

Section 4 - Scope of Work

4.1 Intent of Plans and Specifications.

The intent of the Plans and Specifications is to describe the details for the construction and completion of the work which the Contractor undertakes to perform in accordance with the terms of the contract. Where the Plans or Specifications describe portions of the work in general terms but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used. Unless otherwise specified, the contractor shall furnish all tools, equipment, and incidentals, and do all the work involved in executing the contract in a satisfactory and workmanlike manner.

In the event materials or equipment are to be furnished by the City, as designated in the Special Provisions or as agreed on, this shall not relieve the Contractor of the requirements to furnish all other labor, materials and equipment to complete the contract.

4.2 Differing Site Conditions.

Attention is directed to Section 7104 of the Public Contract Code. The Contractor shall promptly, and before such conditions are disturbed, notify the Engineer in writing of:

1. Material that the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required by law to be removed to a Class I, Class II, or Class III disposal site.
2. Subsurface or latent physical conditions at the site differing materially from those indicated in this contract.
3. Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this contract.

The Engineer will promptly investigate the conditions. If he finds that such conditions do materially differ, or do involve hazardous waste, and do cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the work under this contract, an equitable adjustment will be made, as determined by the Engineer.

In the event of disagreement between the Contractor and the Engineer whether the conditions do materially differ or whether hazardous waste is involved or whether the conditions cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any completion date required by the contract, but shall proceed with all work to be performed under the contract

4.3 As Built Drawings.

The Contractor shall maintain a set of project plans at the job site for the sole purpose of noting changes, details, corrections, and any other information reflecting or

clarifying actual conditions. Both the Contractor and the Engineer shall have access to and entrance of information thereon, such information duly initialed and dated. All entries shall be clear and sufficiently detailed to be used as entries on the original plans as Final "As Built Drawings." The said plans at the job site shall be City Property under custody of the Contractor, returned to the City upon completion of the Project.

4.4 Work to be Done.

The intent is to prescribe complete work or improvement which the Contractor undertakes to do in full compliance with the plans, specifications, and contract. The Contractor shall perform all items of work covered and stipulated in the specifications and contract, together with any extra work, all in accordance with lines, grades, cross-sections, and dimensions shown on the plans. It is further intended that all miscellaneous work required to make driveways, sidewalks, intersections, roof drains, and other privately owned improvements conform to the new work shall be performed by the Contractor. The Contractor shall furnish, unless otherwise provided in these specifications, all material, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to the prosecution and completion of the work.

All work described in the plans and specifications will be let under one contract unless otherwise set forth in the Notice to Bidders or on the Bidder's Proposal.

4.5 Alterations and Increased or Decreased Quantities.

The City reserves the right in writing, to increase or decrease the quantity, 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, as may be deemed necessary or advisable by the Engineer, provided such alterations do not change the total cost of the project, based on original estimated quantities and the unit prices bid, by more than twenty percent (20%), and provided further that such items do not change the total cost of any major item by more than fifty percent (50%). (A major item is one, the total cost of which is more than ten percent (10%) of the total contract price.) Any alterations in excess of these limits will be treated as extra work and will be covered by a contract change order, the same as though the alteration were an extra work item.

Should conditions during the progress of the work make it impossible for the Contractor to comply strictly with the terms of the contract, the Contractor shall apply in writing to the Engineer for an alteration, provided that it is not detrimental to the work or does not entail additional cost. If such alteration is acceptable to the Engineer, the Contractor shall be notified in writing, whereupon the alteration may be made. When such alteration is not acceptable to the Engineer, the Contractor shall determine some other method of doing the work which shall be acceptable.

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

4.6 Extra Work.

New and unforeseen items of work will be classed as extra work when they cannot be covered by any of the various items for which there is a bid price or by combinations of such items, or if the character of an item is materially changed on which the Contractor based his bid price, and that change materially increases or decreases the cost of the item as outlined in Section 401.2 hereof.

Prices for extra work shall be itemized and covered by a contract change order submitted by the Contractor and approved by the Engineer prior to actual starting of such work.

Should the parties be unable to agree on unit prices for the extra work, or if it is impractical, the Engineer may instruct the Contractor to proceed with the work by force account and he shall be paid as provided in Section 901.2 of these specifications.

4.7 Unauthorized Work.

Work done without lines and grades being given, work done beyond the lines and grades shown on the plans, work done in the absence or without the knowledge of the Engineer, including any work performed by subcontractors without proper superintendence by the Contractor, as provided for in Section 501.6, or any extra work done without written authority, will be considered as unauthorized and at the expense of the Contractor and will not be measured or paid for by the City.

4.8 Protection of Utilities.

A preliminary study of the location of underground utilities within the limits of the work has been made. The location of the underground utilities indicated on the plans is not guaranteed to be accurate or complete, but is plotted for the general information of the Contractor. The Contractor shall contact Underground Service Alert (USA) at (800) 227-2600 at least four (4) working days before excavating, to allow utility companies to mark and identify their respective utilities within the limit of the work. Aboveground utilities are not shown on the plans. It shall be the responsibility of the Contractor to coordinate and determine the exact locations and/or depths of all of the aboveground utilities, underground utilities, and their service locations.

The Contractor shall be responsible for protecting and supporting the aboveground utilities and the identified underground utilities that occur in the limits of the work with a method acceptable to the respective utility owners. The cost of protecting and supporting the utilities shall be included in the bid prices for the various items of work. Any identified damage to the SBC Telephone, PG&E, EBMUD, or Cable TV lines shall be repaired by the respective utility owner at the Contractor's expense.

4.9 Cleaning Up.

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

The Contractor shall maintain a neat appearance to the work. Contractor shall promptly remove splattered concrete, asphalt, oil, paint, corrosive liquids and cleaning solutions from surfaces to prevent marring or other damage.

Broken concrete debris, and unsuitable excavated native soil during construction shall be disposed of concurrently with its removal. If stockpiling is necessary all debris shall be placed in trash bins daily and shall be removed or disposed of weekly. Any waste shall not be buried on the site or disposed of into storm drains, sanitary sewers, streams, or waterways.

Forms or falsework that are to be re-used shall be stacked neatly concurrently with their removal. Forms and falsework that are not to be re-used shall be disposed of concurrently with their removal.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

Sidewalks, street area, parking strips, and driveway approaches must be kept reasonably clean at all times during construction and be completely and carefully cleaned after the work has progressed beyond the immediate vicinity to the satisfaction of the Engineer. Reasonable cleanup is defined as no dust, rock, or mud on any portion of the public right-of-way or the private properties as a result of the Contractor's work.

4.10 Noise Control.

All construction machinery and vehicles employed on the project shall be equipped with approved sound muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the work. Section 701.11 specifies time limitation in which engine driven equipment shall not be operated.

4.11 Temporary Light, Power, and Water.

The Contractor shall at its own expense, furnish, install, maintain, and remove all temporary light, power, and water, including piping, wiring, lamps, and other equipment, necessary for the work. The Contractor shall not draw water from any fire hydrant, except to extinguish a fire, without first obtaining permission from the water agency concerned.

4.12 Coordination With Affected Residents.

This contract may include a significant amount of work within construction easements in private property. The Contractor shall be required to provide adequate notification to, and coordination with, the affected residents. At least 1 week prior to working in easements, the Contractor shall notify the affected residents in writing of the intention to perform work within their properties, the starting dates of work, and duration of the work. The Contractor shall only initiate an amount of work that can be reasonably completed on the same day. If the initiated work is unfinished, the Contractor shall provide adequate covers and appropriate barricades and warning signs to ensure public safety to the satisfaction of the Engineer. After completion of work in the easement area, the Contractor shall obtain written release from the property owners and give a copy to the Engineer. Any damages to the properties shall be restored and handled in accordance with Section 401.11 of this specification.

In addition, service connections may be required to be temporarily stopped for rehabilitation of the sewer mains and/or laterals. At least 1 week prior to working in a particular area, the Contractor shall notify the affected residents in writing of the intended work, the starting date and duration, and any coordination requirements to facilitate work progress. The Contractor shall be required to adequately notify affected residents of schedule changes.

For service connection disruptions required to make system improvements, the Contractor shall provide a second notice to residents/businesses not less than 48 hours prior to service interruption. For interruptions in service longer than the limits specified below, the Contractor shall at his cost arrange for and provide in-kind services. Maximum interruption time without provision of in-kind services for private residences shall be as follows:

Water Services: 4 hours

Sewer Services: 7 hours

All interruptions shall be restored by the Contractor at the end of each day.

The Contractor shall plan for and provide the services of a septic tank pumper truck to periodically pump out any sewage which may accumulate in excavation pits at the two-way cleanout location. Alternatively, the Contractor may utilize submersible sewage pumps or trash pumps to convey the sewage from the pits to a functional portion of the existing sanitary sewer within the project area.

The Contractor shall at all times perform his lateral connection work so as to minimize the quantity of sewage which may accumulate, to minimize adverse impacts on public health and sanitation and to minimize the potential for odors. The Contractor shall at all times maintain an adequate supply of bottled chlorine bleach (sodium hypochlorite solution) to treat any accumulated sewage should this be determined necessary by the Engineer to minimize odors and to protect the public and workers' health.

All costs to the Contractor for coordination with the affected residents shall be included in bid prices for the replacement or rehabilitation of sewer mains and laterals.

4.13 Protection and Restoration of Existing Improvements.

The Contractor shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements and street pavements which are not designated for removal (e.g., street sections, curbs, gutters, driveways, fences, walls, structures, landscaping, etc.) which are damaged or removed as a result of its operations. Repairs and replacements shall be at least equal to existing improvements, and shall match them in finish and dimensions.

Prior to initiating work in the public right of way and in the easements, the Contractor shall make an audio/video cassette tape recording of the affected areas showing all existing improvements, and their conditions. The tapes shall be turned over to the Engineer and shall

be used as a historical recording of the pre-construction conditions. The costs of the pre-construction audio-visual survey shall be the responsibility of the Contractor.

Any damages to the private properties will be restored to the satisfaction of the property owners/Engineer within seven (7) days of the damage(s).

Damages within the public right of way including street pavement will be restored to the satisfaction of the Engineer after work on that particular block is completed.

4.14 Submittals.

4.14.1 Where required by the specifications, the Contractor shall submit descriptive information which will enable the Engineer to advise the Agency whether the Contractor's proposed materials, equipment or methods of work are in general conformance to the design concept and in compliance with the drawings and specifications. The information to be submitted shall consist of proposed construction schedule, traffic control plan, shoring, sheeting and bracing as required drawings, specifications, descriptive data, certificates, samples, test results and such other information, all as specifically required in the specifications. In some instances, specified submittal information described some, but not all, features of the material, equipment, or method of work. Features not requiring submittals shall be as specified.

4.14.2 Contractor's Responsibilities. Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the drawings. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall insure that there is no conflict with other submittals and notify the Engineer in each case where his submittal may affect the work of another contractor or the Agency. The Contractor shall insure coordination of submittals among the related crafts and subcontractors.

4.14.3 Transmittal Procedure

A. General. Submittals regarding material and equipment shall be accompanied by a transmittal form. A separate form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittal documents common to more than one piece of equipment shall be identified with all the appropriate equipment numbers. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.

B. Deviation from Contract. If the Contractor proposes to provide material, equipment, or method of work which deviates from the requirements of the plans and specifications, he shall indicate as "deviation" on the transmittal form accompanying the submittal copies.

C. Submittal Completeness. Submittals which do not have all the information required to be submitted, including deviations, are not acceptable and will be returned without review.

4.14.4 Review Procedure. Submittals are specified for those features and characteristics of materials, equipment, and methods of operation which can be selected based on the Contractor's judgment of their conformance to the requirements of the plans and specifications. Other features and characteristics are specified in a manner which enables the Contractor to determine acceptable options without submittals. The review procedure is based on the Contractor's guarantee that all features and characteristics not requiring submittals conform to the plans and specifications. Review shall not extend to means, methods, techniques, sequences or procedures of construction, or to verifying quantities, dimensions, weights or gages, or fabrication processes except where specifically indicated or required by the contract documents or to safety precautions or programs incident thereto. Review of a separate item, as such, will not indicate approval of the assembly in which the item functions.

When the contract documents require a submittal, the Contractor shall submit the specified information as follows:

1. One reproducible original of all the submitted information. When individual sheets in the submittal exceed 8-1/2 inches x 11 inches, a sepia shall be submitted.
2. Four copies of all the submitted information.

Unless otherwise specified, within 10 calendar days after receipt of the submittal, the Engineer shall review the submittal and return one copy of the marked-up reproducible original noted in 1 above. The reproducible original will be retained by the Engineer. The returned submittal shall indicate one of the following actions:

1. If the review indicates that the material, equipment or work method complies with the contract documents, submittal copies will be marked "NO EXCEPTIONS TAKEN." In this event, the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.
2. If the review indicates limited corrections are required, copies will be marked "MAKE CORRECTIONS NOTED." The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections.
3. If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked "AMEND AND RESUBMIT." Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."
4. If the review indicates that the material, equipment, or work method does not comply with the contract documents, copies of the submittal will be marked "REJECTED - SEE REMARKS." Submittals with deviations which have not been identified clearly may be

rejected. Except at his own risk, the Contractor shall not undertake the work covered by such submittals until a new submittal is made and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

4.14.5 Effect of Review of Contractor's Submittals. Review of drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibility for errors therein and shall not be regarded as an assumption of risks or liability by the Engineer or the Agency, or by any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" shall mean that the Agency has no objection to the Contractor, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

4.15 Final Cleaning Up.

Upon completion of the work, and before acceptance and final payment, the Contractor shall clean the project areas and remove all surplus and discarded materials, falsework, rubbish and temporary structures and restore in an acceptable manner all property, both public and private, which has been damaged during the prosecution of the work, and shall leave the improvement in a neat and presentable condition throughout the entire length of the improvement under contract to the satisfaction of the Engineer. If the Conditions as noted above are not corrected immediately, the Engineer may declare an emergency and take necessary action in accordance with Section 401.7-1 of this specification.

4.16 Changed Conditions.

The Contractor shall notify the Engineer in writing of the following Work site conditions, hereinafter called changed conditions, promptly upon their discovery and before they are disturbed.

1. Subsurface or latent physical conditions differing materially from those represented in the Contract; and
2. Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character being performed.

The Engineer will promptly investigate conditions when notified or any conditions discovered by him which appear to be changed conditions. If the Engineer determines that the conditions are changed conditions and that they will materially increase or decrease the costs of any portion of the Work, a Change Order will be issued adjusting the compensation for such portion of the work in accordance with Subsection 401.3. If the Engineer determines that conditions of which has been notified by the Contractor do not justify an adjustment in compensation, the Contractor will be so advised in writing. Should the Contractor disagree with such determination, it may submit a notice of potential claim to the Engineer, as provided in Subsection 501.12.

If the Engineer determines that the conditions are changed conditions and that they will materially affect the performance time, the Contractor, upon submitting a written request, may be granted an extension of time subject to the provisions of Subsection 801.7.1.

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

4.17 As-Built Records.

The Contractor shall maintain at the jobsite one (1) set of Plans marked to show any deviations which have been made from the Plans, including buried or concealed construction and utility features revealed during the course of construction. Record the horizontal and vertical location of all buried utilities that differ from the Plans. These Plans shall be available for review by the Engineer at all times. Upon completion of the work, deliver the marked set of prints in good condition to the Engineer for incorporation into the original drawings.