



Carpinteria Valley Water District

1301 Santa Ynez Avenue
Carpinteria, CA 93013
(805) 684-2816

NOTICE INVITING SEALED BIDS

EL CARRO PARK MONITORING WELL PROJECT

NOTICE IS HEREBY GIVEN, that sealed bids will be received at the office of the Carpinteria Groundwater Sustainability Agency, 1301 Santa Ynez Ave., Carpinteria, California 93013, until 3:00 p.m. on Friday, June 17, 2022, at which time they shall be publicly opened and read for performing work as follows:

- Mobilization
- Construction of temporary sound barrier, total length approx. 400 feet
- Installation of A 16-inch diameter steel conductor casing to a depth of 50 feet
- Drilling of pilot bore to a depth of 1240 feet
- Collection of 230 feet of undisturbed cores within the pilot bore using the 94 millimeter core-barrel system (optional task)
- Geophysical logging of pilot bore
- Construction of 4-inch diameter PVC monitoring well to a depth of 1200 feet
- Repositioning drilling equipment, installation of a 16-inch diameter steel conductor casing to a depth of 50 feet, drilling a 2nd boring, and construction of 4-inch diameter PVC monitoring well to a depth of 925 feet
- Repositioning drilling equipment, installation of a 16-inch diameter steel conductor casing to a depth of 50 feet, drilling a 3rd boring, and construction of 4-inch diameter PVC monitoring well to a depth of 360 feet
- Development of the three monitoring wells by airlift pumping and swabbing
- Construction of manhole covers (flush with ground surface) for each monitoring well
- Handling, transport, and disposal of drill fluids, drill cuttings, and initial well development water
- Site cleanup and demobilization

Any bids received after the deadline for bid submittal shall be returned unopened.

A mandatory pre-bid meeting will be held on Monday, May 23, 2022 at 10:30 am at El Carro Park, in the City of Carpinteria. Every contractor intending to bid on the project (or his designated representative) must attend the pre-bid meeting. Bids submitted by contractors not attending the pre-bid meeting will not be accepted and shall be returned unopened

Drilling shall be performed using a direct-rotary drilling rig equipped with portable fluid pits and mechanical solids separating equipment. Drill fluids shall be bentonite based with appropriate drilling fluid additives, as needed. Drilling equipment must be capable of reaching a maximum depth of 2,000 feet.

This work shall be done in accordance with the Specifications therefore adopted, to which special reference is hereby made. The Contractor shall furnish all labor, supplies, equipment, and services required to perform the work, except as expressly stated in the Construction Specifications. The Contractor shall hold a valid C-57 drilling contractor license issued by the State of California.

Specifications and bid forms may be secured at no charge from the District office located at 1301 Santa Ynez Avenue, Carpinteria, California, 93013. For further information, please contact Brian King, District Senior Engineer, at (805) 684-2816, extension 107.

The District reserves the right to reject any and all bids or to waive any irregularities or informalities in any bid or in the bidding. No bidder shall withdraw his/her bid for a period of sixty (60) calendar days after the date set by the District for the opening thereof.

Work will not begin until the District Board of Directors has authorized a contract for this work. Notice of Contract Award is tentatively planned to be issued on Friday, June 24, 2022. The successful bidder must submit all required contract and insurance paperwork within seven (7) consecutive calendar days from the Notice of Contract Award. The project's construction period shall be forty five (45) calendar days. The District expects to issue a Notice-to-Proceed on or about Friday, July 8, 2022. The Notice-to-Proceed will identify an "effective start date", which shall be the date the Contractor is authorized to begin work and shall be the start of the six (6) week period. The effective start date is anticipated to be on or about Monday, July 18, 2022.

BIDDERS INFORMATION

1. Proposal

The Scope of Work is as outlined in the **“El Carro Park Monitoring Wells Project”** documents. Proposals shall be made on the forms prepared by the District in the contract documents. All proposals shall give the prices proposed (in figures and in words), all information requested herein, and shall be signed by an authorized representative of the bidder.

2. Bid Prices

Bid prices shall include everything necessary for the completion of construction and fulfillment of the contract including but not limited to furnishing all materials, equipment, tools, plant and other facilities and all management, supervision, labor and services, except as may be provided otherwise in these contract documents. In the event of a difference between a price quoted in words and a price quoted in figures for the same quotation, the words shall be the amount bid.

3. Taxes and License

Bid prices shall include allowance for all federal, state and local taxes.

4. Qualification of Bidders

Bidder shall be skilled and regularly engaged in the general class or type of work called for under the contract for at least 5 years. Bidder shall possess a valid Contractor's License issued by the California Contractor's State License Board at the time the bid is submitted. The class of license shall be applicable to the work specified in the contract. Each bidder shall also have no less than five (5) years experience in the magnitude and character of the work bid.

5. Modification of Proposal

A modification of a proposal already received will be considered only if the modification is received prior to the time announced for the opening of proposals. All modifications shall be made in writing, executed and submitted in the same form and manner as the original proposal.

6. Rejection of Proposals

The District reserves the right to reject any proposals which are incomplete, obscure or irregular; failure of a bidder to possess qualifications outlined above; any proposals which omit a bid on any one or more items on which the bids are required; any proposals which omit unit prices if unit prices are required; any proposal in which unit prices are unbalanced in the opinion of the District; and any proposals from bidders who have previously failed to perform properly or to complete on time contracts of any nature.

7. Award of Contract

Within fifteen (15) days after the time announced for opening proposals, the District by action of its Board of Directors will either accept a proposal and award a contract or reject all proposals unless the Bidder has extended the time for consideration of its proposal. The District shall give written notice of the acceptance of a proposal and award of contract to the Bidder whose proposal is accepted. Such notice may be given by either personal delivery or mailed and shall be given within fifteen (15) days after acceptance of a proposal. The award of a contract shall obligate the Bidder whose proposal is accepted to provide evidence of insurance and execute the contract set forth herein.

8. Value of Work

The undersigned has had the opportunity to examine the location of the proposed work and/or is familiar with the Specifications and the local conditions in the place where the work is to be done.

The undersigned has checked carefully all the above figures and understands that the District shall not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

Award shall be made which, in the judgment of the District, is to the best interest of the District. It is agreed that the prices reflected in this bid are fixed for a period of 90 days from submittal.

9. Timing of Work

In accordance with the Technical Specifications, the undersigned further agrees to so plan the work and prosecute it with such diligence that said work shall be commenced within 14 days after receipt of the notice to proceed, and the work shall be completed within **six weeks**.

The undersigned agrees, if awarded the contract, that there shall be paid by the undersigned and all subcontractors under him, to all laborers, workmen, and mechanics employed in the execution of such contract or any subcontract thereunder, not less than the general prevailing rate of per diem wages, and rates for overtime and legal holidays in the locality in which the work is to be performed, as established by the State Director of the Department of Industrial Relations.

**CARPINTERIA VALLEY WATER DISTRICT
 EL CARRO PARK MONITORING WELLS PROJECT**

The undersigned hereby proposes and binds himself by the District, under this Bid, to execute in accordance with such award, a contract of which this Bid and the Specifications shall be a part, to furnish any and all labor, equipment, and services necessary for satisfactory performance and completing the work set forth in said Specifications within the time hereinafter set forth and at the prices named in this bid as follows:

**Bid to Provide Drilling and Monitoring Well Construction Services
 El Carro Park Monitoring Wells Project**

Bid Item	Units	Quantity	Unit Price	Item Price
1. Mobilization	Lump Sum	1	\$	\$
2. Sound Barrier	Lump Sum	1	\$	\$
3. Conductor Casings	Lump Sum	3	\$	\$
4. Drilling	Feet	2395	\$	\$
5. Geophysical Logging	Lump Sum	1	\$	\$
6a. 4-in. Diam. Blank PVC Casing, <i>Sch. 80</i>	Feet	1960	\$	\$
6b. 4-in. Diam. PVC Well Screen, <i>Sch. 80</i>	Feet	165	\$	\$
6c. 4-in. Diam. Blank PVC Casing, <i>Sch. 40</i>	Feet	295	\$	\$
6d. 4-in. Diam. PVC Well Screen, <i>Sch. 40</i>	Feet	65	\$	\$
7. Gravel Pack	Feet	410	\$	\$
8. Annular Seal	Feet	2075	\$	\$
9. Drilling Fluids and Cuttings Disposal	Lump Sum	1	\$	\$
10. Well Development	Hourly	24	\$	\$
11. Well Head Completions	Each	3	\$	\$
12. Site Cleanup	Lump Sum	1	\$	\$
Total Amount for Bid Items 1 through 12:				\$
Total Amount in Words:				

Refer to Special Provisions and Technical Specifications for description of materials and methods.

Bidder: _____

Signature: _____ Dated: _____

Title: _____

SECURITY FOR COMPENSATION CERTIFICATION

TO: CARPINTERIA VALLEY WATER DISTRICT

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

Date: _____

(Signature of Bidder)

Business Address:

Place of Residence:

(This certificate must be executed by the successful bidder prior to the award of Contract.)

FAIR EMPLOYMENT PRACTICES CERTIFICATION

TO: CARPINTERIA VALLEY WATER DISTRICT

The undersigned, in submitting a bid for performing the following work by Contract, hereby certifies that he has or shall meet the standards of affirmative compliance with Fair Employment Practices requirements of the special provisions contained herein:

EL CARRO PARK MONITORING WELLS PROJECT, CARPINTERIA, SANTA BARBARA COUNTY, CALIFORNIA

Date: _____

(Signature of Bidder)

Business Address:

Place of Residence:

(This certificate must be executed by the successful bidder prior to the award of Contract.)

CONTRACT AGREEMENT

This agreement, made and entered into this ____th day of _____, 2022 by and between the Carpinteria Valley Water District, Santa Barbara County, State of California, hereinafter called the District, and _____, hereinafter called the Contractor.

WITNESSETH: That the District and Contractor have mutually covenanted and agree, and by these presents do covenant and agree with each other as follows:

1. That for and in consideration of the covenants and agreements hereinafter contained on the part of the District, and the sums of money hereinafter designated to be paid to the Contractor by the District in the manner and form as hereinafter provided in the attached Specifications, the Contractor hereby covenants and agrees with the District to furnish all labor, equipment and services, and any and all other expenses necessary or incidental to the performance of certain work hereinafter specified, more particularly as set forth in these Specifications filed in the District Office, and identified by the signatures of the parties to the Agreement.

This Agreement specifically includes all items of work described in the Bid attached hereto, all in accordance with the project specifications. All terms and conditions contained in any of the component parts of this contract shall apply to the above designated schedule.

2. Time of Performance. In accordance with the Specifications, the undersigned further agrees to so plan the work and to prosecute it with such diligence that said work shall be commenced within **Fourteen (14) working** days from Notice to Proceed.

In the event the work is not completed within the time agreed upon, the provisions of General Provisions Paragraph 11.08 regarding damages shall govern.

3. Payments. Payments shall be made by check to Contractor for work performed at the times and in the manner provided in the Specifications and General Provisions, Section 11).
4. Component Parts. This Contract shall consist of the following documents, each of which is on file in the office of the District Secretary and all of which are incorporated herein and made a part herein and made a part hereof by reference thereto:

PART A

Bid Form

Security for Compensation Certification

Fair Employment Practices Certification

Contract Agreement

General Provisions

PART B

Special Provisions

Technical Specifications

Construction Drawings

Addenda, If Any

5. Wage Scale. Reference is hereby made to the wage scale established by the State Director of the Department of Industrial Relations which is hereby specified as the rate of prevailing wage to paid workers on this project, and the provisions of Article 2, Chapter 1, Part 7, Division 2 (commencing with Section 1770) of the Labor Code shall be complied with. A copy of the prevailing wage rates is on file and may be inspected at the District office.

It is further agreed that no person shall be hired by the undersigned or any subcontractor under him, who is a not a Citizen of the United States, unless the undersigned or any subcontractor has verified the person's right to live and work in the United States as stipulated in Section 121 of the U.S. Immigration Reform and Control Act (P.L. 99-603).

6. Hours of Labor. The Contractor shall forfeit, as penalty to the District, twenty-five dollars (\$25) for each worker employed in the execution of the Contract by him or by the subcontractor, for each calendar day during which any workman is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, in violation of the provisions of Article 3, Chapter 1, Page 7, Division 2 (commencing with Section 1810) of the Labor Code of the State of California.
7. Apprentices. In accordance with the provisions of Section 1777.5 of the Labor Code, and in accordance with the rules and procedures of the California Apprenticeship Council, properly indentured apprentices shall be employed in the prosecution of the work. The number so employed shall be as set forth in the certificate issued by the appropriate joint apprenticeship committee unless a certificate of exemption has been issued by the Division of Apprenticeship Standards. Willful failure by the Contractor to comply with said Section 1777.5 shall result in his being denied the right to bid on a public works contract for a period of six months from the date the determination is made.

Information relative to number of apprentices, identifications, wages, and hours of employment and standards of working conditions shall be obtained from the Director of the Department of Industrial Relations, who is the Administrative Officer of the California Apprenticeship Council.

8. Trenching. Trenching shall be done in accordance with Sections 6705, 6706, 6707 of the Labor Code.
9. Worker's Compensation Insurance. In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860) and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the Labor Code of the State of California, the Contractor is required to secure the payment of compensation to his employees and shall for that purpose obtain and keep in effect adequate Worker's Compensation Insurance. Proof of such insurance coverage shall be provided to the District prior to commencement of any work on this project.

The undersigned Contractor is aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and shall comply with such provisions before commencing the performance of the work in this Contract.

10. Security for Compensation. Contractor hereby stipulates that the provisions of Section 1775 of the Labor Code of the State of California shall be complied with. Contractor further agrees to secure the payment of compensation to his employees in accordance with the provisions of Section 3700 of the Labor Code of the State of California.
11. Discrimination. Attention is directed to Section 1735 of the Labor Code, which reads as follows:

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

(Amended by Stats. 1976, c. 1174, p. 5270, subsection 1; Stats. 1980, c. 992, p. 3166, subsection 10.)

In connection with the performance of work under this Contract, the Contractor agrees as follows:

- (a) The Contractor shall not willfully discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex. Such action shall include, but not be limited to, the following: Upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants to employment, notices setting forth the provisions of this Fair Employment Practices section.
- (b) The Contractor shall send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, advising the said labor union or worker's representative of the Contractor's commitments under this section, and shall post copies of the notices in conspicuous places available to employees and applicants to employment.
- (c) The Contractor shall permit access to his records of employment, employment advertisements, application forms, and other pertinent data and records by the Fair Employment Practices Commission, the awarding authority or any other appropriate agency of the State of California designated by the awarding authority, for the purposes of investigation to ascertain compliance with the Fair Employment Practices section of this Contract.
- (d) A finding of willful violation of the Fair Employment Practices section of this Contract or of the Fair Employment Practices Act shall be regarded by the awarding authority as a basis for determining the Contractor to be not a "responsible bidder" as to future contract for which such Contractor may submit bids, for revoking the Contractor's prequalification rating, if any, and for refusing to establish, reestablish or renew a prequalification rating for the Contractor.

The awarding authority shall deem a finding of willful violation of the Fair Employment Practices Act to have occurred upon receipt of written notice from the Fair Employment Practices Commission that it has investigated and determined that the Contractor has violated the Fair Employment Practices Act and has issued an order under Labor Code Section 1426 or obtained an injunction under Labor Code Section 1429.

Upon receipt of such written notice from the Fair Employment Practices Commission, the awarding authority shall notify the Contractor that unless he demonstrates to the satisfaction of the awarding authority within a stated period that the violation has been corrected, his prequalification rating will be revoked at the expiration of such period.

- (e) The Contractor agrees that should the awarding authority determine that the Contractor has not complied with the Fair Employment Practices section of this Contract, then pursuant to Labor Code Sections 1735 and 1775 the Contractor shall, as a penalty to the awarding authority, forfeit for each calendar day or portion thereof, for each person who was denied employment as a result of such non-compliance, the penalties provided in the Labor Code for violation of prevailing wage rates. Such moneys may be recovered from the Contractor. The awarding authority may deduct any such damages from any moneys due the Contractor.
- (f) Nothing contained in this Fair Employment Practices section shall be construed in any manner of fashion so as to prevent the awarding authority or the State of California from pursuing any other remedies that may be available by law.
- (g) Prior to awarding the Contract, the Contractor shall certify to the awarding authority that he has or will meet the following standards for affirmative compliance, which shall be evaluated in each case by the awarding authority.
 - (1) The Contractor shall provide evidence, as required by the awarding authority, that he has notified all supervisors, foremen, and other personnel officers in writing of the content of the anti-discrimination clause and their responsibilities under it.
 - (2) The Contractor shall provide evidence, as required by the awarding authority, that he has notified all sources of employees' referrals (including unions, employment agencies, advertisements, Department of Employment) of the content of the anti-discrimination clause.
 - (3) The Contractor shall file a basic compliance report, as required by the awarding authority. Willfully false statements made in such reports shall be punishable as provided by law. The compliance report shall also spell out the sources of the work force and who had the responsibility for determining who to hire, or whether or not to hire.
 - (4) Personally, or through his representatives, the Contractor shall, through negotiations with the unions with whom he has agreements, attempt to develop an agreement, which will:
 - a. Spell out responsibilities for nondiscrimination in hiring, referral, upgrading, and training.
 - b. Otherwise implement an affirmative anti-discrimination program in terms of the unions' specific areas of skill and geography to the end that qualified minority workers shall be available and given an equal opportunity for employment.
 - (5) The Contractor shall notify the contracting agency of opposition to the anti-discrimination clause by individuals, firms, or organizations during the period of its prequalification.

(h) The Contractor shall include the provisions of the foregoing paragraphs 1 through 5 in every first-tier subcontract so that such provisions shall be binding upon each subcontractor.

12. This contract is binding upon the heirs, executors, administrators, successors, and assigns of the parties hereto.

IN WITNESS WHEREOF, District Board of Directors has caused these presents to be executed by its officers, thereunto duly authorized, and Contractor has subscribed same, all on the day and year first above written.

Name of Contracted Entity & Contractor License Number

Authorized Signature Only

Sign _____

Title: _____

CARPINTERIA VALLEY WATER DISTRICT:

Authorized Signature Only

Sign _____

Title: _____

GENERAL PROVISIONS

Qualifications of Contractor. Contractor shall be licensed in accordance with the provisions of Sections 7065, et seq., Business and Professions Code, State of California, and shall be skilled and regularly engaged in the general class or type of work called for under this contract. Contractor shall be licensed in the State of California with the appropriate class of contractor's license for the work under this contract.

Execution of Contract. The contract agreement shall be signed by the Contractor and returned to the District.

These Provision; The provisions herein are in addition or over and above the general provision as set forth in the 2006 edition of the Standard Specification for Public Works Construction, also known as the "Green Book". Additionally, the material and workmanship specifications articulated in the "Green Book" apply to this contract unless explicitly stated otherwise herein.

Definitions. Whenever any word or expression defined in this section, or pronoun used in its stead, occurs in these contract documents, it shall have and is mutually understood to have the meaning given:

- a. "District" shall mean the Carpinteria Valley Water District, its board of directors or any other board, body, official or officials to which or to whom the power belonging to the District has been properly delegated.
- b. "Hydrogeologist" shall mean the Hydrogeologist duly and officially appointed by the District to supervise and direct the work of construction under this contract, acting personally or through agents or assistants duly authorized by him, such agents or assistants acting within the scope of the particular duties entrusted to them. By this designation, no requirement shall attach that such individual be licensed by the State of California.
- c. "Inspector" shall mean the geologic or technical inspector or inspectors duly authorized or appointed by the Hydrogeologist or District, limited to the particular duties entrusted to said inspector(s).
- d. "Contractor" shall mean the party entering into contract with the District for the performance of work covered by this contract, and his authorized agents or legal representatives. This term shall also apply to all bidding contractors insofar as the provisions of Section 1 of the General Provisions apply.
- e. "Date of Signing of Contract" or words equivalent thereto, shall mean the date upon which this contract, with the signature of the Contractor affixed, together with the prescribed bonds, shall be or shall have been delivered to the District or its duly authorized representative.
- f. "Day" or "Days", unless herein otherwise expressly defined, shall mean a calendar day or days of twenty-four (24) hours each, beginning at 00:00 and ending at 24:00 (midnight).
- g. "The Work" shall mean the work to be done under this contract, unless some other meaning is indicated by the context.
- h. "Contract Drawings" or "Plans" shall mean and include all drawings which may have been prepared by or on behalf of the District, as a basis for bids, when duly signed and made a part of this contract by incorporation or reference; all drawings submitted in pursuance of

the terms of this contract by the successful bidder with his bid and by the Contractor to the District if and when approved by the Hydrogeologist; and all drawings submitted by the Engineer to the Contractor during the progress of the work as provided for herein.

All such Contract drawings or plans shall be stamped by a licensed professional engineer registered within the State of California.

- i. Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that reference to the drawings accompanying these specifications is made unless stated otherwise. Where "as directed", "as permitted", "approved", or words of similar import are used, it shall be understood that the direction, requirements, permission, approval, or acceptance of the Hydrogeologist is intended unless stated otherwise. As used herein, "provide" shall be understood to mean "provide complete in place", that is "furnish and install". "Install" shall mean the installation complete in place of an item of equipment furnished by the District.
- j. Specifications. The directions, provisions, and requirements contained here; supplemented by any special provisions as provided herein, pertaining to the method and manner of performing the work, to kinds, quantities, and qualities of materials to be furnished under the contract, and method of measurement and payment.
- k. Superintendent. The executive representative of the Contractor, present on the work site at all times during progress, authorized to receive and fulfill instructions from the Engineer and to accept orders for changed and extra work.
- l. Change Orders. A written order by the Hydrogeologist or his authorized representative to the Contractor making changes in the plans or specifications. If the change involves items for which there is no contract unit price, the order shall so state and stipulate that the changes shall be performed as extra work or work omitted.
- m. Extra Work. Work or material, the performance or furnishing of which is found necessary for the proper completion of the improvement, the payment for which is not covered by any item of the bid schedule and for which no means of payment, direct or indirect, has been provided in the contract.

3.02 Official Copies of Contract. This Contract shall be executed and signed in duplicate, one copy shall be filed with the District, and one copy shall be delivered to the Contractor.

3.03 Titles and Headings. The subheadings and titles printed on the drawings, in these general provisions, in the specifications, and elsewhere in the contract documents, are inserted for the convenience of reference only, and shall not be taken or considered as having any bearing on the interpretation thereof.

3.04 Effect of Inspection and Payments. Inspection by the Hydrogeologist or by any Inspector, or any order, measurement, approved modification, certificate or payment of money, or acceptance of any part or whole of the work, or any extension of time, or any possession by the District or its agents, shall not operate as a waiver for any provision of this contract or of any power reserved therein to the District, or any right to damage thereunder; no breach of this contract shall be held to be a waiver of any or subsequent breach. All remedies shall be taken and construed as cumulative.

3.05 Effect of Extension of Time. The granting of any extension of time due to delays which in the judgment of the District are unavoidable delays, shall in no way operate as a waiver on the part of the District of its rights under this contract.

3.06 Extra Work and Time and Material Work. If change orders requiring extra work are given in accordance with the provisions of this contract or work under this contract is designated "time and material" such work shall be considered a part hereof and subject to each and all of the contract terms and requirements. No extra work, which is reasonably estimated to exceed twenty percent (20%) of the cost of the contract work or project is authorized without compliance with applicable competitive bidding practices. Basis of establishing costs for such work will be as follows:

Markups shall not exceed 20 % on Labor, 15 % on materials and equipment rental and 10% for subcontractors. Cost shall be based on cost plus overhead plus markup

3.07 Assignment of Contract. The contract may be assigned or sublet and a subcontractor may assign or sublet to sub-subcontractors in whole or in part only upon the written consent of the District acting through authorized agents.

3.08 Recognition of Subcontractors or Sub-Subcontractors. No subcontractor or sub-subcontractor shall be recognized as such, and all persons engaged in the work of construction shall be considered as employees of the Contractor and their work shall be subject to the provisions of the contract, including specifically these general provisions, the specifications, and the contract drawings.

4.01 Faithful Performance Bond. As a part of the execution of this contract, the Contractor shall furnish and bear the cost of a bond of a Surety Company acceptable to the District, which bond is conditioned upon the faithful performance of all covenants and stipulations under this contract. The amount of the bond shall be one hundred percent (100%) of the total contract price, as such sum is set forth in the agreement.

As a condition precedent to satisfactory completion of this contract, an amount equal to ten percent (10%) of the estimate contract cost shall be withheld for the period specified in said bond until completion and acceptance of the work by the District.

4.04 Power of Attorney. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their Power of Attorney.

INSURANCE

5.01 Indemnification Agreement. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Carpinteria Valley Water District, its officers, agents and employees both severally and collectively from and against all claims, damages, losses, injury, liability, costs, and expenses of whatsoever kind or nature including but not limited to attorney's fees and all defense costs howsoever the same may be caused resulting directly or indirectly from or arising out of the activities, operations, or work performed by the Contractor, its employees, agents, subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and without limiting the generality of the foregoing, the same shall include; (1) bodily injury, sickness, disease or death to any person or persons or, (2) injury to or destruction of tangible and/or property including that of the Carpinteria Valley Water District's whether direct or consequential including the loss of use resulting there from. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person described herein. The District, at its sole option, may choose to provide all or a portion of the defense of claims, damages, losses, liability, costs, and expenses as set forth above, and in such event, Contractor shall indemnify and hold harmless the District from the costs and expenses, including attorney's fees, of such defense.

5.02 General Insurance Requirements. The Contractor shall procure, purchase at its expense and maintain in full force and effect such insurance as will protect it from claims, damages, losses, liability, costs, and expenses as set forth herein which may arise out of or result from or in any way connected with the Contractor's activities, work, services, and/or operations performed by the Contractor under the Contract, whether such activities or operations be by itself or by any subcontractor or by any sub-subcontractor or by anyone directly or indirectly employed by any of them, or by anyone else for whose acts the Contractor or any of them is or may be liable. The procurement and maintenance by the Contractor of policies required under this Contract shall not relieve, limit or satisfy Contractor's obligation to indemnify, defend and save harmless CVWD, its officers, directors, agents and employees.

a. Contractor represents that he will, prior to commencement of work pursuant to this agreement, name and endorse on to his Comprehensive General Liability insurance policy CVWD as an "Additional Insured" as respect to liability arising out of your activities, services, operations or work performed by Contractor for CVWD (ISO form CG 20 09 11 85 or its equivalence). Contractor shall obtain and keep in full force and effect insurance policies and in appropriate limits as specified by the Insurance Requirements and shall

- require any subcontractor or sub-subcontractor to provide evidence of similar liability insurance coverages.
- b. Contractor shall add to his Comprehensive General Liability insurance policy a severability or interest clause or such similar wording if his policy does not automatically have this clause already written into it. Such language shall be similar to: "The insurance afforded applies separately to each insured against whom claim is made or suit is brought, including claims made or suits brought by any person included within the persons insured provision of this insurance against any other such person or organization."
 - c. All policies carried by Contractor shall contain a provision or be endorsed to state that coverage as respects to CVWD shall not be suspended, voided, canceled or non-renewed except after the insurance company has given to CVWD at least **Thirty (30) days** prior written notice to the address shown below prior to any such termination of coverage becomes effective.
 - d. omitted
 - e. Prior to the execution of the contract, Contractor shall file with CVWD copies of all insurance policies, certificates of insurance of coverage actually in force, along with original endorsements effecting coverages required to be carried by Contractor pursuant to this section. With respects to each renewal or replacement of any such insurance, the requirements of this paragraph must be complied with not less than thirty (30) days prior to the expiration or cancellation of the policy being renewed or replaced.
 - f. All insurance policies carried by or available to Contractor shall be primary and not excess nor contributing with any insurance issued to or available to CVWD. Any insurance or self-insurance maintained or carried by CVWD shall be excess of the Contractor's insurance and shall not participate in nor contribute with such insurance carried by or available to Contractor. CVWD will not be responsible for any payment of premiums due as a result of compliance with the terms and conditions of the insurance requirements. The cost of such insurance shall be borne solely by the Contractor.
 - g. CVWD shall be under no duty either to ascertain the existence of or to examine such insurance policies or to advise Contractor in the event such insurance coverage does not comply with the requirements hereof. However, CVWD may, at any time, and from time to time, inspect and copy any and all insurance policies, endorsements, certificates, and correspondence required to be carried by Contractor pursuant to this Contract.

5.03 Workers' Compensation Insurance. Each Bidder shall submit concurrently with his Bid a Certificate of Insurance for Compensation, in accordance with the provisions of Labor Code Sections 1860-61 and any acts amendatory thereof. Before beginning the work the Contractor shall furnish to the District satisfactory proof that he has taken out, for the period covered by the work under this contract, full compensation insurance for all persons whom he may employ directly or through subcontractors, in carrying out the work contemplated under this Contract, in accordance with the "Workers' Compensation and Insurance Act," Sections 3200 et seq., Labor Code.

- a. The following endorsements are to be attached to the Worker's Compensation Policy:
 - (1) Waiver of Subrogation Endorsement

(2) Sixty (60) Days Prior Notice

- b. If the Contractor fails to maintain such insurance, the District may take out compensation insurance which the District might be liable to pay under the provisions of the Act by reason of any employee of the Contractor being injured or killed, and deduct and retain the amount of the premiums for such insurance from any sums due the Contractor.
- c. If any injury occurs to any employee of the Contractor for which the employee, or his dependents in the event of his death, is entitled to compensation from the District under the provisions of said Act, or for which compensation is claimed from the District, the District may retain from the sums due the Contractor under this contract an amount sufficient to cover such compensation, as fixed by said Act, until such compensation is paid, or until it is determined that no compensation is due, and if the District is compelled to pay such compensation, the District will deduct and retain from such sums the amount so paid.

5.04 Specific Insurance Requirements

- a. Provide evidence of valid and collectible insurance carried for those exposures indicated by an "X".
 - A. Professional Liability Errors & Omissions
 - B. Workers Compensation and Employers Liability
 - C. Automobile Liability - "Any Auto - Symbol 1"
 - D. Comprehensive General Liability, including: Bodily Injury, Property Damage, Personal Injury
 - E. Owners & Contractors Protective
 - F. Protection & Indemnity (Aviation)
- b. Minimum Limits of Insurance. Contractor shall maintain limits of insurance protection no less than:
 - (1) Professional Liability shall be not less than \$1,000,000 per claim and in the aggregate.
 - (2) Workers' Compensation as required by the Labor Code of the State of California and Employers Liability limits of Bodily Injury by Accident \$1,000,000 Each accident, Bodily Injury by Disease \$1,000,000 Each Employee; and Bodily Injury by Disease \$1,000,000 Policy Limit.
 - (3) Business Automobile Liability, Insurance Services Offices, "ISO" from CA 00 01 12-92 or its equivalence with limits not less than \$1,000,000 combined single limit per accident for bodily injury and property damage.
 - (4) Commercial General Liability, Insurance Services Offices, "ISO" form CG 00 01 11-88 or its equivalence with limits not less than \$1,000,000 combined single limit per occurrence for bodily injury, property damage, personal injury and shall specifically include contractual liability providing protection for liability assumed by the Contractor under this contract. Coverage for "Explosion, Collapse and Underground" shall be specifically endorsed on to the policy for full coverage under the policy.

- (5) Owners & Contractors Protective, "O&CP", Insurance Services Offices, "ISO" form CG 00 09 11-88 or its equivalence with limits not less than \$1,000,000 combined single limit per accident for bodily injury and property damage.
 - (6) Protection & Indemnity (Aviation) shall not be less than \$5,000,000 combined single limit, including passengers.
- c. All insurance correspondence, certificates, binders, etc., shall be mailed to:

Carpinteria Valley Water District
Attn: Risk Manager
1301 Santa Ynez Avenue
Carpinteria, CA 93014

- d. All policies carried by the Contractor shall be primary coverage to any and all other policies that may be in force. The "District" will not be responsible for payment of premiums due as a result of compliance with the terms and conditions of the insurance requirements.
- e. All such policies of insurance shall be issued by domestic United States insurance companies with general policy holders' rating of not less than "B" and admitted to do business in the State of California.

5.05 Other Insurance Provisions. The Contractor shall comply with the following insurance provisions:

- a. Additional Insured. The "Persons Insured" provision on each policy shall include as an additional insured: "Carpinteria Valley Water District and its officers, directors, agents and employees," and "Padre Associates, Inc. and its officers, agents, and employees."
- b. Waiver of Subrogation. Contractor hereby waives any and all right of recovery against the Carpinteria Valley Water District, and its officers, directors, agents, and employees for any loss or damage sustained by the Contractor which is insured under valid and collectible insurance policy or policies secured pursuant to Paragraph 5.02 or any other property insurance applicable to the activities of the Contractor.
- c. Mailing Address. All insurance correspondence: (certificates, binders, policies, endorsements, etc.) is to be mailed to:

Carpinteria Valley Water District
Attention: Engineering Manager
1301 Santa Ynez Avenue
Carpinteria, CA 93014

5.06 Hold Harmless. The following entities are to be held harmless: Carpinteria Valley Water District, its directors, officers, agents, and employees.

5.07 Property Insurance. If required by District, the Contractor shall, before commencing the work, take out and maintain during the life of this contract, an "All Risk" Property Insurance Policy as shall protect him, any subcontractor performing work covered by this contract, the District and its officers, directors, agents, and employees, from any damage to the work being performed under this contract, including finished structures, partially finished structures, and all materials and equipment which are to be incorporated into the work. The Contractor shall furnish

the District satisfactory proof that such a policy has been secured, and which shall be for not less than the amount listed in the contract documents.

5.08 Issuance of Stop-Work Order. The Contractor will be issued an immediate stop-work order when the District is notified of cancellation of any insurance required under this Contract. Such stop order shall continue until District is notified and provided proof of new or reinstated insurance. Neither the Contractor nor the subcontractor shall be entitled to any increase in Contract performance time, or to any adjustment in Contract price due to the effects of such a stop-work order.

SECTION 6. DUTIES AND RESPONSIBILITIES OF CONTRACTOR

6.01 Legal Address of Contractor. The Contractor's address as shown on this contract, as well as such office or headquarters the Contractor establishes at the site of the work, hereby are designated as addresses to which drawings, samples, notices, letters, articles, or other communications to the Contractor may be mailed or delivered. The delivery at either of these places of any item or communication from the District or agents thereof to the Contractor shall be deemed sufficient service of such delivery. The Contractor's address as shown on the Contractor's information page may be changed at any time by notice in writing from the Contractor to the District. Nothing herein contained shall be deemed to preclude or render inoperative the service of any drawing, sample, notice, letter or other article or communication to or upon the Contractor personally.

6.02 Office of Contractor at Site. During the performance of this contract the Contractor may be required to maintain a suitable office at the site of the work which shall be the headquarters of a representative authorized to receive drawings, instructions or other communications or articles from the District or District's agents; and any such thing given to the said representative or delivered at the Contractor's office at the site of the work in his absence shall be deemed to have been given to the Contractor. A signed receipt shall be given to the Districts or District's Representative upon such delivery. The Contractor shall maintain a complete set of plans and specifications at the site office whenever work is in progress.

6.03 Permits and Licenses. The Contractor shall acquire, pay for and possess such State and local permits or licenses as are required by law, such as the general building permit, the plan check fee, utility connection fees, Department of Fish and Game permits, and Army Corps of Engineer permits, and the Contractor shall furnish satisfactory proof to the District, upon request, that such permits or licenses are and will be in effect throughout the entire life of this contract. **The Contractor shall keep all permits and licenses posted on the job site during the work, and forward copies of all permits obtained to the District.**

The District, at its sole option, may choose to provide any or all permits and licenses.

6.04 Attention to Work. The Contractor shall give his personal attention to and shall supervise the work to the end that it shall be prosecuted faithfully, and when he is not personally present on the work, he shall at all reasonable times be represented by a competent superintendent or foreman who shall receive and obey all instructions or orders given under this contract, and who shall have full authority to execute the same and to supply materials, tools and labor without delay, and who shall be the legally appointed representative of the Contractor. The

Contractor shall be liable for the faithful observation of any instructions delivered to him or to his authorized representative.

6.05 Liability of Contractor. The Contractor shall do all of the work and furnish and pay for all labor, materials, tools, and appliances, except as otherwise herein expressly stipulated, necessary or proper for performing and completing the work herein required in the manner and within the time herein specified. The mention of any specific duty or liability imposed upon the Contractor shall not be construed as a limitation or restriction of any general liability or duty imposed upon the Contractor by this contract, said reference to any specific duty or liability being made herein merely for the purpose of explanation.

6.06 Status of Contractor. The right of general inspection by the District shall not make the Contractor an agent 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 inspection.

6.07 Right of Appeal. The Contractor shall have the right to appeal from any decision by any inspector to the Hydrogeologist and from the Hydrogeologist to the General Manager of the Carpinteria Valley Water District

6.08 Protection of Persons and Property. The Contractor shall at all times during the progress of the work, or temporary suspension of the work, provide, erect and maintain all proper and/or necessary temporary walks, roads, driveways, guards, railings, lights and warning signs, provide a sufficient number of flagmen and take all necessary precautions at all times for the protection of the work and safety of the public, and those engaged in the work. Streets and alleys closed to traffic shall be protected by effective barricades. Signs and barricades shall conform to standards approved by the Hydrogeologist. All barricades and obstructions shall be illuminated at night with reflector signs and lights, and all lights for this purpose shall be kept burning from sunset to sunrise. If in the opinion of the Hydrogeologist or his authorized representative, the Contractor, during the course of the work, does not provide sufficient light and barricades and other safety devices, the District may provide them and deduct the cost thereof from monies due the Contractor under this contract. The Contractor shall also furnish, install and maintain at his own expense, such temporary fences, gates and barricades as may be required to confine cattle or other stock to the limits existing before the start of construction operations.

6.09 Use of Explosives. When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property. Before blasting operations are undertaken, at least twenty-four (24) hours written notice must be given to the District and the Hydrogeologist. The Contractor shall be responsible for obtaining permits from the appropriate authorities.

6.10 Notice of Entrance. If any portions of the work specified herein are to be installed in rights-of-way passing through privately owned land, it is of utmost importance that before entering any private property, the Contractor shall give the tenant and inspector a minimum of forty-eight (48) hours' notice.

6.11 Preservation and Restoration of Property. The Contractor shall be responsible for the preservation of all public and private property along and adjacent to the work being constructed, and shall be responsible for restoring said property to the condition in which it existed before the Contractor undertook the work. The Contractor shall not be required to restore trees if they have

been specifically designated for removal, but otherwise shall be required to restore all property including but not limited to trees, vegetation, lawns, land monuments, utilities, fences, driveways, and bridges which have been disturbed in performance of the work. The Contractor shall carefully protect from disturbance or damage all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location.

The Contractor shall confine his operations to the area within the limits of construction, and not disturb ground outside of construction stakes, and shall not unreasonably encumber the site with materials or equipment.

The Contractor shall be familiar with all restrictions, which apply to works or activity within streambeds and watercourses and shall insure that all activities of Contractor, subcontractors, and sub-subcontractors comply with those restrictions and protect the streambed, banks, water, and water life from disturbance and/or damage.

6.12 Maintenance of Traffic. Throughout the performance of the work in connection with this contract, the Contractor shall construct and adequately maintain suitable and safe crossings over trenches and such detours as are necessary, to care for public and private traffic, and to permit ingress and egress from public ways and private dwellings. The material excavated from trenches shall be compactly deposited along the sides of the trench in such manner as shall give as little inconvenience as possible to the traveling public and to adjoining property owners.

6.13 Protection of Buried Utilities. The Contractor's attention is directed to the existence of pipes, cables, culverts, and other underground structures and improvements, which may or may not be shown on the plans. It is the responsibility of the Contractor to use reasonable care to ascertain the existing location of such underground utilities in advance of any digging operations so that they shall not be disturbed or damaged by him during the progress of the work. The Contractor shall exercise care in avoiding damage to those utility facilities, which are to remain in service subsequent to the construction of the work under this contract, and he will be held responsible for their repair if damaged. There is no guarantee that all utilities or obstructions are shown on construction drawings or that locations indicated are accurate.

The Contractor shall uncover all piping, conduit or other buried utilities, to a point one foot below the pipe or conduit, where crossings, interferences or connections are indicated, prior to trenching or excavating for any work structure, to determine actual elevations. If the Contractor does not expose all required utilities, he shall not be entitled to additional compensation for work necessary to avoid interferences nor for repair to damaged utilities.

The Contractor shall be compensated for costs of locating and repairing damages not due to the failure of the Contractor to exercise reasonable care and for the costs of removing or relocating such utility facilities and for equipment on the project necessarily idled during such work.

The Contractor shall not be assessed liquidated damages for delay in completion of the project, when such delay was caused by the failure of the District or the Hydrogeologist or the owner of the utility to provide for removal or relocation of such utility facilities.

If the location of pipelines or other works being installed by the Contractor under this contract conflicts with the location of existing pipelines, the Contractor shall so notify the Hydrogeologist in writing. The Hydrogeologist shall ascertain the location of the existing utility in question and may at his discretion relocate the pipeline or other work being installed for the convenience of the Contractor. It shall not be construed that the District or the Hydrogeologist is in any way required

or obligated to locate or relocate pipelines or other works to locations other than shown on the construction drawings.

6.14 Protection of Bridges. The Contractor shall be responsible for any damage, which he may cause to bridges, culverts, and road structures. He shall determine in advance the allowable safe load for each structure and, if necessary, provide special shoring and support at his expense.

6.15 Assumption of Risks. Until the completion and final acceptance by the District of all of the work under and implied by this contract, the work shall be under the Contractor's responsible care and charge. The Contractor shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs, occasioned or rendered necessary, by causes of any nature whatsoever, excepting only acts of God and none other, to all or any portions of the work, excepting as otherwise stipulated.

6.16 Responsibility for Damage. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Carpinteria Valley Water District, its officers, agents and employees both severally and collectively from and against all claims, damages, losses, injury, liability, costs, and expenses of whatsoever kind or nature including but not limited to attorney's fees and all defense costs howsoever the same may be caused resulting directly or indirectly from or arising out of the activities, operations, or work performed by the Contractor, its employees, agents, subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and without limiting the generality of the foregoing, the same shall include; (1) bodily injury, sickness, disease or death to any person or persons or; (2) injury to or destruction of tangible and/or property including that of the Carpinteria Valley Water District's whether direct or consequential including the loss of use resulting therefrom; (3) loss of, injury to, or destruction of materials, supplies, equipment, or tools, including those of owner, contractor, subcontractors, or sub-subcontractors. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person described herein. The District, at its sole option, may choose to provide all or a portion of the defense of claims, damages, losses, liability, costs, and expenses as set forth above, and in such event, Contractor shall indemnify and hold harmless the District from the costs and expenses, including attorney's fees, of such defense. The District shall have the right to estimate the amount of such damage and to cause the District to pay the same, and the amount so paid for such damage shall be deducted from the money due the Contractor under this contract; or the whole or so much of the money due or to become due the Contractor under this contract, as may be considered necessary by the District, shall be retained by the District until such suits or claims for damages shall have been settled or otherwise disposed of, and satisfactory evidence to that effect furnished to the District.

6.17 Protection of District Against Patent Claims. All fees, royalties, or claims for any patented invention, article, or method that may be used upon or in any manner connected with the work under this contract shall be included in the price bid for the work, and the Contractor and his sureties shall protect and hold the District, together with all of the District's officers, agents and employees, harmless against any and all demands made for such fees or claims brought or made by the holder of any invention or patent, and before the final payment is made on account of this contract the Contractor shall, if requested by the Hydrogeologist, furnish acceptable proof of a proper release from all such fees or claims.

Should the Contractor, his agents, or employees, or any of them, be enjoined from furnishing or using any invention, article, material or appliance supplied or required to be supplied or used under this contract, the Contractor shall promptly substitute other articles, materials or appliances, in lieu thereof, of equal efficiency, quality, finish, suitability and market value and satisfactory in all respects to the Hydrogeologist. Or in the event that the Hydrogeologist elects, in lieu of such substitution, to have supplied, and to retain and use, any such invention, article, material or appliance, as may by this contract be required to be supplied, in that event the Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for the District, the District's officers, agents, and employees, or any of them to use such invention, article, material or appliance without being disturbed or in any way interfered with by any proceeding in law or equity on account thereof. Should the Contractor neglect or refuse to make the substitution promptly, or to pay such royalties and secure such licenses as may be necessary, then in that event the Hydrogeologist shall have the right to make such substitution, or the District may pay such royalties and secure such licenses and charge the cost thereof against any money due the Contractor from the District or recover the amount thereof from him and his sureties notwithstanding final payment under this contract may have been made.

6.18 Cooperation. The Contractor shall cooperate with all other contractors who may be performing work on behalf of the District and workmen who may be employed by the District on any work in the vicinity of the work to be done under this contract; and he shall so conduct his operations as to interfere to the least possible extent with the work of such contractors or Agents. He shall make good promptly, at his own expense, any injury, or damage that may be sustained by other contractors or employees of the District at his hands.

Any difference or conflict, which may arise between the Contractor and other contractors, or between the Contractor and agents of the District in regard to their work, shall be adjusted and determined by the Hydrogeologist.

If the work of the Contractor is delayed because of any acts or omissions of any other contractor or of the District, the Contractor shall on that account have no claim against the District other than for an extension of time.

If any portions of the work specified herein are to be installed in any right-of-way owned by the State, County, Municipality, or other public entities or public utilities, it shall be incumbent upon the Contractor to familiarize himself with the regulations of each of these agencies, especially concerning traffic controls, lights, barricades, and backfill requirements. Such portions of the work which may fall within the right-of-way of the agencies described above will necessarily be subject to their inspection and approval before acceptance of these portions of the work by the Hydrogeologist. Any costs for inspection by agents other than those of the District shall be borne by the Contractor. Where other agencies have jurisdiction over some portion of the work, and the requirements of the agencies are at variance with this specification, then that portion of the work shall be done in accordance with the requirements of the agency(ies), as agreed to by the District.

6.19 Compliance with Laws and Regulations. The Contractor shall keep himself fully informed of all existing and future State and National laws and County, Municipal or District ordinances and regulations which in any manner affect those engaged or employed in the work, or the materials and equipment used in the work, or which in any way affect the conduct of the work and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the drawings or specifications,

or in this contract in relation to any such law, ordinance, regulation, order or decree, the Contractor shall forthwith report the same to the Hydrogeologist in writing. He shall at all times observe and comply with, all such existing and future laws, ordinances, regulations, order and decrees. The Contractor shall protect and indemnify the District and all of the District's officers, agents and employees against any claim or liability arising from or based upon the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor himself or by his employees or by subcontractors or sub-subcontractors.

To the extent applicable hereto, the Contractor shall, in the performance of this Agreement comply with the following provisions of law:

- a. The Fair Labor Standards Act of 1939 (20 U.S.C. 201-219);
- b. The Walsh-Healy Public Contracts Act (41 U.S.C. 35-45);
- c. The Contract Work Hours Standards Act - Overtime Compensation (40 U.S.C. 327-330, and the California state requirement under Labor Code §1810, 1811, and 1815 which define 8 hours as a legal day's work;
- d. Laws restraining the Use of Convict Labor;
- e. Utilization of Small Business and Small Disadvantaged Business Concerns (Public Law 95-507);
- f. The Equal Employment Opportunity clause in Section 202 of Executive Order (E.O.) 11246, as amended, and the implementing rules and regulations 41 CFR Part 60) are incorporated herein by reference, unless this order is exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of E.O. 11246 or provisions of any superseding E.O. As used in this clause, "Contractor" means Seller. Unless this order is exempted, the applicable Equal Employment Opportunity Compliance Certificate previously submitted by Seller to Buyer is by reference also incorporated herein.
- g. The affirmative action for Handicapped Workers Clause in Title 41, Code of Federal Regulations, Part 60, Subsection 741.4 and the implementing rules and regulations of the Department of Labor associated therewith are incorporated herein by reference unless the contract amount is under \$2,500.
- h. The Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era Clause of Title 41, Code of Federal Regulations, Part 60, Subsection 25014 and the implementing rules and regulations of the Department of Labor associated therewith are incorporated herein by reference, unless the contract amount is under \$10,000.
- i. The requirements of Labor Code §3700 and §1860 which require the contractor to secure the payment of compensation to its employees, and which require the contractor to execute a certification form, as follows:

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

- j. The requirements of Public Contract Code §7106, which requires the contractor to execute a noncollusion affidavit where job is competitively bid.
- k. The requirements of Public Contract Code §4104 setting forth the "Subletting and Subcontracting Fair Practices Act" and which require the Contractor to identify any subcontractor who will perform work or render service in excess of one-half of one percent of the Contractor's total bid estimate.
- l. The requirements of Labor Code §1776, which requires the Contractor to keep accurate payroll records, and make them available for inspection on request, and Labor Code §1777.5 requirements for apprentice labor.
- m. Public Contract Code §7104, which requires a clause specific to hazardous waste and unforeseen conditions in any public works contract involving excavations deeper than four feet. The Code also requires the Contractor to notify the District in writing if any hazardous waste or other unforeseen latent physical conditions are found in the course of excavation. The District must promptly investigate and issue a change order if necessary.
- n. Labor Code §6705, which requires special trench shoring for public works in excess of \$25,000.
- o. Business & Professions Code §§7028.7 and 7028.15 pertaining to licensing requirements for Contractors who perform public works.
- p. Public Contract Code §7013(b) requires a provision regarding antitrust claims assignments. The contractor or subcontractor must "offer and agree to assign any antitrust claim arising from the purchase of goods, services or materials."
- q. Workers' compensation laws (Labor Code §3700 - Insurance, Business & Professions Code §§7124.6 - disclosure of complaints, 7125 - address of insurance carrier, and 7125.1 - evidence of coverage).
- r. All other federal, state and local laws; and
- s. All other federal, state and local regulations and orders issued under any applicable law.
- t. Governing Law and Venue. In the event of litigation, the contract documents and all matters related to the work shall be governed by and controlled only in accordance with the laws of the State of California. Venue shall be with the appropriate state court in the County of Santa Barbara only.
- u. The Americans with Disabilities Act (ADA) prohibiting discrimination on the basis of disability.

6.21 Construction Utilities. The Contractor shall be responsible for providing and bearing the cost, for and in behalf of his work under this contract, all necessary utilities, such as special connections to water supply, telephones, power lines, fences, roads, watchmen, suitable storage places, and approved sanitary facilities for his employees.

6.22 Approval of Contractor's Plans. The approval by the Hydrogeologist of any drawing or any method of work proposed by the Contractor shall not relieve the Contractor of any of his responsibility for any errors therein and shall not be regarded as any assumption of risk or liability by the District or any officer or employee thereof, and the Contractor shall have no claim under this contract on account of the failure or partial failure or deficiency of any plan or method so

approved. Such approval shall be considered to mean merely that the Hydrogeologist has no objection to the Contractor's using upon his own full responsibility, the plan or method proposed.

6.23 Suggestions to Contractor. Any plan or method of work suggested by the Hydrogeologist to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor; and the Hydrogeologist and the District shall assume no responsibility therefor.

6.24 Termination of Unsatisfactory Subcontractors. Should any subcontractor or sub-subcontractor fail to perform in a satisfactory manner the work undertaken by him, such subcontractor or sub-subcontractor shall be terminated immediately by the Contractor upon written notice from the Hydrogeologist or such sub-subcontractor shall be terminated by the subcontractor at the direction of the Contractor upon written notice from the Hydrogeologist.

6.25 Hiring and Dismissal of Employees. During the performance of this contract, the Contractor agrees as follows:

- a. The Contractor shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, mental condition, marital status, or sex. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this Equal Opportunity clause.
- b. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religious creed, sex, national origin, ancestry, physical disability, mental disability, mental condition, or marital status.

The Contractor shall employ only such foremen, mechanics and laborers as are competent and skilled in their respective lines of work and whenever the Hydrogeologist shall notify the Contractor in writing that any man on the work is, in his opinion, incompetent, unfaithful, intemperate, or disorderly, or refuses to carry out the provisions of this contract, or uses threatening or abusive language to any person on the work representing the District, or is otherwise unsatisfactory, such man shall be discharged immediately from the work and shall not be re-employed upon it except with the consent of the Hydrogeologist.

6.26 Wages of Employees. The Contractor shall provide a copy of his certified payroll for the project weekly to the Hydrogeologist. The District shall investigate any discrepancies in actual payments to those required by the general prevailing rates determined by the State Director of the Department of Public relations for the locality in which the work is performed.

The time of service of any worker shall be restricted to eight (8) hours during any calendar day and forty (40) hours during a calendar week unless overtime compensation is paid at not less than one and one-half times the basic rate of pay.

The Contractor shall forfeit, as penalty, to the District, fifty dollars (\$50) for each worker employed in execution of the contract by him or by any subcontractor, for each calendar day during which any worker is required or permitted to labor more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one (1) calendar week in violation of the provisions of Section 1775, Labor Code.

The Contractor shall comply with Section 1776, Labor Code, by maintaining accurate and complete payroll records and making such records available for inspection. Subcontractors shall also comply with the Section 1776 provisions, but the prime responsibility for maintenance and availability of complete and accurate payroll records rests with the Contractor.

6.27 Preservation of Stakes and Marks. The Contractor shall preserve carefully bench marks, reference points, and stakes, and in case of willful or careless destruction he will be charged with the resulting expense of replacement and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

6.28 Protection of Contractor's Work and Property. The Contractor shall protect his work, supplies, and materials from damage due to the nature of the work, the action of the elements, trespassers, or any cause whatsoever until the completion and acceptance of the work by the District.

Neither the District nor any of the District's agents assume any responsibility for collecting indemnity from any person or persons causing damage to the work of the Contractor.

6.29 Assistance to Hydrogeologist. At the request of the Hydrogeologist, the Contractor shall provide workers from his force, and tools, stakes and other materials to assist the Hydrogeologist temporarily in making measurements and surveys and in establishing temporary or permanent reference marks. Payment for such materials and assistance will be made as provided for under the caption "Extra Work," provided, however, that the cost of setting stakes and marks carelessly lost or destroyed by the Contractor's employees will be assessed to the Contractor.

6.30 Removal of Condemned Materials and Structures. The Contractor shall remove from the site of the work, without delay, all rejected and condemned materials or structures of any kind brought to or incorporated in the work, and upon his failure to do so, or to make satisfactory progress in so doing, within forty-eight (48) hours after the service of a written notice from the Hydrogeologist, the condemned materials or work may be removed by the District and the cost of such removal shall be deducted from the money that may be due or may become due the Contractor on account of or by virtue of this contract. No such rejected or condemned material shall again be offered for use by the Contractor under this contract.

6.31 Proof of Compliance with Contract. In order that the Hydrogeologist may determine whether the Contractor has complied with the requirements of this contract not readily ascertainable through inspection and tests of the work and materials, the Contractor, shall, at any time when requested, submit to the Hydrogeologist properly authenticated documents or other satisfactory proofs as to his compliance with such requirements.

6.32 Approval of Variations. The work done by the Contractor under this contract shall not vary in any manner from the specifications, drawings and contract stipulations, or from any materials, samples of which have been submitted and approved, except by written permission of the Hydrogeologist.

6.33 Modification of Work by Contractor. Should conditions develop during the progress of the work to make it impossible or impracticable for the Contractor to comply strictly with the terms of this contract, the Contractor shall apply in writing to the Hydrogeologist for modification, provided that it be not detrimental to the work or of additional cost. If such modification is acceptable to the Hydrogeologist, the Contractor shall be so notified in writing, whereupon the modification may be made. If such modification is not acceptable to the Hydrogeologist, the Contractor shall determine some other method of doing the work, which shall be acceptable to and duly accepted by the Hydrogeologist.

Such modifications shall in no way affect, vitiate, or make void this contract or any part thereof, except what is necessarily affected by such alterations and is clearly the evident intention of the parties to this contract.

6.34 Cleaning Up. The Contractor shall not allow the site of the work to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction period. The Hydrogeologist shall have the right to determine what is or is not waste material or rubbish and the place, manner and timing of disposal.

On or before the completion of the work, the Contractor shall, without charge therefor, carefully clean out all pits, pipes, chambers or conduits and shall tear down and remove all temporary structures built by him and shall remove rubbish of all kinds from any of the grounds which he has occupied and leave them in first-class condition, to the satisfaction of the District's Representative.

6.35 Subsequent Repair. The Contractor shall promptly make all needed repairs arising out of defective materials and equipment or faulty workmanship whether caused by the Contractor, subcontractors or sub-subcontractors, irrespective of fault, during the period specified in the Bond of Faithful Performance after the date of completion of the work under this contract and the final acceptance of the same by the District. The District is hereby authorized to make such repairs if within ten (10) days after the mailing of a notice in writing to the Contractor, or his agent, the said Contractor shall neglect to make or undertake with due diligence the aforesaid repairs; provided, however, that in case of an emergency where, in the opinion of the District, delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor, and the Contractor shall pay the costs thereof.

6.36 Hazardous Waste and Differing Site Conditions.

- a. When the work involves digging trenches or other excavations deeper than four feet, the Contractor shall promptly, and before disturbing the site, notify the Hydrogeologist in writing of: (1) material believed to be hazardous waste as defined in Section 25117, Health and Safety Code; (2) subsurface or latent physical conditions at the site differing from those indicated; or (3) unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The Hydrogeologist shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.

- b. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in (a) above; provided, however, the time prescribed therefor may be extended by the government. If a dispute arises whether the conditions materially differ or involve hazardous waste or cause a change in the cost or time for performance of the work, the Contractor shall not be excused from the scheduled completion date, but shall proceed with all work to be performed under the contract. Contractor shall retain all rights under the Contract or by law with respect to the dispute.
- c. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

- d. The removal of 100 square feet or more of surface area of asbestos-related material or of other hazardous substances as defined in Section 7058.7, Business and Professions Code, shall be encompassed by a new and separate contract undertaken with a contractor certified in accordance with Section 7058.5(a), Business and Professions Code.

If, however, an emergency condition arises by reason of the discovery of asbestos-related material or hazardous substances, the removal thereof shall be contracted and performed as day labor or by contract without giving notice for bids, or both.

The meaning of "emergency condition" shall be that as defined by Sections 10122 and 22035, Public Contract Code.

6.37 Assignment of Antitrust Claims. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 USC Sec. 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this 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 (Public Contract Code, § 7103.5).

SECTION 7. DUTIES AND POWERS OF DISTRICT

7.01 Authority of the Hydrogeologist. All work done under this contract shall be done in a workmanlike manner and shall be performed to the reasonable satisfaction of the Hydrogeologist who shall have general supervision of all work included hereunder. To prevent disputes and litigation, the Hydrogeologist shall in all cases determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract; shall decide all questions relative to the true construction, meaning, and intent of the specifications and drawings; shall decide all questions which may arise relative to the classifications and measurements of quantities and materials and the fulfillment of this contract; and shall have the power to reject or condemn any work or material which does not conform to the terms of this contract. His estimate and decision in all matters shall be a condition precedent to an appeal to the District, or the right of the Contractor to receive, demand, or claim any money or other compensation under this agreement and a condition precedent to any liability on the part of the District to the Contractor on account of this contract. Prior to giving approval of extra work or work omitted as contemplated by Section 11.05 of this contract, the Hydrogeologist shall obtain written approval by the District.

7.02 Substitute for Hydrogeologist. Whenever the Hydrogeologist shall be unable to act, in consequence of absence or other cause, then such person as the Hydrogeologist or the District shall designate, shall perform any and all of the duties, and be vested with any or all powers herein given to the Hydrogeologist.

7.03 Authority of Inspectors. Properly authorized and accredited inspectors shall be considered to be the representatives of the District limited to the duties and powers entrusted to them. It will be their duty to inspect materials and workmanship of those portions of the work to which they are assigned, either individually or collectively, under instructions of the Hydrogeologist and to report any and all deviations from the drawings, specifications, and other contract provisions which may come to their notice. Any inspector may be considered to have the right to order the work entrusted to his supervision stopped, if in his opinion such action becomes necessary, until the Hydrogeologist is notified and has determined and ordered that the work may proceed in due fulfillment of all contract requirements.

7.04 Liability of District Officials. No District official, nor the Hydrogeologist, nor any authorized assistant of any of them, shall be personally responsible for any liability arising under this contract.

7.05 Termination of Contract. If the work provided for under this contract shall be abandoned or if the contract shall be sublet or sub-sublet or assigned without the consent of the District or if at any time the Hydrogeologist shall be of the opinion that the conditions specified as to the rate of progress are not being fulfilled, or that the work or any part thereof is unnecessarily delayed, or that the Contractor is willfully violating any of the conditions or provisions of this contract or is executing the same in bad faith, or if the Contractor is adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, the District shall notify in writing the Contractor to fulfill the conditions of this contract, and should the Contractor fail to begin compliance with said notice within five (5) days, the District may, at the District's discretion, notify in writing the Contractor to discontinue all work under this contract, or any part thereof, and thereupon the Contractor shall discontinue work, and the District may, by contract or otherwise, at the District's discretion, complete the work or such part thereof, and may take possession of the work and use therein such materials, machinery, implements and tools of every description as shall be found upon the work or provide whatever is needed for the completion of the work and charge the expense thereof to the Contractor.

In order to meet the expense so incurred, the District is hereby authorized by the Contractor to draw a warrant in the name of the Contractor and in favor of those persons, firms, or corporations doing the work or providing the materials or labor therefor, against the fund or appropriation set aside for the purpose of this contract, and when a warrant is so drawn it shall be conclusive upon the Contractor, and shall be to all intents and purposes the same as drawn by the Contractor in person. When any of the said demands have been audited and paid, the amount of the same shall be deducted from the fund or appropriation set aside for the purposes of this contract being so terminated. The Contractor shall immediately, upon due notice in writing from the Hydrogeologist, remove from the premises all materials and personal property belonging to him which have not already been used in the construction of the work, or which are not in place in the work and he shall forfeit all sums due him under this contract, and both he and his sureties shall

be liable on his bond for all damages caused the District by reason of his failure to complete this contract.

Neither the extension of time, for any reason, beyond the date fixed for the completion of this work, nor the doing and acceptance of any part of the work called for by the terms of this contract, subsequent to the said date, shall be deemed to be a waiver by the District of the right to abrogate, annul, or terminate this contract for abandonment or cause as provided above.

7.06 Early Termination. Notwithstanding any provision to the contrary, if for any fiscal year of this agreement, the governing body of the District fails to appropriate or allocate funds for future periodic payments under the Agreement after exercising reasonable efforts to do so, the District, may, upon thirty (30) days notice, order work on the project to cease. The District will remain obligated to pay the work already performed but shall not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the work has not been done.

7.07 Access to Work. During the performance of the work under this contract, the District and the District's agents and employees may at any time enter upon the work, or the shops where any part of such work may be in preparation, or the factories where any materials for use in the work are being or are to be manufactured or fabricated, and the Contractor shall provide proper and safe facilities therefor, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as the District's interest may require. Other contractors performing work for the District may also, for all purposes required by their respective contracts, enter upon the work.

7.08 Removal or Replacement of Work Done Without Lines, Grades, or Levels. Any work done without lines, levels, or grades being given by the Hydrogeologist or without the supervision of an inspector, or which in the opinion of the Hydrogeologist is deficient in construction, may be ordered replaced at the Contractor's sole cost and expense, except when such work is authorized by the Hydrogeologist in writing.

7.09 Retention of Imperfect Work. If any portion of the work done or material furnished, under this contract, shall prove defective and not in accordance with the specifications and drawings, and if the imperfection in the same shall not be of sufficient magnitude or importance to make the work dangerous or undesirable, or, if the removal of such work is impracticable or will create conditions which are dangerous or undesirable, the Hydrogeologist shall have the right and authority to retain such work instead of requiring the imperfect work to be removed and reconstructed, but he shall make such deductions therefor in the payments due or to become due the Contractor as may be just and reasonable. A contract modification shall be written containing any such deductions.

7.10 Modification of Work by District. The Hydrogeologist shall have the right, in writing, to order additions to, omissions from, or corrections, alterations and modifications in the line, grade, form, dimensions, plan or kind or amount of work or materials herein contemplated, or any part thereof, either before or after the beginning of construction.

The order of such additions, omissions, corrections, alterations, and modifications shall be in writing and signed by the Hydrogeologist, and such order shall then be binding upon the Contractor.

Such alterations shall in no wise affect, vitiate or make void this contract or any part thereof, except that which is necessarily affected by such alterations and is clearly the evident intention of the parties to this contract.

7.11 Extra Work by District. In case of neglect or refusal by the Contractor to perform any extra work, which may be authorized by the Hydrogeologist or to make satisfactory progress in the execution of the same, the District may employ any person or persons to perform such work and the Contractor shall not in any way interfere with the person or persons so employed.

7.12 Additional and Emergency Protection. Wherever, in the opinion of the Hydrogeologist, the Contractor has not taken sufficient precautions for the safety of the public or the protection of the works to be constructed under this contract, or of adjacent structures or property which may be injured by processes of construction on account of such neglect, and whenever, in the opinion of the Hydrogeologist, an emergency shall arise and immediate action shall be considered necessary in order to protect public or private personal or property interest, then and in that event, the Hydrogeologist, with or without notice to the Contractor, may provide suitable protection to the said interests by causing such work to be done and such material to be furnished as shall provide such protection as the Hydrogeologist may consider necessary and adequate.

The cost and expense of such work and material so furnished shall be borne by the Contractor and if the same shall not be paid on presentation of the bills therefor, then such costs shall be deducted from any amounts due or to become due the Contractor. The performance of such emergency work under the direction of the Hydrogeologist shall in no way relieve the Contractor from any damages which may occur during or after precaution has been taken by the Hydrogeologist.

7.13 Use and Possession Prior to Completion. The District shall have the right to take possession of or use any completed or partially completed part of the work. Prior to such possession or use, the District's representative shall furnish the Contractor an itemized list of work remaining to be performed or corrected on such portions of the project as are to be possessed or used by the District, provided that failure to list any item of work shall not relieve the Contractor of responsibility for compliance with the terms of the contract. Such possession or use shall not be deemed an acceptance of any work under the contract. If such prior possession or use by the District delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment in the contract price or the time of completion will be made and the contract shall be modified in writing accordingly.

7.14 Rights-of-Way. The District shall provide all rights-of-way and easements in or beneath pipes and other structures, which will be constructed by the Contractor under this contract. If through the failure of the District to acquire or clear title to rights-of-way, the Contractor sustains loss which could not have been avoided by the judicious handling of forces and plant,

there shall be paid to the Contractor such amount as the Hydrogeologist may find to be a fair and reasonable compensation for such part of the Contractor's actual loss as the Hydrogeologist deems unavoidable.

Actual loss shall be understood to include no items other than necessary payments, idle time of men, idle time of equipment, cost of extra moving of equipment, and cost of longer hauls, with no allowance in any case for overhead or profit.

If performance of the Contractor's work is delayed as the result of the failure of the District to acquire or clear title to rights- of-way, a commensurate extension of time will be granted.

7.15 Relocating Existing Public Utilities. Should it be necessary to move the property of any owner of a public utility or franchise, such owner shall be notified by the Hydrogeologist, upon proper application by the Contractor, to move the property within a specified time, and the Contractor shall not interfere with said property before the expiration of the time so specified. Should the Contractor desire to have any alterations made in public utility or private improvements in order to facilitate his operations and for his sole benefit, which alterations would not be otherwise required, he shall make whatever arrangements are necessary with the owners of that utility or private improvement and bear all expenses in connection therewith.

SECTION 8. SCOPE AND INTENT OF SPECIFICATIONS AND DRAWINGS

8.01 Interpretation of Specifications and Drawings. The specifications and the contract drawings are intended to be explanatory of each other. Any work indicated in the contract drawings and not in the specifications, or vice versa, is to be executed as if indicated in both. Should it appear that the work to be done, or any of the matters relative thereto, are not sufficiently detailed or explained in these contract documents, including the contract drawings, the Contractor shall apply in writing to the Hydrogeologist for such further explanations as may be necessary, and shall conform thereto as part of this contract, so far as may be consistent with the terms of this contract. In the event of any doubt or question arising respecting the true meaning of the specifications, reference shall be made to the District and its decision thereon shall be final.

8.02 Figured Dimensions. Figured dimensions on the contract drawings shall in all cases be given precedence over scaled dimensions. If figured dimensions do not correspond to scaled dimensions, the Contractor shall request the Hydrogeologist to verify the accuracy of the figured dimensions. It shall be the responsibility of the Contractor to ascertain the correct scale of all contract drawings in his possession including those, which may have been reduced for reproduction.

8.03 Errors or Discrepancies. If the Contractor, in the course of the work, discovers any discrepancies between the drawings and the conditions of the ground, or any errors or omissions in the drawings or in the layout given by stakes, points, or instructions, it shall be his duty to inform the Hydrogeologist immediately in writing, and the Hydrogeologist shall promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

8.05 Additional Drawings by District. The contract drawings are intended to be comprehensive and to indicate in detail the scope of the work. However, the Hydrogeologist may furnish the Contractor additional drawings during the progress of the work in order to clarify and define in greater detail the intent of the contract drawings or specifications. The Contractor may

request such detailed drawings by submitting his request in writing to the Hydrogeologist at least two (2) weeks in advance of the time they are required.

8.06 Lines and Grades. All work under this contract shall be constructed to the lines and grades shown on the contract drawings, which shall be furnished by the Hydrogeologist. The Contractor shall advise the Hydrogeologist at least forty-eight (48) hours in advance of the time and place he wishes to do work, in order that lines and grades may be furnished and necessary measurements for record and payment made with minimum inconvenience to the Hydrogeologist and/or delay to the Contractor.

8.07 Method of Measurement. Unless specifically stated otherwise in this contract, no extra measurement or measurements according to local custom of any kind shall be allowed in measuring the work under this contract, but only the length, area, solid contents, number, weight, or time in standard units, as the case may be, shall be considered as specified. Asphalt shall be measured in place by the Ton.

SECTION 9. WORKMANSHIP, MATERIALS AND EQUIPMENT

9.01 General Quality. Materials and equipment shall be new and of a quality equal to or superior to that specified or approved. Work shall be done and completed in a thorough and workmanlike manner and in strict conformance with the plans and specifications.

9.02 Quality in Absence of Detailed Specifications. Whenever under this contract it is provided that the Contractor shall furnish materials or manufactured articles or shall do work for which no detailed specifications are set forth, the materials or manufactured articles shall be of the best grade in quality and workmanship obtainable in the market from firms of established good reputation, or, if not ordinarily carried in stock, shall conform to the usual standards for first-class materials or articles of the kind required, with due considerations of the use to which they are to be put. In general, the work performed shall be in full conformity and harmony with the intent to secure the best standard of construction and equipment of the work as a whole or in part.

9.03 Domestic Preference. Only manufactured materials produced in the United States, and only manufactured materials made in the United States substantially from materials produced in the United States, shall be employed in the performance of this contract, in accordance with the provisions of Sections 4300-4305 and of Sections 4330-4334 (Articles I and 2, Chapter 4, Division 5) of the Government Code of the State of California and any acts amendatory thereof and under the proviso of Title III, Section 3, of the Act of March 3, 1933, 47 Stat. 1520 (U.S. Code, Title 41, Sec. 10b).

The foregoing provisions of this paragraph pertain, except as otherwise provided in certain treaties and international agreements of the United States. Attention is specifically called to the "General Agreement on Tariff and Trade" entered into between the United States of America and other signatory nations which provides, among other things, that the products of any contracting nation imported into the United States must be treated no less favorably than like products of the United States, with certain exceptions.

9.04 Samples and Tests. No material shall be used in the work until it has been approved by the Hydrogeologist. All material and equipment are subject to test to determine their conformity with these specifications. Certified factory and mill tests normally shall be acceptable for standard manufactured items. Tests on other materials, including concrete mix designs and aggregate

quality tests shall be made in a materials testing laboratory, approved by the Hydrogeologist. All tests shall be performed as specifically or otherwise designated by the Hydrogeologist, and shall be completed to his satisfaction.

All tests shall be furnished by the Contractor at his expense except the following, which shall be performed at the District's expense: Initial soil compaction and stabilization tests, foundation bearing tests, concrete cylinder compression tests. In areas where soil compaction must be repeated due to failure of the compacted material to pass the initial compaction tests, the Contractor shall pay for any and all retesting required subsequent to the initial test.

9.05 Materials and Equipment Specified by Name. Unless otherwise specified in the technical sections of these specifications, any material or equipment indicated or specified by patent, proprietary, or manufacturer's name, shall be considered as used for the purpose of describing the items desired and establishing the standard of quality and utility required. In such cases, the names shall be considered as followed by the words "or approved equal." The Contractor may supply any material or equipment which is equal in every respect to that specified, provided, however, that written approval for its use is first obtained from the Hydrogeologist who shall be the sole judge of its quality and ability to meet the specifications. The Contractor shall append to the request for substitution sufficient data, drawings, samples, literature or other detailed information as will demonstrate to the Hydrogeologist that the proposed substitute material is equal in quality and utility to the material specified. The Contractor shall also append the exact amount of credit or charge to be received by the District resulting from said substitution.

The Hydrogeologist shall approve, in writing, such proposed substitution provided its quality and utility are, in his exclusive opinion, satisfactorily demonstrated and the resulting credit or charge to the District warrants such substitution. Such approval shall not relieve the Contractor from complying with the requirements of the contract documents, and the Contractor shall be responsible at his own expense for any changes caused by this proposed substitution, which affects other parts of his own work or the work of other contractors.

9.06 Standard Specifications. Wherever standard specifications are referred to, they shall be the latest revised edition of the Standard Specification referred to and shall be considered to be a part of these specifications insofar as they apply. Standard specifications from the following may be referred to herein:

- National Electrical Code (NEC)
- National Electrical Safety Code (NESC)
- International Electrical Testing Association (NETA)
- American National Standards Institute (ANSI)
- Electrical Industries Association (EIA)
- Institute of Electrical and Electronics Engineers (IEEE)
- National Electrical Manufacturers Association (NEMA)
- Underwriters Laboratory (UL)
- American Society for Testing Materials (ASTM)
- American Standards Association (ASA)
- American Water Works Association (AWWA)
- Federal Specifications (Fed. Specs.)
- Uniform Building Code (UBC)
- State of California, Division of Highways, (Cal. Div. Hwys.)

9.07 Inspection. All work and materials shall be subject to inspection by the Hydrogeologist.

The Hydrogeologist may assign such assistants as he may deem necessary to inspect the material to be furnished and the work to be done under this contract, and to see that the same strictly conform therewith.

The Hydrogeologist shall be notified at the time and place of preparation, manufacture, or construction of all material for work or any part of the work, which he may wish to inspect, and of the time and place of making the factory tests required under this contract. Such notification shall be given a sufficient length of time in advance of the beginning of the work on such material or part or of the beginning of such test to allow arrangements to be made for inspecting and testing or witnessing, as the case may be, if such inspection and testing or witnessing are deemed practicable by the Hydrogeologist.

When the Hydrogeologist considers such action to be proper and practicable, he shall at the written request of the Contractor cause materials for use upon the work to be inspected at the point of production or manufacture. The Hydrogeologist may at any time, if he so desires, cause an inspection to be made.

Any work done in the absence of an inspector that may be complete or in progress shall be subject to examination, if required by the Hydrogeologist, and the Contractor shall furnish all tools, labor, materials, and other facilities necessary to make such examination, even to the extent of uncovering or taking down portions of the finished work. The cost of making such examination and the removal of defective work and reconstruction shall be defrayed by the Contractor.

9.08 Compliance with State Safety Code. All necessary machinery guards, railings, and other protective devices shall be provided as specified by the State Division of Industrial Relations Department. Before final acceptance of the work, the Contractor shall cause an inspection to be made by a representative of the California Occupational Safety & Health Administration Consultation Division and shall certify that all safety requirements have been complied with.

9.09 Storage of Materials. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. They shall be so located and disposed that prompt and proper inspection thereof may be made. Granular material shall be covered when not in use and protected through the use of current Stormwater Best Management Practices.

9.10 Field Tests, Adjustments, and Operation. As soon as the progress of the work permits it shall be placed in service.

The Contractor shall arrange for the presence, as necessary during the succeeding thirty-day (30) period, of representatives of manufacturers of all the various pieces of equipment and parts of the installation, or other qualified persons, who shall instruct the District operating personnel in the operation and care thereof. The Contractor shall superintend the operation of any equipment during the thirty-day (30) period and shall be responsible for the proper operation thereof; and he shall make no claim against the District for any damage to the equipment during such operation, or for the services of the above-mentioned representatives or other qualified persons. The Contractor shall make such changes, adjustments, or replacements as may be required to make the same comply with the specifications, or to replace any defective parts or material.

9.11 Warranty of Supplies, Equipment, and Related Services. Notwithstanding the inspection and acceptance by the District of all supplies, equipment and related services furnished under the Contract, the Contractor warrants that:

- a. All supplies, equipment, and related services under this Contract will be free from defects in material or workmanship and will comply with the specifications of the Contract.
- b. All aspects of the shipment of supplies and equipment related to the Contract will conform to the specifications of the Contract. Failure by the Contractor to conform to the shipping requirements stated in this Contract shall constitute a breach.

9.12 Guarantees. In addition to guarantees called for elsewhere in this Contract, Contractor shall and does guarantee all work and materials for a minimum period of one year from the date of recordation of the Notice of Completion against defective material or faulty workmanship that may arise with in that period.

SECTION 10. PROSECUTION OF THE WORK

10.01 Equipment and Methods. The work under this contract shall be prosecuted with all materials, tools, machinery, apparatus, and labor and by such methods as are necessary to complete execution of everything described, shown, or reasonably implied under this contract.

The Contractor shall give the Hydrogeologist full information in advance as to his plans for carrying out any part of the work. If at any time before the beginning or during the progress of the work, any part of the Contractor's plant, or equipment or any of his methods of execution of the work, appear to the Hydrogeologist to be unsafe, inefficient, or inadequate to insure the required quality or rate of progress of the work, he may order the Contractor to increase or improve his facilities or methods, and the Contractor shall comply promptly with such orders; but neither compliance with such orders or failure of the Hydrogeologist to issue such orders shall relieve the Contractor from his obligation to secure the degree of safety, the quality of the work, and the rate of progress required of the Contractor. The Contractor alone shall be responsible for the safety, adequacy, and efficiency of his plant, equipment, and methods.

10.02 Time of Completion. The Contractor shall promptly begin the work under this contract and all portions of the project made the subject of this contract shall be begun and so prosecuted that they shall be completed and ready for full use within the Contract performance time listed in the contract. The Contractor shall be done with all work including site cleanup within **45 Calendar Days.**

10.03 Avoidable Delays. Avoidable delays in the prosecution or completion of the work shall include all delays, which might have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor.

Delays in the prosecution of parts of the work, which may in themselves be unavoidable but do not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole work within the time herein specified, reasonable loss of time resulting from the necessity of submitting plans to the Hydrogeologist for approval and from the making of surveys, measurements, and inspections, and by such interruptions as may occur in the prosecution of the work on account of the reasonable interference of other contractors employed by the District,

which do not necessarily prevent the completion of the whole work within the time herein specified, will be considered by the District as avoidable delays within the meaning of this contract.

10.04 Unavoidable Delays. Unavoidable delays in the prosecution or completion of the work under this contract shall include all delays which may result, through causes beyond the control of the Contractor and which he could not have provided against by the exercise of care, prudence, foresight and diligence. Orders issued by the District changing the amount of work to be done, the quantity of material to be furnished, or the manner in which the work is to be prosecuted, and unforeseen delays in the completion of the work of other contractors under contract with the District will be considered unavoidable delays, so far as they necessarily interfere with the Contractor's completion of the whole of the work. Delays due to adverse weather conditions may, at the discretion of the District, be considered unavoidable. However, the Contractor shall anticipate such delays and plan his work accordingly. The District shall provide an extension for weather delays as covered in the Special Provisions to the contract.

10.05 Notice of Delays. Whenever the Contractor foresees any delay in the prosecution of the work, and in any event immediately upon the occurrence of any delay which the Contractor regards as an unavoidable delay, he shall notify the Hydrogeologist in writing of the probability of the occurrence of such delay and its cause, in order that the Hydrogeologist may take immediate steps to prevent, if possible, the occurrence or continuance of the delay, or, if this cannot be done, may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the work are to be delayed thereby.

After the completion of any part of the whole of the work, the Hydrogeologist, in estimating the amount due the Contractor, shall assume that any and all delays which have occurred in its prosecution and completion have been avoidable delays, except such delays as shall have been called to the attention of the Hydrogeologist in writing at the time of their occurrence and found by him to have been unavoidable. The Contractor shall make no claim that any delay not called to the attention of the Hydrogeologist at the time of its occurrence has been an unavoidable delay.

10.06 Extension of Time. Should any delays occur which the Hydrogeologist may consider unavoidable, as herein defined, the Contractor shall, pursuant to his application, be allowed an extension of time, beyond the time herein set forth, proportional to said delay or delays in which to complete this contract; and liquidated damages for delay shall not be charged against the Contractor by the District during an extension of time granted because of unavoidable delay or delays.

10.07 Unfavorable Weather and Other Conditions. During unfavorable weather and other conditions, the Contractor shall pursue only such portions of the work as shall not be damaged thereby. No portions of the work on which satisfactory quality or efficiency will be affected by any unfavorable conditions shall be constructed while these conditions remain, unless by special means or precautions approved by the Hydrogeologist, the Contractor shall be able to overcome them.

SECTION 11. PAYMENT

11.01 Progress Payments. Payments shall be made within 30 days upon presentation of undisputed and properly submitted estimates prepared jointly by the Contractor and District's

representative and received and properly certified and approved by the Hydrogeologist. Payments shall be based upon the percentage of the work completed under each payment item during the preceding month, or upon actual quantities performed.

If the District fails to make a timely payment after receipt of an undisputed, properly submitted payment request or estimate, interest shall be paid the Contractor at the legal rate until paid.

Payment requests or estimates determined not to be properly submitted or disputed shall be returned, with written reasons therefore to the Contractor as soon as practicable, but not later than seven (7) days after receipt.

The number of days available to the District to make a payment without incurring interest shall be reduced by the number of days, if any, exceeding the seven-day return requirement of disputed or improperly submitted payment requests or estimates.

These provisions shall not apply to that portion of the final payment designated by the Contract as retention earnings.

11.02 Retentions. The District shall retain ten percent (10%) of the amount of each progress estimate, and the accumulation of said amounts so retained from the progressive payments to the extent unencumbered shall be paid to the Contractor in no less than thirty-five (35) days after the completion of the work and acceptance by the Hydrogeologist and the District.

In lieu of retention of ten percent (10%) of the amount of each progress payment, the Contractor may elect to deposit certain securities (certificate of deposit or other interest bearing securities) equivalent to the amount to be withheld. The Contractor shall notify the District in writing upon the presentation of estimates of the Contractor's intention to enter into an escrow agreement.

The Contractor also has the option, at his cost, to request the District to make payment of retentions earned, directly into an escrow agent, pursuant to the terms of Section 22300, Public Contract Code.

11.03 Acceptance. The Contractor shall notify the Hydrogeologist in writing of the completion of the work whereupon the Hydrogeologist shall promptly, by personal inspection, satisfy himself as to the actual completion of the work in accordance with the terms of the contract. After receiving a recommendation for acceptance of the work from the Hydrogeologist in writing, the District shall either accept or reject the work, stating the conditions for acceptance if the work is rejected. When the District accepts the work, it shall file a "Notice of Completion" with the County Recorder in the County of Santa Barbara and shall promptly notify the Contractor in writing of the recordation. The Contractor warrants and guarantees that title to all work, materials and equipment accepted by the District shall pass to the District free and clear of all liens, claims, security interests or encumbrances, and that no work, materials or equipment accepted will have been acquired by the Contractor, subcontractor or sub-subcontractor, or by any other person performing the work at the site or furnishing materials or equipment for the project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

11.04 Final Quantities and Payment. The Hydrogeologist shall, as soon as practicable after the final acceptance of the work done under this contract, make a final determination of the amount of work done thereunder and the value thereof.

Such final determination shall be signed by the Hydrogeologist, and after approval, the District shall pay or cause to be paid to the Contractor, in the manner provided by law, the entire sum so found to be due hereunder, after deducting therefrom all previous payments and such other lawful amounts as the terms of this contract prescribe.

In no case shall final payment be made in less than thirty-five (35) days after the completion of the work and its acceptance by the District.

11.05 Extra Work and Work Omitted. Whenever corrections, alterations, or modification of the work under this contract are ordered by the Hydrogeologist and approved by the District and increase the amount of work to be done, such added work shall be known as extra work, and when such corrections, alterations, or modifications decrease the amount of work to be done, such subtracted work shall be known as work omitted.

When the Contractor considers that any changes ordered involve extra work, he shall immediately notify the Hydrogeologist in writing and after receipt of the Hydrogeologist's written authorization to proceed, and subsequently keep him informed as to when and where alleged extra work is to be performed and shall make claim for compensation therefor each month not later than the first day of the month following that in which the work claimed to be extra work was performed, and he shall submit a daily complete statement of materials used and expenses incurred on account of extra work performed, showing allocation of all materials and expenses.

All such claims shall state the date of the Hydrogeologist's written order authorizing the work on account of which claim is made.

Unless such notification is made in writing and unless complete statements of materials used and expenses incurred on account of such alleged extra work are furnished as above required, the Contractor shall not be entitled to payment on account of such alleged extra work and any future claims for compensation for such alleged extra work shall be invalidated.

When changes decrease the amount of work to be done, they shall not constitute a claim for damages on account of anticipated profits on the work that may be omitted.

11.06 Compensation for Extra Work or Work Omitted. Whenever corrections, additions, or modifications in the work under this contract change the amount of work to be done or the amount of compensation due the Contractor and such changes have been ordered in writing by the Hydrogeologist, then a price may be agreed upon, or failing such an agreement in price, an amount equal to the sum of the following five (5) items shall be used as the full and proper compensation therefor, and such amount shall be added to or subtracted from, as the case may be, the price fixed by the terms of this contract for the part of the work affected:

- a. The necessary reasonable cost to the Contractor of the material required for the work as furnished by the Contractor and delivered by him at the site of the work.
- b. The necessary cost to the Contractor of the labor (including foremen devoting their exclusive attention to the work in question), required to incorporate all of said material into the work and to finish the work in accordance with directions.
- c. Appropriate overhead and profit.
- d. The cost of workmen's compensation insurance premiums on the labor included in item (b).

In order that a proper estimate may be made by the Hydrogeologist of the net cost of labor and materials entering into extra work, in accordance with the procedure just stated, the Contractor shall furnish daily an itemized statement of material and labor supplied, together with the cost of such material and the wages paid, and shall furnish vouchers for quantities and prices of such labor, material, or work. In case the Contractor fails to comply with the above provisions, such failure shall be deemed a voluntary waiver of right, and Contractor thereafter shall have no claim for compensation against the District.

This method of determining the price of work shall not apply to the performance of any work, which is required or reasonably implied to be performed or furnished under this contract.

11.07 Compensation to District for Extension of Time. In case the work called for under this contract is not completed within the time limit stipulated herein, the District shall have the right, as provided hereinabove, to extend the time of completion thereof. If the time limit be so extended, the District shall have the right to charge to the Contractor and to deduct from the final payment for the work the actual cost to the District of engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to the extension of time. The cost of final surveys and preparation of the final estimate shall not be included in such charges.

11.08 Liquidated Damages for Delay. It is agreed by the parties to the contract that time is of the essence and that in case all the work is not completed before or upon the expiration of the time limit as set forth, damage will be sustained by the District, and that it is and shall be impracticable to determine the actual amount of damage by reason of such delay, and it is therefore agreed that the Contractor will pay to the District the sum of **five-hundred dollars (\$500) per day** for each and every working day's delay beyond the time prescribed. It is agreed that such damages shall be in addition to the compensation required pursuant to paragraph 11.07 above.

In addition, the District shall have the right to charge to the Contractor and to deduct from the final payment for the work the actual cost to the District for the Hydrogeologist, inspection, superintendence, and other overhead expenses, which are directly chargeable to the contract and which accrue during the period of such delay, except that the cost of final surveys and preparation of the final estimate shall not be included in such charges.

No liquidated damages shall be paid to the District for unavoidable delays pursuant to sections 6.18 and 10.06 of these General Provisions.

SECTION 12. EMPLOYMENT OF APPRENTICES

12.01 Apprentices. Attention is directed to the provisions in Sections 1777.5 (Chapter 1411, Statutes of 1968) and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or subcontractor under him.

Section 1777.5, as amended, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate shall also fix the ratio of apprentices to journeymen that

shall be used in the performance of the contract. The ratio of apprentices to journeymen in such cases shall not be less than one to five except:

- a. When employment in the area of coverage by the joint apprenticeship committee has exceeded an average of 15 percent (15%) in the ninety (90) days prior to the request for certificate, or,
- b. When the number of apprentices in training in the area exceeds a ratio of one-to-five, or
- c. When the trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis statewide or locally, or
- d. When assignment of an apprentice would create a condition, which would jeopardize his/her life or the life, safety, or property of fellow employees or the public at large or if the specific assigned task is of such a nature that training cannot be provided by a journeyman.

Where the Contractor properly shows that apprentices are employed in the state on all contracts on an annual average of not less than one hour of apprentice labor to five hours of journeyman labor, a certificate may be granted by the Division of Apprenticeship Standards exempting the Contractor from the one to five hourly ratio otherwise required by Section 1777.5, Labor Code.

The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

The Contractor shall be responsible to comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices.

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

A copy of the contract award shall be sent within five (5) days to the Division of Apprenticeship Standards, 525 Golden Gate Avenue, P.O. Box 603,

PART B
Special Provisions
Technical Specifications
Construction Drawings
Addenda, If Any



SECTION 100 - SPECIAL PROVISIONS

- Section 101 - Project Description and Purpose
- Section 102 - Project Location and Work Area
- Section 103 - Hydrogeologic Conditions
- Section 104 - Overview of Required Work
- Section 105 - Additional Requirements of Contractor
- Section 106 - Services Provided by the City
- Section 107 - Qualifications of Contractor
- Section 108 - Construction Schedule



SECTION 101 - PROJECT DESCRIPTION AND PURPOSE

The Carpinteria Valley Water District's (District) El Carro Park Monitoring Wells Project will include the drilling and construction of a cluster of three groundwater monitoring wells within the Carpinteria Groundwater Basin (CGB). Groundwater supply in the Carpinteria Valley area is derived primarily from aquifer units within Storage Unit No. 1 (SU-1) of the CGB (SU-1 is separated from SU-2 to the south by the Rincon Creek Thrust Fault). The Carpinteria Groundwater Sustainability Agency CGSA is in the process of developing a Groundwater Sustainability Plan (GSP) for the CGB, and the District is in the process of establishing the Carpinteria Advanced Purification Project (CAPP) which will serve to replenish the CGB with purified recycled water. Depth discreet monitoring well clusters are critical elements for both of these endeavors and will allow for the collection of important water level and water quality data to track basin conditions.

Three separate monitoring wells will be constructed as part of the project. The proposed wells will be spaced approximately 50 feet apart. The pilot hole for the first and deepest monitoring well will be logged by the onsite hydrogeologist and a geophysical log will be performed. The final monitoring well designs and screen intervals will be based on the information from the pilot hole. Drilling will be performed using the direct rotary method using bentonite based fluid. The wells will be constructed using 4-inch diameter, Class Schedule 40 and 80 PVC. The wells will be developed after construction and baseline water quality samples will be collected. The wells will be routinely sampled and monitored in the future in accordance with the GSP and the CAPP operating conditions.

Pueblo Water Resources, Inc. (Pueblo) will provide hydrogeologic oversight and will serve as the District's technical representative throughout the project.

SECTION 102 - PROJECT LOCATION AND WORK AREA

The project site is located along the western portion of El Carro Park within the City of Carpinteria. **Figure 1** shows the location of the site with respect to the regional setting. **Figure 2** shows the proposed well locations within the park and the work area for project operations. A 16-foot high temporary sound barrier (minimum STC Rating 30), approximately 400-feet in length will be constructed for the project and will serve as the western and southern delineation of the work area. The "L" shaped work area, as shown on **Figure 2** encompasses an area of approximately 20,000 square feet. The Contractor for the project will be required to construct a temporary, locking, chain-link fenced enclosure around the portion of the work area that is not bounded by the sound barrier. The Contractor will be allowed to stage equipment and store materials at the District's maintenance facility located at 1301 Santa Ynez Avenue in Carpinteria, which is approximately 1.5 miles from the project site. Parking of Contractor's vehicles within the City's parking lot north of the project site will not be allowed.

It shall be the responsibility of the Contractor to inspect the project site and the District's maintenance facility.



SECTION 103 – HYDROGEOLOGIC CONDITIONS

The CGB is located on the south flank of the Santa Ynez Mountains, one of the east-west trending ridges of the Transverse Range Geomorphic Province. The basin represents the north limb of a structural syncline that has been filled with water-bearing sediments. In the CGB, water-bearing deposits include all unconsolidated and semi-consolidated sediments of Plio-Pleistocene and Holocene age, with older consolidated non-water bearing rocks forming the boundaries of the basin. The Rincon Creek Thrust Fault divides the CGB into subunits. Storage Unit No. 1 (SU-1) occurs north of the fault, and Storage Unit No. 2 (SU-2) is located south of the fault. The El Carro Park Monitoring Wells Project is within SU-1.

The major aquifer zones of the CGB are comprised of unconsolidated marine sediments of the Carpinteria and Casitas Formations and are generally correlatable throughout the central and eastern portion of SU-1 and beneath the project site. The major water bearing units have been designated as so-called A, B, C, and D “Zones”. Zone A represents the shallowest major aquifer zone with Zone D being the deepest. The geologic deposits within the CGB consist of interbedded unconsolidated and semi-consolidated sand, gravel, silt and clay (and combinations thereof). The coarser grained sandy/gravelly layers make up the individual primary aquifer zones (i.e., Zones A - D). These primary water bearing zones are generally on the order of 50 to 100 feet thick each. Finer grained strata of silt and clay are generally thicker and form a series of aquitards between the coarser grained, water bearing zones. Wells within the central portion of the CGB produce groundwater primarily from Zones A, B, and C, and these are the intended completion zones for the El Carro Park monitoring wells.

The depth to the bottom of Zone C beneath the site is estimated to be approximately 1,200 feet below ground surface (bgs). The lithologic and geophysical logs from the District’s closest production well, El Carro Well No. 2, located approximately 370 feet east of the proposed monitoring well locations, serves as the basis-of-design for the screen intervals of the El Carro Park monitoring wells.

SECTION 104 - OVERVIEW OF REQUIRED WORK

Work includes the furnishing of all materials, labor, equipment, fuel, tools, transportation, and services for drilling, construction, and development of the three monitoring wells as described in these specifications.

While the final drilling depths and design of the well may change slightly based on the conditions encountered during the drilling of the boring, the general work required shall include the following:

- 1) Acquisition of three well drilling permits from the Carpinteria Valley Water District.
- 2) Preparation of the site for well construction activities.
- 3) Construction of a 16-foot high sound barrier along the south and west portions of the work area (approximately 400 feet in total length).
- 4) Drilling and installation of three 20-foot deep, 16-inch diameter, mild steel conductor casings at each of the three monitoring well locations.



- 5) Pilot hole drilling to a depth of 1,240 feet bgs, and completion of a geophysical log of the pilot hole.
- 6) Construction of the deep monitoring well (target aquifer Zone C). After the geophysical log is reviewed and the final well design is established, a ‘wiper run’ of the pilot hole shall be performed to clean and condition the boring for monitoring well construction. The monitoring well shall be constructed with 4-inch diameter, Class 80 PVC. Gravel pack and an annular seal shall then be provided.
- 7) Drilling and construction of an intermediate depth monitoring well (target aquifer Zone B).
- 8) Drilling and construction of a shallow monitoring well (target aquifer Zone A).
- 9) Development of the monitoring wells by air-lifting pumping while swabbing within the screen zones.
- 10) Installation of traffic-rated, water tight circular well vaults (manholes), constructed flush with (or very slightly above) the ground surface.
- 11) Site clean-up and de-mobilization of equipment and materials from the site.

The tentative well design features of the El Carro Park monitoring wells are presented in the table below.

	Depths/Intervals, feet bgs		
	MW-1 (Deep)	MW-2 (Intermed.)	MW-3 (Shallow)
Total Casing Depth,	1,200	925	360
Well Screen	1,090 – 1,190	850 – 915	285 - 350
Annular Seal Depth	1,040	800	235

A generic drawing showing the proposed monitoring well features is presented on **Figure 3**.

The Contractor is advised that the design of the monitoring wells presented above is tentative and is to be used for bidding purposes. The final design of the well may be revised slightly based on the information acquired through the drilling of the pilot hole (lithologic and geophysical logs).

SECTION 105 – ADDITIONAL REQUIREMENTS OF CONTRACTOR

In addition to the work described in Section 104, the Contractor will be responsible for other work that will be required during the construction of the wells.

Underground Services Alert (USA). The Contractor shall contact Underground Services Alert (USA) at least 3 days prior to any drilling or excavation at the site.

Site Preparation. The Contractor shall prepare and maintain the site in a manner as to provide adequate work space and safe working conditions.



Best Management Practices. The Contractor shall implement Best Management Practices (BMPs) which shall include a Storm Water Pollution Prevention Plan (SWPPP) in coordination with the District. The SWPPP shall focus on avoiding non-storm discharges to storm drains and controlling storm water discharges through soil stabilization, sediment control, wind erosion control, sediment tracking control and waste management measures. These measures may include fiber rolls placed at the adjacent storm drain inlet and other features to contain drilling and development fluids on-site. The BMPs shall also include measures and plans to prevent the generation of dust and the migration of dust offsite.

The BMPs and the SWPPP for the project shall be approved by the District prior to mobilization.

Site Security. The Contractor shall be responsible for site security and shall construct a temporary, locking, chain-link fenced enclosure around the work area which shall remain in place for the duration of the project. The Contractor shall adequately secure the site both on a daily basis while the work is progressing, and for periods of more extended absences from the work site. The security measures shall be sufficient to ensure public safety and prevent vandalism and/or destruction of equipment and well components/facilities. The District will not be responsible for security of Contractor's equipment and materials at the well site nor at the District's maintenance facility should the Contractor choose to stage or store equipment and/or facilities there.

Drilling Fluids and Cuttings. The Contractor may temporarily store drill cuttings onsite provided that the cuttings are contained in leak-proof, portable containers/bins. Drilling fluids and development water may also be temporarily contained onsite in leak-proof portable tanks.

The Contractor shall arrange for the containment and legal disposal of all drilling fluids, fluids displaced during well construction, and turbid fluids produced during the initial stages of well development. The Contractor shall also arrange for the containment and legal disposal of all drill cuttings. Proper documentation for cuttings/fluid transport and disposal shall be provided to the District. Testing fees associated with the legal disposal of cuttings/fluids are the responsibility of the Contractor.

Noise Control. In addition to the temporary sound barrier to be constructed along the southern and western boundaries of the work area, the Contractor shall take all possible measures to reduce noise impacts to proximate residences and businesses.

Temporary Restroom Facilities. The Contractor shall provide for portable restroom facilities at the site throughout the course of the project. The temporary facilities shall be located within the temporary construction work area.

SECTION 106 - SERVICES PROVIDED BY THE DISTRICT

The District will provide the Contractor water supply free of charge. A connection to the water supply is located within the District's El Carro Well Facility, approximately 370 feet from the monitoring well site. It shall be the Contractor's responsibility to convey water from the wharf head to the point of use in such a manner as to prevent nuisance leakage of water and promote public safety.



The District will make arrangements for the disposal of well development water to the storm drain system under the existing General NPDES Permit for Drinking Water System Discharges (WQO 2014-0194-DWQ). No water shall be discharged that exceeds the turbidity limit of 100 NTU or the total chlorine residual limit of 0.019 mg/L. The pH of discharge water shall be in the range of 6.5 and 8.5.

Upon completion of the geophysical survey, the District and the District's Hydrogeologist shall confirm the final well designs for the Contractor. This shall include total casing depths and well screen placement, gravel pack placement, and the depths of the annular seals. The final well designs will be provided to the Contractor within 8 hours (maximum) of completion of the geophysical log. The Contractor may proceed with reaming of the pilot bore while the lithologic and geophysical logs are reviewed. No standby time will be charged to the District for time that elapses between the completion of the geophysical survey and final development of well design.

SECTION 107 - QUALIFICATIONS OF THE CONTRACTOR

Bidders shall hold a valid Class C-57 California Contractor's License. Concurrent with the bid submittal, the Contractor shall submit a list of three monitoring well projects recently completed that included monitoring wells that measured at least 1,500 feet in depth and are of similar design as the proposed sentinel wells. The list shall include the construction dates, references, and reference contact information.

All work shall conform to and/or be in compliance with California Department of Water Resources (DWR) Bulletins 74-81 and 74-90.

SECTION 108 - CONSTRUCTION SCHEDULE

A project schedule must be submitted with the bid in order for the bid to be considered responsive. The schedule shall show the timing of operations starting with the Notice-to-Proceed date.

The Contractor shall perform work on an approximate 9-hour per day schedule, between the times of 7:30 a.m. and 5:30 p.m., Monday through Friday. No work will be allowed on City of Carpinteria or District observed holidays. During drilling and construction of the deep, intermediate, and shallow monitoring wells, 12-hour operational periods (7 a.m. to 7 p.m.) will be allowed. Provisional Saturday work may be allowed by the District upon request.

All work must be completed within eight weeks from the Notice-to-Proceed date.



**CARPINTERIA VALLEY WATER DISTRICT
CARPINTERIA GROUNDWATER BASIN SENTINEL WELL PROJECT**

SECTION 200 - TECHNICAL SPECIFICATIONS

- Section 201 - Mobilization
- Section 202 - Sound Barrier
- Section 203 - Conductor Casing
- Section 204 - Drilling
- Section 205 - Geophysical Logging
- Section 206 - Well Casings
- Section 207 - Gravel Pack
- Section 208 - Annular Seals
- Section 209 - Drilling Fluid and Cuttings Disposal
- Section 210 - Well Development
- Section 211 - Wellhead Completions
- Section 212 - Site Cleanup



SECTION 201 - MOBILIZATION

MOBILIZATION - BID ITEM NO. 1

SCOPE OF WORK

Mobilization shall consist of all preparatory work and materials necessary for construction operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; control of water; site leveling; and all other facilities necessary for work on the project and for all other work and operations which must be performed, or cost incurred prior to beginning work on the various Contract items on the project site. Mobilization shall include the following: acquisition of well permits from the Carpinteria Groundwater Sustainability Agency; USA notifications for the three monitoring well locations; installation of temporary, locking chain-link fencing encompassing the temporary construction easement/work area; and establishment of portable restroom facilities within the fenced work area. Mobilization shall also include a pre-construction conference with the District and the District's Representative to assess and document the pre-construction site conditions of the work area and the surrounding areas. No tree trimming shall be allowed without prior consent of the District or the District's representative.

MATERIALS AND METHODS

The Contractor shall provide a complete drilling unit, all tools, accessories, power, fuel, materials, supplies, lighting, tanks, piping, portable restroom facilities, and other equipment and experienced personnel necessary to conduct efficient drilling operations. The drilling unit shall be in good condition and of such capacity as to drill the hole and complete a well as required by these Specifications to a depth of approximately 2,000 feet. All equipment shall be cleaned prior to mobilization to prevent potential cross-contamination from previous projects on which the equipment was used. The cleaning shall also remove vegetation and soil from equipment to prevent non-native seed and plant transfer.

PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment, permits, and incidentals, and for doing all work required for mobilization shall be included in the lump sum price bid for "Mobilization", Bid Item No. 1. ***The bid price for Bid Item No. 1 – Mobilization shall not exceed ten percent (10%) of the total bid price.***



SECTION 202 – SOUND BARRIER

202- SOUND BARRIER, BID ITEM NO. 2

SCOPE OF WORK

The Contractor shall do all work necessary to design, furnish, install, maintain, and remove a temporary sound attenuation barrier ('sound barrier'). The sound barrier shall be placed along the western and southern boundary of the temporary work area (approximately 400 total linear feet) and shall have a consistent height of 16 feet (minimum). The final design and placement of the sound barrier shall be subject to the approval of the District and the District's Representative. Supports for the sound panels shall be drilled; sound barriers constructed using the 'K-Rail' and 'guy wire' method will not be allowed.

The reduction of noise pollution shall also consist of providing construction equipment and performing construction activities in a manner that minimizes noise generation and conforms to these Specifications. It shall be the Contractor's responsibility to keep noise pollution due to construction activities as low as possible. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a residential grade muffler to minimize noise emission. No internal combustion engine shall be operated on the project without said muffler. In no case shall noise levels produced by the Contractor exceed 88 decibels (dBA) as measured within the soundwall and at a distance of 50 feet, or 60 decibels (dBA) as measured outside the soundwall and at a distance of 200 feet from the wellhead.

MATERIALS AND METHODS

The engineered soundwall shall utilize a sound absorption panels with a minimum Sound Transmission Class rating (STC) of 30. The soundwall shall be self-supporting and at least 16 feet high. The total length of the sound barrier shall be approximately 400 feet. The barrier shall be in place and operational throughout drilling and well development operations. In addition to the soundwall, the Contractor shall plan to have available at all times during the project acoustical blankets or other sound control material for miscellaneous sound control as needed and as determined to be necessary by the District and/or the District's Representative. The Contractor shall comply with requests by the District and the District's Representative to implement any additional sound control measures deemed necessary.

The District's Representative will take periodic sound level measurements during the construction process to ensure compliance with the levels specified above.

PAYMENT

Payment for the Contractor's materials, equipment, and labor for the reduction of noise impacts shall be included in the lump sum price for "Sound Barrier", Bid Item No. 2.



SECTION 203 - CONDUCTOR CASING

CONDUCTOR CASING - BID ITEM NO. 3

SCOPE OF WORK

The Contractor shall furnish all equipment, material, and work necessary to install the surface conductor casings as specified herein. Prior to pilot hole drilling for each of the three monitoring wells, the Contractor shall bore a 24-inch-minimum-diameter hole from ground surface to a depth of 20 feet, or as directed by the District's Representative, in which a 16-inch diameter steel surface conductor casing shall be installed.

MATERIALS AND METHODS

The conductor casing shall be a minimum 16 inches outside-diameter steel pipe having a wall thickness of not less than 0.25-inches and a length of not less than 20 feet. Conductor casing shall be manufactured in accordance with ASTM Designation A-139, Grade B, without copper. All joints in the conductor casing shall be securely welded and shall be watertight. Centering guides shall be welded to the conductor casing with a minimum of two sets of guides (one near the bottom and one near the top). Each set will consist of three guides equally spaced circumferentially.

After the conductor casing has been installed, it shall be sealed by filling the annular space between the hole and the conductor casing by means of a grout pipe with standard pumping mix concrete (minimum, 10 sack mix). The seal will be considered to be sufficiently emplaced when the concrete is visible at the surface. After cementing operations are completed, the concrete shall be left undisturbed for a period of not less than 24 hours before drilling is resumed. The final depth of the concrete within the annulus shall be no shallower than 18 inches below ground surface to accommodate the placement of the well enclosure.

PAYMENT

Full compensation for doing all work and furnishing all materials necessary to manufacture, deliver, and install the 16-inch surface conductor casings shall be included in the lump sum price for "Conductor Casings" - Bid Item No. 3.



SECTION 204 - DRILLING

DRILLING - BID ITEM NO. 4

SCOPE OF WORK

The Contractor shall furnish and provide all work, equipment, and materials necessary to complete the drilling of a 12.75-inch diameter boring for each of the three monitoring wells. The initial pilot hole shall be drilled to a depth of 1240 feet for the first and deepest monitoring well. The estimated boring depths for the other intermediate and shallow monitoring wells, and the depths to be assumed for bidding purposes, are 935 feet and 370 feet, respectively. The borings for each of the monitoring wells shall be cleaned and conditioned so as to allow for the installation of the monitoring well casings. Borehole cleaning and conditioning may include performance of a 'wiper' run, and/or reaming, and shall be provided as necessary at no additional cost to the District.

MATERIALS AND METHODS

The Contractor must provide to the District's Representative a description of the drilling equipment and fluids to be used prior to mobilization. The drilling fluid shall possess such characteristics as are required to adequately maintain the walls of the hole to prevent caving of the hole as drilling progresses and to permit recovery of representative samples of cuttings. The drilling fluid shall possess such characteristics that it can be readily removed from the hole during the placement of the gravel pack and during development of the well. The drilling fluid shall be a clay-based bentonite system, with appropriate additives as needed. The drilling equipment, drilling fluid system, and proposed drilling fluid additives shall be disclosed to the District's Representative and approved of prior to mobilization.

Surface containment (i.e., tanks and/or bins) of drilling fluids and drill cuttings will be required. Contractor is advised that cuttings from shaker or those removed from tanks will need to be stored and contained on-site. Upon completion of drilling operations and well construction, all fluids and cuttings shall be removed from the site and disposed of as provided in Section 209.

Mechanical separation must be utilized to remove all but the finest of drill cuttings from the drilling fluid. Mechanical separation shall include, at a minimum, a shale shaker and de-sanders capable of handling a minimum of 125 percent of the circulating capacity of the fluid system. This equipment must keep sand content below one percent in the drilling fluid at all times during the drilling process.

It is the Contractor's sole responsibility to ensure that the sizing and configuration of the fluid system and settling tanks are adequate to meet the drilling fluid properties outlined below.

The Contractor must provide at the drilling site at all times Standard API measurement devices in proper working order to determine the following drilling fluid properties:

- 1) Drilling fluid weight
- 2) Drilling fluid viscosity
- 3) Drilling fluid sand content
- 4) 30 minute water loss/filter cake



The above properties of the drilling fluid entering the mud pump or leaving the circulation tank must be recorded by the contractor at a minimum of 100 foot intervals during the drilling of the pilot hole. The drilling fluid shall have the following properties in accordance with API Code RP 13B (or recent modification) "Recommended Standard Procedures for Testing Drilling Fluids."

For **clay-based bentonite** fluid systems, the following properties shall be maintained.

1. Weight - a maximum of 9.5 pounds per gallon during all aspects of drilling.
2. Marsh Funnel Viscosity – a minimum of 38 seconds and a maximum of 50 seconds during all aspects of drilling.
3. Sand Content - a maximum of one percent by volume during all aspects of drilling.
4. Water Loss - a maximum of 15 ml. Wall cake thickness shall be no greater than 3/32-inch.

The Contractor must keep records providing the following information for the well:

1. A log of the cuttings, providing the depths and descriptions of the earth materials encountered. The Contractor shall collect cutting samples at 10-foot intervals during the drilling of the pilot boring. Samples shall be placed in "zip-lock" plastic bags and labeled with well name, sample depth interval, and date.
2. A log of drilling fluid test results, and a log listing the types and amounts of drilling fluid additives used, with corresponding times and depths, and drilling fluid changes.
3. A log of drilling bit types and depths at which drill bit changes are made.

All measurements for depths shall be referenced to existing ground surface at the well site. All drilling records shall be delivered to the District's Representative upon completion of the well.

Upon completion of the pilot bore, a geophysical log of the bore hole shall be performed. The geophysical log will be used to develop the final design elements of the well. The District's Representative may authorize additional pilot boring upon review of the geophysical log. The geophysical logging is described in Section 205.

PAYMENT

Full compensation for doing all work and furnishing all labor, materials, and tools necessary to complete pilot bore drilling and the borehole drilling for the monitoring wells to the depths established in these Specifications shall be included in the unit price bid per linear foot for "Drilling" - Bid Item No. 4.



SECTION 205 - GEOPHYSICAL LOG

GEOPHYSICAL LOG - BID ITEM NO. 5

SCOPE OF WORK

The Contractor shall furnish all equipment, materials, and work necessary to perform a geophysical log of the pilot bore. The surveys to be performed as part of the geophysical log include: spontaneous potential; resistivity; resistance; and natural gamma.

MATERIALS AND METHODS

The Contractor shall furnish services to complete a geophysical log of the pilot hole for the deep monitoring well. Borehole geophysical logs, consisting of spontaneous potential, 16- and 64-inch resistivity surveys, and a natural gamma survey, all in API format, shall be made of the pilot bore by the Contractor as directed by the District's Representative. Standby time will not be paid for additional cleaning and conditioning of the hole to enable logging operations to proceed. If the logging probe fails to descend to the desired depth, the Contractor, at his own expense, shall condition the hole to permit the logging probe to descend to the bottom of the drilled hole.

The Contractor shall provide field copies of the geophysical log to the District's Representative immediately upon completion of the logging. The geophysical log shall also be provided to the District's Representative in a digital format (PDF and Excel compatible).

PAYMENT

Full compensation for all labor, tools, equipment and insurance, and doing all work necessary and incidental to complete the task of Geophysical Logging, including standby time as specified in these Specifications shall be included in the lump sum price for "Geophysical Logging" - Bid Item No. 5.



SECTION 206 - WELL CASINGS

WELL CASINGS - BID ITEM NO. 6

SCOPE OF WORK

The Contractor shall furnish all materials and work necessary to manufacture, deliver, and install the blank well casing, the well screen, and the cellar pipe with end cap, as listed in the table below and shown on Plate 3, and in accordance with these Specifications.

Quantity (Linear Feet)	Item
1,960	4-INCH-DIAMETER, SCHEDULE 80, BLANK CASING.
165	4-INCH-DIAMETER, SCHEDULE 80, WELL SCREEN, 0.040-INCH HORIZONTAL, MACHINE CUT SLOTS.
295	4-INCH-DIAMETER, SCHEDULE 40, BLANK CASING.
65	4-INCH-DIAMETER, SCHEDULE 40, WELL SCREEN, 0.040-INCH HORIZONTAL, MACHINE CUT SLOTS.

The Schedule 80 casing and screen shall be used for construction of the deep and intermediate monitoring wells. The Schedule 40 casing and screen shall be used for construction of the shallow monitoring well. The tentative completion schedules of the three monitoring wells is shown in the table below:

	Depths/Intervals, feet bgs		
	MW-1 (Deep)	MW-2 (Intermed.)	MW-3 (Shallow)
Total Casing Depth,	1,200	925	360
Well Screen	1,090 – 1,190	850 – 915	285 - 350
PVC Classification	Schedule 80	Schedule 80	Schedule 40

MATERIALS AND METHODS

The well casing shall be PVC plastic pipe, 4-inch nominal diameter, Schedules 40 and 80, flush-threaded. All casing materials shall be new. Pipe and couplings shall be made from unplasticized PVC compounds having a minimum cell classification of 12454, as defined in ASTM D1784, and shall meet the test requirements set forth in ASTM F480. White pipe shall be supplied. Well screens shall be perforated with machine-cut horizontal slots, with a maximum opening of 0.040-inches. PVC casing centralizers shall be used to center the well casings in the boreholes.

Upon completion of the drilling and any borehole conditioning, a construction tremie shall be installed to the appropriate well completion depth. The Contractor shall then install the well casing at depth and completion intervals as determined by the District's Representative. The well



completion depths and intervals described within these specifications are tentative, and will likely be revised based on review of the pilot hole information.

The casing and screen shall be plumb and shall be centered in the hole. Casing centralizers shall be attached directly to the casing immediately above and below the well screen, and at intervals of not more than 60 feet within upper blank casing sections. Centralizers shall be comprised of PVC. Metallic centralizers will not be allowed. The type of centralizers proposed by the Contractor must be approved by the District's Representative prior initiation of the drilling.

The casing shall be suspended in tension from the surface by means of an appropriate hanger or clamp. The bottom of the casing shall be at a sufficient distance above the bottom of the reamed hole to ensure that none of the casing will be supported from the bottom of the hole. The Contractor may 'overdrill' the boring to accommodate the well casing if desired, and upon approval of the District's Representative, at no additional cost to the District.

If, for any reason, the casing cannot be landed in the correct position or at a depth acceptable to the District's Representative, or any portion of the casing should collapse prior to well completion, the Contractor shall remove the casing from the borehole, perform a wiper run, and reinstall the casing to the desired depth. Alternatively, and should landing the casing continue to be unsuccessful, the Contractor shall construct another well immediately adjacent to the original location and complete this well in accordance with the specifications at no additional cost to the District. The abandoned hole shall be sealed in accordance with directions from the District's Representative and in accordance with any laws pertaining to proper well abandonment.

All work required to be repeated and all additional materials, labor, and equipment required, shall be furnished at the expense of the Contractor and no claim for additional compensation shall be made or be allowed, except as specifically provided herein.

The top of the casing will be provided with a locking cap at all times when personnel are not on the site.

Prior to Mobilization, the Contractor shall provide to the District's Representative: the name of the casing manufacturer; the slot size and design (slot pattern, horizontal length of slots, the number of rows of slots circumferentially around the casing, the number of slots per linear foot of casing, the percent open area, etc.). The Contractor shall also describe to the District's Representative prior to mobilization the design and composition of the proposed centralizers.

PAYMENT

Full compensation for doing all work and furnishing all materials necessary to manufacture, deliver, and install well casing and screens as shown on the drawings and as specified in the Specification shall be included in the unit price bid per linear foot for "Well Casings" - Bid Item Nos. 6a, 6b, 6c, and 6d.



SECTION 207 - GRAVEL PACK

GRAVEL PACK - BID ITEM NO. 7

SCOPE OF WORK

The Contractor shall furnish all equipment, material and work necessary to install gravel pack in the annulus, adjacent (approximately) to the well screen, and generally placed as specified herein. The final determination of the interval to be gravel packed will be determined by the District’s Representative following review of the information acquired during the pilot drilling, however, the tentative intervals of gravel pack placement (and bid quantities) for each of the wells are provided in the table below:

	Depths/Intervals, feet bgs		
	MW-1 (Deep)	MW-2 (Intermed.)	MW-3 (Shallow)
Depth of Annular Seal	1,040	800	235
Bottom of Casing	1,200	925	360
Gravel Pack Interval	1,040 – 1,200	800 – 925	235 - 360

MATERIALS AND METHODS

All gravel or coarse-grained sand for packing shall be hard, water worn, and washed clean of silt, fine sand, clay, and foreign matter. Crushed gravel will not be accepted. Gravel pack materials shall be rounded to well-rounded. Not more than three percent, by weight, of the gravel shall be flat or elongated. Gravel shall be of the type provided by P.W. Gillebrand, Oglebay Norton/Colorado Silica, RMC Lonestar, Silica Resources, or an approved equal. An approximate 8x16 gradation shall be used. The gravel pack material proposed for use by the Contractor shall be subject to the approval of the District’s Representative prior to delivery to the site. The gravel pack material, if stockpiled at the well site, shall be in bags, supersacks, or otherwise protected and kept free of all foreign matter. A description of, a sample of, and a sieve analysis of the proposed gravel pack materials shall be provided to the District’s Representative at the preconstruction meeting.

Prior to placement of the gravel pack in the well, the drilling fluid shall be thinned and balanced. Gravel shall be installed in the annular space between the reamed hole and the well screen through a construction tremie pipe. During placement of the gravel, disinfectant (e.g., sodium hypochlorite) shall be added to the gravel at a uniform rate and in accordance with Bulletin 74-81. Fluids displaced from the well casing and annulus during gravel packing operations shall be contained and disposed of as provided in Section 209. The final depth to the top of the gravel pack shall be verified by measurement with a sounding line, or other method acceptable to the District’s Representative.

PAYMENT

Full compensation for furnishing all labor, materials, tools, and equipment necessary to install the gravel pack as specified by the District’s Representative shall be included in the unit price bid per linear-foot for "Gravel Pack" - Bid Item No. 7.



SECTION 208 – ANNULAR SEALS

ANNULAR SEALS - BID ITEM NO. 8

SCOPE OF WORK

This item shall consist of providing and installing a cement grout annular seal for each of the monitoring wells. The annular seal depths for the deep (MW-1), intermediate (MW-2), and shallow (MW-3) monitoring wells are 1,040 feet, 800 feet, and 235 feet, respectively.

MATERIALS AND METHODS

Cement grout shall be composed of not more than 3 cubic feet of sand and 1 cubic foot (one sack) of Portland cement to 5 to 7 gallons (0.67 to 0.90 cubic feet) of clean water. This is typically considered to be a 10-sack Portland cement sand slurry mix when ordered from batching plants. Bentonite, to make the mix more fluid, reduce shrinkage, and slow the curing process to reduce heat, shall be used to a total of 5 percent (5%) of the volume of the cement. With the use of 5 percent bentonite, water content can be increased to 8.2 gallons per sack of cement. Contractor shall provide the District's Representative cement batch plant documentation prior to installation of the cement grout. The grout mixture shall contain no additives that would reduce the curing time and increase the heat during curing.

Cement grout shall then be placed in the annular space between the inner casing and the borehole from bottom to top by means of a tremie pipe. Cement grout material shall be placed by the positive displacement pumping method. A grout pipe shall extend from the surface to the bottom of the zone to be grouted. The Contractor will be allowed to place the annular seal in stages, as the Contractor deems necessary, in order to minimize the potential for casing collapse. The grout pipe may be slowly raised as the grout is placed, but the discharge end of the grout pipe must be submerged in the emplaced grout at all times, and maintained full to the surface during ongoing staged grouting operations. The Contractor may raise and flush the tremie pipe as he deems appropriate in between stages. Grouting shall continue to within 18 inches of surface to allow installation of the below grade vault covering the wellhead. The fluid level in the casing shall be maintained at the ground surface during cementing operations and throughout the curing period. After cementing, no work will be undertaken for a period of 24 hours. After the annular cement seal has cured, the depth of the well shall be sounded to verify that casing collapse has not occurred.

Fluids displaced from the annulus during sealing operations shall be contained and legally disposed of as provided in Section 209.

PAYMENT

Full compensation for furnishing all labor, materials, tools, and equipment necessary to install the annular seals as specified herein shall be included in the unit price bid for "Annular Seals" - Bid Item No. 8.



SECTION 209 – DRILLING FLUIDS AND CUTTINGS DISPOSAL

DRILLING FLUIDS AND CUTTINGS DISPOSAL - BID ITEM NO. 9

SCOPE OF WORK

During drilling, well construction, and initial well development, the Contractor shall provide for the temporary containment and storage of drilling fluids, drill cuttings and heavy development fluids. Drilling fluids and drill cuttings shall be hauled offsite and disposed of legally either during the course of the project, or upon completion of well development and as part of the site cleanup activities.

MATERIALS AND METHODS

Portable, temporary, leak proof containment vessels shall be used for drilling fluids and cuttings. Temporary containment of fluids and cuttings within 'bermed' areas on the ground surface will not be allowed. Drill cuttings and fluids shall be legally disposed of offsite. Proper documentation for cuttings/fluid transport and disposal, including tallies documenting the amount of material removed and disposed of, shall be provided to the District's Representative. Any required testing fees associated with the legal disposal of cuttings/fluids are the responsibility of the Contractor.

PAYMENT

Full compensation of all labor, tools, equipment, and other costs required to complete the task of Fluid and Cuttings Containment and Disposal as specified in these Specifications shall be included in the lump sum price for " Fluid and Cuttings Containment and Disposal" - Bid Item No. 9.



SECTION 210 - WELL DEVELOPMENT

WELL DEVELOPMENT - BID ITEM NO. 10

SCOPE OF WORK

This item shall consist of swabbing, air-lift pumping, and bailing to remove drilling fluids and cuttings, develop the gravel pack, and provide for the collection of clean, representative samples from the monitoring well.

MATERIALS AND METHODS

Materials for well development shall include but not be limited to: a bailer; a line swab tool; an eductor pipe, air-lift tubing; discharge piping or hoses for the conveyance of development water at the surface; and a suitably sized air compressor.

Following a minimum 24-hour period after completion of the annular seal placement, the well will be developed by air-lifting and line-swabbing. Development shall consist of alternating periods of airlifting and line-swabbing. The Contractor shall provide to the District's Representative a description and/or drawing of the assembly that will allow for alternating airlifting and line swabbing. The well shall be considered thoroughly developed when it produces relatively clear water after initiating airlifting following a period of water level recovery, and when the water is clear (turbidity less than 5 NTU) after 5 minutes of sustained airlifting. The development time for each well for bidding purposes shall be eight hours.

Development water from the wells will be directed to a temporary containment tank(s) onsite. The initial, heavy fluids produced during the early stages of development shall be contained and disposed of as specified in Section 209. Water produced during the subsequent stages of development shall also be placed in the onsite tank. The District will make arrangements for the disposal of well development water to the storm drain system under the existing General NPDES Permit for Drinking Water System Discharges (WQO 2014-0194-DWQ). No water shall be discharged that exceeds the turbidity limit of 100 NTU or the total chlorine residual limit of 0.019 mg/L. The pH of discharge water shall be in the range of 6.5 and 8.5.

PAYMENT

Full compensation for furnishing all labor, materials, tools, and equipment necessary for well development shall be included in the per well bid price for "Well Development" - Bid Item No. 10.



SECTION 211 - WELLHEAD COMPLETION

WELLHEAD COMPLETION - BID ITEM NO. 11

SCOPE OF WORK

The Contractor shall furnish all materials, equipment, and work necessary to construct a wellhead foundation and well vault/cover.

MATERIALS AND METHODS

The Contractor shall provide and install a ***Morrison Watertight 12" x 12" Limited Access Manholes (Model 418XA-0400 AM)***, or a District's Representative approved equal, with a bolt down lid. The monitoring well casings shall be terminated approximately 4 inches below ground surface. The manholes shall be securely cemented into place and completed above ground surface (as directed by the District's Representative) to prevent ponding around the well. The manholes shall be so installed as to permit easy access for instrumentation, monitoring, or sampling. A sufficient number of weep holes or a gravel drain shall be placed in the manhole subgrade so that any condensation or liquid is readily drained, thus preventing accumulation of water within the manhole.

The Contractor shall install a water-tight locking well cap to secure the monitoring well casing.

SUBMITTALS, TESTING, AND MEASUREMENT

Not applicable.

PAYMENT

Full compensation for furnishing all labor, materials, tools, and equipment necessary to provide for and install the wellhead completion features, as specified herein, shall be included in the per well bid price for "Wellhead Completions" - Bid Item No. 11.



SECTION 212 - SITE CLEANUP

SITE CLEANUP - BID ITEM NO. 12

SCOPE OF WORK

This item shall consist of doing all work and furnishing all materials necessary to maintaining the well site in a professional manner during drilling, construction, and testing and restoring the site to predrilling conditions after work is completed.

MATERIALS AND METHODS

The Contractor shall keep the premises free from accumulations of waste materials, rubbish, and other debris resulting from the work. At completion of the work the Contractor shall remove all waste materials, rubbish and debris from and about the well site as well as all tools, construction equipment, fuel tanks, and machinery and surplus materials.

The Contractor shall leave the site clean and ready for use by the District and shall restore to their original condition all temporary work areas and surrounding areas. The documentation of pre-construction site conditions established during mobilization will be the metric to assess restoration of the site and surrounding areas to pre-construction conditions.

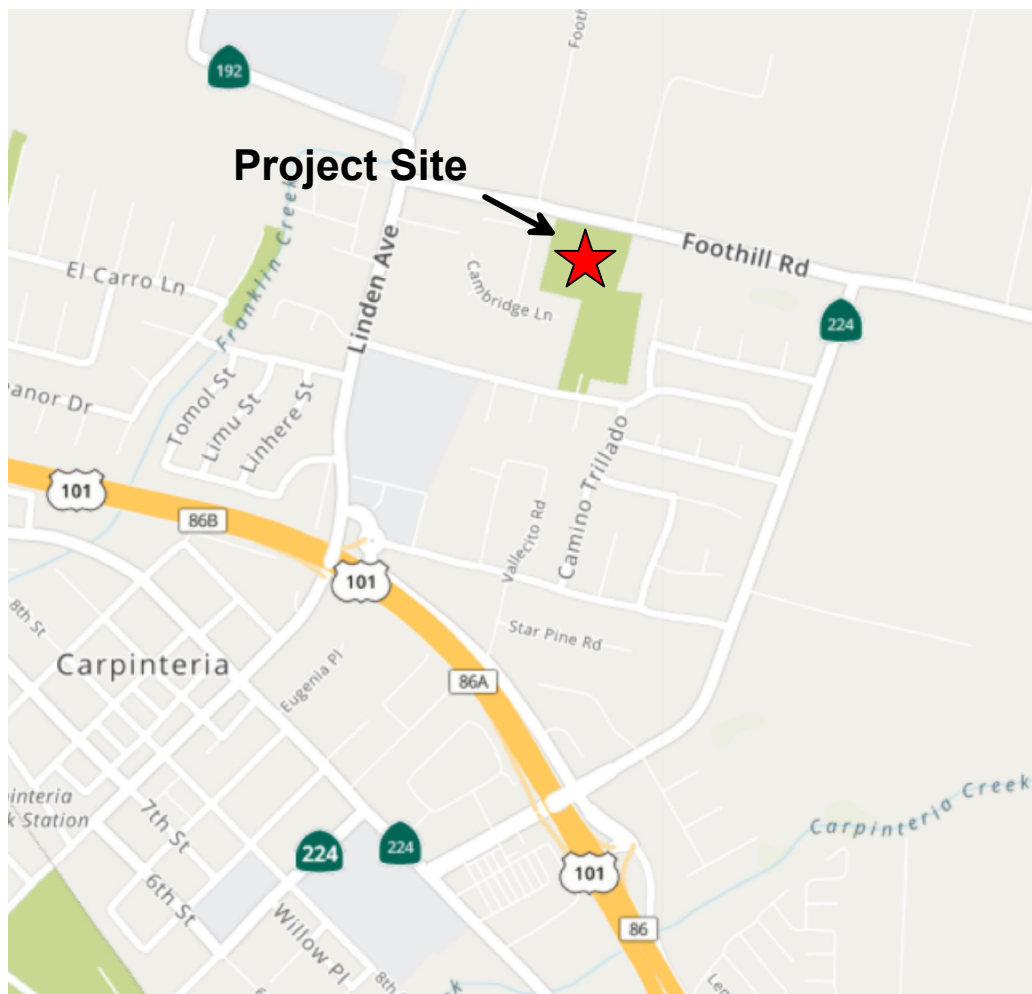
The Contractor is responsible for any damages to facilities or properties within and adjacent to the well caused by drilling, construction, or well development activities associated with the work described herein.

The District's Representative will be the sole judge who determines when cleanup efforts can be considered to be sufficient and complete.

PAYMENT

Full compensation for site cleanup as specified by these Specifications shall be included in the lump sum price for "Site Cleanup" - Bid Item No. 12.

**Figure 1. El Carro Park Monitoring Well Project Location Map
Carpinteria Valley Water District**



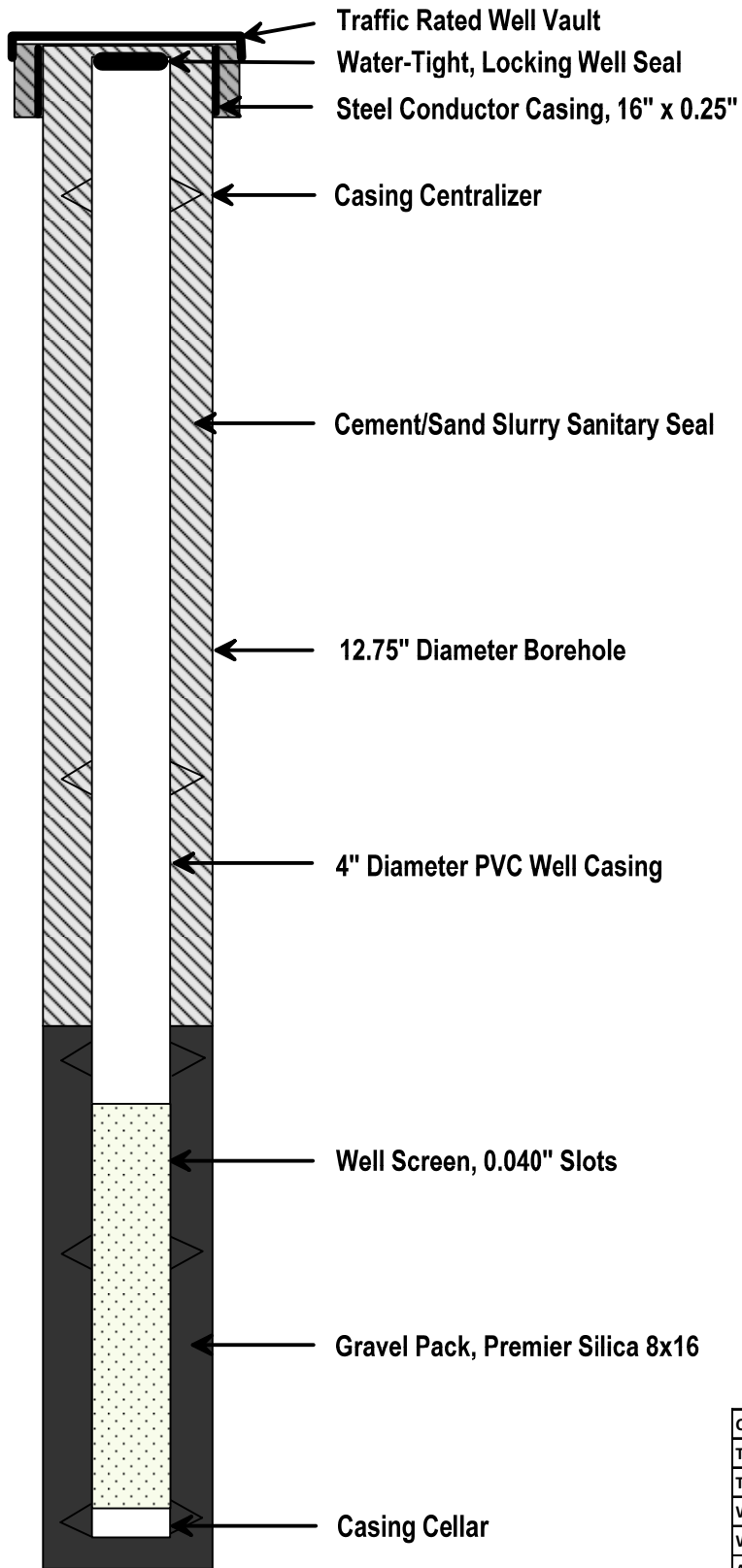
**Figure 2. El Carro Park Monitoring Well Project Site Map
Carpinteria Valley Water District**



0 100
Scale, feet



**Figure 3. El Carro Park Monitoring Well Project Well Design
Carpinteria Valley Water District**



	MW-1	MW-2	MW-3
Conductor Depth	20'	20'	20'
Total Casing Depth	1200	925	360
Total Drilled Depth	1240	935	370
Well Screen Interval	1090' - 1190'	850' - 915'	285' - 350'
Well Screen Length	100	65	65
Annular Seal Depth	1040	800	235
Gravel Pack Footage	160	125	125
PVC Grade	80	80	40