies be named:
 - a. East Contra Costa County Habitat Conservancy

01.8 Superintendent (this section is in addition to Article 11)

- .1 Qualifications. The superintendent (or competent assistant) shall be an employee of the Contractor and shall be shown on the Contractor's certified payroll. The Contractor shall not be allowed to designate a Subcontractor as the superintendent.

01.9 Safety Precautions and Public Convenience

- .1 Staging areas shall be set up in areas indicated on the plans and/or as approved by the District. These areas shall be closed to the public during construction. Contractor shall be responsible to ensure that the public has no access into the construction area. Contractor shall install barricades accordingly.
- .2 Speed limit on work site property is 10 m.p.h. Contractor shall post speed limit signs and direction signs for truck traffic as needed.
- .3 Contractor shall be responsible for preventing unauthorized access to the site throughout construction. Gate shall be locked at the end of each work day.

01.10 Environmental Protection

- .1 The Contractor's attention is directed to Article 20, "Project Cleanliness," Article 21, "Water and Air Pollution," and Article 23, "Hazardous Materials," of the General Conditions.

- .2 Projects in the East Contra Costa County Habitat Conservation Plan/Natural Communities Conservation Plan inventory area are required to conduct planning surveys for land cover types prior to construction. The presence of particular land cover types or species habitat elements may trigger preconstruction surveys, notification requirements, construction surveys/monitoring, or avoidance and minimization measures. If surveys conducted by the District determine presence of a covered species or cover type, the installation of temporary fencing to protect these areas may be required. Temporary protection fencing, in addition to what is shown on the drawings, will be installed by the Contractor according to the unit rate as directed by the District.
- .3 Contractor shall take all precautions necessary to prevent any stream contamination, including crossing the creek only at the designated crossing and only allowing equipment in the creek in areas where in channel grading is occurring.
- .4 Contractor shall confine equipment to designated construction and maintenance access routes, as identified on the plans and in accordance with Article 01.24, to ensure that the overall area of impact is minimized to the maximum extent feasible. No construction equipment or vehicles shall enter, cross, or otherwise disturb the creek in areas where grading is not occurring.
- .5 Contractor shall park equipment over drip pans or absorbent materials.
- .6 The Contractor shall implement measures to reduce construction noise including: ensuring that all construction equipment has sound-control devices at least as effective as those originally supplied by the manufacturer, and that no equipment with an un-muffled exhaust is operated; prohibiting unnecessary warming up, idling, or engine revving of gas or diesel powered equipment or vehicles; and limiting the amount of equipment in use at any one time.
- .7 All asphalt, concrete, wood, metal and other deleterious materials removed shall be disposed of off-site in a lawful manner.
- .8 The Contractor shall store all materials that are potential construction pollutants from the Contractor's operations in a lawful manner. The Contractor shall not fuel, service or make repairs to any equipment or vehicles within 200-feet of the top of bank of a tributary draining into the stream or the stream itself.
- .9 The California State Water Resources Control Board, San Francisco Bay Region has jurisdiction over the project storm water discharges.
 - a. The District will submit a Notice of Intent (NOI) and obtain a waste discharger identification number (WDID) from above agency.

- b. The Contractor shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the District in conformance with California State Water Resources Control Board No. 92-08 DWQ for discharges of storm water runoff associated with construction activity. No Contract work shall begin at the site until the District has reviewed and approved the plan. Principal elements of the plans shall include at minimum the following Best Management Practices items.
- (1) Identification and protection of all drainage swales, creeks, and streams at or near the construction site and the appropriate measures to prevent sediment and pollutants from entering them.
 - (2) Use of erosion control materials that are certified free of noxious weed seed, and contain biodegradable mesh.
 - (3) Proper storage of potential pollutants.
 - (4) Proper containment and cleanup procedures for accidental spills. Adequate materials for proper containment and cleanup shall be stored at the site.
 - (5) Proper waste disposal methods.
 - (6) Development of designated and contained washout areas for concrete.
 - (7) On-site vehicle wash and designated on-site refueling area with spill containment in a bermed area at least 200 feet away from the existing stream channel only if it is necessary to fuel equipment on-site.

01.11 Fire Hazards and Preventions

- .1 The following language from the Public Resources Code shall be added to Article 25 of the General Conditions:

4427. During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate, which is located on or near any forest-covered land, brush-covered land, or grass-covered land, without doing both of the following:

(a) First clearing away all flammable material, including snags, from the area around such operation for a distance of 10 feet.

(b) Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.

This section does not apply to portable power saws and other portable tools powered by a gasoline-fueled internal combustion engine.

4431. During any time of the year when burning permits are required in an area, pursuant to this article, no person shall use or operate or cause to be operated in the area any portable saws, auger, drill, tamper, or other portable tool powered by a gasoline-fueled internal combustion engine on or near any forest-covered land, brush-covered land, or grass-covered land, within 25 feet of any flammable material, without providing

and maintaining at the immediate locations of use or operation of the saw or tool, for firefighting purposes one serviceable round point shovel, with an overall length of not less than 46 inches, or one serviceable fire extinguisher. The Director for Forestry and Fire Protection shall by administrative regulation specify the type and size of fire extinguisher necessary to provide at least minimum assurance of controlling fire caused by use of portable power tools under various climatic and fuel conditions.

The required fire tools shall at no time be farther from the point of operation of the power saw or tool than 25 feet with unrestricted access for the operator from the point of operation.

4435. If any fire originates from the operation or use of any engine, machine, barbecue, incinerator, railroad rolling stock, chimney, or any other device that may kindle a fire, the occurrence of the fire is prima facie evidence of negligence in the maintenance, operation, or use of such engine, machine, barbecue, incinerator, railroad rolling stock, chimney, or other device. If such fire escapes from the place where it originated and it can be determined which person's negligence caused such fire, such person is guilty of a misdemeanor.

4442. (a) Except as otherwise provided in this section, no person shall use, operate, or allow to be used or operated, any internal combustion engine which uses hydrocarbon fuels on any forest-covered land, brush-covered land, or grass-covered land unless the engine is equipped with a spark arrester, as defined in subdivision (c), maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire pursuant to Section 4443.

(b) Spark arresters affixed to the exhaust system of engines or vehicles subject to this section shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

(c) A spark arrester is a device constructed of non flammable materials specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.

(d) Engines used to provide motive power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code.

(e) Turbo charged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbo charger is in effective mechanical condition.

01.12 Contractor's Transportation and Access

- .1 Ingress/egress to the project site shall be via Armstrong Road as shown on the drawings, or as approved by the District.
- .2 Contractor is responsible for any damage along the construction access during the course of construction.

01.13 Cultural Resources

- .1 If cultural resources or human remains should be encountered during construction, all ground disturbing activities shall be halted and the District notified immediately. Work shall not be permitted to commence until the District has taken corrective measures.

01.14 Protection of Work and Property (this section is in addition to Article 27)

- .1 Contractor shall provide and maintain protective devices on all pavement and concrete surfaces to protect surfaces. In the event of damage to pavement or concrete surfaces, Contractor shall be responsible for prompt repair to the satisfaction of the District.

01.15 Recycling

- .1 The Contractor shall implement the Construction and Demolition Debris Waste Reduction and Recycling Requirements required by local permitting agencies.

01.16 Temporary Utilities and Sanitary Facilities

- .1 All utilities, including sanitary facilities, shall be provided by the Contractor at the Contractor's expense in accordance with Article 26 (f), "Temporary Utilities and Facilities", of the General Conditions.

01.17 Survey and Layout (this section supersedes Article 37 of the General Conditions)

- .1 Benchmark locations, coordinates and elevations are provided on the drawings. Contractor shall be responsible for all construction surveying and layout.
- .2 In accordance with Chapter 15, Article 3, and Section 8726 (a) and (b) of the Business and Professions Code, the District requires that all engineering surveying be under the direct supervision of a California Professional Land Surveyor (or a person registered to practice Land Surveying in the State of California).
- .3 The name, address, phone number and the registration number of the Professional Land Surveyor who will be in charge shall be furnished to the District at the preconstruction meeting. The Land Surveyor shall be responsible for the correct determination of all protection areas as identified on the plans, lines, grades, distances and elevations.
- .4 The Surveyor shall re-establish all existing control points damaged or removed during construction, and no additional compensation will be allowed therefore. Surveyor shall provide a report to the District documenting any such changes.
- .5 The District reserves the right to perform quality control surveys to insure conformance with contract specifications as deemed necessary or appropriate by the District Surveyor or District Inspector. Contractor shall render whatever assistance necessary to allow access by the District survey crew at no additional cost to the District.
- .6 The plans as needed for layout may also be provided in an electronic format (AutoDesk Civil 3D version 2007 or higher) as a courtesy to the layout surveyor. The District will not be responsible for any modifications to the electronic files by others or for any errors or omissions found within the files. The delivery of the electronic files does not constitute the official contract plans or drawings. In the event of any questions or discrepancies

between the electronic drawings files and the approved plans, the paper plans will prevail.

01.18 Materials

- .1 Each manufacturer's name, catalog number and trade name mentioned in this specification shall be deemed to be followed by the words "or equal".
- .2 Whenever such terms as "per manufacturer's specifications" are used, they shall mean in strict accordance with the printed directions. If these directions conflict with these specifications it shall be brought to the attention of the District and the District's instructions shall be obtained before proceeding with the work.
- .3 All materials shall be new and in perfect condition.
- .4 Material delivery, storage and handling:
 - a. Deliver all materials in a timely manner to insure uninterrupted progress of the work.
 - b. Store in such a manner as will preclude damage thereto and permit ready access for inspection and identification of each shipment.

01.19 Submittals

- .1 This requirement modifies submittal requirements in Information for Bidders paragraph 3.(c) and General Conditions, Article 14.(a) and (c).
 - a. Upon receipt of the written Notice of Award of Contract, Contractor shall prepare a submittal schedule (material submittals, certifications, and samples) and submit the schedule to the District at the preconstruction meeting for review. Submittals shall be delivered to the District in accordance with the submittal schedule.
- .2 Submittals shall be required for all substitutions.
 - a. Each requested substitution shall be identified with the specified item it is intended to replace.
- .3 Refer to each division of the Technical Specifications for additional submittal requirements.
- .4 Submit three (3) copies of each submittal to the District for written approval. Only those materials and items of equipment so approved by the District shall be used.
- .5 Submittals shall contain the following technical data:

- a. Tag, mark, or number by which item is identified by this Contract.
 - b. Complete documentation and comparison of proposed unit relating to all of the specified features, complete dimensional data, view, drawings and construction details.
 - c. Complete installation, performance and technical data.
 - d. Manufacturer's sales literature.
 - e. Certification listings.
 - f. Installation/operation/maintenance manuals.
 - g. Any exceptions to the Contract Documents shall be clearly indicated.
- .6 All submittals, including material provided by subcontractors, shall be reviewed by the Contractor prior to submittal to the District. Submittals not signed by the Contractor will be returned without review.
- .7 The Contractor shall provide the following submittals to the District for review and approval in accordance with this Section.
- a. Storm Water Pollution Prevention Plan (also see 01.10.96)
 - b. Construction Operations Plan

01.20 Changes to Plans and Specifications

- .1 No changes shall be made to the plans and specifications unless approved in writing by the District. All requests for changes shall first be made on a Request for Information (RFI) form to the District. Any items on the approved plans and specifications which are not completed by the contractor shall be considered as dollar credits to the District. The actual dollar amount of the credit shall be determined by the District.

01.21 Weekly Meetings

- .1 The Project Manager and District may meet weekly with the Contractor. Discussions resulting in proposed changes to the construction documents shall be submitted by the Contractor as a Request For Information to the District.

01.22 Electronic Documents

- .1 The District may supply Electronic Documents to the Contractor. These documents are provided at the District's option for the convenience of the Contractor. The Contractor may request Electronic Documents for a specific use; the Documents may not be used for any other purpose. Electronic Documents are superseded by the paper Contract Documents.

The Contractor shall carefully examine and compare Electronic Documents with the Contract Documents, notify the District of any discrepancies or inconsistencies, and obtain written clarification from the District before proceeding with the work.

- .2 Electronic Documents may not scale accurately and may vary significantly from the Contract Documents. The Contractor is advised against using Electronic Documents to produce prints.

01.23 Work Schedule

- .1 Contractor shall begin Mobilization and Earthwork (Erosion Control, Demolition, Earthwork, Pond Construction, Boulder Weir, and Concrete Mat) upon receipt of written Notice to Proceed.
- .2 Contractor shall begin Planting on November 2, 2009.
- .3 Well Destruction and Fencing may be performed during either Earthwork or Planting.
- .4 Contractor shall schedule/order work so as not to damage previously installed work.
- .5 The Contractor's attention is directed to Article 15, "Work Schedule," of the General Conditions.
- .6 The District shall have the right to temporarily suspend work at the site if in the sole judgment of the District, the weather and site conditions are not suitable for the proper execution of the work.

01.24 Construction Operations Plan

- .1 The Contractor shall **submit** a detailed plan describing the proposed methods of general operations, demolition, excavation, filling, and planting for approval by the District. At a minimum, the plan shall include:
 - a. A list of major equipment to be used.
 - b. A diagram of the site showing the plan of operation for excavating and filling, and transporting material, including construction and maintenance access routes.
 - c. Proposed work outside of regular working hours.
 - d. Dewatering plan.
 - e. Location of proposed equipment, materials, and vehicle storage and maintenance area.

01.25 Cleanup

- .1 In order to minimize traffic hazards and public nuisance arising out of Contractor's operations, Contractor shall ensure that adjacent improved surfaces stay free and clean of silt, tracked mud, dust, etc., coming from or in any way related to construction.
- .2 The District Inspector may determine that a traffic hazard or public nuisance requires an immediate cleanup. Such immediate corrective measures shall be at the expense of the Contractor.

01.26 Water Pollution

- .1 Installation of boulder weirs in the stream channel may require temporary dewatering of the immediate in-channel work area. Water pumped from the inchannel work areas is allowed to be discharged onto the adjacent floodplain. Hay bales, silt fences or other Best Management Practices (BMPs) shall be implemented to contain the discharge on the floodplain and prevent sediment inputs into the creek channel.

01.27 Utilities

- .1 The Contractor's attention is directed to Article 26, "Utilities," of the General Conditions.
- .2 The Contractor shall be aware of existing overhead electrical lines within the work site. Contractor shall maintain clearance to these lines in accordance with PG&E requirements.

01.28 Change Orders

- .1 This section modifies Article 46 of the General Conditions.
- .2 Contract Price Adjustments.
 - a. Lump Sum
 - (1) Labor rates shall be prevailing wage as verified by contractors certified payroll.
 - (2) Labor surcharge shall be as shown in the Cal Trans Labor Surcharge and Rental Rates.
 - (3) Bond markup shall be the actual rate determined by the cost of the performance bond divided by the total contract bid value.
 - (4) Equipment rates for contractor owned equipment shall be as shown in the Cal Trans Labor Surcharge and Rental Rates and for contractor rented equipment shall be the actual rental rate.

b. Time and Material

- (1) Costs shall be calculated the same as in a. above except that labor rates shall be prevailing wage as verified by contractors certified payroll and hours reconciled between the daily log and the certified payroll.
- .3 The Contractor's superintendent shall be considered an overhead employee and compensation shall be included in the 20% markup on the cost of labor; except, if the superintendent performs direct labor on the extra work (as approved by the District Inspector), compensation shall be in accordance with the applicable prevailing wage rate that governs that work activity.
- .4 All other conditions of Article 46 of the General Conditions shall remain in effect.

01.29 Contractor and Subcontractor Qualifications

- .1 The Contractor shall document the following experience:
 - a. Earthwork experience on projects involving the construction or restoration or enhancement of ponds or wetlands or creeks.
- .2 The Contractor or C27 Subcontractor shall document the following experience:
 - a. Experience seeding native grasses and planting native plants for a habitat restoration or creation project with a combined seeding and planting area greater than two (2) acres.
- .3 Document qualifying experience for a minimum of one (1) project, each completed within the last ten (10) years, representing each of the above types of work. Each reference shall be verifiable by the District via telephone and include current project contact information in the Formal Bid Proposal paragraph 3.a.

DESCRIPTION OF BID ITEMS

01.1 General

- .1 The General Conditions and Supplementary Conditions shall apply to all work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

01.2 Scope of Work

- .1 Furnish all labor, equipment, materials, storage, transportation and services required for the completion of the project in accordance with these Bid Documents.

01.3 Base Bid

- .1 The Base Bid shall include all work as shown on the drawings and/or described in the specifications. The responsibility for determining the quantities of work of the lump sum bid item rests with the Contractor.
- .2 The lump sum Base Bid are eleven (11) individual items as described below:
 - (1) Base Bid Item No. 1: Mobilization and Demobilization: As shown on the Plans and/or described in the Specifications.
 - (2) Base Bid Item No. 2: Erosion Control: As shown on the Plans and/or described in the Specifications.
 - (3) Base Bid Item No. 3: Demolition: As shown on the Plans and/or described in the Specifications.
 - (4) Base Bid Item No. 4: Well Destruction: As shown on the Plans and/or described in the Specifications.
 - (5) Base Bid Item No. 5: Earthwork: As shown on the Plans and/or described in the Specifications.
 - (6) Base Bid Item No. 6: Pond Construction: As shown on the Plans and/or described in the Specifications.
 - (7) Base Bid Item No. 7: Boulder Weirs: As shown on the Plans and/or described in the Specifications.
 - (8) Base Bid Item No. 8: Concrete Mat: As shown on the Plans and/or described in the Specifications.
 - (9) Base Bid Item No. 9: Planting: As shown on the Plans and/or described in the Specifications.

- (10) Base Bid Item No. 10: Barb Wire Fencing: As shown on the Plans and/or described in the Specifications.
- (11) Base Bid Item No. 11: Planting Maintenance: As shown on the Plans and/or described in the Specifications.

01.4 Unit Price Items

- .1 Each Unit Price Item shall include all work as shown on the plans and/or described in the specifications. The responsibility for determining the quantities of work for each Unit Price Item rests with the Contractor.
- .2 Unit Prices may be used by the District to add or deduct work during the period of the Contract, at the sole discretion of the District. The unit prices shall be for adding or deleting items from the total contract amount, as awarded.
- .3 The Unit Price Items are fourteen (14) individual items as described below:
 - (1) Unit Price Item No. 1: Cost to remove and dispose of ten (10) linear feet of barbed wire fencing as shown on the Plans and/or described in the Specifications.
 - (2) Unit Price Item No. 2: Cost to remove and dispose of one (1) downed utility pole as shown on the Plans and/or described in the Specifications.
 - (3) Unit Price Item No. 3: Cost to clear and grub (100) square feet as shown on the Plans and/or described in the Specifications.
 - (4) Unit Price Item No. 4: In-place cost for ten (10) linear feet of temporary protection fencing as shown on the Plans and/or described in the Specifications.
 - (5) Unit Price Item No. 5: In-place cost for ten (10) linear feet of fiber rolls as shown on the Plans and/or described in the Specifications.
 - (6) Unit Price Item No. 6: Cost to loosen one-hundred (100) square feet of soil with flared-end shank as shown on the Plans and/or described in the Specifications.
 - (7) Unit Price Item No. 7: In-place cost for one (1) stream boulder as shown on the Plans, described in the Specifications, and/or directed by the District.
 - (8) Unit Price Item No. 8: In-place cost for one (1) square foot of concrete mat with sub-base and fabric as shown on the Plans and/or described in the Specifications.

- (9) Unit Price Item No. 9: In-place cost for one-hundred (100) square feet of hand broadcast seed as shown on the Plans and/or described in the Specifications.
- (10) Unit Price Item No. 10: In-place cost for eight (8) plug plantings as shown on the Plans and/or described in the Specifications.
- (11) Unit Price Item No. 11: In-place cost for one (1) container planting as shown on the Plans and/or described in the Specifications.
- (12) Unit Price Item No. 12: Cost for one (1) week of plant maintenance as shown on the Plans and/or described in the Specifications.
- (13) Unit Price Item No. 13: In-place cost for ten (10) linear feet of barb wire fencing as shown on the Plans and/or described in the Specifications.
- (14) Unit Price Item No. 14: In-place cost for one (1) vehicle gate as shown on the Plans and/or described in the Specifications.

INDEX

TECHNICAL SPECIFICATIONS

<u>DIVISION</u>		<u>NUMBER OF PAGES</u>
01	MOBILIZATION AND DEMOBILIZATION.....	1
02	DEMOLITION.....	2
03	WELL DESTRUCTION.....	2
04	EARTHWORK.....	2
05	POND CONSTRUCTION.....	3
06	BOULDER WEIRS.....	2
07	CONCRETE MAT.....	2
08	PLANTING.....	6
09	BARB WIRE FENCING.....	7

DIVISION 01: MOBILIZATION AND DEMOBILIZATION

01.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

01.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Mobilization
 - b. Demobilization

01.3 Submittals

- .1 None

01.4 Materials

- .1 None

01.5 Workmanship

- .1 Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all other facilities necessary for work on the project; and for all other work and operations which may be performed or costs incurred prior to beginning work on the project site.
- .2 Demobilization shall consist of all work required to prepare personnel, equipment, facilities, supplies, and incidentals for return trip, and removing the same from the project site at the completion of the contract work, including cleaning up any staging and storage areas used in the execution of the work, and restoring these areas and any access roads to pre-existing conditions.
- .3 The Contractor's equipment used to perform this work shall be of sufficient size and efficiency to meet all job requirements and will be subject to approval by the District.

DIVISION 02: DEMOLITION

02.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

02.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Removal and disposal of fence posts, downed utility poles, fence wire, corrugated metal pipes, water tanks, and related items as shown on the drawings.
 - b. Salvage, stockpile and protect specified soil salvage material.
 - c. Installation and removal of temporary protective fencing.
 - d. Installation of fiber rolls.

02.3 Submittals

- .1 Dewatering plan.
- .2 Product data for fiber roll and stake.

02.4 Materials

- .1 Water for dust control and grouting as provided by the Contractor.
- .2 Temporary protection fencing shall be orange plastic fencing made of high-density polyethylene resin with approximate mesh opening of 1 by 4 inches and minimum height of 4 feet.
- .3 Fence posts for temporary protection fencing shall consist of 6.5-foot, 1/2-inch rebar posts with protective caps, or equivalent pickets.
- .4 Fiber rolls shall be 9-inch diameter, 100% rice straw, with jute, or other biodegradable mesh covering. Fiber rolls shall be certified free of noxious weed seed.
- .5 Stakes shall be wood, 2 feet long, 1-inch by 1-inch wide. The stake top shall be cut flat, and the bottom shall be cut at a 45° angle.

02.5 Workmanship

- .1 Contractor shall use water for dust control as required during demolition work in accordance with Article 21 of General Conditions.
- .2 Prior to beginning demolition, to protect the areas from construction activities, the Contractor shall install temporary protective fencing around areas to be protected, as shown on the drawings. Fence posts shall be 5-foot on center, driven into the ground a minimum of 12 inches. The fencing shall be inspected and approved by the District before demolition begins. Additional temporary protective fencing not shown on the drawings shall be installed as directed by the District according to the unit rate. Following completion of all construction work and acceptance by the District, Contractor shall remove all protective fencing as directed by the District.
- .3 Prior to beginning demolition, the Contractor shall install fiber rolls according to the manufacturer's specifications, and as shown on the drawings to prevent discharge of sediment into the stream channel.
 - a. The installed fiber rolls shall be inspected and approved by the District before demolition begins.
 - b. Contractor shall maintain fiber rolls through the duration of the contract to prevent sediment from discharging into the stream channel. Contractor shall not be responsible for removing fiber rolls following completion of the contract.
- .4 Contractor shall excavate and remove and dispose of off-site in a legal manner the corrugated metal pipes shown on the drawings. Excavation will be in accordance with OSHA requirements for work in open excavations.
- .5 Contractor shall strip and salvage the upper 6 inches of organic material and soil from existing wetlands, as shown on the drawings. Salvaged material shall be stored at the staging area, as shown on the drawings, or in another location within the work area approved by the District. The height of the material stockpiles shall be limited to 3 feet to prevent compaction and maintain viability of the salvaged material. Stockpiled salvaged soil material shall be protected from wind and water erosion.
- .6 The Contractor shall remove and dispose of off-site in a legal manner, all fence posts, downed utility poles, water tanks, fence wire, and related items as shown on the drawings.

DIVISION 03: WELL DESTRUCTION

03.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

03.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Obtain Well Destruction Permit from Contra Costa County Environmental Health.
 - b. Destruction of abandoned well shown on the drawings by a contractor with a C57 License.

03.3 Submittals

- .1 Contra Costa County Well Destruction Permit.
- .2 C-57 California State Well Contractors License.

03.4 Materials

- .1 Water for dust control and grouting as provided by the Contractor.
- .2 Neat cement grout shall consist of Portland cement mixed with water (94 pounds cement mixed with 6 gallons of water).

03.5 Workmanship

- .1 Contractor shall use water for dust control as required in accordance with Article 21 of General Conditions.
- .2 Well destruction shall be conducted in accordance with the California Well Standards Bulletin 74-90 and Contra Costa County permit conditions.
- .3 Excavation will be in accordance with OSHA requirements for work in open excavations.
- .4 Contractor shall remove any obstructions from the abandoned well.
- .5 Contractor shall excavate an area at least one-foot in diameter around the casing to a depth of 6 feet, and remove or perforate the well casing to the bottom of the well. If the well casing is removed, Contractor shall dispose of it off-site in a legal manner.

- .6 Contractor shall place neat cement grout from the bottom of the well up to the surface. During the sealing operation, the neat cement grout shall be allowed to spill over into the excavation to form a cap.

DIVISION 04: EARTHWORK

04.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

04.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Clearing, grubbing, and grading the project site to the contours and elevations shown on the drawings.
 - b. Hauling and placing excess material in the designated spoils disposal areas as shown on the drawings.
 - c. Ripping and compacting seasonal wetland depressions.
 - d. Removing the existing dirt road, as shown on the drawings, by loosening the road surface in preparation for seeding (as described under Division 08, Planting).

04.3 Submittals

- .1 None.

04.4 Materials

- .1 Fill material excavated onsite
 - a. Fill material shall be generated from below the stripped layer.
 - b. Contain no stripped material and no more than 3-percent organic content by volume.
 - c. Contain no more than 15 percent (by weight) rocks or lumps greater than 2 inches in greatest dimension. Rocks or lumps shall be broken up and stones, pieces of crushed rock or lumps which cannot be readily broken up shall be removed to fulfill the above criteria.
- .2 Water supplied by Contractor.

04.5 Workmanship

- .1 Contractor shall layout the clearing and grubbing limits with lathe stakes 5 days prior to beginning site clearing for approval by the District.

- .2 Contractor shall strip the top 2" of soil and organic material from all areas to be graded or filled. Stripped material shall be spread out in the spoils areas adjacent to the work sites, as shown on the drawings, and covered with a minimum of 1-foot of spoils fill material.
- .3 Upon completion of clearing and grubbing, areas shall be left in a neat, clean condition to receive subsequent work.
- .4 Contractor shall construct all graded areas to meet finish grade as shown on the drawings, +/- 0.1 foot.
- .5 Contractor shall remove or break-up rocks or lumps greater than 2 inches in greatest dimension remaining on the surface after achieving finish grade.
- .6 Contractor shall place excess onsite material in spoils disposal areas adjacent to the work areas, as shown on the drawings, to achieve the contours and elevations shown on the drawings.
- .7 Contractor shall place spoil material in 6" maximum lifts and compact to 85% maximum compaction in accordance with ASTM Test Method D1557.
- .8 Contractor shall over excavate the wetland depressions by 6 inches, as shown on the plans. After final grading of the wetland depressions have been completed, the Contractor shall loosen the depression bottoms to a depth of 6 inches below finish grade. The Contractor shall loosen the soil using a dozer with an attached flared-end shank of the type used in agricultural operations. A sufficient number of shanks or a sufficient number of passes shall be made through the soil so that the shank(s) pass through the soil between 3 and 4 feet apart. Once the soil has been loosened in successive parallel passes in one direction, additional passes will be made at a 60 to 120 degree angle to the alignment of the first series of passes using the same equipment. Following soil loosening, the Contractor shall compact the depression bottoms to minimum of 90% relative density in accordance with ASTM Test Method D1557.
- .9 Upon completion of grading, Contractor shall loosen the existing road bed, as shown on the drawings, to a depth of 12 inches below existing grade. The Contractor shall loosen the soil using a dozer with an attached flared-end shank of the type used in agricultural operations. A sufficient number of shanks or a sufficient number of passes shall be made through the soil so that the shank(s) pass through the soil between 3 and 4 feet apart.
- .10 Dust control shall conform to Article 21 of General Conditions.

DIVISION 05: POND CONSTRUCTION

05.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

05.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Construction and compaction of pond berm and installation of geomembrane barrier and turf reinforcement mat.
 - b. Ripping and compaction of the pond bottom.

05.3 Submittals

- .1 Product data for High-Density Polyethylene (HDPE) geomembrane, turf reinforcement mat, geotextile pins, and wire staples.

05.4 Materials

- .1 Fill material excavated onsite
 - a. Fill material shall be generated from below the stripped layer.
 - b. Contain no stripped material and no more than 3-percent organic content by volume.
 - c. Contain no more than 15 percent (by weight) rocks or lumps greater than 2 inches in greatest dimension. Rocks or lumps shall be broken up and stones, pieces of crushed rock or lumps which cannot be readily broken up shall be removed to fulfill the above criteria.
- .2 80 mil High-Density Polyethylene (HDPE) geomembrane.
- .3 8.9 mm Landlok TRM 435 turf reinforcement mat, or equal.
- .4 U-shaped 8-gauge wire staples, 6 to 18 inches long.
- .5 Steel 1/16-inch diameter geotextile pins, 6 to 18 inches long, with 1 ½-inch steel washers at the head of the pin.
- .6 Water supplied by Contractor.

05.5 Workmanship

- .1 Contractor shall construct all graded areas to meet finish grade as shown on the drawings, +/- 0.1 foot.
- .2 Contractor shall place onsite fill material used to construct the pond berm, as shown on the drawings, in 6" maximum lifts and compact to minimum of 90% relative density in accordance with ASTM Test Method D1557.
- .3 Following construction of the pond berm, Contractor shall excavate a narrow trench in the center of the berm to insert the HDPE geo-membrane vertical barrier, as shown on the drawings. The membrane shall be placed a minimum of one-foot below the elevation of the pond bottom and anchored with geotextile pins, with washers, installed on 1-foot centers. The terminal end of the membrane shall be keyed a minimum of one-foot into the existing slope, as shown on the drawings. If more than one continuous sheet of material is used, adjacent sheets shall be overlapped by a minimum of one-foot. After installing membrane, contractor shall backfill trench with native fill material excavated onsite with 6" maximum lifts and compact to a minimum of 90% relative density in accordance with ASTM Test Method D1557.
- .4 Contractor shall install a turf reinforcement mat in the pond spillway, as shown on the drawings. Contractor shall excavate 6-inch wide by 12-inch deep key trenches at the upper and lower ends of the spillway, as directed by the District to anchor the ends of the mat. Longitudinal trenches 4-inches wide by 4-inches deep shall be excavated along the sides of the spillway to anchor the edges of the mat. Beginning at the downstream end (below the pond berm) of the channel place the mat in the anchor trench and secure with u-shaped wire staples placed on one-foot centers. Approximately 12 inches of the mat shall extend beyond the trench, beneath the mat in the upstream (next to the pond) direction. Contractor shall anchor the edges of the mat in the longitudinal trenches using u-shaped wire staples placed on one-foot centers. If more than one continuous sheet of material is used, adjacent sheets shall be overlapped by a minimum of 3 inches. The upstream material shall overlap the downstream material by a minimum of one-foot. Anchor by placing two rows of u-shaped wire staples at one-foot intervals across the overlap. Place two rows of wire staples on 6-inch centers at 30-foot intervals along the spillway to anchor the mat. Anchor the upstream terminus of the mat in the upstream anchor trench using u-shaped wire staples placed on one-foot centers. Approximately 12 inches of the mat shall be folded over the top of the mat in the downstream direction and anchored using -shaped wire staples placed on one-foot centers. All trenches shall be backfilled with native fill material excavated onsite in 6" maximum lifts and compacted to minimum of 90% relative density in accordance with ASTM Test Method D1557. Following installation of the turf reinforcement mat, spread and rake ½ inches of fine fill material into the mat to completely fill the voids in the mat. Smooth and level soil fill in order to just expose the top netting of the mat. Do not place excessive soil above the mat.

- .5 After final grading of the pond has been completed, the Contractor shall loosen the pond bottom to a depth of 6 to 12 inches below finish grade, as directed by the District. The Contractor shall loosen the soil using a dozer with an attached flared-end shank of the type used in agricultural operations. A sufficient number of shanks or a sufficient number of passes shall be made through the soil so that the shank(s) pass through the soil between 3 and 4 feet apart. Once the soil has been loosened in successive parallel passes in one direction, additional passes will be made at a 60 to 120 degree angle to the alignment of the first series of passes using the same equipment. Following soil loosening, the Contractor shall compact the pond bottom to a minimum of 90% relative density in accordance with ASTM Test Method D1557.
- .6 Dust control shall conform to Article 21 of General Conditions.

DIVISION 06: BOULDER WEIRS

06.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

06.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Installing J-hook boulder weirs, boulder cross-weirs, and boulder clusters.

06.3 Submittals

- .1 Analytic and material data for stream boulders.

06.4 Materials

- .1 Stream boulders
 - a. Stream boulders shall be 30 to 36 inches in size, measured across the median axis. The maximum axis length shall not exceed 2 times the minimum axis length.
 - b. Stream boulders shall be similar in color (tan or brown) to existing natural rock found on the project site.
 - c. Stream boulders will be clean, hard, durable, and rounded in shape, free of fractures, with a specific gravity of at least 2.5, and a minimum durability index of 52.
 - d. Angular and sub-angular rock, obtained by blasting or rushing larger rock, will not be acceptable.
- .2 Water supplied by Contractor.

06.5 Workmanship

- .1 Contractor shall install J-hook boulder weirs, boulder cross-weirs, and boulder clusters in the locations shown on the drawings. The District may make minor adjustments to the locations and grades of the boulder weirs in the field. Boulders shall be placed at the direction of the District.
- .2 The Contractor shall control water to provide suitably dry conditions to observe placement of boulders.

- .3 Contractor shall excavate the subgrade to a depth adequate to key stream boulders approximately 1 foot into the channel bed, as shown on the drawings. Stream boulders installed at the edges of the boulder weirs and clusters shall be abutted to the channel banks as shown on the drawings, and as directed by the District.
- .4 For J-hook and boulder cross-weirs, boulders shall be placed with gaps of 8 to 12 inches between boulders. For boulder clusters, boulders shall be abutted against each other and the channel bank, as shown on the drawings.
- .5 Boulder clusters shall be placed at intervals equal to 3 to 4 channel widths (45 to 60 feet).
- .6 Dust control shall conform to Article 21 of General Conditions.

DIVISION 07: CONCRETE MAT

07.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

07.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Installing an articulated concrete mat.

07.3 Submittals

- .1 Product data for the articulated concrete mat and filter fabric, including manufacturers certified test results.

07.4 Materials

- .1 Articulated concrete mat
 - a. Cellular interlocking concrete blocks 3.5 inches in thickness as manufactured by ARMORTEC, or equal.
 - b. Meet testing requirements in accordance with ASTM D 6684-01, Standard Specifications for Materials and Manufacture of Articulating Concrete Block (ACB) Revetment Systems.
- .2 Filter fabric
 - a. The geotextile fiber shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of propylene, ethylene, ester, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic, if necessary, to make the filaments resistant to deterioration due to exposure to ultraviolet light or heat. The edges of the geotextile fabric shall be finished to prevent the outer fiber from pulling away from the geotextiles.
 - b. Meet testing requirements in accordance with ASTM D 4632, ASTM D3786, ASTM D4833, ASTM D 4751, ASTM D4491, CWO-22125 and ASTM D5105.
- .3 Water supplied by Contractor.

07.5 Workmanship

- .1 Contractor shall excavate the subgrade to a depth equal to the thickness of the block to “key in” the blocks and ensure a smooth transition to the road grade. The area on which the filter fabric and cellular concrete blocks are to be placed shall be graded to provide a smooth surface to ensure close contact between the subgrade and the geotextile fabric, and between the geotextile fabric and the entire bottom surface of the cellular concrete. No holes greater than 1-inch in depth or grooves or depressions greater than 0.5 inches in depth with a dimension exceeding 1-foot in any direction shall be permitted. Where such areas are evident, they shall be backfilled to grade with compacted homogenous soil material. The subgrade shall be uniformly compacted to not less than 90% minimum compaction in accordance with ASTM Test Method D1557.
- .2 Dust control shall conform to Article 21 of General Conditions.
- .3 Contractor shall place the geotextile fabric directly on the prepared area, in close contact with the subgrade, and free of folds and wrinkles. The geotextile fabric shall be placed so that the upstream strip (closest to the remaining culvert) overlaps the downstream strip. Any joints shall be overlapped by at least 2 feet. The geotextile fabric shall extend at least one foot on all sides beyond the mat termination points.
- .4 The cellular concrete blocks shall be placed on the filter fabric in such manner to produce a smooth plane surface in close contact with the geotextile fabric. No individual block shall protrude more than one-half inch above the flat finished concrete block surface. To ensure that the cellular concrete blocks are flush and develop close contact with the geotextile fabric, the Contractor shall “seat” the blocks with a walk-behind mechanical roller.
- .5 Contractor shall backfill any side trenches to ensure an even transition between the mat and adjacent surfaces.
- .6 Contractor shall backfill the openings in the concrete blocks with native material free of rocks and debris and compact immediately following installation of the mat. The compacted fill shall extend from the filter fabric to 1 inch above the surface of the concrete block and shall contain no voids.

DIVISION 08: PLANTING

08.1 General

- .1 The General Conditions and the Supplementary Conditions shall apply to all of the work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

08.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings and as specified herein, including, but not limited to, the following:
 - a. Preparing the project site for planting.
 - b. Hand broadcast seeding with native and erosion control seed mixes using a rotary-type spreader and hydromulching.
 - c. Installing District-supplied plug and container plant material.
 - d. Placing onsite salvaged and District supplied soil material.

08.3 Submittals

- .1 Product data for wood cellulose fiber mulch, tackifier, and erosion control seed mix.

08.4 Materials

- .1 Native plugs and container plant material
 - a. All native plugs and container plant material will be supplied and delivered to the site by the District. Species, propagule type, and quantities are shown on the drawings.
- .2 Replacement plant material
 - a. All replacement plant material will be supplied and delivered to the site by the District.
- .3 Salvaged soil material
 - a. Onsite material salvaged by the Contractor during Demolition (see 02.5.5).
 - b. Offsite salvaged soil material shall be supplied by the District.
- .4 Native Grass seed mix

- a. The Native Grass seed mix shall be supplied by the District.
- .5 Wetland seed mix
 - a. The Wetland seed mix shall be supplied by the District.
- .6 Erosion Control Seed Mix
 - a. The erosion control seed mix shall be provided by the Contractor and shall consist of:
 - (1) Triticum X Agropyron 'Escort' (Escort sterile wheat) – 20 pounds per acre (pure live seed)
 - (2) Hordeum vulgare (Barley) – 30 pounds per acre (pure live seed)
- .7 Wood cellulose fiber mulch
 - a. Mulch shall be supplied by the Contractor. Mulch shall be produced from virgin or recycled wood fiber and shall be free of synthetic or plastic materials and chemical contamination. Water content of the mulch shall not exceed 15 percent of the dry fiber weight. Mulch shall be colored to contrast with the soil to which it is applied.
- .8 Tackifier
 - a. Tackifier shall be supplied by the Contractor. Tackifier shall be an organic substance in powder form and shall be psyllium-based and packed in clearly marked bags stating the contents of each package. All ingredients shall be biodegradable. The tackifier shall require no curing time, shall remain soft, and rewettable, and shall not inhibit seed germination.
- .9 Water supplied by Contractor.

08.5 Workmanship

- .1 Dust control shall conform to Article 21 of General Conditions.
- .2 After final grading has been completed, the Contractor shall disc the planting areas, as shown on the drawings, and other disturbed areas (i.e., equipment access routes) to a depth of 6 to 12 inches to prepare the areas for hydroseeding and plant installation. No discing shall be conducted in the pond bottom or wetland depression areas designated for placement of salvaged soil material.
- .3 Contractor shall place onsite salvaged soil material and District supplied soil material in excavated seasonal wetland depressions, as shown on the drawings and as directed by the District. During transport of salvaged soil material from stockpile locations to placement sites, Contractor shall

- minimize handling and compaction of material. The salvaged material shall be spread evenly to a depth of six inches. If necessary, the Contractor shall track-walk the area to pulverize the material so that no clod greater than 2 inches in diameter remains.
- .4 Following disking, Contractor shall broadcast seed the Upland/Grassland, as shown on the drawings, with the Native Grass seed mix by hand using a rotary-type spreader. Native grass seed mix shall be applied at a rate of 33 pounds of live seed per acre. Contractor shall broadcast seed Seasonal Wetland, Wetland Transition, and Emergent Wetland Margin planting zones, as shown on the drawings, with the Wetland seed mix by hand using a rotary-type spreader. Wetland seed mix shall be applied at a rate of 33 pounds of live seed per acre. Contractor shall broadcast seed the staging and spoils disposal areas, and the loosened road bed, as shown on the drawings, and equipment access routes and other areas disturbed by construction activities with the Erosion Control seed mix by hand using a rotary-type spreader. Erosion control seed mix shall be applied at a rate of 50 pounds of live seed per acre. Contractor shall drag the seeded areas using a chain, or other implement, to mix the seed into the top layer of the disked soil. Contractor shall apply mulch and tackifier in one operation at rates of 3,000 pounds per acre, and 120 pounds per acre, respectively, over the seeded areas. Areas where salvaged soil material has been placed shall not be seeded or hydromulched. All seeding and hydromulching shall be completed before plant installation.
 - .5 Where equipment access routes are required, the sequence of construction activities shall be coordinated to only allow equipment access prior to preparation of soils. Upon completion of soil preparation activities, no further vehicular traffic will be allowed other than equipment required for planting (e.g., truck mounted auger). If equipment access should become necessary, the access route shall be disked and fine graded again prior to seeding to eliminate any resulting soil compaction.
 - .6 At the time of delivery of the District-supplied plant material to the site by the nursery, the Contractor and the District will jointly inspect the material to ensure that they are the correct species and size, and are free of disease and insect infestation. Unacceptable plant material will be replaced by the District. Contractor shall provide the District with a minimum of 15 days advance notice when requesting delivery of plant materials to the work site.
 - .7 Contractor shall begin Planting on November 2, 2009. It is anticipated that by this time there will have been enough rain to support planting activities. If, in the opinion of the District, there has not been enough rain, planting shall be delayed. The delay will be considered a change to the contract.
 - .8 Handling and storage of plants delivered to the site by the District and accepted by the Contractor become the responsibility of the Contractor. All plant materials not installed on the day of arrival at the project site shall be

- stored, protected, and kept moist. Plant materials shall be maintained in optimal health and protected at all times from animal damage, vandalism, theft, wind, excessive sun, drying out, and any other conditions that would damage or reduce the viability of the plants.
- .9 Contractor shall install plants according to the locations, species percentages, and quantities indicated on the Drawings. Locations shall be field marked by the District prior to the start of plant installation. Planting locations may be modified at the discretion of the District, if large rocks, tree roots, or other underground obstructions are encountered that interfere with plant installation. The Contractor shall request field marking by the District 15 days, minimum, in advance of the Contractor's anticipated plant installation date.
 - .10 Contractor shall excavate container planting holes twice the width and 1.5 times the depth of the container, as shown on the Drawings. After the holes have been excavated, scarify the inside surfaces of the holes to enable root penetration.
 - .11 Plug planting material will be delivered in one gallon containers. Contractor shall separate plant material from each one gallon container into eight individual plugs of equal size/proportion by hand or using a spade.
 - .12 Contractor shall install all plugs and container plants as shown on the drawings. Container plants shall be removed from the container with the root ball intact. After removing the plants from containers, scarify each side of the root ball to prevent a root-bound condition. Matted roots on the side of the root ball shall be longitudinally sliced 1/8 to 1/4 inch deep at least once per side. Matted roots on the bottom of the root ball shall be sliced to 1/4 inch deep. Insert the root ball into the planting hole without bending or damaging the roots. Plants shall be set plumb and braced in position until backfill material has been placed and tamped solidly around the root ball. Planting holes shall be backfilled with native material. Stones, sticks, or other materials greater than 2 inches in dimension shall be removed from the backfill soil material and discarded. The root ball shall be placed so that it is at finished grade after settling.
 - .13 Following container plant installation all containers shall be kept in good condition and returned to the District.
 - .14 Seeding and plant installation shall be sequenced to minimize soil compaction of the planting areas during installation.
 - .15 All container plants and cuttings shall be watered immediately following installation. All installed container plants shall be inspected after installation and watering for settling. If plants have settled, they shall be raised in accordance with the installation specification.
 - .16 The Contractor shall prepare as-built record drawings to document plant

installation. The record drawings shall update the drawings and shall include plant material quantities, sizes, and species. All planting areas shall be field located using GPS, to within 3 feet; GPS coordinates shall be included on the record drawings. Before the start of the maintenance period, the Contractor shall provide the District with 2 sets of newly printed record drawings and digital data.

- .17 A preliminary inspection will be conducted following completion of installation. Notice requesting preliminary inspection shall be submitted by the Contractor to the District at least 7 Days prior to the anticipated date. Each container plant and plug shall be maintained continually moist until inspection and acceptance of installation by the District. All plants shall be installed in place as indicated and specified, and shall be healthy and free of infestations. The Contractor and District shall be represented at the inspection.

08.6 Plant Maintenance Period

- .1 Contractor shall water installed plant material, and seeded areas, using a water truck weekly for a period of 4 weeks following acceptance of planting by the District unless District has determined that adequate rain has fallen. Contractor shall use approved routes to access plants for watering.
- .2 Contractor shall maintain all planting basins, or an area 3 feet in diameter around each plant, free of weeds during the duration of the maintenance period. Weed control shall include hand-pulling, mechanical removal, and/or herbicide application. Herbicide shall be applied according to manufacturer's specifications by licensed applicators in a manner that minimizes drip and drift onto native plantings.
- .3 At the end of the maintenance period, the District will conduct a final inspection to determine the condition of the plants and improvements. Notice requesting final inspection shall be submitted by the Contractor to the District at least 7 Days prior to the anticipated date. Acceptance of this work will be contingent upon proper maintenance and the establishment of vigorous plant materials. Plants, which are dead, unhealthy, or missing, whether by disease, neglect, vandalism, or any other reason, shall be replaced by Contractor, at no additional cost to the District, with the same species and sizes originally specified and following these same specifications for installation.
- .4 The Contractor shall replace plants within two weeks after final inspection, and extend the Plant Maintenance Period for an additional 4 weeks after replacement planting has been accepted by the District. The District will then repeat the final inspection for the replaced plants at the end of the extended Plant Maintenance Period.
- .5 Throughout the maintenance period the Contractor shall update the record drawings (as described under Article 08.5.16 above) and keep written notes documenting replacement plantings, and any modifications to the irrigation system. The record drawings shall also identify plants as original plants or, if

required, during the maintenance period, replacement plants. A summary table describing the number and species of plants requiring replacement shall also be updated as part of the record drawings. All replacement plantings shall be field located using GPS, to within 3 feet. GPS coordinates shall be recorded on the drawings and provided electronically to the District. Within 30 days of final acceptance of the project, and prior to final payment, the Contractor shall provide final record drawings to the District along with all supporting digital data.

DIVISION 09: BARB WIRE FENCING

09.1 General

- .1 The General Conditions and Supplementary Conditions shall apply to all work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

09.2 Summary of Work

- .1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings, as staked in the field, and as specified herein, including, but not limited to, the following:
 - a. Removal and disposal of existing fencing as required.
 - b. Installation of barb wire fencing.
 - c. Installation of vehicle/equestrian gates in barb wire fencing.
 - d. Installation of park boundary signs along property boundary line fencing.

09.3 Submittals

- .1 Product Data: Manufacturer's catalog cuts, specifications and installation instructions for each item specified.
- .2 Samples:
 - a. Fence and Gate Posts: Two each, one foot long, if requested.
 - b. Post top: One each, if requested.
 - c. Wire: one of each type, one foot long, if requested.
 - d. Miscellaneous fittings: One each.

09.4 Materials

- .1 Fence Posts & Braces
 - a. Line pickets shall be Class B steel, heavy-duty studded "T" section posts, weighing 1.33 pounds per linear foot, 6 feet long, with green enamel finish, conforming to ASTM A702.

- b. Stress (pressure/pull/intermediate) posts shall be 2½-inch (2.875-inch outside diameter) Schedule 40 steel pipe.
- c. Terminal Brace Section and Intermediate Angle Brace
 - (1) Terminal brace section includes two vertical brace posts, a horizontal brace, and a diagonal brace, with associated footings, as shown on the drawings.
 - (2) Intermediate angle brace includes one vertical brace post and a diagonal brace, with associated footings, as shown on the drawings.
 - (3) Brace posts
 - a. Vertical brace posts shall be 3-inch (3.5-inch outside diameter) Schedule 40 steel pipe.
 - b. Horizontal and diagonal braces shall be 2-inch (2.375-inch outside diameter) Schedule 40 steel pipe.
 - c. Horizontal and diagonal braces shall be welded or bolted to vertical brace posts in a strong and secure manner and in such a way as to prevent water from entering the pipe.
 - (4) The terminal brace section may be replaced with a “Self-anchoring Super Brace” as manufactured by and available from:

Southwest Fence and Supply Company
PO Box 1523, Patterson, CA 95363
(800) 843-9623
www.swfence.com
 - (5) The intermediate angle brace may be replaced with a “Super Leg Brace post and pole” as manufactured by and available from:

Southwest Fence and Supply Company
PO Box 1523, Patterson, CA 95363
(800) 843-9623
www.swfence.com
 - (6) Concrete footings shall not be required where Self-anchoring Super brace is substituted for a constructed terminal brace section.
- d. All posts shall be capped to prevent water from getting into the pipes. Posts may be capped with a welded circular metal cap

- e. All posts, braces and all necessary fittings may be galvanized in accordance with ASTM A123.
 - f. All posts, braces, and all necessary fittings shall be painted green.
 - (1) Green color should be similar to any components painted by the manufacturer, such as the Super Brace, Vehicle Gate, Equestrian Gate, or line pickets.
- .2 High Tensile Wire
- a. High tensile wire shall be 15.5 gauge, 4 point, Gaucho barb wire with Class III galvanization.
- .3 Barb wire clips and tie wires shall be 9 gauge steel wire with Class III galvanization.
- .4 Post top, anchor plates, bar bands and other required fittings and hardware shall be steel, malleable iron or wrought iron and shall be galvanized in accordance with Section 75-1.05, "Galvanizing" of the Standard Specifications.
- .5 Footings
- a. Portland Cement: ASTM C150 Standard Specifications for Portland Cement. It shall be Type II for general construction and only one brand shall be used on the project.
 - b. Concrete Aggregates: ASTM Standard Specifications for Concrete Aggregates (C-33), including methods of sampling and testing. Obtain from established sources proven to be highly resistant to alkali in cement.
 - c. Mixing water shall be free from impurities that would be injurious to concrete.
 - d. Strength and design requirements for all footings:
 - (1) Minimum compressive strengths for concrete at 28 days shall be 2,500 pounds per square inch. Minimum cement content per cubic yard shall be 4 sacks. Maximum aggregate size shall be 1-inch.
- .6 Gates
- a. Vehicle gate shall be heavy duty tube gate, in green color, as manufactured by and available from:

Powder River Company
(800) 453-5318
www.powderriver.com

- b. Equestrian gate shall be heavy duty “Southwest Ranger Gate”, in green color, as manufactured by and available from:

Southwest Fence and Supply Company
PO Box 1523, Patterson, CA 95363
(800) 843-9623
www.swfence.com

- c. Gates and gate posts do not require painting unless not supplied by manufacturer in green color.
- .7 Zinc metal paint shall be single component, zinc-rich compound. The compound, when dried to a film, shall be a minimum of 95% pure zinc. Application shall be in accordance with manufacturer’s specifications. Compound shall be approved by District prior to use.

09.5 Workmanship

- .1 Workmanship shall meet minimum requirements of Standard Specifications, May 2006 edition, Section 80-3.02, except as modified below.
- .2 All fencing and gates shall be staked in the field by prior to installation for District approval. Fence and gates shall be installed to line and grade unless otherwise directed by the District.
- .3 Fence construction operations shall be conducted so as to prevent the escape of livestock.
- .4 Removal of Existing Fencing and Gates
 - a. Fencing and gates to be removed shall be marked in the field and approved by the District prior to removal.
 - b. Existing fencing and gates shall be removed only to the length that can be replaced with an equal length of new fencing in any one contract work day.
 - c. Existing fence and gate system, including fabric, wire, posts, hardware, etc., shall be removed in locations shown on drawings, and hauled off-site and disposed of in a legal manner.
 - d. Contractor shall backfill and compact fence and gate post holes after fence post removal. Backfill material shall be native, on-site material,

generated adjacent to the existing fence line or excess excavated post hole materials.

.5 Fence Posts & Braces

- a. Posts and pickets shall be set plumb and tops shall not appear to deviate horizontally from the alignment. Post and picket tops shall also appear to conform smoothly to grade changes in the alignment.
- b. In general, in determining the post spacing, measurement will be made parallel to the slope of the natural ground, and all posts shall be placed in a vertical position, except in locations where the District determines that the posts shall be set perpendicular to the ground surface.
- c. Line pickets ("T" posts) shall be driven to the depth indicated on the drawings in all soils; bent or damaged posts will not be accepted. In locations where the line pickets cannot be driven, posts shall be set in a concrete footing 12 inches in diameter and 3'-0" feet deep, at no additional cost to the District.
- d. Line pickets shall be spaced at no more than 10 foot intervals, measured from center to center of posts.
- e. Stress posts shall be installed at vertical angle points at grade changes and wire stress may pull the line picket ("T" post) out of plumb. Stress posts shall also be installed at mid-point in the fence run, or every 300 feet, whichever is less.
- f. Horizontal angle points in the fence alignment, where the angle or deflection is 5-55 degrees, shall use an intermediate angle brace.
- g. Horizontal angle points in the fence alignment, where the angle or deflection is 55 degrees or more, shall be considered as corners and corner sets (twin terminal braces) conforming to the plans and specifications shall be installed.
- h. Vertical angle points in the fence alignment, where the vertical grade change is 30 degrees or more shall be considered terminal points for runs of fence in either direction from the grade break. Corner sets (twin terminal braces) shall be installed at these points. Any braces installed on slopes along the alignment greater than 30 degrees (or 58%) from the horizontal shall be modified dimensionally to conform to the degree of slope where installed. They shall be fabricated according to the material and workmanship specifications for the standard terminal brace detail.

- i. On either side of ravine bottoms or any other streambed or wash, terminal braces shall be installed. The lowest leg of the terminal brace shall be set in relatively undisturbed soil above the highest point of obvious stream flow evidence or active erosion features. One or more 8' anchor T-posts shall be installed as a break away fence section between terminal braces.
 - j. At both horizontal and vertical angle points of less than 30 degrees where wire tension will pull, push or bend sections of line posts out of vertical and/or horizontal alignment, intermediate angle braces shall be installed.
 - k. On straight runs of fence greater than 500 feet and not otherwise interrupted by other bracing requirements due to corners, horizontal angles, curves or grade breaks or gates, intermediate angle braces shall be installed at 500 foot maximum intervals.
- .6 High Tensile Wire
- a. High tensile wire shall be fastened to the side of the posts designated by the District.
 - b. High tensile wire shall be installed by stretching equipment. 15 ½ gauge wire should be stretched to 275 lbs (+/- 20 lbs), or as recommended by the manufacturer.
 - c. High tensile wire runs shall not continue beyond any terminal brace section.
 - d. High tensile wire splices, when necessary, should be done by wrapping the end of each wire 5-8 times onto the other.
 - e. Connection of high tensile wire to posts and pickets
 - (1) High tensile wire shall be attached to line pickets ("T" posts) with galvanized barb wire clips.
 - (2) High tensile wire shall be attached to stress posts and brace posts with galvanized tie wire. Tie wire should be wrapped around the vertical post one time and twisted around the high tensile wire at least 5 times.
 - (3) High tensile wire shall be double wrapped at end posts and twisted around itself at least 5 times.
- .7 Gates
- a. All gates shall be installed per manufacturer's installation directions.

- b. On either side of gate openings terminal braces shall be installed and shall be separate from gate posts.
- .8 Welding
- a. All welds shall be ground smooth and painted with zinc metal paint.
- .9 Damaged galvanized surfaces shall be repaired in accordance with the provisions in Section 75-1.05, "Galvanizing", of the Standard Specifications.
- .10 Fences and gates that are to remain in place and which have been damaged by the Contractor shall be replaced by the Contractor at his/her expense.
- .11 All earth, trees, brush, and other natural obstructions which interfere with the proper construction of fences shall be removed and cut vegetation shall be spread evenly onto the District side of the boundary but shall not be piled up in any manner so as to produce accessibility or fire hazards.
- a. Prior to cutting any trees, contractor must obtain District approval.
- .12 Full compensation for clearing the line of the fence and disposing of the resulting material, excavating and backfilling holes, disposing of surplus excavated material, and furnishing and placing concrete footings, and connecting new fences to existing cross fences shall be considered as included in the contract price paid for the new fence and no additional compensation will be allowed therefore.
- .13 All disturbed ground areas shall be restored to original condition. Topsoil and hydroseed, as appropriate, to match adjacent areas.

