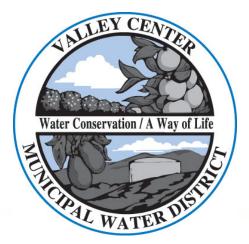
VALLEY CENTER MUNICIPAL WATER DISTRICT

STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION

SECTION 1: General Conditions



Latest Revision: MARCH 2020

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SECTION 1 GENERAL CONDITIONS

LATEST REVISION

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SECTION 1 GENERAL CONDITIONS

1-01 GENERAL

These specifications are to be used to establish standards of work, materials, and construction procedures for improvements to the distribution system of the Valley Center Municipal Water District (District). These specifications are not intended to establish general requirements or special conditions for a particular project, but rather to be used as minimum guidelines for all work within the District. Project specific general conditions will take precedence when applicable. From time to time, the District may amend these specifications and standard drawings to reflect current practices.

1-02 DEFINITION OF TERMS

Whenever the following terms are used in these specifications or other contract documents which these specifications govern, they shall be defined as follows:

- A. <u>Acceptance</u>: The Valley Center Municipal Water District formal acceptance of the water improvements by the Board into the District's water distribution system.
- B. <u>Board</u>: The Board of Directors of Valley Center Municipal Water District, Valley Center, California.
- C. <u>Contractor</u>: The person or entity entering into a contract with the developer or District for performance of work pursuant to these specifications.
- D. <u>Owner/Developer</u>: Any individual, firm, partnership, or corporation contracting for private work under District approval pursuant to these specifications with the express intent of turning over ownership of said work to the District.
- E. <u>District</u>: The Valley Center Municipal Water District, State of California.
- F. <u>District Engineer</u>: The District's Engineer, acting either directly or through his/her duly authorized inspectors, agents, engineers, and assistants.
- G. <u>District Inspector</u>: A duly authorized agent of the District Engineer.
- H. <u>Plans</u>: The official scale and full-size approved detail drawings, or exact reproductions thereof, which show location, character, dimensions, elevations, and details of the work to be done and which are to be considered as part of these specifications.
- I. <u>Specifications</u>: The "Standard Specifications for Construction of Pipelines and Appurtenances" of the District, unless otherwise qualified.
- J. <u>Standard Drawings</u>: The "Standard Drawings," a part of the "Standard Specifications for Design and Construction" of the District, unless otherwise qualified.
- K. <u>Subcontractor</u>: A person or entity acting as an agent of the Contractor, supplying labor and materials or labor for work of improvements pursuant to these specifications shall not be recognized as the Contractor engaged in the work and will be considered as employees of the Contractor.

- L. <u>Surety</u>: The word "surety" refers to the individual, firm, partnership, or corporation with whom the Contractor joins with in assuming the liability for performance of the contract in accordance with the plans and specifications by issuing the bonds required by law.
- M. <u>Work</u>: Labor, materials, equipment, transportation, or other facilities necessary to complete the improvement pursuant to these specifications.
- N. <u>Private Engineer or Project Engineer</u>: An engineer registered or licensed in California, who is qualified to act as an agent of the owner or an individual in preparing plans of facilities to be accepted by the District and incorporated into the District system thereafter. As used herein, the term includes persons registered or licensed in the State of California as Civil Engineers or Structural Engineers for any duties which they are qualified by law to perform.

1-03 SUPPLEMENTARY SPECIFICATIONS

Wherever reference is made within these documents to certain standard specifications, the reference shall be construed to mean the standards, with all subsequent amendments, changes, or additions as thereafter adopted and published that are in effect at the date of approval of the plans and specifications.

ASTM =	American Society for Testing Materials
AWWA =	American Water Works Association
ASME =	American Society of Mechanical Engineers
ASA =	American Standards Association
EPA =	United States Environmental Protection Agency
SSPC =	The Society For Protective Coatings
ACI =	American Concrete Institute
CALOSHA =	Construction Safety Orders of California Occupational
	Safety and Health Standards Board

1-04 SUPPLEMENTARY SPECIFICATIONS

The District Engineer shall have the general supervision and direction of the work including, the authority to stop the work whenever such stoppage may be necessary. He or she shall have authority to reject any work or materials which do not conform to the specifications and to decide questions which arise in the execution of the work.

1-05 WORK TO BE DONE

The work to be done shall consist of furnishing all materials, equipment, labor, and all other items of expense necessary for the installation of a completed facility as shown on the approved plans and in accordance with the specifications. In some instances, the District may furnish certain materials and services which will be expressly called out on the plans or in the specifications.

The work shall be performed in a thorough, workmanlike manner in accordance with the plans, water, wastewater, or recycled water main estimate, and specifications which have been approved by the District. All work shall conform to the lines, elevations, and grades shown on said plans.

The District's approval of plans prepared by a private engineer denotes agreement with the plan as prepared and is not an acceptance of responsibility as to accuracy. The private engineer shall be responsible for any errors, coordination with other facilities, and interpretation of the plans. The intent is that the completed facility shall be in conformance with the approved plan, water main estimate, and in accordance with the requirements of these specifications. All revisions and changes in the plans must be approved by the District Engineer.

The owner/developer shall complete all necessary requirements (cash bonds, agreement, easements, etc.) before commencing construction. Any work done prior to this shall be subject to rejection. It shall be the Contractor's responsibility to expose for inspection and/or remove any portion of the work rejected by the District Engineer.

1-06 INDEMNIFICATION

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless and defend the District, its directors, officers, employees, or authorized volunteers and each of them from and against:

- 1. Any and all claims, demands, causes of action, damages, costs, expenses, losses or liabilities, in law or in equity, of every kind and nature whatsoever for, but not limited to, injury to or death of any person including District and/or Contractor, or any directors, officers, employees, or authorized volunteers of the District or Contractor, and damages to or destruction of property of any person, including but not limited to, the District and/or Contractor or their directors, officers, employees, or authorized volunteers, arising out of or in any manner directly or indirectly connected with the work to be performed under this agreement, however caused, regardless of any negligence of the District or its directors, officers, employees, or authorized volunteers, except the sole negligence or willful misconduct or active negligence of the District or its directors, officers, employees; or authorized volunteers;
- 2. Any and all actions, proceedings, damages, costs, expenses, penalties or liabilities, in law of equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of the Contractor;
- 3. Any and all losses, expenses, damages (including damages to the work itself), attorney's fees, and other costs, including all costs of defense, which any of them may incur with respect to the failure, neglect, or refusal of the Contractor to faithfully perform the work and all of the Contractor's obligations under the Contract. Such costs, expenses, and damages shall include all costs, including attorney's fees, incurred by the indemnified parties in any lawsuit to which they are a party.

Contractor shall defend, at Contractor's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against District or District's directors, officers, employees, or authorized volunteers.

Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the District or its directors, officers, employees, or authorized volunteers, in any such suit, action or other legal proceeding.

Contractor shall reimburse the District or its directors, officers, employees, or authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

Contractor agrees to carry insurance for this purpose as set out in the specifications. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the District, or its directors, officers, employees or authorized volunteers.

Until the completion and final acceptance by the District of all 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.

1-07 INSURANCE REQUIREMENTS

The Contractor shall obtain, and at all times during performance of the work of this Contract, maintain all of the insurance described herein. Contractor shall not commence work under this Contract until it has provided evidence satisfactory to the District that it has secured all insurance required hereunder. Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the District that the subcontractor has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for the District to terminate this Contract for cause. Contractor shall furnish District with original certificates of insurance and endorsements of effective coverage required by this Contract on forms satisfactory to the District. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms acceptable to the District. All certificates and endorsements must be received and approved by the District before work commences.

- A. <u>Workers' Compensation Insurance:</u> The Contractor shall provide workers' compensation insurance for all of the employees engaged in work under this Contract, on or at the site, and, in case of any sublet work, the Contractor shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract, on or at the site, is not protected under the Workers' Compensation Statutes, the Contractor shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected. The Contractor is required to secure payment of compensation to his/her employees in accordance with the provisions of section 3700 of the Labor Code. The Contractor shall file with the District certificates of his/her insurance protecting workers. Company or companies providing insurance coverage shall be acceptable to the District, if in the form and coverage as set forth in the Contract Documents.
- B. <u>Employer's Liability Insurance</u>: Contractor shall provide Employer's Liability Insurance, including Occupational Disease, in the amount of at least one million dollars (\$1,000,000.00) per person, per accident. Contractor shall provide the District with a certificate of Employer's Liability Insurance. Such insurance shall comply with the provisions of the Contract Documents. The policy shall be endorsed, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement and contain a Waiver of Subrogation in favor of the District.
- C. <u>Commercial General Liability Insurance</u>: Contractor shall provide "occurrence" form Commercial General Liability insurance coverage at least as broad as the most current ISO CGL Form 00 01, including but not limited to, premises liability, contractual liability,

products/completed operations, personal and advertising injury which may arise from or out of Contractor's operations, use, and management of the site, or the performance of its obligations hereunder. The policy shall not contain any exclusion contrary to this Contract including but not limited to endorsements or provisions limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 39); or (2) crossliability for claims or suits against one insured against another. Policy limits shall not be less than \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. Defense costs shall be paid in addition to the limits.

- i. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further, the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor's indemnification obligations to the District, and shall not preclude the District from taking such other actions available to the District under other provisions of the Contract Documents or law.
- ii. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.
- iii. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, underground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions relating to liability for injury to or death of persons and damage to property.
- iv. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, the District may require additional coverage to be purchased by Contractor to restore the required limits. Contractor may combine primary, umbrella, and as broad as possible excess liability coverage to achieve the total limits indicated above. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.
- v. All policies of general liability insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.
- D. <u>Automobile Liability Insurance</u>: Contractor shall provide "occurrence" form Automobile Liability Insurance at least as broad as ISO CA 00 01 (Any Auto) in the amount of, at least, one million dollars (\$1,000,000) per accident, for bodily injury and property damage. Such insurance shall provide coverage with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible, in a form and with insurance companies acceptable to the District. All policies of automobile insurance

shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

FORM AND PROOF OF CARRIAGE OF INSURANCE

- A. The District, its officials, officers, employees, agents and authorized volunteers shall be named as Additional Insureds on Contractor's All Risk policy and on Contractor's and its subcontractors' policies of Commercial General Liability and Automobile Liability insurance using, for Contractor's policy/ies of Commercial General Liability insurance, ISO CG forms 20 10 and 20 37 (or endorsements providing the exact same coverage, including completed operations), and, for subcontractors' policies of Commercial General Liability insurance, ISO CG form 20 38 (or endorsements providing the exact same coverage). Notwithstanding the minimum limits set forth in this Contract for any type of insurance coverage, all available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as Additional Insureds hereunder. Contractor and its insurance carriers shall provide a Waiver of Subrogation in favor of those parties.
- B. Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California unless waived, in writing, by the District's Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A:VII. Insurance deductibles or self-insured retentions must be declared by the Contractor. At the election of the District, the Contractor shall either (1) reduce or eliminate such deductibles or self-insured retentions, or (2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses. If umbrella or excess liability coverage is used to meet any required limit(s) specified herein, the Contractor shall provide a "follow form" endorsement satisfactory to the District indicating that such coverage is subject to the same terms and conditions as the underlying liability policy.
- C. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or cancelled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the District and ten (10) days prior written notice for non-payment of premium; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the District its directors, officials, officers, employees, agents and volunteers.
- D. The Certificates(s) and policies of insurance shall contain or shall be endorsed to contain the covenant of the insurance carrier(s) that it shall provide no less than thirty (30) days written notice be given to the District prior to any material modification or cancellation of such insurance and ten (10) days prior written notice for non-payment of premium. In the event of a material modification or cancellation of coverage, the District may terminate the Contract or stop the work in accordance with the Contract Documents, unless the District receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, use the site, or commence operations under this Contract until the District has been furnished original Certificate(s) of Insurance and certified original copies of endorsements or policies of insurance including all endorsements and any and all other attachments as required in this section. The original endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.

- E. The Certificate(s) of Insurance, policies and endorsements shall so covenant and shall be construed as primary, and the District's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.
- F. The District reserves the right to adjust the monetary limits of insurance coverages during the term of this Contract including any extension thereof if in the District's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.
- G. Contractor shall report to the District, in addition to Contractor's insurer, any and all insurance claims submitted by the Contractor in connection with the Work under this Contract.

GENERAL INSURANCE ISSUES:

- All endorsements must contain the policy number and an authorized signature.
- The additional insured endorsement cannot be blanket in nature and must specifically name the District, its directors and officers, employees, and agents or representatives.
- The primary/noncontributory language cannot be blanket in nature and must specifically name the District, et al.
- The waiver of subrogation cannot be blanket in nature and must specifically be in favor of the District, its directors and officers, employees, and agents or representatives.

GENERAL LIABILITY:

- Policy must include an endorsement for a cancellation clause providing that coverage will not be cancelled except after 30 days prior written notice to the District and 10 days prior written notice for non-payment of premium.
- Policy must include an endorsement containing primary/noncontributory language.

AUTOMOBILE:

• Policy must include an endorsement for a cancellation clause providing that coverage will not be cancelled except after 30 days prior written notice to the District and 10 days prior written notice for non-payment of premium.

WORKERS' COMPENSATION:

• Waiver of Subrogation is blanket in nature and must specifically be in favor of the District, et al.

1-08 CONTRACTOR'S LICENSE REQUIREMENTS

The construction of any District improvements to be accepted by the District must be performed by a licensed Contractor having an appropriate license for the project. Pipelines require a C-34 or General Engineering A license. Pump stations, reservoirs, and any other above ground facilities require a General Engineering A license. The Contractor shall have satisfactorily completed three or more similar projects for a public agency or have experience which is acceptable to the District constructing similar projects in the public sector.

1-09 COMPLIANCE WITH LAWS & REGULATIONS AND OBTAINING NECESSARY PERMITS & LICENSES

All permits and licenses necessary to perform the work shall be secured by the Contractor at his/her own expense. The Contractor shall keep informed of and observe and comply with all laws, ordinances, decrees, and regulations effective before completion of the work affecting in any manner all employees, subcontractors, agents, and materials used in the work. The Contractor shall protect and indemnify the District against any claim of liability arising from or based upon the violation of any such law, ordinance, decree, or regulation, whether by himself/herself, his/her employees, subcontractors, or agents.

1-10 PREJOB CONFERENCE

A prejob conference between the Contractor, owner/developer, private engineer, and District is required prior to the start of construction. At this time, the Contractor shall submit his/her construction schedule to the District for approval. The construction schedule shall include an approximate completion date, and the Contractor shall be required to pursue his/her work in a diligent manner to completion.

1-11 INSPECTION

The Engineer will monitor the Contractor's compliance with the plans and these specifications and has the right to inspect all materials used and all work performed at the full cost of the project proponent. Any work done in the absence of the Engineer, or representative, is subject to rejection. The Engineer is not responsible for Contractor's means, methods, techniques, or procedure of construction. The Engineer is not responsible for Contractor's failure to perform or furnish the work in accordance with these specifications.

1-12 SAFTEY REQUIREMENTS

The Contractor shall provide for the protection of all persons and property as herein specified in accordance with CAL-OSHA & OSHA to which the Contractor is required by law to conform. In the event the Contractor fails to observe any of the safety provisions of these standards, Director of Operations/Facilities, the District Engineer, District Safety Officer or District Authorized Representative shall order the work stopped in the affected areas for noncompliance of said safety orders until corrected. Contractor is responsible for the safety and first aid procedures of their employees on the job site. Contractor must notify the District Project Manager or Project Inspector if an employee is injured on the job site. Contractor must provide copies of all incident reporting documentation, notification is not required for ergonomic injuries.

The Contractor shall take all necessary measures to protect the work and prevent accidents during construction. The Contractor shall provide and maintain sufficient night lights, barricades, guards, temporary sidewalks, temporary bridges, danger signals, watchmen, and necessary appliances and safeguards to properly safeguard life and property. Contractor shall also protect all excavations, equipment, and materials with barricades and danger signals so that the public will not be endangered.

1-13 ALCOHOL & DRUGS

No alcohol, drugs, or illegal substances shall be used by or be in the possession of anyone associated with the Contractor on or in the proximity of a project in which the District is involved.

1-14 TRAFFIC OBSTRUCTION & CONTROL

The Contractor shall so conduct his/her operations as to offer the least possible obstruction and inconvenience to traffic, and shall have under construction no greater amount of work than they can handle properly with due regard for the safety of the public. Where existing roads are not available as detours, all traffic shall be permitted to pass through the work with as little delay and inconvenience as possible, unless otherwise authorized by the District Engineer. In order that unnecessary delay to the traveling public may be avoided, the Contractor, when so ordered by the District Engineer, shall provide competent flagmen whose duty shall solely consist of directing traffic either through or around the work.

1-15 PLANS & SPECIFICATIONS ON JOB SITE

The Contractor shall be responsible for maintaining a clean and legible set of plans, specifications and approved submittals on the work site at all times. Noncompliance of this requirement shall result in stoppage of all work.

1-16 CONSTRUCTION WATER

Construction water is available from existing supply sources by use of a construction meter. The Contractor must provide 24 hours' notice and pay the required deposit. Construction meters shall be connected to an existing blow off or a fire hydrant and shall be limited to a 30-day rental period per construction project. Meters for use beyond the 30-day period must be approved by the District Engineer. All water used is at the Contractor's expense.

1-17 TEMPORARY LINES

All temporary lines, fittings, and service connections shall be furnished, installed, and connections made by the Contractor to a water source designated by the District. The Contractor shall be responsible for disinfecting all temporary lines connections and flushing and assisting the District in taking water samples for bacteriological tests.

Following disinfection and acceptance of the temporary lines as a potable water system, the Contractor shall maintain continuous service through the temporary lines to all consumers normally served both directly and indirectly by the pipeline. Upon completion of the work, the temporary lines shall be removed by the Contractor.

The temporary lines shall be installed in such a manner that it will not present a hazard to traffic and will not interfere with access to homes and driveways along its route. All pipe, valves, fittings, hose and connections furnished by the Contractor shall be of good quality, absolutely clean inside and suitable for conveying potable water in the opinion of the District Engineer. The material and plan to be used for temporary lines must be submitted in writing for approval by the District Engineer. All PVC piping must be labeled "U.S.F." tested for a potable water system.

1-18 RESPONSIBILITY FOR DAMAGE TO EXISTING IMPROVEMENTS

The Contractor shall have full responsibility of the work until acceptance by the District, and will be responsible for all damage to existing improvements while the work is in his/her charge. All damage done to existing improvements shall be repaired immediately by Contractor at his/her own expense.

1-19 MATERIALS & WORKMANSHIP

Unless otherwise specified, all materials incorporated in the permanent work shall be new. Materials not otherwise designated by detailed specifications shall be of the best commercial quality and suitable for the purpose intended. All workmanship shall be in conformance with the best trade practices.

Particular attention shall be given to appearance of above ground finish work. Any workmanship not conforming to the best practices shall be subject to rejection.

All defective work shall be made good and unsuitable materials rejected, notwithstanding that such work and materials have been previously overlooked by the District Engineer and accepted. If the work, or any part thereof, shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defect, without additional compensation, in a manner satisfactory to the District Engineer. All costs for retesting and re-inspection which are necessitated by defective materials and/or workmanship shall be at the sole expense of the Contractor.

1-20 ATMOSPHERIC CONTROL

No fuel shall be used nor shall any operation be conducted which shall emit into the atmosphere any smoke which is defined as equal to Ringelmann No. 1, or darker. The Contractor's equipment and operations shall be in conformance with applicable air quality standards set forth by the Air Pollution Control District. No operation shall be conducted which will emit into the atmosphere any flying dust or dirt which is noticeable to humans or which might constitute a nuisance. The Contractor shall control the dust by sprinkling with water as often as is necessary.

1-21 WORK IN COUNTY ROADS

All work performed within San Diego County roads shall be in accordance with the requirements of the Department of Public Works. Work performed within the City of Escondido shall be in accordance with its requirements. These requirements are hereby made a part of these specifications. The Contractor is required to obtain the encroachment permit and will be responsible for all associated fees. Contractor must present proof of permit prior to performing any work on District facilities with public ROW.

The Contractor shall secure a County excavation permit and pay all fees and post all bonds and/or cash deposits required under that permit. It shall be the responsibility of the Contractor to familiarize himself/herself with all of the provisions of said permit and comply with all the requirements therein. The Contractor will pay all fees for County inspection required as provided in said permit, including those fees for re-inspection necessitated because of faulty materials and/or workmanship. The Contractor shall pay all costs of testing of materials and soil compaction tests required by said permit.

1-22 RIGHT-OF-WAY & EASEMENTS

The right-of-way, easements, and land for the improvements will be provided by the District or owner/ developer. The Contractor shall obtain consent from the property owners and shall make their own arrangements for additional areas required by him/her outside the limits of the right-of-way. All water facilities not located within a dedicated public right-of-way shall be installed in an easement acceptable to the District. All necessary easements shall be conveyed to the District prior to the start of water facilities construction. Easements shall be the full width of the legal access easement to the development/ property and in no case shall the easement be less than 20 feet in width. Water facilities in easements with grades in excess of 13% shall be protected with a minimum 13 foot wide, 3 inch thick asphalt roadway or slope protection. All easements shall be shown on the improvement plans with dimensional information. Water facilities in easements shall outer parking stalls and/or landscaped areas and shall be drivable unless otherwise approved by the District Engineer.

1-23 LOSS OR DAMAGE

The District shall not be answerable or accountable in any manner for any loss or damage that may happen to the work or any part thereof, or to any of the materials or other things used in performing the work, or for injury to any persons, either workers or the public, or for damage to any property for any cause which might have been prevented by the Contractor. The Contractor shall properly guard against all these injuries or damages to persons and property.

The Contractor shall be responsible for any liability imposed by law for any damage to any person or property resulting from defects or obstructions, or from any cause whatsoever during the process of the work, or at any time before final acceptance, and shall indemnify and save harmless the District from all suits or actions of every description brought for, or an account of, any injuries or damages received or sustained by any persons by reason of the construction of the work, or any negligence in guarding the same of improper materials used in its construction or of any act of omission of the Contractor.

1-24 PROTECTION OF PROPERTY & UTILITIES

A. <u>Protection of Property</u>: The Contractor shall conduct his/her operations in such a manner as to avoid injury or damage to adjacent property, improvements, or facilities. Buildings, trees, ground cover, and shrubbery that are not designated for removal, pole lines, fences, guard rails, conduits, pipelines, and other improvements within or adjacent to the street or right-of-way shall be protected from injury or damage. The Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. Objects injured or damaged by reason of the Contractor's operations shall be replaced or restored to a condition equal to or better than found prior to the start of construction.

The Contractor shall be responsible for all damage to streets, roads, highways, ditches, embankments, bridges, culverts, or other public or private property which may be caused by transporting equipment, materials, or men to or from the work. The Contractor shall make satisfactory and acceptable arrangements with the property owner over the

damaged property concerning its repair or replacement and be prepared to provide the District with a release from the property owner indicating satisfaction for said repairs.

B. <u>Protection of Groves</u>: During the progress of construction, the Contractor shall take proper precautions to prevent damage to trees and irrigation systems. No trees shall be removed or trimmed by the Contractor without the written consent of the District Engineer, property owner, or representative of the owner of the property on which the tree is planted. The piling of excavated material, equipment, construction materials, or anything else on top of branches or against the trunks will not be permitted.

The Contractor shall contact each property owner or his/her representative prior to construction to determine the exact location of all irrigation systems and the type of materials used in its construction. The Contractor shall have all materials necessary to make a repair on-site prior to commencing construction. All irrigation lines broken during construction will be repaired immediately by the Contractor.

C. <u>Protection of Utilities and Substructures</u>: A search of known utility records has been made in an endeavor to indicate on the drawings the nature and location of all utilities which exist within the limits of the work. However, the accuracy of completeness of the utilities indicated on the drawings is not guaranteed. Utility structures and/or service connections to adjacent property may or may not be shown on the drawings.

It shall be the responsibility of the Contractor, before commencing any excavation, to contact all possible owners of utilities within the work area and to ascertain from records, or otherwise, the existence, position, and ownership of all utilities, utility structures, and service connections. The Contractor shall also comply with the law regarding use of the Regional Notification Center. No error or omission regarding said utilities shall be construed to relieve the Contractor from responsibility in protecting all such facilities.

The Contractor shall indemnify and save harmless the District from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description. If the Contractor, while performing the work of construction, discovers utility facilities not identified by the plans or specifications, they shall IMMEDIATELY notify the District Engineer in writing.

Unless otherwise indicated on the plans or in these specifications, or unless otherwise cared for by the owner thereof, all water, gas, oil, or irrigation lines, lighting, power or telephone conduits, sewer lines, house connection lines, sprinkling systems, and other subsurface structures of any nature along the work shall be maintained by the Contractor at his/her own expense and shall not be disturbed, disconnected, or damaged by him/her during the progress of the work. Should the Contractor in the performance of the work disturb, disconnect, or damage any of the above, all expenses of whatever nature arising from such disturbance or the replacement or repair thereof shall be borne by the Contractor.

The Contractor shall not disturb any existing private sanitary facilities. Unless otherwise indicated on the plans, all private sanitary facilities shall be maintained by the Contractor and shall not be disturbed or disconnected by him/her. The Contractor shall install temporary pipes of adequate size to carry off sewage from any private sewer facilities cut off by construction work. Connections to temporary pipes shall be made immediately by the Contractor upon cutting of the existing facility. No sewage shall be allowed to flow from any severed facility upon the ground surface or in the trench excavation. Pipe used in temporary sewers may be clay, metal, concrete, or composition. Upon completion of

work, the Contractor shall replace all severed connections and restore to operating order the existing sanitary facilities.

1-25 DISPOSAL OF EXCESS WATER

Any chlorinated water that could enter a water way must be dechlorinated in a manner acceptable to the District Engineer.

1-26 SUPERINTENDENCE & LABOR COMPETENCY

Whenever the Contractor is not present on any part of the work where it may be desired to give direction, orders given by the District Engineer shall be received and obeyed by the superintendent or foreman as authorized representative who may be in charge of the work. Any order given by the District Engineer, not otherwise required to be in writing by the specifications, will, on request of the Contractor, be given or confirmed in writing. An authorized representative of the Contractor shall be at the job site at all times during working hours.

All superintendents and foreman shall be English speaking. Any superintendent, foreman, laborer, or other person employed on the work by the Contractor who fails or refuses to perform the work in the manner specified herein shall be discharged immediately and such person shall not again be employed on the work. When required in writing by the District Engineer, the Contractor or any subcontractor shall discharge any person who is, in the opinion of the District Engineer, incompetent, unfaithful, disorderly, or otherwise unsatisfactory. Such discharge shall not be the basis of any claim for compensation or damages against the District.

1-27 WORK SITE MAINTENANCE

- A. <u>Access to Property Adjacent to Work</u>: Convenience of abutting owners along the street shall be provided for as far as practicable. Convenient access to driveways, houses, and buildings adjoining work shall be maintained and temporary approaches to intersecting streets and alleys shall be provided and kept in good condition. When a section of surfacing, pavement, or a structure has been completed, it shall be opened for use by traffic at the request of the District Engineer. In order that unnecessary delay to the traveling public may be avoided, the Contractor, when so ordered by the District Engineer, shall provide competent flagmen whose sole duty shall consist of directing traffic either through or around the work.
- B. <u>Water Hydrants & Utility Valves</u>: The Contractor shall not prevent the free access to water valves, water hydrants, or gas valves.
- C. <u>Rights of Access</u>: The Contractor shall at all times provide proper facilities for access and inspection of the work by the District Engineer, his/her assistants, inspectors, agents, and representatives of public agencies having jurisdiction.

1-28 USE OF EXPLOSIVES

The Contractor shall keep themselves informed of all state, city, and county laws, ordinances, and regulations governing the transportation, storage, and use of explosives. Contractor shall be use the utmost care not to endanger life and property. The Contractor shall be responsible for any and all damage resulting from the use of explosives. No blasting shall be done which will

damage subsurface conduits or structures. In no case shall blasting be done within 10 feet of any subsurface installation without the prior approval of the owner of the subsurface installation. Contractor shall be licensed by the State of California and County of San Diego to work in the District. District Engineer has the right to deny the use of explosives if it poses a potential risk to District facilities.

1-29 ATTORNEYS FEES

If an action is commenced in a court of competent jurisdiction by the Contractor or the owner/developer in which the District is named as a party and if, as a result of such action the District is afforded any relief, the prevailing party will be entitled to its reasonable attorney fees as fixed by the court.

1-30 SHUTDOWN PERIODS

Shutdown periods for existing facilities shall be kept to a minimum and the Contractor shall schedule his/her work accordingly. The Contractor shall give 4 full working days' advance written notice to the District Engineer of his/her desire for an existing valve to be operated, an existing facility to be shut down, a pipeline drained, or a service to be turned off, using the request form provided by the District. No valve or other control device of the water system shall be operated by the Contractor without the approval of the District Engineer. The District will operate the existing valve, shut down the existing District facility or service, or supervise the draining of a line by the Contractor. Shutdowns of existing facilities can only be scheduled Tuesday through Thursday, be a maximum of 8 hours, within the hours of 8:00am to 4:00pm, and any individual customer cannot be without water service more than two (2) times in any calendar week nor two (2) consecutive days due to a requested shutdown. If, in the opinion of the District Engineer, the shutdown cannot be accomplished in an 8 hour period, Contractor will be required to provide necessary means for temporary water service to affected customers during the outage.

The Contractor shall provide, at his/her expense, equipment, materials, and labor whenever required by the District to facilitate the draining of lines. Contractor shall account for drain times in the shutdown duration. The District will not be responsible for any compensation for any work resulting from faulty operation or leakage through existing valves. The Contractor shall exercise any necessary precautions in performing all work in conjunction with the connections to prevent any damage to existing mains or any contamination thereof, and shall be liable for all damages and contamination caused by his/her operations.

Shutdown requests will not be considered by the District until the Contractor has positively located the existing pipe or facility, all pressure and bacteriological tests have been successful, and the Contractor has all material to be used for the connection at the project site and has made arrangements for all required labor and equipment.

1-31 PROJECT CLEAN-UP

The Contractor shall maintain an orderly work site at all times. Tools, rubbish, and materials shall be picked up and stored in a workmanship like manner at all times. Contractor shall remove from the vicinity of the completed work all materials, etc., belonging to him/her or used under his/her direction during construction or a result of the construction itself. If the Contractor fails to do so, such removal may be carried out by the District at the expense of the Contractor and the Contractor's surety shall be liable for all costs or damages. Surfaces shall be returned

to a condition equal to or better than the conditions found prior to the start of construction or as acceptable to the District Engineer. Unless otherwise approved by the District Engineer, all excess material must be removed from the work site.

1-32 WORK PROGRESS

The percentage of work completed on work contracted by the District shall be determined by the District Engineer using the following method:

Completed:

Trench excavated and pipe laid	55%
Pipeline backfilled, connections completed, & appurtenances set to grade	70%
All trenches compacted to required density	80%
Pipeline tested and disinfected	85%
Permanent pavement repair made	95%
Clean up and final acceptance	100%

1-33 1-YEAR WARRANTY OF WORK

The Contractor or owner/developer shall guarantee all parts of the work against defective materials or workmanship furnished by the Contractor for a period of 1 year from the date of acceptance by the District. This guarantee shall be in the amount of 25% of the Contract price or estimate of value of the water main improvements. Said guarantee can be the posting of a "Defective Materials, Workmanship and Equipment Bond," the form of which is furnished by the District, or through the posting of a Time Certificate of Deposit or Irrevocable Standby Letter of Credit through a bank acceptable to the District.