DIVISION 1
GENERAL DATA

SECTION 01005

SPECIAL REQUIREMENTS

PART 1 - GENERAL REQUIREMENTS

1.01 REFERENCE TO BUILDING CODE

A. Whenever the term "standard specification" is used on the drawings or in the specifications, the term means the following:
   1. Standard Specifications for Public Works Construction, latest adopted edition, with all adopted Supplements.

B. Whenever the term "building code" or "code" is used on the drawings or in the specifications, the term means the following:
   1. The latest adopted edition of the California Building Code.
   2. All applicable codes, laws, regulations, zoning ordinances, and protective covenants governing the site of the work.

C. In case of conflict, the most strict of all the foregoing shall govern.

1.02 REFERENCE STANDARDS AND MANUFACTURERS' SPECIFICATIONS

Materials specified by title, symbol, or number of a Commercial Standard, Federal Specification, ASTM designation, ANSI designation, manufacturer's literature, or other reference standards, refer to the current issues of same, except as indicated otherwise, if not in contradiction to the building code or codes of other governmental agencies as may have jurisdiction. Such referenced documents shall be considered as an integral part of the specification as if repeated verbatim therein. Upon request, the Architect will furnish source for securing copies of same. The Architect may require that copies of certain reference specifications be kept at the job site.

1.03 MANUFACTURERS' RECOMMENDATIONS

With exceptions as specified or indicated on the drawings, apply, install, connect, erect, use, clean, and condition manufactured articles, materials, and equipment in accordance with manufacturers' current printed recommendations. The Architect may require that copies of such printed recommendations be kept at the job site.

1.04 DEFINITIONS

A. Where the words "shown", "indicated", detailed", "noted", "scheduled", or words of similar import are used, reference is made to the drawings, specifications, and other contract document, unless stated otherwise.

B. Directions: Where the words "directed", "designated", selected", or words of similar import are used, the direction, designation, selection of the Architect is intended, unless stated otherwise. The word "required", and words of similar import mean "as required to properly complete the work and as required and approved by the Architect", unless otherwise stated.

C. Equals and approvals: Where the words "equal" or "approved equal", "equivalent" and words of similar import are used, it shall be understood that such words are followed by the expression "in the opinion of the Architect", unless stated otherwise.

Where the words "approved", "approval", "acceptable", "acceptance", or words of similar import are used, the approval, acceptance, or other indications of the Architect and Owner is intended.

D. Perform and provide: The word "perform" shall be understood to mean that the Contractor, at his expense, shall perform all operations necessary to complete the work, including furnishing of necessary labor, tools, and equipment, and further including the furnishing and installation of materials that are indicated, specified, or required to complete such performance. The word "provide" shall be understood to mean that the Contractor, at his expense, shall furnish and install the work, complete in place and ready for use, including furnishing of necessary labor, materials, tools, equipment, and transportation. These definitions apply the same to future, present, and past tenses, except the word "provided" may mean "contingent upon" where such is the context.

1.5 FOUNDATION AND SOILS ENGINEER

Foundation and Geotechnical Engineer is the authorized professional representative of the Owner. Earthwork and trenching of every kind is subject to supervision, inspection, and testing by the Foundation and Soils Engineer. Refer to Soils Report prepared by Converse Consultants, Project No. 07-81-368-01, dated October 30, 2008 with all attachments.

1.06 MATERIALS FOR TESTING

Contractor shall furnish, at no extra cost, samples of materials required for testing purposes to the Testing Engineer or Laboratory in a timely manner. Materials represented by samples under test shall not be incorporated into the work without approval of the Architect. Copies of test reports, with action of Architect noted thereon, will be furnished to the Contractor.

1.07 COORDINATION

The Contractor shall coordinate the work of the various crafts to avoid possible interferences, duplication of work, or unfinished gaps between operations. The Contractor shall agree that, due to field conditions, minor departures from the drawings are bound to occur, and that such departures are compensated for so far as costs of additions or deductions are concerned. No claims for extras will be allowed in connection with such minor changes due solely to field conditions.

1.08 PERMIT

Contractor shall obtain and Owner shall pay for the building permit.

1.09 CONSTRUCTION FORCE

A. The Contractor shall provide and maintain in full operation at all times during the performance of the Contract, a sufficient crew of laborers, mechanics, and foremen to prosecute the work with dispatch.

B. By "sufficient" is specifically meant a crew equal to the work of the various trades required by all parts of the project--whether simultaneously or in the successive sequence of construction--as soon as such work is ready to be performed, so that no delays on any portion of the project will occur.

1.10 PROTECTION OF ADJACENT BUILDINGS AND PROPERTY

Exercise all required precautions necessary to protect all buildings and other constructions of property adjacent to that of the work under this Contract. Contractor shall be responsible for, and shall pay for, all damage to such adjacent buildings and constructions on account of operations under this Contract.

1.11 MAINTENANCE OF EXISTING IMPROVEMENTS

Unless otherwise indicated on the drawings or in the specifications, or unless otherwise called for by the Owner thereof, all water, gas, or irrigation lines, lighting, power, or telephone conduit or wires, or sewer lines, structure or house connections in place, and other surface or subsurface structure or lines, shall be maintained by the Contractor, and shall not be disturbed, disconnected, or damaged by him in the performance of the work; provided that, 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 in replacing or repairing thereof shall be borne by the Contractor.

1.12 SERVICE LINES

Locate drainage, sewer lines, water, gas, and other utility service lines or piping in the way of new work. Properly cap or plug, and make tight at the property line, such services which are not to be removed. Identify all capped or plugged utility lines on the record set of drawings described in Section 01700.

1.13 PUBLIC UTILITIES

A. Send notices, make all necessary arrangements, and perform all other services required in care and maintenance of all public utilities. Assume all responsibility concerning same for which Owner may be liable. Provide enclosing or boxing-in for protection of any public utilities equipment. Upon completion of work, remove all enclosures, fill in all openings in concrete, grout same watertight, and leave in finished condition.

B. In case it should be necessary to move the property of any Owner of a public utility or franchise, the cost of which, because of the terms of any franchise or for any other reason, must be borne by the Owner thereof, such Owner will, upon proper application by the Contractor, be notified by the Engineer to move such property within a specified reasonable time, and the Contractor shall not interfere with said property until after the expiration of time specified.

C. In case it should be necessary to move or temporarily maintain the property of any public utility or any other property, the cost of which is not required to be borne by the Owner thereof, the Contractor shall bear all expenses incidental to the removal or temporary maintenance of such property in a manner satisfactory to the Owner thereof.

D. The right is reserved to the controlling governmental agencies and to the owners of public utilities and franchises to enter at any time upon any street, alley, right-of-way or easement for the purpose of making changes in their property made necessary by the work and for the purpose of maintaining and making repairs to their property.

1.14 REMOVING OBSTRUCTIONS

When the proper completion of the work requires their temporary or permanent removal, the Contractor shall, at his own expense, remove and, without unreasonable delay, temporarily or permanently replace or relocate, in a workmanlike manner and to the satisfaction of the Engineer, all water pipe, pipelines, conduits, culverts, roads, driveways, fences, wires, poles, retaining walls, curbs, gutters, concrete walks and all other improvements of whatever character, not required by law to be removed by the Owner thereof; and all such improvements temporarily removed shall be maintained until permanently replaced, all at the Contractor's expense.

1.15 INVESTIGATION AND PREPARATION OF SURFACES TO RECEIVE WORK OF SUBTRADES

Prior to commencement of work, make a thorough and complete investigation of recipient surfaces to determine their suitability to receive required additional construction and finishes. Make whatever repairs and conditioning may be required to properly prepare such surfaces to receive additional work at Contractor's expense. It is the responsibility of the Contractor to coordinate the work of the various trades to provide suitable surfaces to receive following work. Commencing work indicates acceptance of conditions and such surfaces as being satisfactory to receive following work.

1.16 SLEEVES AND HANGERS

Contractor shall require subcontractors for each section of the work to furnish conduits, outlets, piping sleeves, boxes, inserts, or other materials and equipment necessary to be built into the work by Contractor. Promptly set such sleeves or other materials in accordance with requirement of construction program.

1.17 PARTIAL OCCUPANCY

A. Owner reserves the right to enter upon the site and into the building(s) for the purpose of making inspections, which shall not be considered obligatory upon him, and to occupy portions of the site and building(s) prior to the date of substantial completion, provided same does not interfere with the work under the Contract.

B. Exercise of the aforementioned right shall in no way be construed or deemed to be acceptance by the Owner of work under the Contract.

1.18 PREREQUISITES TO FINAL PAYMENT

Before final payment under the Contract is authorized, the following requirements of the contract documents shall be fulfilled:

A. Satisfactory completion of construction work, and acceptance by Architect and Owner as evidenced by the issuance and posting of the required Certificate of Occupancy.

B. Submission to Architect of required written warranties.

C. Submission to Architect of record drawings, completely posted.

D. Return to Architect of plans and specifications loaned to Contractor during construction period.

E. Delivery to Owner of a satisfactory Mechanics Lien Guarantee.

F. Delivery to Owner of a complete list of subcontractors and principal vendors, including addresses and telephone numbers.

G. Delivery to Owner two complete sets of Operations and Maintenance Manuals for equipment and materials used in the work.

H. Submission to the Owner of an affidavit, sworn to before a Notary Public, stating that all workmen and persons employed, all firms supplying the materials, and all subcontractors upon the project have been paid in full, and that there are not bills outstanding against the project for either labor or materials, except certain items, if any, to be set forth in such affidavit covering disputed claims or items in connection with which Notices to Withhold have been filed under provisions of the Statutes of the State of California.

END OF SECTION - 01005

SECTION 01010
SUMMARY OF WORK

PART 1 – GENERAL

1.1 Work covered by Contract Documents:

a. The work covers all site improvements to the Big League Dreams Park Facility, Perris Valley, California. Work includes demolition, clearing and grubbing, earthwork and grading, site utilities, electrical service and security lighting, all drainage and sub-surface drainage systems, ball field lighting, chain link fencing, ball field backstops, bleacher seating, play area, site furnishings, concrete headers, walks, paving, decorative paving, slabs, concrete steps, curbs, curbs and gutters, asphalt base and paving, raised planters, parking areas, parking area striping, site and building signage, monument signage, masonry block walls, poured in place concrete walls, ornamental fencing, Building Architectural, Structural, Mechanical, Electrical and Audio-Visual systems ball field dugouts, Cover Soccer buildings, batting cages, administration building, maintenance building, outfield Replica Walls, scoreboards, netting structures, shade shelters, ball field turf, infield and warning track mix with stabilizer, landscape planting, automatic irrigation system, 30 day plant establishment period and 60 day project maintenance. The work to be performed shall include, but not be limited to, the items described. All work shall include the furnishing of labor, services, tools, equipment, materials, appurtenances and incidentals necessary to install and complete the work contemplated per the plans and specifications.

b. Owner may award separate Contracts for products and installation for work as may be indicated on Drawings as NIC (Not in Contract), including, but not limited to:
   1. Furniture and furnishings.

1.2 Related Work Specified Elsewhere:

a. General Conditions, Special Provisions or such other Conditions/Provisions as may be applicable to this Contract and required by the County.
b. Construction Schedule: Section 01310
c. Schedule of Values: Section 01370
d. Temporary Facilities and Controls: Section 01500
e. Products and Materials: Section 10600
f. Landscape Planting: Section 02900

1.3 Contractor's Duties:

a. Comply with codes, ordinances, rules, regulations orders, and other legal requirements of public authorities which bear on performance of work.

1.4 Testing:

a. The County will arrange and pay for all off-site inspection of the work required by ordinance or governing authorities. The Contractor shall also arrange and pay for other inspections, including tests in connection therewith, as may be assigned to it in other sections of the specifications.

1.5 Allotted Working Space:

a. A reasonable space will be assigned. All materials and equipment shall be kept within this space with no liability to the County.

b. Provide temporary chain link fence and gate construction barricade around water company facilities to remain in operation during new project, as indicated on the drawings.

c. All existing utilities serving above-noted temporary facilities shall remain in place and fully operational until their removal is allowed and will not hinder their operation.

1.6 Contract

a. Perform Work of this Contract under a Guaranteed Maximum Price (GMP) with the Owner.

1.7 Owner-furnished, Owner-installed work

a. Items shown on the Drawings as Owner-Furnished, Owner-Installed shall be furnished by the Owner and installed by the Owner. Work indicated as Owner-Furnished, Owner -Installed will be performed under separate Contract, employed by the Owner at its discretion

b. Where work of this Contract adjoins or conflicts with Owner-Furnished, Owner-Installed work, the Contractor shall cooperate with the Owner and its employees in a manner which will provide for a reasonable and accurate completion of this Contract and work under separate Contract.

1.8 Owner-furnished, Contractor-installed work

a. The Contractor shall verify exact sizes and services required for each item of equipment indicated on the Drawings or in the Project Manual as Owner-Furnished, Contractor-Installed and shall obtain from the Owner rough-in drawings, diagrams, setting templates, and other necessary information to assure proper mating of assemblies.

b. The Contractor shall receive at the project site each item of equipment from the Owner and from that time on, shall assume full responsibility for the items and equipment until one year from Date of Notice of Completion.

c. The Contractor shall give the Owner 90 days prior notice of the requirement for delivery to the site of all Owner-Furnished, Contractor-Installed equipment.

d. Contractor shall be responsible for receiving Owner-Furnished, Contractor-Installed items and equipment and shall uncrate, inspect and notify the Owner in writing within 7 days of receiving said items or equipment of the acceptance or rejection of the items or equipment.
   1. The Owner, after receiving notice, will take appropriate action to have the items or equipment made acceptable for the Contractor´s use.
   2. Rejected items shall be carefully stored and protected from damage by the Contractor until the Owner takes appropriate action.

e. The Contractor shall be responsible for final placing, installation, connection, start-up, checking, testing and demonstrated satisfactory operation.

f. The Owner will provide names of manufacturer's representatives, who shall assist the Contractor in checking, testing and demonstrating the equipment.

1.9 Current Contract Documents

a. Order of Precedence:
   1. Change Orders, Supplemental Agreements and Approved Revisions to Plans and Specifications.
   2. Agreement.
   3. Addenda.
   4. Specifications.
   5. Plans (Contract Drawings).
   6. Contractor's Bid (Bid Forms).
   7. Special Provisions (PSA Document).
   8. General Conditions (County Document).
   9. Standard Specifications for Public Works Construction (Greenbook).
   10. Notice Inviting Bids.
   11. Instructions to Bidders.
   12. Standard Plans
   13. Reference Documents.

1.10 Contract Drawings

a. The Drawings provided with and identified in the Project Manual are the Drawings referenced in the Agreement.

b. The location, extent and configuration of the required construction and improvements are shown and noted on Drawings. The Drawings may be referenced in the Agreement. An index of Drawings is included on the title page of the Drawings.

c. Drawings are arranged into series according to design discipline. Such organization and all references to trades, sub-contractors, specialty contractors or suppliers shall not control the Contractor in assigning the Work among sub-contractors or in establishing the extent of the work to be performed by any trade.

d. Where the terms "as shown," "as indicated," "as noted," "as detailed," "as scheduled," or terms of like meaning are used in the Drawings or Specifications, it shall be understood that reference is being made to the Drawings referenced in the Agreement.

e. Where reference to the word "plans" is made anywhere in Drawings, Specifications and related Contract Documents, it shall be understood to mean the Drawings referenced in the Agreement.

1.11 Contract Specifications

a. The Specifications provided in the Project Manual are the Specifications as may be referenced in the Agreement.

b. Specifications are organized by Divisions and Sections in accordance with the recommended practices of the Construction Specifications Institute. Such organization shall not control the Contractor in assigning the work among subcontractors or in establishing the extent of work to be performed by any trade.

c. Specifications are included in the Project Manual, which also may include other documents related to the project, including, but not limited to, Information For Bidders, Proposal Form or Bid Form, Agreement, Certifications and Attachments, Soils and Geotechnical Data, Sample Forms and Schedules.

1.12 General Construction Considerations

a. Provide all Work identified in Divisions 2 through 16 except Work specifically assigned to other Contractors as may be specified or directed by the Owner.

1.13 Maintenance of Existing Plantings:

a. The Contractor shall protect and maintain all existing trees and plantings designated as to remain from the first day of work under this contract to acceptance.

1.14 Not in Contract:

a. Items shown on the contract drawings, but marked N.I.C., are not included in this contract.

1.15 Limits of Work:

a. Limits of work shall be the legal property boundaries unless modified by Contract limit lines indicated on the plans or as noted otherwise.

PART 2 – PRODUCTS

Not used

PART 3 – EXECUTION

Not used

END OF SECTION - 01010

SECTION 01020

CONTRACT CONSIDERATIONS

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
1. Bid descriptions.
2. Schedule of values.
3. Application for payment.
4. Change procedures.
5. Measurement and Payment
6. Alternates.
7. Allowances
8. Owner Furnished, Contractor Installed Items

1.02 BID DESCRIPTIONS

A. Work of prime contract shall include the construction of the Perris Valley Big League Dreams sports park, including:
1. Base Bid - Site improvements, offsite improvements, utilities, various structures, including Administration building, Stadium Club, Concessions building, Maintenance building, Soccer field shade structures, themed baseball play fields, and additional recreation facilities.
2. Additive Alternates – Where Additive Alternate work is indicated on the Drawings, contractor shall include separate bids for such work, including:
a. Add. Alt. #1: Raised seating area at Soccer Stadium
b. Add. Alt. #2: Additional work to back of outfield walls at Yankee Field and Fenway Park
c. Add. Alt. #3: Shade structure over center sections of Minor League Field seating
d. Add. Alt. #4: Decorative paving feature at park entry

1.03 SCHEDULE OF VALUES

A. Submit a printed schedule on AIA Form G703 - Application and Certificate for Payment Continuation Sheet. Contractor's standard form or electronic media printout subject to approval by the Owner will be considered.

B. Submit Schedule of Values in duplicate immediately after date of Owner-Contractor Agreement, and not later than 15 days after receipt of notice to proceed.

C. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the major specification Section. Identify site mobilization, bonds and insurance separately,

D. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.

E. Include within each line item, a direct proportional amount of Contractor's overhead and profit. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 APPLICATIONS FOR PAYMENT

A. Submit three copies of each application on AIA Form G702 - Application and Certificate for Payment and AIA G703 - Continuation Sheet. AIA G722 - Project Application and Project Certificate for Payment and AIA G723 - Project Application Summary or on Owner-approved Contractor's electronic media driven form.

B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.

C. Include any specific forms, certifications or documents required by Owner for accounting purposes.

1.05 CHANGE PROCEDURES

A. The Architect will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions.

B. The Architect may issue a Proposal Request (or Bulletin) which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor will prepare and submit an estimate within five (5) days.

C. The Contractor may propose changes by submitting a Change Request to the Architect, describing the proposed change and its full effect on the Work. Include a statement describing the reason for the change, and the effect on the Contract Sum/Price and Contract Time with full documentation and a statement describing the Work by separate or other contractors.

D. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's Change Request as approved by Architect.

E. Unit Price Change Order: For pre-determined unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under a Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Change Order.

F. Construction Change Directive (or Bulletin): Architect may issue a directive, on AIA Form G713 Construction Change Directive or other such Owner-approved form, signed by the Architect or the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute the change.

G. Maintain detailed records of work done on Time and Material basis, when such work is authorized by the Owner. Provide full information required for evaluation of proposed changes and to substantiate costs for changes in the Work.

H. Change Order Forms: AIA G701 Change Order or Owner approved form.

I. Change Order: Submit itemized account and supporting data after completion of change. Architect will determine the change allowable in Contract Sum/Price and Contract Time as provided in the Contract Documents.

J. Execution of Change Orders: Owner will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.06 MEASUREMENT AND PAYMENT

A. Authority: Measurement methods are delineated in the individual specification sections.

B. The Architect or Owner will take measurements and compute quantities accordingly. Provide and assist in the taking of measurements.

C. Unit Quantities: Actual quantities provided will determine payment.

D. Payment Includes: Full compensation for required labor, products, tools, equipment, plant, transportation, services and incidentals- erection, application or installation of an item of the Work, overhead and profit.

E. Defect Assessment: Replace the Work, or portions of the Work, not conforming to specified requirements. If, in the opinion of the Architect or Owner, it is not practical to remove and replace the Work, the Architect will direct an appropriate remedy, or adjust payment

1.07 ALTERNATES

A. Alternates will be reviewed and accepted or rejected at the Owner's option.

B. Accepted Alternates will be identified in Owner-Contractor Agreement.

C. Coordinate related work and modify surrounding work as required.

1.08 ALLOWANCES

A. Provide a $10,000.00 allowance for interior signage in addition to those specified in Section 10400.

1.09 OWNER FURNISHED, CONTRACTOR INSTALLED ITEMS

A. Deposit Safes

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION - 01020

SECTION 01040

PROJECT COORDINATION

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
1. Project Coordination.

1.02 COORDINATION

A. Coordinate scheduling, submittals, and Work of the various Sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

B. Verify that utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable. Place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

E. Coordinate completion and clean up of Work of separate Sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial occupancy, when applicable.

F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

G. Contractor shall protect all existing work. Any and all damage to existing work or to adjacent premises shall be replaced or repaired in accordance with Section 01005.

1.03 COORDINATION OF SEPARATE CONTRACTS

A. Contractor shall coordinate the Work of this Contract with work under separate contracts issued by Owner. Cooperate with Owner and others as directed by Owner in scheduling and sequencing the incorporation into the Work of Owner Furnished, Owner Installed (OFOI) products identified in the Drawings and Specifications.

1.04 RELATIONSHIP OF CONTRACT DOCUMENTS

A. Drawings, Specifications and other Contract Documents in the Project Manual are intended to be complementary. What is required by one shall be as if required by all. What is shown or required, or may be reasonably inferred to be required, or which is usually and customarily provided for similar work, shall be included in the Work.

1.05 INTERFACING AND COORDINATION

A. Layout, scheduling and sequencing of all Work shall be solely the Contractor's responsibility.

B. Contractor shall verify, confirm and coordinate field measurements so that new construction correctly and accurately interfaces with conditions existing prior to construction.

C. Contractor shall bring together the various parts, components, systems and assemblies as required for the correct interfacing and integration of all elements of the Work.

D. Contractor shall coordinate Work to correctly and accurately connect abutting, adjoining, overlapping and related elements, including work under separate contracts by Owner, utility agencies and companies.

1.06 SUPERINTENDENCE OF WORK

A. Contractor shall appoint a field superintendent and a project manager, who shall directly and full-time supervise and coordinate all work of the Contract.

1.07 SUB-CONTRACTORS, TRADES AND MATERIALS SUPPLIERS

A. Contractor shall require all sub-contractors, trade crafts and suppliers to coordinate their portions of the Work with the Contractor's field superintendent to prevent scheduling, sequencing, dimensional and other conflicts and omissions.

1.08 CONSTRUCTION ORGANIZATION AND START-UP

A. Contractor shall establish on-site lines of authority and communications:
   1. Schedule and conduct pre-construction meeting and progress meetings with subcontractors and/or suppliers.
   2. Establish procedures for intra-project communications.
   3. Interpret Contract Documents:
      a. Consult with Architect to obtain interpretation.
      b. Assist in resolution of questions or conflicts which may arise.
      c. Transmit written interpretations to subcontractors and to other concerned entities.
   4. Obtain permits and approvals:
      a. Building permits and special permits required for work or for temporary facilities.
      b. Verify that subcontractors have obtained inspections and approvals for work and for temporary facilities.
      c. Verify subcontractors have State contractor's licenses for trades to be performed.
      d. All Contractors shall obtain required City and/or County business licenses.

5. Control use of the site:
   a. Supervise field engineering and site layout.
   b. Allocate space for field offices, sheds and work and storage areas used by subcontractors.
   c. Establish vehicular and pedestrian access, parking allocations and regulations, and traffic control.
   d. Monitor use of site during construction.

1.09 GENERAL DUTIES

A. Construction Schedules:
   1. Prepare a schedule of construction activities for all subcontractors.
      a. Each subcontractor shall prepare detailed sub-schedules to comply with critical phases.
   2. Monitor schedules as work progresses:
      a. Identify potential variances between scheduled and probable completion dates for each phase of the work.
      b. Recommend to Architect adjustments in schedule to meet required completion dates.
      c. Adjust schedules of subcontractors as required.
      d. Document changes in schedule for submittal to Owner, Architect and involved subcontractors.
   3. Observe work of each subcontractor to monitor compliance with schedule.
      a. Verify that labor force and construction equipment are adequate to complete work within schedule.
      b. Verify that product procurement schedules are adequate to prevent delays.
      c. Verify that product deliveries are adequate to maintain schedule.
      d. Report inadequacies to Architect, with recommendations for changes.

B. Process Shop Drawings, product data and samples in accordance with section 01300.

C. Inspection and Testing:
   1. Inspect work to ensure performance in accordance with requirements of Contract Documents.
   2. Administer special testing and inspections of suspect work.
   3. Reject work which does not comply with requirements of Contract Documents.
   4. Coordinate Testing laboratory services:
      a. Verify that required laboratory personnel are present.
      b. Verify that tests are made in accordance with specified standards.
      c. Review test reports for compliance with specified criteria.
      d. Recommend and administer required retesting.

D. Monitor the use of temporary utilities.
   1. Verify that adequate services are provided and maintained.

E. Monitor subcontractors´ periodic cleaning.
   1. Enforce compliance with Specifications.
   2. Resolve conflicts.

F. Changes and Substitutions:
   1. Recommend necessary or desirable changes to Architect.
   2. Review subcontractors' requests for changes and substitutions.
   3. Submit recommendations to Architect.
   4. Assist Architect in negotiating Change Orders.
   5. Promptly notify subcontractors of pending changes or substitutions.

G. Maintain reports and records at job site available to Architect and Owner.
   1. Provide the following records:
      a. Daily log of progress of work of each subcontractor.
      b. Authorized modifications.
      c. Inspection and Testing.
      d. Materials and equipment records.
      e. Applicable handbooks, codes and standards.
   2. Obtain information from subcontractors and maintain file of project record documents.
   3. Assemble documentation for handling of claims and disputes.

1.10 CLOSE-OUT DUTIES

A. Mechanical and Electrical Equipment Start-up.
   1. Coordinate check-out of utilities, operations systems and equipment.
   2. Assist in initial start-up and testing.
   3. Record dates of start of operation of systems and equipment.
   4. Submit to Owner written notice of beginning of warranty period for equipment put into service.
   5. Comply with requirements of Section 01650.

B. At completion of work of each subcontract, conduct and inspection to ensure that:
   1. Specified cleaning has been accomplished.
   2. Temporary facilities have been removed from site.
   3. Comply with requirements of Section 01710.

C. Substantial Completion:
   1. Conduct an inspection and prepare punch list to confirm or supplement subcontractors' list of work to be completed or corrected.
   2. Assist in preparation of Architect's correction list.
   3. Supervise correction and completion of work as established in Certificate of Substantial Completion.
   4. Comply with requirements of Section 01700.
   5. Establish date of beginning of warranty period for each product.
   6. Comply with requirements of Section 01740.

D. Partial Occupancy: When Owner occupies a portion of project prior to final completion, coordinate established responsibilities of Contractor and Owner.

E. Final Completion:
   1. When each subcontractor determines that its work is finally complete, conduct an inspection to verify completion of work.
   2. Assist Architect in verification of final completion.

F. Administration of Contract Closeout:
   1. Receive and review subcontractors' final submittals.
   2. Transmit final submittals to Architect with recommendations for action.
   3. Comply with requirements of Section 01730.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used

END OF SECTION - 01040

SECTION 01050

FIELD ENGINEERING

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Survey and field engineering.
2. Quality control.
3. Project record documents.
4. Submittals.

1.02 QUALITY ASSURANCE

A. Employ a Land Surveyor or Civil Engineer registered in the State of California and approved by the Owner, to perform survey work of this Section.

1.03 SUBMITTALS FOR REVIEW

A. Submit name, address, and telephone number of Surveyor or Civil Engineer before starting survey work.

1.04 PROJECT RECORD DOCUMENTS

A. Maintain a complete and accurate log of control and survey work as it progresses.

B. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

C. Submit Record Documents.

1.05 EXAMINATION

A. Verify locations of survey control points, reference points and benchmarks prior to starting work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.

B. Promptly notify Owner of any discrepancies discovered.

1.06 SURVEY REFERENCE POINTS

A. Owner will locate survey control and reference points, and provide legal description of site.

B. Control datum for survey is that required by Owner.

C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.

D. Promptly report to Owner the loss or destruction of any reference point or relocation required because of changes in grades or other reasons. Replace lost or destroyed project control points. Base replacements on the original survey control points.

E. Replace dislocated survey control points based on original survey control. Make no changes without prior written approval of the Owner.

1.07 SURVEY REQUIREMENTS

A. Provide field engineering services. Utilize recognized engineering survey practices.

B. Establish a minimum of one permanent three inch diameter brass bench mark on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.

C. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
   1. Site improvements including pavements, stakes for grading, fill and topsoil placement when applicable, utility locations, slopes and invert elevations. Locate by instrumentation or similar appropriate means.
   2. Grid or axis for structures.
   3. Building foundation, column locations, ground floor elevations, set-out references. Include batter boards for structures, building foundations, column grids and locations, floor levels and control lines and levels required for mechanical and electrical work.
   4. Floor elevations of existing structures, if any, which relate to the project.
   5. Partition layouts on rough floor as a guide to all trades.

D. Periodically verify layouts by same means.

E. The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction.

F. Prior to construction, verify the location and invert elevation at points of connection of sanitary sewer, storm drain and water service piping.

G. Working from lines and levels established by the property survey, establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to properly locate each element of the project. Calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.

H. Advise entities engaged in construction activities of marked lines and levels provided for their use.

I. As construction proceeds, check every major element for line, level and plumb.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION - 01050

SECTION 01060

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Required regulatory requirements.

1.02 CODES AND REGULATIONS

A. All work pertaining to and all materials supplied for executing and completing this contract shall comply with provisions specified in the contract documents and with all applicable laws, regulations and ordinances governing work including, but not necessarily limited to, those of:
   1. 2007 California Building Code (CBC).
   2. National Electrical Code (NEC), latest adopted edition.
   3. 2007 California Mechanical Code (UMC).
   4. 2007 California Plumbing Code (UPC).
   5. California Energy Code (CEC).
   6. 2007 California Fire Code (UFC).
   7. Title 24, California Code of Regulations.
   8. National Fire Protection Association - NFPA 101 Life Safety Code.
   9. Applicable ordinances of City of Perris, California.
   10. Applicable ordinances of Riverside County.

B. Requirements for accessibility shall conform to California Title 24 and ADA (Americans with Disabilities Act), Title II.

C. Enforcement includes all other codes or regulations referenced in the above listed codes.

D. The preceding listed codes, regulations and ordinances of the regulatory agencies are hereby made a part of this Contract. Nothing in the Contract shall be construed as allowing any violation of any provision of any of the above listed documents.

1.03 PUBLICATION DATES

A. Unless specified otherwise, specific references to codes, regulations, standards, manufacturer's instructions or requirements of regulatory agencies, when used to specify requirements for materials or design elements, shall mean the latest edition of each in effect at the date of the Contract or the edition in effect on the date of subsequent change orders or field orders, as applicable.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION - 01060

SECTION 01090

REFERENCE STANDARDS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Quality assurance.
   2. Partial list of reference standards and abbreviations.

1.02 QUALITY ASSURANCE

A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Comply with reference standard by date of issue current on date of Owner-Contractor Agreement.

C. Obtain copies of standards when required by the Contract Documents.

D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Date of Substantial Completion.

E. Should specified reference standards conflict with Contract Documents, request clarification from the Architect before proceeding.

F. The contractual relationship, duties, and responsibilities of the parties in Contract nor those of the Architect shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

G. Reference standards and abbreviations noted herein may be contained in Sections of the Technical Specifications and are so referenced for brevity and to connote prevailing industry usage.

1.03 USE OF REFERENCES

A. References: The Drawings and Specifications contain references to various standards, standard specifications, codes, practices and requirements for products, execution, tests and inspections. These reference standards are published and issued by the agencies, associations, organizations and societies listed in this Section or identified in individual product specification Sections.

B. Relationship to Drawings and Specifications: Such references are incorporated into and made a part of the Drawings and Specifications to the extent applicable.

C. Referenced Grades Classes and Types: Where an alternative or optional grade, class or type of product or execution is included in a reference but is not identified on the Drawings or in the Specifications, provide the highest, best and greatest of the alternatives or options for the intended use and prevailing conditions.

D. Copies of Reference Standards:
   1. Reference standards are not furnished with the Drawings and Specifications because it is presumed that the Contractor, subcontractors, manufacturers, suppliers, trades and crafts are familiar with these generally-recognized standards of the construction industry.
   2. Copies of reference standards may be obtained from publishing sources. The Architect will furnish, upon request, information on how to obtain copies.

E. Jobsite Copies:
   1. Contractor shall obtain and maintain at the project site copies of reference standards identified on the Drawings and in the Specifications in order to properly execute the Work.
   2. At a minimum, the following shall be readily available at the site, as applicable to the Work:
      a. Local and State Building Codes: As referenced in Section 01060.
      b. Safety Codes: State of California, California Code of Regulations (CCR), Title 8 Industrial Relations, Chapter 4, Subchapter 7, General Industry Safety Orders (CAL/OSHA).

F. General Standards:
   1. International Building Code (IBC) Standards (as amended and adopted by authorities having jurisdiction), other model code standards.
   2. Underwriters Laboratories, Inc. (UL) or Warnock-Hersey International (WHI) publications.
   3. Factory Mutual Research Organization (FM) Approval Guide.
   4. American Society for Testing and Materials (ASTM) publications.
   5. Fire and Life Safety Standards: All referenced standards pertaining to fire rated construction and exiting.
   6. Other Common Materials Standards Referenced in the Technical Specifications Sections:
      a. American Concrete Institute (ACI).
      b. American Institute of Steel Construction (AISC).
      c. American Welding Society (AWS).
      d. Gypsum Association (GA).
      e. National Fire Protection Association (NFPA).
      f. Tile Council of America (TCA).
      g. Woodwork Institute of California (WIC).
   7. Research Reports: ICBO Evaluation Service (ICBO). Research Reports and National Evaluation Service Reports (NER), for products not in conformance to prescribed requirements stated in Building Code.
   8. Product Listings: Approval documentation, indicating approval of authorities having jurisdiction for use of product within the applicable jurisdiction.

G. Edition Date of References:
   1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date of the permit issued by authorities having jurisdiction.
   2. All amendments, changes, errata and supplements as of the effective date shall be included.

H. ASTM and ANSI References: Specifications and Standards of the American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision or amendment. It is presumed that the Contractor is familiar with and has access to these nationally- and industry-recognized specifications and standards.

1.04 DEFINITIONS OF TERMS

A. Words and Terms Used on Drawings and in Specifications: Words and terms as may be used in the Drawings and Specifications and are defined as follows:

1. "Applicable." As appropriate for the particular condition, circumstance or situation.
2. "Approve(d)." Limited to duties and responsibilities of the Architect for actions performed in the professional judgment of the Architect or the Architect's responsible design consultant, in conjunction with submittals, applications, and requests. Approvals shall be valid only if obtained in writing and shall not apply to matters regarding the means, methods, techniques, sequences and procedures of construction. Approval shall not relieve the Contractor from responsibility to fulfill Contract requirements.
3. "And/or." If used, shall mean that either or both of the items so joined are required.
4. "Directed." Limited to duties and responsibilities of the Architect, meaning as instructed by the Architect or the Owner, in writing, regarding matters other than the means, methods, techniques, sequences and procedures of construction. Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean "approved " by the Architect, "requested by the Architect," and similar phrases. No implied meaning shall be interpreted to extend the Architect's responsibility into the Contractor's supervision of construction.
5. "Equal" or "Equivalent." As determined by Architect as being equivalent, considering such attributes as durability, finish, function, suitability, quality, utility performance and aesthetic features.
6. "Furnish." Means "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."
7. "Indicated." The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the reader locate the reference. There is no limitation on location.
8. "Install." Describes operations at the project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.
9. "Installer:"
   a. "Installer" refers to the Contractor or an entity engaged by the Contractor, such as an employee, subcontractor, or sub-subcontractor for performance of a particular construction activity, including installation, erection, application and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

b. "Experienced installer." The term "experienced," when used with "installer" means having a minimum of 5 previous projects similar in size to this project, knowing the precautions necessary to perform the Work, and being familiar with requirements of authorities having jurisdiction over the Work.

10. "Jobsite." Same as site.
11. "Necessary." With due considerations of the conditions of the project and as determined in the professional judgment of the Architect as being necessary for performance of the Work in conformance with the requirements of the Contract Documents, but excluding matters regarding the means, methods, techniques, sequences and procedures of construction.
12. "Noted." Same as "Indicated."
13. "Owner". The term Owner shall mean Riverside County Economic Development Agency, Big League Dreams or their designated representative.
14. "Per." Same as "in accordance with," "according to" or "in compliance with."
15. "Products." Material, system or equipment.
16. "Project Site." Same as "Site."
17. "Proper." As determined by the Architect as being proper for the Work, excluding matters regarding the means, methods, techniques, sequences and procedures of construction, which are solely the Contractor's responsibility to determine.
18. "Provide." Means "furnish and install, complete and ready for the intended use."
19. "Regulation." Includes laws, ordinances, statutes and lawful orders issued by authorities having jurisdiction, as well as and rules, conventions and agreements within the construction industry that control performance of the Work.
20. "Required." Necessary for performance of the Work in conformance with the requirements of the Contract Documents, excluding matters regarding the means, methods, techniques, sequences and procedures of construction, such as:
    a. Regulatory requirements of authorities having jurisdiction.
    b. Requirements of referenced standards.
    c. Requirements generally recognized as accepted construction practices of the locale.
    d. Notes, schedules and graphic representations on the Drawings.
    e. Requirements specified or referenced in the Specifications.
    f. Duties and responsibilities stated in the Bidding and Contract Requirements.
21. "Scheduled." Same as "Indicated."
22. "Selected." As selected by Architect or Owner from the full selection of the manufacturer's products, unless specifically limited in the Contract Documents to a particular quality, color, texture or price range.
23. "Shown." Same as "Indicated."
24. "Site." Same as "Site of the Work" or "Project Site," the area or areas or spaces occupied by the project and including adjacent areas and other related areas occupied or used by the Contractor for construction activities, either exclusively or with others performing other construction on the project. The extent of the project site is shown on the Drawings, and may or may not be identical with the description of the land upon which the project is to be built.
25. "Inspector." Individual or entity engaged by the Owner to perform inspection services.

26. "Testing Laboratory." An independent entity engaged by the Owner or Contractor, to perform specific inspections or tests of materials, systems, or components, at the project site or elsewhere, and to report on, and, if required, to interpret, results of those inspections or tests.

1.05 ABBREVIATIONS, ACRONYMS, NAMES AND TERMS, GENERAL

A. Abbreviations, Acronyms, Names and Terms: Where acronyms, abbreviations names and terms are used in the Drawings, Specifications or other Contract Documents, they shall mean the recognized name of the trade association, standards generating organization, authority having jurisdiction or other entity applicable.

B. Abbreviations: Refer to Drawings for commonly-used abbreviations.

C. Undefined Abbreviations, Acronyms, Names and Terms: Words and terms not otherwise specifically defined in this Section, on the Drawings or elsewhere in the Specifications, shall be as customarily defined by trade or industry practice, by reference standard and by specialty dictionaries such as the following:

1. Dictionary of Architecture and Construction (Cyril M. Harris, McGraw-Hill Book Company, 1975).
2. The American Institute of Architects (AIA) Document M101, "Glossary of Construction Industry Terms."
3. The Construction Specifications Institute (CSI) Technical Document TD 2-4, "Abbreviations."
4. Encyclopedia of Associations, published by Gale Research Co., available in most libraries.

1.06 PARTIAL SCHEDULE OF REFERENCES AND ABBREVIATIONS

AA	Aluminum Association, Washington, DC
AABC	Associated Air Balance Council, Washington, DC.
AAIEE	American Institute of Electrical and Electronics Engineers.
AAMA	Architectural Aluminum Manufacturers Association.
AASHTO	American Association of State Highway and Transportation Officials, Washington, DC.
ACI	American Concrete Institute, Detroit MI.
AIA	American Institute of Architects, Washington, DC.
AI	Asphalt Institute, College Park MD.
AISC	American Institute of Steel Construction, Englewood CO.
AISI	American Iron and Steel Institute, Washington, DC.
AITC	American Institute of Timber Construction, Englewood CO.
ANSI	American National Standards Institute, New York NY.
APA	American Plywood Association, Tacoma WA.
APWA	American Public Works Association.
ARI	Air Conditioning and Refrigeration Institute, Arlington VA.
AISC	American Institute of Steel Construction.
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers, Atlanta GA.
ASME	American Society of Mechanical Engineers, New York NY.
ASSE	American Society of Sanitary Engineering.
ASTM	American Society for Testing and Materials, Philadelphia PA.
AWI	Architectural Woodwork Institute, Arlington VA.
AWPA	American Wood Preservers' Association, Bethesda MD.
AWS	American Welding Society, Miami FL.
AWWA	American Water Works Association, Denver CO.

BHMA	Builders Hardware Manufacturers Association.
BIA	Brick Institute of America, Reston VA.
CAL/OSHA	Title 8, California Code of Regulations - Construction Safety Orders.
CalTrans	State of California Department of Transportation.
CARB	California Air Resources Board.
CAS/CAR	California Accessibility Statutes/California Accessibility Regulations, Books 1 and 2, May, 1994.
CCR	California Code of Regulations.
CDA	Copper Development Association, New York NY.
CISCA	Ceiling and Interior Systems Contractors Association.
CLFMI	Chain Link Fence Manufacturers Institute, Washington, DC.
CRSI	Concrete Reinforcing Steel Institute, Schaumburg IL.
CS	US Commercial Standards.
CSI	Construction Specifications Institute, Alexandria VA.
CTI	Ceramic Tile Institute.
DHI	Door and Hardware Institute, McLean VA.
DFPA	Douglas Fir Plywood Association.
EGMA	Expansion Joint Manufacturers Association, Tarrytown NY.
FGMA	Flat Glass Marketing Association, Topeka KS.
FIA	Factory Insurance Association.
FLIB	Furring and Lathing Information Bureau, Los Angeles CA.
FM	Factory Mutual System, Norwood MA.
FS	Federal Specification General Services Administration, Washington, DC.
GA	Gypsum Association, Evanston IL.
HMMA	Hollow Metal Manufacturers Association, Chicago IL.
ICBO	International Conference of Building Officials, Whittier CA.
IEEE	Institute of Electrical and Electronics Engineers, New York NY.
IES	Illuminating Engineering Society.
IMIAC	International Masonry Industry All-Weather Council, International Masonry Institute, Washington, DC.
LSGA	Laminators Safety Glass Association
MFMA	Maple Flooring Manufacturers Association, Northbrook IL.
MIL	Military Specification Naval Publications and Forms Center, Philadelphia PA.
ML/SFA	Metal Lath/Steel Framing Association, Chicago IL.
NAAMM	National Association of Architectural Metal Manufacturers, Chicago IL.
NACA	National Acoustical Contractors Association.
NBS	National Bureau of Standards.
NAGDM	National Association of Garage Door Manufacturers.
NCMA	National Concrete Masonry Association, Herndon VA.
NEBB	National Environmental Balancing Bureau, Vienna VA.
NEC	National Electrical Code.
NEMA	National Electrical Manufacturers Association, Washington, DC.
NFC	National Fire Code.
NFPA	National Fire Protection Association, Quincy MA.

NLMA	National Lumber Manufacturers Association.
NRCA	National Roofing Contractors Association.
NSF	National Sanitation Foundation.
NTMA	National Terrazzo and Mosaic Association, Des Plaines IL.
NWMA	National Woodwork Manufacturers Association, Park Ridge IL.
PCA	Portland Cement Association, Skokie IL.
PCI	Prestressed Concrete Institute, Chicago IL.
PDCA	Painting and Decorating Contractors of America.
PPI	Plastics Pipe Institute.
PS	Product Standard, US Department of Commerce, Washington, DC.
RCRBJ	Research Council of Riveted and Bolted Joints.
RIS	Redwood Inspection Service, San Francisco CA.
RCSHSB	Red Cedar Shingle and Handsplit Shake Bureau, Bellevue WA.
SCAQMD	South Coast Air Quality Management District, Los Angeles CA.
SDI	Steel Deck Institute, Canton OH.
SDI	Steel Door Institute, Cleveland OH.
SFPA	Southern Pine Forest Products Association.
SIGMA	Sealed Insulating Glass Manufacturers Association, Chicago IL.
SJI	Steel Joist Institute, Myrtle Beach SC.
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Vienna VA.
SPIB	Southern Pine Inspection Bureau.
SSPC	Steel Structures Painting Council, Pittsburgh PA.
SSPWC	Standard Specifications for Public Works Construction.
SWRI	Sealant, Waterproofing and Restoration Institute.
TCA	Tile Council of America, Princeton NJ.
IBC	International Building Code.
IFC	International Fire Code.
UL	Underwriters Laboratories, Northbrook IL.
IMC	International Mechanical Code.
IPC	International Plumbing Code.
WCLIB	West Coast Lumber Inspection Bureau, Portland OR.
WHI	Warnock Hersey International.
WI	Woodwork Institute, Fresno CA.
WWPA	Western Wood Products Association, Portland OR.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION - 01090

SECTION 01200
PROJECT MEETINGS

PART 1 – GENERAL

1.1 Summary:

a. To enable orderly review during progress of the work and to provide for systematic discussion of requirements for interpretation and clarification of the Contract Documents, meetings will be conducted as required herein.

1.2 Related Requirements Specified Elsewhere:

a. Summary of Work: Section 01010
b. Construction Schedules: Section 01310
c. Shop Drawings, Project Data, and Samples: Section 01340
d. Project Record Documents: Section 01720

1.3 Related Work :

a. The Contractor's relations with his subcontractors and materials suppliers, and discussions relevant thereto, are the Contractor's responsibility and normally not part of project meetings content.

1.4 Quality Assurance

a. The Owner, Landscape Architect, Landscape Architect's consultants and Contractor will designate their representatives to attend and participate in project meetings. They shall be provided the authority to commit to solutions agreed upon in the project meetings that do not require change orders.

1.5 Submittals

a. Agenda Items: To the maximum extent practicable, Contractor shall advise the Architect by telephone or email agenda at least 24 hours in advance of project meetings regarding items to be addressed in the meeting.

b. Contractor shall notify Owner a minimum 48 hours in advance of project meetings if any of the prime design consultant's sub consultants shall be in attendance of meeting or available by phone/conference call.

1.3 Pre-Construction Meeting:

a. Schedule within 15 calendar days after date of award by Owner.

b. Minimum Attendance:

Prime Contractor
Major Subcontractors
Landscape Architect/Consultant Team
Utility Representatives
City Building and Safety Department
City Engineer

PART 2 – PRODUCTS

Not used

PART 3 - EXECUTION

3.01 MEETING SCHEDULE

A. Project meetings will be scheduled and held weekly.

3.02 MEETING LOCATION

A. Meetings will be held at the jobsite, within the Contractor's field office.

3.03 PRECONSTRUCTION MEETING

A. Owner will schedule a preconstruction meeting after issuance of Notice Of Award.

B. Prior to preconstruction meeting, the Contractor shall submit following documentation, to the approval of the Owner:
1. Execution of Owner-Contractor Agreement.
2. Submission of executed bonds and insurance certificates by Contractor, when required under terms of the Agreement.
3. Distribution of Contract Documents.
4. Submission of list of Subcontractors, list of products when required, schedule of values, and progress schedule by Contractor.
5. Designation of personnel representing the parties in Contract.
6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
7. Submittal of project schedule by Contractor.

C. Attendance Required: Owner, Architect, Contractor and subcontractors related to the Work.

D. Preconstruction Meeting Agenda, Including, But Not Limited To:
1. Method of, and responsibility for, recording minutes and distribution of copies after project meetings, to affected participants.
2. Use of premises by Owner and Contractor.
3. Owner's requirements and partial occupancy, when required by Owner.
4. Construction facilities and controls provided by Owner.
5. Temporary utilities if provided by Owner.
6. Survey and civil information when available.
7. Security and housekeeping procedures as may be required by the Owner.
8. Progress schedules.
9. Procedures for testing and inspections.
10. Procedures for maintaining record documents as required in Section 01700.
11. Requirements for start-up of equipment as required in Section 01650.
12. Inspection and acceptance of equipment put into service during construction period.

E. The Architect will advise other interested parties including building authorities or local agencies, where applicable, and request their attendance.

3.04 CONSTRUCTION PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at maximum twice monthly intervals.

B. Attendance Required: Contractor's job superintendent, major sub-contractors and suppliers when requested, Owner, Architect, Consultants when requested and those as appropriate to agenda topics for each meeting.

C. To the maximum extent practicable, all participants will be required to assign the same person or persons to represent their respective discipline at project meetings throughout progress of the Work.

D. Sub-contractors, materials suppliers and others may be invited to attend only those project meetings in which their aspect of the Work is involved.

E. Agenda, Including But Not Limited To:
   1. Review minutes of previous meetings.
   2. Review of Work progress.
   3. Field observations, problems, and decisions.
   4. Identification of problems which impede planned progress.
   5. Review of submittals schedule and status of submittals.
   6. Review of off-site fabrication and delivery schedules.
   7. Maintenance of progress schedule.
   8. Corrective measures to regain projected schedules.
   9. Planned progress during succeeding work period.
   10. Coordination of projected progress.
   11. Maintenance of quality and work standards.
   12. Effect of proposed changes on progress schedule and coordination.
   13. Other business relating to Work.

F. Minutes will be distributed in the agreed-upon number of copies to participants and those affected by decisions made.

3.05 PREINSTALLATION MEETING

A. When required in individual specification sections, Contractor shall convene a pre-installation meeting at work site prior to commencing work of the Section.

B. Required Attendance: Parties directly affecting, or affected by, work of the specific Section.

C. Contractor shall notify all affected parties three (3) days in advance of meeting and shall prepare agenda and preside at meeting:
   1. Items To Be Reviewed: Conditions of installation, preparation and installation procedures and coordination with related work.

D. Contractor will record minutes prior to date of next scheduled project meeting and will distribute copies of meeting to participants and those affected by decisions made.

END OF SECTION - 01200

SECTION 01300

SUBMITTALS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Submittal procedures.
   2. Construction progress schedules.
   3. Proposed products list.
   4. Shop drawings.
   5. Product data.
   6. Samples.
   7. Manufacturer's installation instructions.
   8. Manufacturers' certificates.

1.02 SUBMITTAL PROCEDURES

A. Transmit each submittal directly to Architect, for subsequent review and approval by Owner, in a form approved by the Architect.
   1. Bind submittals sturdily. Neatly label covers.
   2. Include Architect's project identification number as it appears on the Contract Documents.
   3. Include building authority identification number or State agency application or approval number, if any.

B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
   1. Provide name and telephone number of individual who may be contacted for further information.

C. Identify project, Contractor, Subcontractor or supplier, pertinent drawing and detail number, and specification section number, as appropriate.

D. Apply Contractor´s dated stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
   1. Contractor's original signature or initials shall be affixed to all submittals.
   2. In lieu of signing each submittal, the Contractor may indicate on the letter of transmittal that he has reviewed and approved all the material included.
   3. Submittals without Contractor's stamp and signature will be returned without review.

E. Schedule submittals to expedite the project, and deliver to Architect, for subsequent review and approval by Owner. Coordinate submission of related items.

F. Make submittals in groups containing associated and related items to make sure that information is available for checking each item when it is received. Submittals for all items requiring color selection must be received before any will be approved.

G. For each submittal for review, allow adequate time including delivery time to and from the Contractor, and in sufficient time for Architect and Owner review. Make submittals far enough in advance of scheduled dates of installation to provide time for Architect's review, Owner's review and possible revisions and resubmission prior to approval and subsequent placement of orders.

H. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed Work.

I. Provide space for Contractor and Architect/Owner review stamps.

J. Revise and resubmit, as indicated, and identify all changes made since previous submission.

K. Submittals will be processed by the Architect and transmitted to Owner for review. Owner will distribute reviewed submittals to Contractor.

L. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with provisions.

M. Submittals not requested will not be recognized or processed.

N. In general, types and quantities of submittals are designated in individual Sections. The Architect may require additional submittals not so designated, including product data, samples, certificates, letters of confirmation and conferences, for the purpose of substantiating quality, quantity, procedures, methods and conformance with the requirements of the Contract Documents. Compliance with this requirement is mandatory, when notification is submitted in writing by the Architect.

O. Rechecking of any scheduled shop drawings required by the Architect or his consultants will be paid for by the Contractor at the Architect's established hourly rate schedule.

1.03 CONSTRUCTION PROGRESS SCHEDULES

A. Submit initial schedule within 15 days after date of Owner-Contractor Agreement.

B. Revise and resubmit as required.

C. Submit revised schedules with each application for payment, identifying changes since previous version.

D. Submit a computer generated chart and diskette as listed under provisions of Section 01310.

E. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.

F. Indicate estimated percentage of completion for each item of Work at each submission.

G. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by Owner and required by allowances, if any.

1.04 PROPOSED PRODUCTS LIST

A. Within 15 days after date of Owner-Contractor Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.

B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.05 SHOP DRAWINGS

A. Submit in the form of six (6) bond prints of each Drawing.

B. Shop Drawings: Submit for review. After review, produce copies and distribute as specified herein for record documents purposes described in Section 01700.

C. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

D. Submit newly prepared information, drawn to accurate scale. Highlight, encircle or otherwise indicate deviations from the Drawings.

E. Do not reproduce Drawings or copy standard information as the basis of shop drawings. Standard information prepared without specific reference to the project will not be approved as shop drawings.

F. Shop drawings shall include fabrications and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
   1. Dimensions.
   2. Identification of products and materials included.
   3. Compliance with specified standards.
   4. Notation of coordination requirements.
   5. Notation of dimensions established by field measurement.

G. Sheet Size: Except for templates, patterns and similar full-sized drawings, submit shop drawings on sheets at least 8-1/2 inch by 11 inch, but not larger than 30 by 42 inch.

H. The Architect will review shop drawings with reasonable promptness so as not to cause any delay, but only for conformance with the design concept of the project and with the information given on the Drawings and technical specifications.

I. The Architect's review of shop drawings shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Architect in writing of such deviation at the time of submission and the Architect has given written acknowledgment of the specific deviation, nor shall the Architect's review relieve the Contractor from responsibility for errors or omissions in the shop drawings.

J. No portion of the Work requiring shop drawings shall be commenced until the shop drawings have been reviewed and accepted by the Architect.

1.06 PRODUCT DATA

A. Submit six copies. When approved, four copies will be retained by the Architect, one of which will be retained in the Architect's files, one to the applicable consultant, one to the Owner and one for reference at the jobsite. Two copies will be returned to the Contractor, for optional distribution.

B. Clearly mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this project.

C. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

1.07 SAMPLES

A. Submit samples to illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

B. Submit samples of finishes from the full range of manufacturers' standard colors, in custom colors if selected, and textures, and patterns for Architect's selection.
   1. Provide samples of sufficient size to indicate all salient features of the material or item, and which provides a true representation of any extreme variation in color, texture, finish and construction to be expected in the installed work.

C. Include identification on each sample, with full project information.
   1. Allow sufficient space for the Architect's review stamp.

D. Submit the number of samples specified in individual specification sections, or if not specified, a total of not less than three.
   1. Unless noted otherwise, one sample will be returned to the Contractor.
   2. Two samples will be retained by the Architect, one of which will remain in the Architect's office. The second sample will be delivered to the jobsite.
   3. Retained samples shall constitute the standard of quality and appearance of all materials of the type represented by the sample.

E. In the event samples are rejected, the Contractor will be notified of the reasons for rejection. Contractor shall continue to submit samples until required approvals are obtained.

F. Reviewed samples which may be used in the Work are indicated in individual specification sections.

1.08 MANUFACTURER INSTALLATION INSTRUCTIONS

A. When specified in individual specification Sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Architect in quantities specified for product data.

B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.09 MANUFACTURER CERTIFICATES

A. When specified in individual specification Sections, submit certification by manufacturer to Architect in quantities specified for product data.

B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

C. Certificates may be recent or previous test results on material or product, but must be approved by Architect.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION - 01300

SECTION 01310
CONSTRUCTION SCHEDULE

PART 1 – SUMMARY

1.1 To assure adequate planning and execution of the Work so that the Work is completed within the number of calendar days allowed in the Contract, and to assist the Architect in appraising the reasonableness of the proposed schedule and in evaluating progress of the Work, prepare and maintain the schedules and reports described in this Section

A. In general, the following elements are covered under this Section:

1. Provide Qualification of Scheduler and/or Scheduling Consultant
2. Utilize the latest Version of Primavera Project Planner
3. Develop the 90-day Preliminary Schedule
4. Develop the Initial (Baseline) Schedule
5. Develop the 3 Week Look-ahead Schedule
6. Update/Revise the Progress Schedule
7. Format and Submittal/Review Procedures
8. Time-Impact Evaluation Preparation
9. Request for Time Extension
10. Submission of a Recovery Schedule

B. Comply with pertinent provisions of Section 01300.

PART 2 – QUALIFICATIONS

2.1 Contractor shall employ experienced scheduling personnel qualified to use the latest version of Primavera Project Planner. Scheduling Personnel must have a minimum of three (3) years experience using Primavera Project Planner whose experience shall include at least two (2) projects of similar nature, scope and value not less than three-fourths the Total Bid Price of this Project. Contractor may employ such personnel directly or may employ a consultant for this purpose and shall provide a written statement shall identify individual/firm who will perform CPM scheduling identifying the capability and experience on which the individual/firm has successfully applied computerized CPM Scheduling. The County reserves right to approve Contractor's scheduler, or Contractor's Consultant, and right to reject them at any time.

PART 3 – 90-DAY PRELIMINARY SCHEDULE

3.1 Contractor shall develop a 90-day preliminary schedule indicating a detailed plan for the WORK to be completed in first ninety (90) calendar days of the Contract with work beyond ninety (90) days in summary form with special emphasis on the critical path.

3.2 The 90-day preliminary schedule shall be submitted within 14 calendar days after Notice to Proceed or at the Pre-construction Conference, whichever is later. The Contractor agrees that, in accordance with the Contract Documents, liquidated damages for failure to submit said preliminary schedule within the time specified is Two Hundred Fifty Dollars ($250.00) per Calendar Day.

3.3 As part of the 90-day preliminary schedule, Contractor shall include an activities necessary to start work, including, but not limited to:

a. Site mobilization

b. Temporary facilities,

c. Submittal of the Site Safety Work Plan

d. Storm Water Pollution Prevention Program

e. Earthwork / Grading

f. Drainage

g. Site Utilities

h. Site Concrete

i. Submittal of the Baseline Project Schedule

j. Submittal of Long Lead Items

3.4 The preliminary schedule shall be cost-loaded for the first 90-days as it will serve as the basis for the initial (first) progress payment. This schedule shall follow the schedule guidelines as stated within this section which include the showing of activity interdependency and identify the manner in which Contractor intends to complete all work within Contract Time.

3.5 Due to the critical nature of this project, the County will not process any request for payment until the 90-day schedule is submitted and approved. In addition, no contract work may be pursued at the site without an approved 90-Day Preliminary Schedule.

PART 4 - INITIAL (BASELINE) SCHEDULE

4.1 The Initial (baseline) Schedule shall be based on and incorporate Contract milestone and completion dates specified in Contract Documents. The Initial (baseline) Schedule shall be submitted within 30 calendar days after Notice to Proceed or 20 days after the 90-day preliminary schedule approval, whichever is later. The Contractor agrees that, in accordance with the Contract Documents, liquidated damages for failure to submit said Initial (baseline) schedule within the time specified is Five Hundred Dollars ($500.00) per calendar day.

4.2. The activities included in the Contractors scheduled are to be described so that the work is readily identifiable and the progress of each activity can be readily measured. For each activity, Contractor shall identify the trade or subContractor performing the work, the duration of the activity in work days, the manpower involved by trade, and the location of the work and a dollar value of the activity. The dollar value assigned to each activity is to be reasonable and based on the amount of labor, materials, and equipment involved when added together, the dollar value of activities is to equal the contract price.

4.3. Contractor is responsible for assuring that the work sequences are logical and the network shows a coordinated plan for complete performance of the work. Failure of the Contractor to include in the schedule any element of work required for the performance of the contract shall not relieve the Contractor from completing the work within the time limit specified in the contract. County's acceptance of schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon County, or act to relieve Contractor of its responsibility for means and methods of construction.

4.1 Schedule Development - Specific:

a. Include all Contract Milestones as separate activities

b. Include County-furnished materials and equipment, outside agency, and all work by others Contractors/entities as separate activities.

c. Include submittal review/approval by County as separate activities. Allow 21 Calendar Days to review all submittals, Resubmittals.

d. Include Procurement and Long Lead Items as separate activities

e. Scheduled activities shall be cost and manpower loaded

f. Progress payment will be generated using the schedule

g. Schedule is to be set to calculate on retained logic.

h. Schedule shall not contain negative lags or artificial constraints

i. Scheduled Activities at a minimum shall be coded to Area, Responsibility, and Work Type

4.2 Other Activities to be included in schedule. In order to assist the County in tracking the progress of work, contractor is to include the following activities within the Initial Baseline Schedule. Contractor is to determine the logic and duration of the activities specified below:

Submittal of all Long Lead Items (over 30 days)
Procurement of all Long Lead Items (over 30 days)
Inspection by City and Other Agencies
Completion Milestones for:
- Rough Grading
- Final Grading
- Underground Utilities
- Light Pole Foundations
- Delivery of Long Lead Items (over 30 days)
- Permanent Power Available
- Each Facility Ready for Use
- Landscaping

4.3 Contract Times: Work Schedule shall be based on and incorporate Contract milestone and completion dates specified in Contract Documents.

4.4 Early Completion Schedule: Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in Contract Agreement, unless an earlier (advanced) time of completion is requested by Contractor and agreed to by the County. A Change Order shall formalize any such agreement.

4.5 The County is not required to accept an earlier (advanced) schedule, i.e., one that shows early completion dates for the Contract Times.

4.6 Contractor shall not be entitled to extra compensation in event agreement is reached on an earlier (advanced) schedule and Contractor completes its Work, for whatever reason, beyond the completion date shown in earlier (advanced) schedule but within the Contract Times.

4.7 Contractor shall include in its bid price, all direct and indirect costs associated with performing the work from the time of Notice to Proceed the date shown at Substantial Completion and at Final Completion in the Contract Documents.

4.8 A schedule showing the work completed in less than the Contract Times, which the County has accepted shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the work and Contract Substantial Completion. Project Float is a resource available to both the County and the Contractor.

4.9 Float Ownership: Neither the County nor the Contractor owns float. The Project owns the float. As such, liability for delay of the Substantial Completion Date rests with the party whose actions, last in time, actually cause delay to the Substantial Completion Date.

4.10 For example, if Party A uses some, but not all of the float and Party B later uses remainder of the float as well as additional time beyond the float, Party B shall be liable for the time that represents a delay to the Substantial Completion Date.

4.11 Party A would not be responsible for the time since it did not consume the entire float and additional float remained; therefore, the Substantial Completion Date was unaffected.

4.12 The County has the final determination on the appropriate use of float and on the total float calculation. The County will routinely check float calculations provided by the Contractor and resolve disputes regarding allocation of float.

4.13 Time Periods / Calendar Assignments: Work schedule duration's and calendars for scheduled activities shall be scheduled on the following Calendars:

a. Calendar 1 – 5 Day Work Week with Holiday and Non-working periods
b. Calendar 2 – 7 Day Calendar Week
c. Calendar 3 (optional) – 5 Day Work Week with Holidays and Non-working periods (excluding adverse weather days)

4.14 Standard Work Week: The schedule is to be developed and submitted utilizing a 5-day workweek. The standard workweek shall be based on 40 hours (Monday through Friday) and the standard workday shall be 8 hours per. Extended Work Periods may only be used upon prior written authorization by the Engineer

4.15 Non-working Periods: Non-working periods are those days in which Contractor anticipated work would not be performed and are to be excluded from Contractors working calendar.

4.16 Holidays, Weekends and Black Fridays: The Contractor shall submit a list of anticipated non-Working days for weekends, holidays and Black Fridays. The Contract schedule shall exclude in its Working day calendar the above days on which Contractor anticipates work will not be performed.

4.17 Rain days: Workday Delays due to adverse weather conditions will not be allowed for weather conditions which fall within parameters listed herein. Adverse weather delays may only be allowed if the number of days of adverse weather exceeds these parameters and Contractor can verify that adverse weather caused delays. Rain days shall be excluded from the Contractors CPM Schedule Calendar 1 and be excluded from the working days (WD) – Monday thru Friday. Contractor may choose what days in the following month he/she wishes to exclude. The parameters are as follows: January – 3 WD; February – 3 WD; March – 2 WD; April – 2 WD; May – 1 WD; October – 2 WD; November – 2 WD; December – 3 WD. If the adverse weather day does not occur within the month specified, then the excluded day (rain day duration) becomes float to the project. If excess weather days are encountered per Caltrans Standards, the Contractor shall be entitled to a time extension for the excess days experienced. The excess or scarcity of adverse weather days shall be calculated over a calendar year extending from June 1 through May 31.

4.18 The adverse weather day duration shall not be used in calculating the Contractors' productivity rate. The Contractor may choose which specific days in the month are to become non-working within the given month to the extent the adverse weather/rain day does not fall on a Holiday, Weekend, Black Friday, or previously excluded day.

4.19 If operations are not weather dependent, the Contractor may use an alternate calendar for those activities. This calendar may also be used for activities not weather dependent which occur prior to dry-in. Calendar 3 (optional) may be used as a 5-day work week calendar w/out adverse weather days.

4.20 Submittal Reviews / Approvals: Submittal review and approval time for all required submittals shall be included in the schedule. Activities that are dependent on submittal acceptance or material delivery shall not be scheduled to start earlier than expected acceptance or delivery dates and shall have a relationship between them. Contractor shall include a 21 calendar day review period for all submittals. Contractor is responsible for all impacts resulting from rejected or resubmitted items.

4.21 Cost Loading: Identify the total cost of performing each activity. This cost shall be total of labor, material, equipment, including overhead and profit. Sum of cost for activities shall equal total Contract value. Each cost account shall be defined in the cost account dictionary and shall match the schedule of values. The Contractor is to establish a methodology which to identify the sum total of all activity cost as it relates to the schedule of values and Contract Price. Separate cost accounts shall be maintained for all change order work. Progress payments shall be generated from the schedule and updated activity percent complete. Should the contractor wish to establish a Schedule of Values, the cost loaded activities shall be directly related to such a schedule.

4.22 Punch-List / Closeout: Contractor shall include 15 working days for developing punch list(s), completion of punch list items, and final clean up prior to substantial completion. No other activities shall be scheduled during this period, except for parking system control verification.

4.23 Activity Duration / Total Float: A total of not more than 35 percent of the Contract Schedule activities shall be critical or near critical, unless otherwise approved by the Engineer. Activities shall have duration of no more than 20 working days, unless otherwise approved by the Engineer unless they relate to procurement, cure-time, delivery, or similar activity types. The activities in the Contract Schedule, with the exception of the first and last activities, shall have a minimum of one predecessor and a minimum of one successor, unless otherwise specified. The schedule will clearly identify the activities that constitute the controlling operations or critical path. There shall be no negative float in the initial (baseline) schedule.

4.24 Written Narrative: The initial (baseline) schedule shall be accompanied by a written narrative discussing basic assumptions, historic project comparisons, productivity and installation rates, construction staging plans, maintenance of traffic, quantities, manpower and crew development, construction equipment planned, and other elements related to developing the schedule

PART 5 – MONTHLY PROGRESS UPDATE

5.1 Following acceptance of Contractor's Intital CPM Schedule, Contractor shall monitor progress of Work and adjust schedule each month to reflect actual progress and any anticipated changes to planned activities. Each schedule update shall include updated information for all items required for the initial (baseline) Schedule submittal. Each update shall continue to show all work activities including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed.

5.2 It is anticipated that the contract will meet with Owner to discuss the agreed upon percent complete for each activity prior to the preparation of the schedule submittal and application for payment. See Schedule Review and Approval under this section for anticipated review times and submission requirements.

5.3 Updating the Schedule to reflect actual progress shall not be considered as a revision to the Schedule. Since scheduling is a dynamic process, revisions to activity duration's and sequences are expected on a monthly basis.

5.4 Neither submission nor updating of Contractor's original schedule submittal nor submission, updating, change or revision of any other report, curve, schedule or narrative submitted to the County by Contractor under this Contract, nor the County's review or acceptance of any such report, curve, schedule or narrative shall have the effect of amending or modifying, in any way, Contract completion date or milestone dates or of modifying or limiting, in any way, Contractor's obligations under this Contract. Only a signed, fully executed change order can modify these contractual obligations.

PART 6 – SCHEDULE REVIEW AND APPROVAL

6.1 90-Day Preliminary Schedule: Within 14 calendar days of receipt of the 90-day preliminary schedule, County will review and accept the Contractor's schedule or return to the Contractor with comments. If the preliminary schedule is returned to the Contractor with comments the Contractor shall revise the preliminary Schedule to incorporate these comments and resubmit the schedule for approval within seven (7) calendar days after receiving it and the owner will review it within (7) calendar days until an acceptable schedule can be produced.

6.2 Initial (Baseline) Schedule: Within 14 calendar days of receipt of the Initial (Baseline) Schedule, County will review and accept the Contractor's initial (baseline) Schedule or return to the Contractor with comments. If the Contract Schedule is returned to the Contractor with comments the Contractor shall revise the Contract Schedule to incorporate these comments and resubmit the schedule for approval within seven (7) calendar days after receiving it and the owner will review it within (7) calendar days until an acceptable schedule can be produced. The accepted schedule shall become the Contract Baseline Schedule.

6.3 Monthly Progress Schedule Update: It is anticipated that the contract will meet with Owner to discuss the agreed upon percent complete for each activity prior to the preparation of the schedule submittal and application for payment. As such, seven (7) calendar days prior to the Contractor submitting his Request for Payment, the Contractor shall submit to owner the requested percentage complete for each activity. Upon Contractor/owner agreeing to the percent complete for each activity, Contractor will prepare his monthly progress payment application and progress schedule submittal. Within two (2) working days following Contractor Submission of the request for payment, Contractor will submit his updated progress schedule. In the event Contractor fails or refuses to submit the required progress schedule, Owner may withhold up to 50% of the current and all subsequent requests for payment.

6.4 In addition, the Contractor agrees that, in accordance with the Contract Documents, liquidated damages for failure to submit any progress schedule within the time specified is Two Hundred Dollars ($200.00) per Calendar Day.

6.5 Acceptance of Contractor's schedule by the County will be based solely upon schedule's compliance with Contract requirements. By way of Contractor assigning activity duration's and proposing sequence of Work, Contractor agrees to utilize sufficient and necessary management and other resources to perform work in accordance with schedule. Submission of Contractor's progress schedule to the County shall not relieve Contractor of total responsibility for scheduling, sequencing, and pursuing Work to comply with requirements of Contract Documents, including adverse effects such as delays resulting from ill-timed work.

PART 7 – SUBMITTALS

7.1 For the preliminary, initial, and each progress schedule submitted the following will be submitted to the County in the specified quantities which include the following tabular, graphic, and narrative reports:

a. Three (3) separate Tabular Reports shall be submitted and are as follows:
(1) Tabular Schedule Listing – Sorted by Area, Early Start Total Float.
(2) Detailed Predecessor / Successor Listing – Sorted by Area, Early Start, Total Float. At a minimum, the report shall show all predecessor, all successors, early start, early finish, late start, late finish, original duration, remaining duration, and total float.
(3) Critical Path Listing – Sorted by Early Start, Total Float Two
(2) Graphic Report as follows: The time-scaled network diagrams shall show a continuous flow of information from left to right. The primary path(s) of criticality shall be clearly and graphically identified on the network(s). The network diagram shall be prepared on E-size sheets, 34" x 44", and shall have a title block in the lower right-hand corner and a timeline on each page.

b. Two (2) narrative reports shall be submitted and organized as follows:

Contractor's Transmittal Letter;
Work completed during the period;
Identification of unusual resources: manpower, material, or equipment restrictions or use, including multiple shifts, 6-day work weeks, specified overtime, or work at times other than regular days or hours;
Description of the current critical path;
Changes to the critical path since the last schedule submittal;
Description of problem areas;
Current and anticipated delays to include: Cause of delay;
Impact of delay on other activities, milestones and completion dates;
Corrective action and schedule adjustments to correct the delay.
Contract completion date status, and whether the schedule is ahead or behind schedule and number of days,
Reproduction / Copies: The Schedule network diagrams, tabular reports and narrative reports shall be submitted to the Engineer for acceptance in the following quantities:
Two (2) sets of originally plotted, time-scaled network diagram(s) (in-color) E-Size
Two copies of each of the three sorts of the CPM software-generated tabular reports (8 1/2" x 11");
Three compact disks (CD) containing the schedule data, in P3 format, compressed, without access restrictions, or DVD.
Two copies of the narrative report.
1 electronic copy sent to the Construction Manager

PART 8 – THREE-WEEK LOOK AHEAD SCHEDULE

8.1 The Contractor shall provide, in addition to the monthly schedule update, a weekly schedule update at each project progress meeting. Weekly schedule updates will include one week's past activities and three weeks future activities. Updates will be derived from the master schedule and be consistent in format with the Contract Schedule. The weekly schedule update shall directly relate to the Master Schedule by Activity Number. All activities identified on the three week look-ahead shall have an activity number associated with the Master Schedule, should they be different.

PART 9 – SCHEDULE REVISIONS

9.1 Upon approval of a change order or upon receipt by Contractor of authorization to proceed with additional work (e.g. Force Account, Change Order, Changed Condition), change shall be reflected in next submittal of CPM schedule by Contractor. Contractor is to clearly code these activities from the base contract work as to be able to identify them by change, force account, or changed condition.

9.2 Contractor shall utilize a separate activity or series of activities (sub-network) in schedule depicting changed work and its effect on other activities. This sub-network shall be tied to main network with appropriate logic so that a true analysis of Critical Path can be made. This shall be performed in accordance with the Time Impact Evaluation Procedures as described under this section.

PART 10 – TIME IMPACTS EVALUATION (TIE)

10.1 When the Contractor is directed to proceed with changed work, the Contractor shall prepare and submit, within 14 days after the date of the direction to proceed, a time impact evaluation (TIE) that includes both a written narrative and a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how the Contractor proposes to incorporate the changed work in the schedule, and how it impacts the current schedule update critical path. The Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram must be tied to the main sequence of schedule activities to enable the County to evaluate the impact of changed work to the scheduled critical path.

10.2 Once agreement has been reached on a TIE, the Contract Times will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Times may be extended in an amount the County allows, and the Contractor may submit a claim for additional time.

10.3 Scheduling of approved changes (e.g. force account, change orders) is responsibility of Contractor. The Contractor is responsible for all costs associated with the preparation of TIE's and the process of incorporating the TIE's, changes, and revisions into the current schedule update and as such no additional payment for incorporation of these items into the schedule will be made.

10.4 The County shall have no obligation to consider any time extension request unless requirements of Contract Documents are complied with. The County shall not be responsible or liable to Contractor for any constructive acceleration due to failure of the County to grant time extensions under Contract Documents, or if Contractor should fail to substantially comply with submission requirements and justification requirements of this Contract for time extension requests.

10.5 Contractor is to provide 2 copies of the TIE to the County for review with accompanying diskette of change in Primavera Project Planner.

PART 11 – RECOVERY SCHEDULE

11.1 If the Schedule Update shows a substantial completion date 21 calendar days or more beyond the Contract Substantial Completion date, or individual milestone completion dates, the Contractor shall, within seven (7) days after submittal of the updated schedule showing such delay, submit to the City the proposed revisions to recover the lost time. As part of this submittal, the Contractor shall provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, the Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of work and as described within this section. The revisions shall not be incorporated into any schedule update until the revisions have been reviewed and accepted by the County.

PART 12 – TIME EXTENSION

12.1 The Contractor is responsible for requesting time extensions for time impacts that, in the opinion of the Contractor, impact the critical path of the current schedule update. Notice of time impacts shall be given in writing.

12.2 Where an event for which the County is responsible impacts the projected Substantial Completion date, the Contractor shall, within fourteen (14) days from the date of discovery of said impact, submit a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. The Contractor shall also include a detailed cost breakdown of the labor, equipment and material the Contractor would expend to mitigate the City caused time impact. The Contractor is responsible for the cost of preparing the mitigation plan.

12.3 The County will not be obligated to consider any time extension request unless requirements of Contract Documents are complied with. Failure of the Contractor to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.

PART 13 – INITIAL AND ALL RELATED PROGRESS PAYMENTS

13.1 Progress payments shall be made monthly, based on Contractor's monthly update of Contract Schedule.

13.2 Payment for amount of work completed in current progress payment period shall be sum of activity cost multiplied by percentage of work completed for each activity in progress minus previous payments, less retainage.

13.3 The progress payment application shall be generated from the computerized monthly schedule update. Retainage calculation will be made on the payment request form.
Request for payment for accepted materials delivered shall be limited to invoice value of materials or equipment shown on Contractor's procurement log, less retainage.
Payment may be made for materials which Contractor stores off-site when materials are stored and insured in manner acceptable to the Engineer. However, in no event will more than 50% of the specified activity value will be paid for offsite stored material. All payment for offsite material is subject to the sole discretion of the Engineer.

13.4 No payment shall be made for materials or equipment which do not have accepted submittals.

13.5 If material or equipment is not identified, it is responsibility of Contractor to submit necessary cost adjustments to Contract Schedule.

13.4 Incorporation of such revisions to computerized version of Contract Schedule and payments on such requests are at discretion and acceptance of the Engineer.

13.5 Payment for mobilization shall not exceed 1 ½ percent of the total contract value and will not be made until the 90-day schedule is submitted and approved.

PART 14 – DEFAULT

14.1 Failure of Contractor to substantially comply with requirements of this Section shall constitute reason that Contractor is failing to prosecute Work with such diligence as will ensure its completion within Contract times and shall be considered grounds for termination or other remedy pursuant to terms of this Contract.

PART 15 - PRODUCTS (Not Used)

PART 16 - EXECUTION (Not Used)

END OF SECTION - 01310

SECTION 01340
SHOP DRAWINGS, PROJECT DATA AND SAMPLES

PART 1 – GENERAL

1.1 The provisions of the Standard Specifications for Public Works Construction (SSPWC), latest Edition, apply except as modified herein.

a. Submit:

Submit to the Owner shop drawings, project data and samples required by specification sections.

b. Related Requirements Specified Elsewhere:

General Conditions
Construction Schedules: Section 01310
Summary of Work: Section 01010
Project Closeout: Section 01700
Products and Materials: Section 01600

c. Construction Schedule:

Designate dates for submission and dates reviewed shop drawings, project data and samples will be needed for each product.

PART 2 - SHOP DRAWINGS

2.1 Original drawings, prepared by Contractor, subcontractor, supplier or distributor which illustrates some portion of the work, showing fabrication, layout, setting or erection details.

a. Furnished at Contractor's expense by Contractor.
b. Prepared by qualified detailer.
c. Identify details by reference to sheet and detail numbers on Contract Drawings.
d. Minimum sheet size: 8 ½" by 11"

2.2 Reproduction for Submittals:

a. Reproducible transparency with three opaque diazo prints.

PART 3 – PROJECT DATA

3.1 Manufacturer's Standard Schematic Drawings:

a. Modify to delete information which does not apply.
Supplement standard information where applicable to work.

3.2 Manufacturer's Catalog Sheets, Brochures, Diagrams, Schedules, Performance Charts, Illustrations and other Standard Descriptive Data:

a. Clearly mark each copy to identify pertinent information.
b. Show dimensions and clearances required.
c. Show performance characteristics and capacities.
d. Show wiring diagrams and controls.

PART 4 – SAMPLES

4.1 Physical examples to illustrate materials, equipment or workmanship, and to establish standards by which completed work is judged.

PART 5 – OFFICE SAMPLES:

5.1 Of size and quantity to clearly illustrate:

a. Functional characteristics of product or material, with integrally related parts and attachment devices.

b. Full range of color samples.

c. After review, samples may be used in construction project.

5.2 Field Samples and Mock-Ups:

a. Erect at project site at location acceptable to Engineer.

b. Construct complete, including work of all trades required in finished work.

PART 6 – CONTRACTOR'S RESPONSIBILITIES

6.1 Review shop drawings, project data and samples prior to submission.
Verify field measurements, field construction criteria, catalog numbers and similar data.
Coordinate each submittal with requirements of work and of Contract Documents.

6.2 Responsibility for Errors and Omissions in Submittals:

a. Not relieved by Landscape Architect's review of submittals.

6.3 Responsibility for Deviations in Submittals from Contract Documents:

b. Not relieved by Landscape Architect's review unless Landscape Architect gives written acceptance of specific deviations.

6.4 Notify Owner in writing at time of submission of deviations in submittals from requirements of Contract Documents.

6.5 Begin no work requiring submittals until return of submittals with Landscape Architect's stamp and signature indicating review.

6.6 Distribute copies after Landscape Architect's review.

PART 7 – SUBMISSION REQUIREMENTS

7.1 Schedule all submittals not later than 60 days after Award of Contract.

7.2 The Owner will not be responsible for delays to the Contractor for any submittal not received within the specific time.

7.3 Contractor's distribution shall be as required, plus three copies for Owner's retention, or number of samples specified in pertinent section.

7.4 Transmittal letter shall be in duplicate, containing date, project title and number, Contractor's name and address, the number of each shop drawing, project data and sample submitted, notification of deviations from Contract Documents, and other pertinent data.

7.5 Submittal shall include:

Date and revision date;
Project title, number, park name or names.
Names of: Owner, Contractor, Subcontractor, Supplier, Manufacturer, separate detailer, where pertinent;
Identification of material;
Relation to adjacent structure or materials;
Field dimensions, clearly identified;
Specification section number;
Applicable standard, such as ASTM # or Federal Specification;
Space for Landscape Architect's stamp;
Identification of deviations from Contract Documents;
Contractor's stamp, initialed or signed, certifying review of submittal, verification of field measurements and compliance with Contract Documents.

PART 8 – RESUBMISSION

8.1 Shop Drawings:

a. Revise initial drawings as required and resubmit as specified for initial submittal.

b. Indicate on drawings any changes which have been made other than those requested by Landscape Architect.

8.2 Project Data and Samples:

Submit new datum and samples as required for initial submittal.

PART 9 – DISTRIBUTION AFTER REVIEW

9.1 Distribute stamped copies of shop drawings and project data to:

Contractor's file
Job site file
Record Documents file
Subcontractor
Supplier
Fabricator.

9.2 Samples:

Distribute as directed.

END OF SECTION - 01340

SECTION 01370
SCHEDULE OF VALUES

PART 1 – GENERAL

1.1 The provisions of the Standard Specifications for Public Works Construction (SSPWC), latest Edition, apply except as modified herein.

1.2 Related Requirements Specified Elsewhere:

a. Project meetings: Section 01200
b. Construction schedule: Section 01310

1.3 Submit to Owner:

Schedule of Values, at least twenty 20 calendar days prior to first progress payment estimate. Upon Owner Representative's request, support values given with substantiating data. Quantities of designated materials.

1.4 Schedule of Values:

Used only as a basis for Progress Payment.

1.5 The contract item values submitted on the schedule of values shall be used to calculate the debt or credit amount for any change in scope by the Engineer where an entire item or section of work is added or deleted from the Contract. The value listed in the schedule of values shall be considered the appropriate addition or deduction. If the item of work is not identifiable on the schedule of values, then the amount to be added or deducted from the Contract amount shall be the estimated value as determined by the Engineer

PART 2 – FORM OF SUBMITTAL

2.1 Typewritten on 8 ½" x 11" white bond paper.

2.2 Use Table of Contents of this Specification for format for listing costs of work for Sections under Divisions 2 through 16.

2.3 Identify each line item with number and title.

PART 3 – PREPARING SCHEDULE OF VALUES

a. Itemize separate line item cost for work required by each section of this specification.
b. Break to indicate total installed cost, with overhead and profit.
c. Round off figures to nearest dollar.
d. Make sum of total costs of all items listed in schedule equal to total Contract sum.

PART 4 – REVIEW AND RESUBMITTAL

4.1 After review by Owner Representative, revise and resubmit schedule as required. Resubmit revised schedules in same manner.

END OF SECTION - 01370

SECTION 01380

CONSTRUCTION PHOTOGRAPHS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Photography.
2. Prints.
3. Digital Files.
4. Technique.
5. Submittals.

1.02 PHOTOGRAPHY

A. Provide photographs of site and construction throughout progress of Work produced by an experienced commercial photographer with minimum three years experience in work of this type, approved by Architect.

B. Take photographs once every two weeks during each major phase of construction, at stations points as selected by the Architect, including but not limited to the following:
1. Exterior:
a. Site construction.
b. Excavations.
c. Foundations.
d. Structural framing.
e. Final completion.

2. Interior:
a. Interior framing.
b. Selected rooms.
c. Close-ups of selected interior construction.

C. Provide aerial photographs of site and construction throughout progress of Work produced by an experienced commercial photographer with minimum three years experience in work of this type, approved by Architect.
1. Photos shall be taken on a monthly basis until project completion.
2. Minimum of 25 shots per visit from various angles of the site.
3. Provide close up of construction activity, when available.
4. Photographer shall be a member of the Professional Aerial Photographers Association, or equal.

1.03 PRINTS

A. Full color, two prints of each view.
1. Paper: Single weight.
2. Finish: Glossy.
3. Size: 4 by 5 inch

B. Aerial Photos, Full Color, two prints of each view
1. Paper: single weight
2. Finish: Glossy

3. Size: 8x11

C. Identify each print on back or on attachment. Identify name of project, orientation of view, date and time of view and negative number.

1.04 DIGITAL FILES

A. Digital files of each image shall be transmitted to the Owner via electronic mail.

B. Images shall be in jpeg format in minimum resolution of 1600x1200.

1.05 TECHNIQUE

A. Provide factual presentation.

B. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.

1.06 VIEWS

A. Provide photographs from a minimum of 6 station points on the exterior of building, and 6 station points on the interior, as selected by the Architect, each specified time, until Date of Final Completion.

B. Consult with Architect for instructions on views required.

1.07 SUBMITTALS

A. Deliver 2 prints of each view within 7 days after exposure with transmittal letter under provisions of Section 01300.

B. Assemble prints in a substantial binder with clear plastic envelopes, one binder for each required set of prints.

C. Provide a compact disk (cd) of all images saved as noted in Item 1.04 above.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION - 01380

SECTION 01400

QUALITY CONTROL

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Quality Assurance - Control of Installation
2. Tolerances.
3. References.
4. Mockup.
5. Project Inspector.
6. Manufacturers' field services and reports.

1.02 QUALITY ASSURANCE - CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.

D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform work by persons qualified to produce workmanship of specified quality.

F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

G. Where experience minimums for workmen, applicators, companies or manufacturers are required in individual sections, written certification and documentation substantiating such minimums shall be submitted and approved by the Owner, when requested or required.

1.03 TOLERANCES

A. Monitor tolerance control of installed products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

1.04 REFERENCES

A. When references, industry standards, abbreviations, engineering data, documents or any technical publication appears in the References paragraph of any technical specification, refer to Section 01090 for a partial listing.

B. References shall be incorporated into the Contract Documents as if fully bound herein.

C. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

D. Comply with reference standard by date of issue current on date of Contract Documents, except where a specific date is established by code.

E. Obtain copies of standards where required by product specification sections.

F. None of the contractual relationships of any of the parties in the Contract shall be altered by mention of any reference document.

1.05 MOCK-UP

A. When required by any Section of the Specifications, provide a mock-up as described therein. Assemble mock-ups with specified attachment and anchorage devices, flashings, seals, and finishes.

B. Accepted mock-ups are representative of the quality required for the Work.

C. Where mock-up has been approved and is specified in product specification Sections to be removed, remove mock-up and clear area.

1.06 PROJECT INSPECTOR

A. An Inspector, herein referred to as the "Project Inspector" or "Job Inspector", may be employed by the Owner at the Owner's option, or when required by the provisions of CBC Chapter 17 or any jurisdiction having authority.

B. The work of construction in all stages of progress shall be subject to the personal periodic observation of the Project Inspector. He shall have free access to any or all part of the work at any time.

C. The Contractor shall furnish the Inspector reasonable facilities for obtaining such information as may be necessary to keep him fully informed respecting the progress and manner of the work and the character of the materials.

D. Inspection of the work shall not relieve the Contractor from any obligation to fulfill this Contract.

E. When Project Inspector's services are required on an overtime basis, attributable to scheduling of the Work by the Contractor, initial payment for such services will be made by the Owner. At termination of work or completion of project, all costs for overtime services will be deducted from Contractor's final payment (or any funds due and payable) by change order.

1.07 MANUFACTURERS' FIELD SERVICES AND REPORTS

A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, and test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.

B. Manufacturer's observer shall report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

C. Submit report within 30 days of observation.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION - 01400

SECTION 01410
TESTING

PART 1 – GENERAL

1.1 SUMMARY

a. Section Includes:
1. Selection and payment.
2. Contractor submittals.
3. Laboratory responsibilities.
4. Laboratory reports.
5. Limits on testing laboratory authority.
6. Contractor responsibilities.

b. Related Requirements Specified Elsewhere:

1. Inspections and testing required by laws, ordinances, rules, regulations or orders of public authorities: General Conditions.
2. Certification of products: Respective specification sections.
3. Cutting and Patching: Section 01045
4. Project Closeout: Section 01700
5. Soil Testing: Section 02200
6. Landscape Planting: Section 02900
7. Tests and Standards: Pertinent sections.

c. Independent Testing Laboratory:

1. Owner will employ and pay for services of an Independent Testing Laboratory to perform soil, cor

2. Contractor will employ and pay for services of an Independent Testing Laboratory, approved by the Owner, to perform agronomic soil test.

3. Employment of Testing Laboratory will in no way relieve Contractor of its obligation to perform work in accord with contract.

1.2 REFERENCES

a. American Society for Testing and Materials.
1. ASTM C39 - Compressive Strength of Cylindrical Concrete Specimens.
2. ASTM C42 - Drilled Cores and Sawed Beams of Concrete.
3. ASTM C1077 - Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
4. ASTM D1557 - Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb Rammer and 18 inch Drop

1.3 SELECTION AND PAYMENT

A. Owner will employ and pay for services of an independent Testing Laboratory approved by the Architect and the Owner to perform inspection and testing services for the Work.

1. In accordance with SB732 dated July 1, 1992, when hazardous materials abatement measures are included in the Work, Owner will employ and pay for the services of an independent testing laboratory, licensed and certified by the State, to conduct clearance and air sampling tests.

B. Contractor shall pay for mileage and travel time for inspection services, required travel more than 50 miles from this project to test products purchased by the Contractor. Testing Laboratory shall forward all billings and records of such costs to the Owner for approval. Such costs, if determined by the Owner to be attributable to the Contractor under this provision, will be deducted from Contractors final payment (or any funds due and payable) by change order.

C. When tests and inspections are required on an overtime basis, initial payment will be made by Owner. At termination of work or completion of project, all costs for overtime testing and inspections will be deducted from Contractors final payment (or any funds due and payable) by change order.

D. Before Testing Laboratory files testing and inspection billings with Owner, they shall be so billed to segregate straight time from overtime costs and all overtime costs are to be substantiated with a detailed explanation for necessity of such work costs.

E. When materials tested fail to meet requirements herein specified, they shall be promptly corrected or removed and replaced and retested in a manner required by the Architect. Costs involved in retesting will be paid by the Owner and deducted from Contractors final payment (or any funds due and payable) by change order.

F. Employment of testing laboratory shall in no way relieve Contractor of obligation to perform work in accordance with requirements of Contract Documents.

1.4 QUALITY ASSURANCE

A. Comply with requirements of those testing standards listed in the above-referenced ASTM Specifications, and those of other appropriate recognized materials testing organizations.

B. Laboratory: Authorized to operate in State of California.

C. Laboratory Staff: Maintain a full time registered Civil Engineer on staff to review services.

D. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

1.5 LABORATORY RESPONSIBILITIES

A. Test samples of mixes submitted by Contractor.

B. Provide qualified personnel at site. Cooperate with Owner, Architect and Contractor in performance of services.

C. Perform specified inspecting, sampling, and testing of products in accordance with specified standards.

D. Ascertain compliance of materials and mixes with requirements of Contract Documents.

E. Promptly notify Owner, Architect and Contractor of observed irregularities or non-conformance of Work or products.

F. Perform additional inspection and tests required by Owner or Architect.

G. Attend preconstruction meetings and progress meetings.

1.6 LABORATORY REPORTS

A. After each inspection and test, but no more than 14 days after date of inspection, submit two copies of laboratory report to those named on the distribution list below.

B. Immediately upon Testing Laboratory determination of a test failure, the laboratory shall telephone the results of test to Owner and Architect. On the same day, laboratory shall send written test results to those named on the distribution list below.

C. Distribution List:
   1. Owner.
   2. General Contractor.
   3. Project Inspector.
   4. Architect.
   5. Structural Engineer.
   6. Mechanical and Electrical Engineers (Related Tests and Inspections).
   7. Authorities having jurisdiction, as applicable.

D. Include:
   1. Date issued.
   2. Project title and number.
   3. Name of inspector.
   4. Date, time and ambient temperature at time of sampling or inspection.
   5. Identification of product and specifications section.
   6. Location in the project.
   7. Type of inspection or test.
   8. Date of test.
   9. Results of tests.
   10. Conformance with Contract Documents.

E. When requested by Owner or Architect, provide interpretation of test results and recommendations on retesting.

1.7 LIMITS ON TESTING LABORATORY AUTHORITY

A. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.

B. Laboratory may not approve or accept any portion of the Work.

C. Laboratory may not assume any duties of Contractor.

D. Laboratory has no authority to stop the Work.

1.8 CONTRACTOR RESPONSIBILITIES

A. Deliver to laboratory at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.

B. Cooperate with laboratory personnel, Owner and Architect, and any governmental authority having jurisdiction, and provide access to the Work and to manufacturers' facilities, including weekends and after-work hours.

C. Provide incidental labor and facilities:
   1. To provide access to Work to be tested,
   2. To obtain and handle samples at the site or at source of products to be tested,
   3. To facilitate tests and inspections,

4. To provide storage and curing of test samples.

D. Notify laboratory 48 hours prior to expected time for operations requiring inspecting and testing services.

E. Arrange with laboratory and pay for additional samples and tests required by Contractor beyond specified requirements.

F. When change of construction schedule is necessary during construction, coordinate such changes with the testing laboratory as required.

G. When the testing laboratory is ready to test according to the established schedule, but is prevented from testing or taking specimens due to incompleteness of the Work, extra charges for testing attributable to the delay shall be included in the Contractor's costs.

PART 2 – PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 TAKING SPECIMENS

A. Except as may be specifically otherwise approved by the Owner or Architect, require the testing laboratory to secure and handle all samples and specimens for testing.

3.2 COOPERATION WITH TESTING LABORATORY

A. Provide access to the Work at all times and at all locations where the Work is in progress. Provide facilities for such access to enable the laboratory to perform its functions properly.

3.3 SOIL INSPECTING AND TESTING

A. Required inspections and tests including, but not necessarily limited to:
1. Visually inspect on-site and imported fill and backfill, making such tests and retests as are necessary to determine compliance with the Contract requirements and suitability for the proposed purpose.
2. Field density tests on samples from in-place material as required. Unless noted otherwise on the Drawings, tests shall comply with the provisions of ASTM D1557.
3. As pertinent, inspect and test the scarifying and recompacting of cleaned subgrade. Inspect the progress of excavating, filling and grading. Make 90 percent density tests at fills and backfills, or such other densities as may be indicated on the Drawings. Compliance with provisions of the Contract Documents and governmental agencies having jurisdiction is mandatory.

B. Necessary reports and certificates shall be distributed to all concerned entities.

3.4 CONCRETE INSPECTING AND TESTING

A. Portland Cement:
1. Certificates of Compliance shall be secured and delivered directly from the concrete producer for further delivery directly to the testing laboratory.
2. Certificates of Compliance shall positively identify the cement as to production lot, bin or silo number, dating and routing of shipment, and compliance with the specified standards.

3. Other specific physical and chemical data as requested by Architect or Owner shall be provided.

B. Aggregate:
1. One test is required, unless character of material changes, material is substituted or additional test is requested by the Architect. Unless noted otherwise on the Drawings tests shall comply with ASTM C1077.
2. Samples procured from conveyor belts or batching gates at the ready-mix plant shall be given a sieve analysis to determine compliance with specified standards and grading, and a specific gravity test for compliance with specified standards.

C. Laboratory design mix:
1. After approval of aggregate, and whenever character or source of materials is changed, a mix design shall be provided, in accordance with requirements of the Drawings and jurisdiction having authority.
2. Designs for all mixes shall be prepared by a licensed Civil Engineer.

D. Molded concrete cylinders:
1. A minimum of three test cylinders shall be provided for each 150 cu yds or fraction thereof of each class of concrete of each day's placement.
2. One cylinder at seven days shall be taken, one at 28 days and one when so required by the Architect.
3. Mix, slump, gage, location of concrete in the structure, and test results shall be reported.
4. Specimens and tests shall be taken in accordance with CBC Section 1905.6 and the applicable ASTM standard.

E. Core tests:
1. Core tests shall be provided only when specifically so directed by the Architect because of low cylinder test results.
2. They shall be cut from locations approved by the Architect, secured in accordance with ASTM C42, and prepared and test in accordance with ASTM C39.

F. Placement inspections:
1. Continuous or other inspection of all concrete as required by governmental agencies having jurisdiction shall be made.
2. Throughout progress of concrete placement, slump tests shall be made to verify conformance with specified slump.
3. Contractor shall employ all required personnel and equipment, throughout progress of concrete placement to verify that finished concrete surfaces will have the level or slope that is required by the Contract Documents.

3.5 CONCRETE REINFORCEMENT INSPECTING AND TESTING

A. Prior to use, all reinforcement steel bars shall be tested for compliance with the specified standards.
1. Material identified by mill test reports, and certified by the testing laboratory, does not require additional testing.
2. The supplier shall be required to furnish mill test reports to the testing laboratory for certification.
3. Identified steel shall be tagged at the supplier's shop.
4. When steel arrives at the job site without such tags, it shall be tested as unidentified steel.

B. Unidentified steel:

1. Testing laboratory shall select samples consisting of two pieces, each 18 inches long, minimum, of each size.
2. Testing laboratory shall make one tensile test and one bend test for each 2-1/2 tons or fraction thereof of each size of unidentified steel.

C. Continuous inspection for all welding of reinforcement steel is required.

3.6 STRUCTURAL STEEL INSPECTING AND TESTING

A. Prior to use, all structural steel shall be tested for compliance with the specified standards.
1. Material identified by mill test reports, and certified by the testing laboratory, does not require additional testing.
2. Supplier shall be required to furnish mill test reports to the laboratory for certification.
3. Identified steel shall be tagged at the supplier's shop.
4. When steel arrives at the job site without such tags, it shall be tested as unidentified steel.

B. Unidentified steel:
1. Testing laboratory shall make one tensile test and one bend test for each five tons or fraction thereof of each shape and size of unidentified structural steel.

C. Shop welding:
1. A qualified testing laboratory inspector shall be provided.
2. On single pass welds, inspection shall take place after completion of welding and prior to painting.
3. On multiple pass welds, and on butt welds with cover pass on the back side, continuous inspection shall be provided.
4. Items being shop welded shall be certified as being in conformance to the reference standards and such certification accompany the items upon delivery to the site.

D. Field welding: Continuous inspection services shall be rendered by a qualified testing laboratory inspector.

3.7 MASONRY INSPECTING AND TESTING

A. Standards of quality for masonry materials shall comply with CBC 2103.

B. Quality assurance for masonry materials shall be provided to ensure that materials, construction and workmanship are in compliance with the Drawings and Specification Sections and the applicable requirements of CBC Chapter 21.

C. Inspecting and testing shall include, but shall not be limited to:
1. Masonry units, reinforcement, cement, lime, aggregate, in accordance with CBC 2105.
2. Mortar and grout mixes, in accordance with CBC 2105.
3. Placement, splices and reinforcement sizes, in accordance with CBC 2105.
4. Masonry prism testing. CBC 2105; a set of five masonry prisms shall be built and tested prior to start of construction, and tested and approved by the Owner. When required by the Owner, prisms cut from the masonry construction shall be tested.

3.8 MISCELLANEOUS INSPECTING AND TESTING

A. Structural components requiring inspecting and testing by authorities having jurisdiction, as applicable or as required by the Architect or Owner may include, but are not necessarily limited to:
   1. Aluminum materials and welding.
   2. Precast and prestressed concrete construction.
   3. Roof construction and covering.
   4. Expansion anchors.
   5. Powder actuated fasteners.
   6. Smoke-control systems.
   7. Prefabricated assemblies, including wood trusses.
   8. Special cases involving work which, in the opinion of the authority having jurisdiction, may include unusual hazards or conditions.

END OF SECTION - 01410

SECTION 01420
INSPECTION OF WORK

PART 1 – GENERAL

1.1 The provisions of the Standard Specifications for Public Works Construction (SSPWC), latest Edition, apply except as modified herein.

a. Inspection:

The Owner will inspect and approve all installations and operations. All submittals to, and communication between, the Owner and the Contractor related to the work of this Contract shall be directed to the Owner Representative.

b. Notice:

The Contractor shall give the Owner Representative or an authorized representative a twenty-four (24) hour notice prior to work inspections required elsewhere in these specifications or by public agencies.

The work shall be ready for inspection at the scheduled times arranged by the Contractor. If, in the Owner Representative's sole judgment, the work is not ready and the inspection must be rescheduled, the Contractor shall be notified, shall reschedule the inspection, and shall provide twenty-four (24) hours notice of the rescheduled inspection.

In order to allow for inspection, and in addition to any inspection required by the County Building and/or Safety Department or any inspection required elsewhere in these specifications, the Contractor shall notify the responsible agency sufficiently in advance of the permanent concealment of any materials or work.

If any work is concealed or performed without the prior notice specified above, then the work shall be subject to such tests or exposure as may be necessary to prove to the Owner Representative or responsible agency that the materials used and the work done are in conformity with the plans and specifications. All labor and equipment necessary for exposing and testing shall be furnished by the Contractor at his expense. The Contractor shall replace, at his own expense, any materials or work damaged by exposure or testing.

Any inspection or approval by any representative or agent of the Owner will not relieve the Contractor of the responsibility of incorporating in the work only those materials which conform to the specifications, and any non-conforming materials shall be removed from the project site whenever identified.

c. Final Inspection:

Upon the completion of the work, the Contractor shall notify the Owner Representative seven (7) days in advance of when he desires a final inspection of the work. Engineer will make such inspection as soon thereafter as possible.

d. Defective Work:

No work which is defective in its construction or deficient in any of the requirements of the specifications shall be considered as accepted. The Contractor shall correct any imperfect work whenever discovered, before the final acceptance of the work.

e. Inspection Overtime:

The Contractor shall compensate the Owner, either upon receipt of a bill therefore or by deduction from the final amount due the Contractor, for all hours worked by the Inspector or other authorized Owner employees on Saturdays, Sundays, or legal holidays at one and one-half (1 ½) times the employees basic rate of pay, plus current rate for overhead.

END OF SECTION - 01420

SECTION 01421

ROOFING AND WATERPROOF MEMBRANE INSPECTION SERVICES

PART 1 - GENERAL

1.01 SUMMARY

A. This Section describes roofing and waterproof membrane inspection services to be provided by the Owner.

B. Related work:
   1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary conditions, and Sections in Division 1 of these Specifications, including Section 01420 - Inspection of Work.

1.02 SUBMITTALS

A. Comply with pertinent provisions of Section 01300.

B. Secure the Architect's advance approval of date and time for roof substrata inspection and pre-roofing meetings, as well as, pre-installation of waterproof membrane meeting.
   1. Notify the roofing and waterproof membrane inspection service, the roofing and waterproof membrane subcontractors, and other interested parties, and secure their agreement to attend.
   2. At least three calendar days prior to the pre- roofing and pre-installation of waterproof membrane meetings, notify the Architect of the names of persons expected to attend.

C. Records:
   1. Maintain a complete and legible file, in chronological order, containing a copy of each report, certificate, and other communication received relative to the work of this Section.
   2. Upon completion of the work of this Section, deliver a copy of the complete file to the Architect.

PART 2 - PRODUCTS

2.01 ROOFING AND WATERPROOF MEMBRANE INSPECTION SERVICES

A. For the work of this Section, the Owner shall retain the inspection services of a qualified roofing and waterproofing consulting firm experienced with the installation of the type of roofing and waterproof membrane specified herein.

PART 3 - EXECUTION

3.01 COORDINATION

A. Coordinate as necessary with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.

3.02 PRE-ROOFING AND PRE-INSTALLATION OF WATERPROOF MEMBRANE MEETINGS

A. Not less than three nor more than ten calendar days prior to scheduled start of roofing and waterproof membrane, conduct inspections and a preliminary meeting at the job site.
   1. Except as otherwise directed by the Architect, the Architect will be chairperson of the meetings, will take minutes of the meetings, and will record all agreements reached as a result of the inspections and meetings.
   2. Visually inspect all areas scheduled to receive roofing and waterproof membrane.
      a. Determine general acceptability, and determine areas requiring further preparation.
      b. Determine acceptable remedies for unacceptable areas.
   3. Discus proposed schedule for work, and reach agreement as to dates of start and finish.
   4. Discuss proposed methods for installation, equipment, and personnel to be used.
   5. Discuss inspection methods to be used, reports to be issued by the inspector, responsibilities and limits of responsibilities of inspector, and potential problems arising from use of methods not agreed to in the preliminary meetings.

3.03 INSPECTION DURING ROOFING AND WATERPROOF MEMBRANE INSTALLATION

A. Verify that materials delivered to the job site are those approved by the Architect for use on this Work.

B. Visually observe installation of roof and waterproof membrane work including, but not necessarily limited to:
   1. Verify use of installation procedures recommended by the manufacturer, indicated in the Shop Drawings and the Contract Documents, and agreed upon in the preliminary meetings.
   2. Call attention of the subcontractor's representative on the job to unacceptable methods and unacceptable results.
   3. Report to the Contractor and to the Architect if the subcontractor fails to correct unacceptable methods or unacceptable results.

C. Make final visual inspection of the entire roofing and waterproof membrane installation.
   1. Compile a list of items required to be revised or replaced.
   2. Deliver a copy of the list to the subcontractor's representative on the job, and to others appropriate.
   3. Verify proper revision or replacement of all items on the list.

3.04 REPORTS

A. Make daily written reports of roofing and waterproof membrane inspection activities, delivering copies to the subcontractors and others as agreed in the preliminary meeting.

B. Upon completion of the roofing and waterproof membrane installation, compile comprehensive reports covering activities performed under this Section, and deliver a copy of the reports to the:
   1. Architect;
   2 Owner;
   3. Waterproof membrane subcontractor;
   4. Roofing subcontractor; and
   5. Others as agreed in the preliminary meeting.

3.05 LIMITS OF ROOFING AND WATERPROOF MEMBRANE INSPECTOR'S RESPONSIBILITIES

A. During progress of the work, the inspector is required to:
   1. Make visual observations and compile reports described in this Section;
   2. Advise the subcontractor's representative on the job as to unacceptable methods and unacceptable results when so observed by the inspector.

B. In connection with the roofing and waterproof membrane installation, "unacceptable methods and unacceptable results" mean methods and results other than:
   1. Those recommended by the manufacturer of the approved system materials;
   2. Those required by pertinent regulations of governmental agencies having jurisdiction;
   3. Those required by these Specifications; and
   4. Those agreed upon in the preliminary meeting.

C. The inspector is not empowered to:
   1. Act for, or in lieu of, representatives of the governmental agencies having jurisdiction.
   2. Give directions to the Contractor, subcontractor, or workmen on the job;
   3. Revise any part of the Contract Documents; or
   4. Approve any change in the methods agreed upon in the pre-roofing meeting.

D. Failure of the inspector to observe unacceptable methods or unacceptable results during progress of the Work will not absolve the Contractor from his responsibility to complete the Work in accordance with the specified requirements and the agreed methods.

END OF SECTION - 01421

SECTION 01500
TEMPORARY FACILITIES AND CONTROLS

PART 1 – GENERAL

1.1 The provisions of the Standard Specifications for Public Works Construction (SSPWC), latest Edition, apply except as modified herein.

1.2 The Contractor shall be responsible for all specific safety requirements promulgated by any governmental authority, including the requirements of the Occupational Safety and Health Act of 1970 (OSHA) and CAL OSHA.

PART 2 – TEMPORARY UTILITIES

2.1 TEMPORARY ELECTRICITY

a. Furnish temporary water, light and power, complete with connecting piping, wiring, lamps, meters and similar equipment as required for the work. Install, maintain, and remove temporary lines upon completion of the work. All expenses in connection with temporary services and facilities shall be paid by the Contractor:
   1. Provide one 200 amp, 220 volt main service.
   2. Three secondary, or equivalent arrangement approved by the Owner, temporary power poles, each equipped with one 50 amp scatter-box receptacle.
   3. One 30 amp 220 volt receptacle.
   4. One 20 amp 15 volt receptacle protected by GFI device.

b. Any temporary power requirements beyond these provided also will be the Contractor's responsibility. Contractor shall provide and pay for power service panels or other facilities required by the utility from utility source.

c. Complement existing power service capacity and characteristics as required.

d. Contractor shall provide power outlets for construction operations, with branch wiring and distribution boxes located as required. Provide flexible power cords as required.

e. Welding shall be done by Contractor-provided self-contained gas powered units.

f. After the Notice of Completion has been approved, the Owner will be responsible for payment of water and electric bills rendered for utility service through the respective permanent meters.

g. Any and all refunds of monies resulting from the extension of any utility service shall accrue to the Owner, irrespective of the time that refunds are made or of the manner in which payment was made for the extension.

2.2 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

a. Contractor shall provide and maintain lighting for construction operations to achieve a minimum lighting level consistent with CAL/OSHA minimums.

b. Contractor shall provide and maintain lighting to exterior staging and storage areas after dark for security purposes.

c. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.

d. Maintain lighting and provide routine repairs.

e. Owner will pay for cost of energy only.

2.3 TEMPORARY HEAT

a. Provide and pay for heating devices as needed to maintain specified conditions for construction operations.

b. Exercise measures to conserve energy.

c. Prior to operation of permanent equipment for temporary heating purposes, verify that installation is approved for operation, equipment is lubricated and filters are in place.

d. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.

e. Self-contained heaters, when utilized, shall bear UL or other approval labels appropriate for application.

f. Fuel-burning heaters shall be adequately vented. Equip units with individual thermostatic controls. Use electric resistance space heaters only where no other more energy-efficient type of heater is available and allowable.

2.4 TEMPORARY VENTILATION

a. Comply with all CAL/OSHA and Riverside County Fire Department regulations and inspection requirements.

b. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

c. Utilize on-line ventilation equipment. Extend and supplement equipment with temporary fan units as required to maintain clean air for construction operations.

d. Report the existence of any suspicious or obnoxious odors to authorities having jurisdiction immediately upon discovery.

2.5 TELEPHONE SERVICE

a. Contractor shall provide, maintain and pay for mobile or fixed telephone service to field office at time of project mobilization.

b. Telephone service shall be provided at the time of the start of the work and service shall be maintained until end of construction operations.

2.6 FACSIMILE SERVICE

a. Provide, maintain and pay for facsimile service to field office at time of project mobilization.

2.7 TEMPORARY WATER SERVICE

a. Provide and maintain suitable quality water service required for construction operations. Connect to existing Owner service. Contractor will pay for cost of water. Water required from traveling meter to fire hydrant shall be obtained and paid for by the Contractor.

b. Extend branch piping with outlets located so water is available by hoses with threaded connections.

c. Maintain all parkway landscape irrigation with active service.

2.8 TEMPORARY SANITARY FACILITIES

a. Provide and maintain required facilities and enclosures for use by all construction personnel.

b. Maintain in a sanitary condition at all times.

c. Use of Owner-owned facilities, or any facilities owned by adjacent property owners will not be permitted.

2.9 BARRIERS

a. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

b. Provide barricades and covered walkways required by the Owner for public rights-of-way and for public access to any existing building, either on the job site or adjacent to construction operations.

c. Provide protection for plant life designated to remain. Replace damaged plant life as required by Owner.

d. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

e. Require subcontractors to construct and maintain fences, guardrails, barricades, lights, flashers, shoring and warning signs as required by Owner and Cal/OSHA ordinances and as required to protect construction personnel and public from injury or loss.

2.10 CONSTRUCTION FENCING

A. Construction type: Contractor's rental option.
   1. Fencing shall be in good condition, galvanized, including posts, wire and all accessories.
   2. Do not locate within setbacks. Sleeves into paving other than asphalt will not be allowed.

B. Provide fence around construction site equipped with vehicular and pedestrian gates with locks, sufficiently high to prevent entry onto the Work by the public.
   1. Obtain layout approval prior to erection, from Owner Representative.

C. Provide fencing around existing buildings onsite which are to remain operational.
   1. Locate per Site Plan and provide gates as noted.

2.11 EXTERIOR ENCLOSURES

A. Provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons.

B. Provide access doors with self-closing hardware and locks.

C. Locate where directed by Owner.

2.12 PROTECTION OF INSTALLED WORK

A. Protect installed Work and provide special protection where specified in individual specification sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

C. Provide protective coverings at walls, projections, jambs, sills and soffits of openings.

D. Protect finished floors, stairs and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Prohibit traffic from landscaped areas.

2.13 SECURITY AND FIRST AID

A. Provide security and facilities to protect Work and existing facilities from unauthorized entry, vandalism or theft.

B. Provide first aid facilities, materials and equipment required by governing authorities, laws ordinances, regulations, standards, orders and underwriters for the work of this Contract as applicable. Require subcontractors to maintain similar facilities.

2.14 PARKING

A. Arrange for temporary surface parking areas to accommodate construction personnel.

B. Coordinate with Owner requirements for location, number and duration of use for all parking required by construction personnel.

PART 3 – ACCESS AND FACILITIES

3.1 Access:

a. Provide and maintain an adequate access to the site of the project. Also provide temporary roads if any are required for prosecution of the work.

b. Extend and relocate as Work progress requires. Provide detours necessary for unimpeded traffic flow.

c. Provide and maintain access to fire hydrants, free of obstructions.

d. Provide means of removing mud from vehicle wheels before entering streets.

3.2 Office:

a. The CONTRACTOR shall furnish and maintain a Class "A" Field Office with a minimum of 672 square feet (12'x56') fully carpeted, with private restroom for the exclusive use of the Engineer and his staff. The sanitary facility provided by the CONTRACTOR shall be maintained in clean, neat and sanitary fashion at all times and shall be for the exclusive use of the Engineer and his staff. All sanitary paper products required for the sanitary facility shall be supplied by the CONTRACTOR and shall be considered as included in the contract price.

b. Office space shall include, at a minimum, (1) 12'x32' office/conference space, (1) 12'x12' private office with separate exterior access and (2) 6'x12' private offices all with lockable doors. Office shall be fully carpeted with commercial grade carpeting, insulated walls, ceilings and floors, sliding windows and (2) 36"x80" lockable exterior doors. Provide 8' ceilings with fluorescent lighting.

c. The Field Office shall have a parking area with all weather parking surface for vehicular parking. The CONTRACTOR shall maintain vehicular access to trailer at all times during the construction of the site and as long as trailer is on site.

d. In addition, the Field Office shall be provided with a facsimile machine with a separate phone line, a copying machine capable of photocopying 11" x 17" size paper, a scanner (can be an all-in-one), 1 desk top computers with necessary software, and a laser jet printer, for the exclusive use of the Engineer and his staff for the entire duration of the project. CONTRACTOR shall be responsible for the office supplies for the engineer's office for the entire duration of the project. Each individual office shall have separate lock and keying system.

e. CONTRACTOR shall be aware that theft and vandalism at the job site may be a problem. CONTRACTOR shall be responsible for the security of the Field Office.

f. If for any reason, the phones, copier, facsimile machine, scanner, computers, printer or any office furniture, and/or sanitary facility is vandalized, stolen, or in need of repair, the CONTRACTOR, upon receipt of written notice by Engineer, shall have a maximum of five (5) working days to replace or repair the above items to full working order. If CONTRACTOR fails to comply within the five (5) working days specified, the County may at its option withhold monthly progress payments until fully equipped Class "A" Field Office is returned to full and complete working order.

g. CONTRACTOR shall meet with the Engineer prior to construction (and at any other time circumstances warrant) and together, shall mutually agree to a list of exact equipment and supplies as generally listed herein, and a location for the Class "A" field office. CONTRACTOR shall supply, at that time, a trailer floor plan with furniture layout for final approval by Engineer.

h. All required field offices, equipped as specified herein, shall be provided at the project site, ready for use by the City 30 calendar days prior to the beginning of any scheduled site work.

i. Full compensation for conforming to the requirements of Class "A" Field Office shall include, but not be limited to, the following:

   a) Office Supplies including but not limited to paper (8.5"x11", 11"x14"), pens, pencils, filing systems, ring binders, desk supplies, etc.

b) Furnish office, with 4 desks, 4 desk chairs, 1 plan table, 2 each 5 foot bookcase, and a conference table (2-5' folding tables) with minimum of 15 folding chairs.
c) One file cabinet, legal size, 4-5 drawers with lock and 3 keys complete with Pendaflex suspension racks for each drawer.
d) Provide mobile plan rack and sticks capable of holding a minimum of 12 clamps and 30" wide plans.
e) Small appliance package, including Microwave, mini-refrigerator and Drinking water cooler and supplies (cups, etc).
f) Service office, by professional cleaning service, a minimum of once a week including trash removal and disposal and supplying toilet paper, hand soap and paper towels.
g) Supply utilities for the entire duration of project (electricity (120V outlets, phone-limited long distance access for business, high speed internet access for each computer)
h) Service and maintain sanitary facility with hot and cold running water
i) Facsimile machine (separate phone line)
j) Copying machine (11" x 17")
k) Three phone lines in addition to the fax line
l) Scanner (latest model) with self feed and capable of scanning 11X17 documents
m) 1 desk top computer systems (latest models) with windows professional office software
n) Laser Jet Printer (latest model), capable of printing 11"X17" document
o) PRIMAVERA EXPEDITION software(latest version) Single License
p) 120V Electrical outlets for computers
q) Central HVAC and electric heating system.
r) All necessary stairs to doors. (CAL OSHA 3 or 4 compatible)
s) Minimum of two separate offices (12'x12') and a central meeting space..
t) Supply (6) new construction hats (hard hats) and high visibility vests.
u) Remove office from job site at the completion of the project
v) Security, including barred doors and windows, and possible alarm system.

j. All labor, tools, equipment, materials, and incidentals necessary to furnish facility complete and in place, as described under this section, shall be included in the contract LUMP SUM price and no additional compensation will be allowed therefore.

k. Any theft or damage to the Engineer's equipment inside a properly locked trailer will become the responsibility of the CONTRACTOR to replace damaged or missing equipment to the satisfaction of the Engineer.

l. NOTE: No monthly progress payments will be due to the CONTRACTOR until all provisions and requirements of this section are complete and in place.

PART 4 – TEMPORARY SIGNBOARDS

4.1 Identification Sign:

a. Provide and maintain one (1) identification sign in a prominent location approved by the Owner Representative. Signs shall be constructed of 3/4" exterior marine plywood, 4' x 8', with 1" x 4" D.F. stiffeners around all edges. Sign shall be mounted 8 feet above grade (bottom of sign) on 4" x 4" posts and adequately braced to withstand wind pressures.

b. Erect each sign on site at locations established and approved by Owner. Maintain signs and supports in an orderly, clean condition. Repair damages to structure, framing or signs during course of construction.

c. No other signs are allowed except those required by law.

d. Sign shall be constructed by a professional sign painter.

e. Sign colors shall be as selected by the Landscape Architect. Paints shall be exterior grade to maintain high quality appearance throughout construction period.

f Contractor shall be responsible for layout of sign subject to approval of the Owner Representative. Sign shall be per this section.

PART 5 – FIRE PROTECTION

5.1 Provide general temporary fire protection for the work under this contract

A. Provide types, sizes numbers and locations as would be reasonably effective in extinguishing fires during early stages, by personnel at job site. Require subcontractors to maintain similar equipment, continually kept current.

B. Instruct all personnel at the time of their first arrival at the job site on the proper use of extinguishers.

PART 6 – TRASH REMOVAL AND CLEANING

6.1 Provide trash receptacles for collecting debris. Remove debris from job site at regular intervals.

PART 7 - REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities, signage and materials at completion of construction operations or as directed by owner or owner's representative.

B. Remove underground installations. Coordinate repair of all surfaces and sitework amenities.

C. Clean and repair damage caused by installation or use of temporary work.

D. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

E. All building services shall be operational prior to disconnect of temporary services.

END OF SECTION - 01500

COUNTY OF RIVERSIDE
(PROJECT NAME OR TITLE)

COUNTY BOARD
OF SUPERVISORS

John J. Benoit, Supervisor
4th District

Marion Ashley, Supervisor
5th District

Bob Buster, Supervisor
1st District

John Tavaglione, Supervisor
2nd District

Jeff Stone, Supervisor
3rd District

Insert rendering of completed project here

PROJECT
DEVELOPMENT TEAM

Bill Luna
County Executive Officer

Robert Field
Assistant County Executive Officer EDA

Insert "Project" Department Name
Insert "Project" Dept Head Name
Insert "Project" Dept Title

Insert General Contractor Name
General Contractor

Insert Project Architect Name
Project Architect

Insert Dept
Logo here

COUNTY OF RIVERSIDE
EDA
ECONOMIC DEVELOPMENT AGENCY

*****Please note: the "project" Board of Supervisor must be listed first and then each supervisor must be listed below in district order. For example, a project that is in district 4 would list John J. Benoit first, then District 5 but then start the series again with District 1 (see example above).**
The font type must be Arial
The sign should be approximately 4' long and 8' wide

Revision Date: 1-27-10

SECTION 01560

ADDITIONAL TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Water and weather control.
2. Dust control.
3. Erosion and sediment control.
4. Noise control.
5. Pest control.
6. Pollution control.
7. Rodent control.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 WATER AND WEATHER CONTROL

A. Grade exterior surfaces to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.

B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion .

C. Do not permit surface or subsurface water or other liquids to accumulate in or about the construction operations and vicinity thereof. Should such conditions be encountered or develop, control the water or other liquid and suitable disposal of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams or other methods as approved by the Owner.

D. Contractor shall at all times protect related or adjacent to his work, excavations, banks, trenches and/or the building from rain water, spring water, ground water, backing up of drains or sewers, and all other water admitted to any work by construction operations. Provide pumps and other equipment and enclosures to provide this protection.

E. Provide protection to the Work against weather, rain, wind storms and excessive winds, frost or heat so as to maintain all work, materials, apparatus and fixtures free from injury or damage.

3.02 DUST CONTROL

A. Conduct earthwork operations in a manner to prevent windblown dust and dirt from interfering with the progress of the Work, the Owner's activities and any existing occupied structures in the area immediately adjacent, as well as adjacent properties.

B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

C. Periodically water construction areas as required to allay accumulation of dust and dirt during the hours that work is to be performed.

D. Water spray or cover with tarpaulins all truck loads of soil to additionally minimize generation of dust and dirt from construction operations.

3.03 EROSION AND SEDIMENT CONTROL

A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.

B. Minimize amount of bare soil exposed at one time.

C. Provide temporary measures such as berms, dikes, and drains, to prevent water flow over adjacent properties or public rights-of-way.

D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.

E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

3.04 NOISE CONTROL

A. Provide methods, means, and facilities to minimize noise produced by construction operations, when noise may be detrimental to adjacent properties. Comply with the requirements of the County.

3.05 PEST CONTROL

A. Provide methods, means, and facilities to prevent pests and insects from construction operations or job site.

3.06 POLLUTION CONTROL

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

B. Burning of refuse, debris or other materials will not be permitted on the job site.

C. Comply with South Coast Air Quality Management District regulatory requirements and all other anti-pollution ordinances during the course of construction and disposal operations.

3.07 RODENT CONTROL

A. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

END OF SECTION - 01560

SECTION 01570

TRAFFIC REGULATION

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Construction parking control.
2. Flagmen
3. Flares and lights.
4. Haul routes.
5. Traffic signs and signals.
6. Removal

1.02 SIGNS, SIGNALS AND DEVICES

A. Post mounted and wall-mounted traffic control and informational signs as required to maintain adequate standards of safety and control of vehicular movement on and off the construction site.

B. Traffic Control Signals: As approved by the County/ City of Perris/ City of Menifee.

C. Traffic Cones and Drums, Flares and Lights: As approved by the County/ City of Perris/ City of Menifee.

D. Flagman Equipment: As approved by the County/ City of Perris/ City of Menifee.

1.03 CONSTRUCTION PARKING CONTROL

A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles and Owner's operations.

B. Monitor parking of construction personnel's vehicles. Maintain vehicular access to and through parking areas.

C. Prevent parking on or adjacent to access roads or in non-designated areas.

1.04 FLAGMEN

A. Provide trained and equipped flagmen to regulate traffic when construction operations or traffic encroach on public traffic lanes.

1.05 FLARES AND LIGHTS

A. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

1.06 HAUL ROUTES

A. Consult with the Owner in establishing public thoroughfares to be used for haul routes and site access.

B. Confine construction traffic to designated haul routes.

C. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

1.07 TRAFFIC SIGNS AND SIGNALS

A. At approaches to site and on site, install at crossroads, detours, parking areas and elsewhere as needed to direct construction and affected public traffic.

B. Install and operate traffic control devices as are necessary to direct and maintain orderly flow of traffic in areas under Contractor's control and areas affected by Contractor's operations.

C. Relocate as Work progresses to maintain effective traffic control.

1.08 REMOVAL

A. Remove equipment and devices when no longer required.

B. Repair damage caused by installation.

C. Remove post settings to full depth.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used

END OF SECTION - 01570

SECTION 01600
PRODUCTS AND MATERIALS

PART 1 – GENERAL

1.1 The provisions of the Standard Specifications for Public Works Construction (SSPWC), latest Edition, apply except as modified herein.

1.2 SUMMARY

A. Section Includes:
1. Products.
2. Transportation and handling.
3. Storage and protection.
4. Product options.
5. Equals
6. Substitutions.
7. Contractor warranties
8. Limitations

1.3 RELATED REQUIREMENTS SPECIFIED ELSEWHERE:
A. Schedule of Values: Section 01700.
B. Shop Drawings, Project Data and Samples: Section 01340.
C. Testing: Section 01410.
D. Inspection: Section 01420.

1.4 PRODUCTS

A. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

B. Provide interchangeable components of the same manufacture, for components being replaced.

1.5 TRANSPORTATION AND HANDLING:

A. Products or materials to be incorporated in the work shall be transported, handled, and stored in such a manner as to assure the preservation of their quality and fitness for the work and to facilitate inspection.

B. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.6 STORAGE AND PROTECTION

A. Store and protect products in accordance with manufacturers' instructions, with seals and labels intact and legible.

B. Store sensitive products in weather tight, climate controlled enclosures.

C. For exterior storage of fabricated products, place on sloped supports, above ground.

D. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.

E. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation or potential degradation of product.

F. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

G. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

H. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.7 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.

B. Products Specified by Naming One Manufacturer: Provide products of manufacturer named and meeting specifications, unless it is no longer available, is incompatible with existing work, or does not comply with specified requirements or governing regulations. Where only one manufacturer is named, the product indicated is the preferred product, however, substitution of equal products is allowed under the provisions of Section 01300 and this Section.

C. Products Specified by Naming More Than One Manufacturer: The selection is at Contractor's option provided the product selected complies with specified requirements.

D. "Or Equal" Provisions: Where products or manufacturers are specified by name accompanied by the term "or equal" or such "or equal" provision as specified below, provide either the product named, or comply with the requirements for gaining approval of substitutions for the use of an unnamed product.

1.8 EQUALS

A. Whenever in the specifications any material or process is indicated or specified by patent or proprietary name or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating description of the material or process desired and shall be deemed to be followed by the words "or equivalent". However, if the material, process, or article offered by the Contractor is not, in the opinion of the Engineer, equal to that specified, then the Contractor must furnish the material, process or article specified, or one which in the opinion of the Owner Representative is the equal thereof in all essential characteristics.

B. If the Owner Representative shall decide to accept for use in the project a material which is not the equal of that specified, authority for the substitution shall be made in the manner described for "Extra Work and Changes", with appropriate monetary allowance for the difference in value.

1.9 SUBSTITUTIONS

A. Architect will consider requests for substitutions only in accordance with the following criteria:

1. Proposals for substitutions shall be made only by the Contractor. The Architect will not review direct submittals by manufacturers, suppliers or Subcontractors.
2. All substitutions relating to a particular Section of the Specifications shall be submitted at one time, listing item for item on the Contractor's letterhead, including physical samples, brochures and technical data supporting compliance for all items.
3. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
4. Substitutions for the specified product, brand or manufacture that have been submitted and disapproved by the Architect shall not be subsequently resubmitted in any modified form, and the Contractor will be required to furnish the specified materials.
5. Submission of data substantiating a request for substitution shall take place within 35 days after award of Contract. Requests submitted after this time will be considered only at the discretion of the Architect.

B. Burden of proof as to equality of any material submissions or "or equal" justification data shall not in any way authorize an extra cost or extension of time to the Contract.

C. In the event Contractor furnishes materials, processes or articles more expensive than that specified, the difference in cost of such materials, processes or articles so furnished shall be borne by Contractor, at no extra cost or time to the Contract .

D. Substitutions shall, without exception, be manufactured of same basic materials, and comply with or exceed all specification requirements of dimension, function, structure and appearance, without deviation.

E. Use of approved substitutions shall in no way relieve Contractor from responsibility for compliance with the Contract Documents after installation.

F. In the event materials are substituted and installed without proper authorization, the Contractor shall remove such materials and install those specified at not extra cost or time to the Contract.

G. Contractor shall determine the effect approved substitutions will have on other portions of the Work and so inform his subcontractors, suppliers and employees of these effects. Any extra costs incurred by the Contractor, subcontractors, suppliers or employees as a consequence of the substitution shall be included in the Contractor's costs, with no extra cost or time added to the Contract.

H. The admissibility of a proposed substitution shall be determined solely by the specifying Architect. The Architect's decision shall be final.

I. Substitutions may be subject to approval by an enforcement agency, and in such case the requirements of the enforcement agency shall be followed, at no extra cost or time to the Contract.

J. A request for substitution constitutes a representation that the Contractor:
1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
2. Will provide the same Warranty for the substitution as for the specified product.
3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost or time to the Contract.
4. Waives claims for additional costs or time extension to the Contract which subsequently may become apparent.

5. Will reimburse Owner and Architect for review of substitutions or redesign services associated with re-approval by any enforcement agency.

K. Substitutions will not be considered when they are indicated or implied on shop drawings or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

L. Substitutions may be considered after the 35 day limitation when a product becomes unavailable through no fault of the Contractor.

M. Substitution Submittal Procedure: In accordance with Section 01300.

1.10 CONTRACTOR WARRANTS:

a. It has personally investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.

b. It will provide the same guarantee for substitution as for product or method specified.

c. It will coordinate installation of accepted substitution into work, making such changes as may be required for work to be complete in all respects.

d. It waives all claims for additional costs related to substitution which consequently becomes apparent.

e. Cost data is complete and includes all related costs under its contract, but excludes:
   1. Costs under separate contracts.
   2. Design Team's re-design.

1.11 LIMITATIONS:

a. Substitutions will not be considered if:
   1. They are indicated or implied on shop drawings or project data submittals without formal request submitted within 30 days of award;
   2. Acceptance will require substantial revision of Contract Documents.
   3. Delays in delivery of specified materials will not be considered justification for substitutions.

PART 2 – PRODUCTS LIST

2.1 Within 60 days after date of Contract, submit to Architect five (5) copies of complete list of all products which are proposed for installation.

2.2 Tabulate list by each specification section. For products specified under reference standards, include with listing of each product:

a. Name and address of manufacturer;
b. Trade name;
c. Model or catalog designation;
d. Manufacturer's data:
   1. Performance and test data
   2. Reference standards

PART 3 - EXECUTION

Not Used.

END OF SECTION - 01600

SECTION 01650

STARTING OF SYSTEMS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Starting systems.
2. Demonstration and instructions.
3. Testing, adjusting, and balancing.

1.02 STARTING SYSTEMS

A. Coordinate schedule for start-up of various equipment and systems.

B. Notify Architect and Owner a minimum of seven days prior to start-up of each item.

C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or for other conditions which may cause damage.

D. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.

E. Verify wiring and support components for equipment are complete and tested.

F. Execute start-up under supervision of applicable manufacturer's representative in accordance with manufacturer's instructions.

G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.

H. Tanks for equipment start up operations requiring fossil fuel shall be filled sufficiently, under requirements of this Section, to complete successful start-up. Complete filling of tanks is not a requirement.

I. Power required for start-up operations shall be paid by Contractor.

1.03 DEMONSTRATION AND INSTRUCTIONS

A. Demonstrate operation and maintenance of products to Owner's personnel at an agreed upon date prior to Date of Notice of Completion.

B. Demonstrate project equipment and instruct in a classroom environment located at the jobsite and instructed by a qualified manufacturer's representative who is knowledgeable about the project.

C. For equipment or systems requiring seasonal operation, perform demonstration for other season within an agreed upon date, but not more than six months from Date of Notice of Completion.

D. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.

E. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed time, at equipment location.

F. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

G. The amount of time required for instruction on each item of equipment and system is that specified in individual sections, or if not specified, in an amount as designated and required by the Owner.

1.04 TESTING, ADJUSTING, AND BALANCING

A. Owner, at Owners option, may appoint and employ services of an independent firm to perform testing, adjusting, and balancing.

B. The independent firm will perform services as may be required for Mechanical, Plumbing and Electrical work, or for such other disciplines as may be required by the Owner.

C. Reports will be submitted by the independent firm indicating observations and results of tests and indicating compliance or non-compliance with the requirements of the Contract Documents.

D. Corrective work shall be provided without extra cost or time to the Contract.
   1. Additionally, costs associated with hiring independent firm in order to determine a failure of mechanical, plumbing, electrical or other such Work shall be borne by the Contractor and deducted from the final payment.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION - 01650

SECTION 01700

CONTRACT CLOSE-OUT

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Close-out procedure.
2. Adjusting.
3. Project record documents.
4. Operation and maintenance data.
5. Spare parts and maintenance materials.

1.02 FINAL COMPLETION REVIEW

A. When the Contractor determines that the Work is complete in accordance with Contract Documents, the Contractor shall submit to the Owner and Architect written certification that the Contract Documents have been reviewed, the Work has been inspected by the Contractor and by authorities having jurisdiction and the facility is ready for Final Completion review.

B. Architect will prepare a list of items to be completed and corrected (punch list).

C. Contractor shall distribute corrected punch list to Subcontractors and suppliers.

D. The punch list shall include all items to be completed or corrected prior to Application for Final Payment.

E. The punch list shall identify items by location and consecutive number.

F. Contractor shall prepare separate lists according to categories used for Drawings.

G. Architect's consultants and Owner's consultants will conduct a walk-through of project with the Contractor to review scope and adequacy of the punch list.

H. Verbal comments will be made to the Contractor by the Architect or Owner, and the Architect's and Owner's consultants. These comments will indicate generally the additions and corrections to be made to the punch list. Such comments shall not be considered to be comprehensive. Contractor shall use the comments as guidance in preparing the punch list for the Final Completion review.

1.03 FINAL COMPLETION MEETING

A. On a date mutually agreed to by Owner, Architect and Contractor, a meeting shall be conducted at the project site to determine whether the Work is complete in accordance with the Contract Documents.

B. Architect and the Architect's and Owner's consultants, as authorized by the Owner, shall attend the Final Completion meeting.

C. In addition to conducting a further walk-through of the facility and reviewing the punch list, the purpose of the meeting shall include submission of warranties, guarantees and bonds to the Owner, submission of operation and maintenance manuals, provision of specified extra stock to the Owner, and submission of other Contract close-out documents and materials as required, if not already submitted.

D. Contractor shall make corrections to the punch list and record additional items as may be identified during the walk-through, including notations of corrective actions to be taken.

E. If additional site visits by the Architect and the Architect's and Owner's consultants are required to review completion and correction of the Work, the costs of additional visits shall be reimbursed to the Owner by the Contractor by deducting such costs from the final payment. Reimbursement to the Architect or consultants, when justified, will be by Owner.

1.04 UNCORRECTED AND NON-CONFORMING WORK

A. The Owner and Architect shall have the right to reject materials and workmanship which are defective or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected material shall be removed from the premises. If the Contractor fails to correct such reject work within a reasonable time, fixed by written notice, the Owner will correct same and charge the expense to the Contractor by change order.

B. Should it be considered necessary or advisable by the Owner or Architect at any time before Date of Final Completion of the entire work to make an examination of work already completed by removing or tearing out the same, the Contractor shall on request promptly furnish all necessary facilities, labor and material. If such work is found to be defective in any respect due to fault of the Contractor or his subcontractor, all extra expenses shall be included in the Contractor's costs.

1.05 CLEANING

A. Prior to Date of Final Completion, Contractor shall conduct cleaning operations described in Section 01710, including removal of construction facilities and temporary controls.

1.06 INSPECTIONS AND TESTING

A. Prior to the Final Completion review, complete inspection and testing required for the Work, and when required as a part of the Contractor's responsibilities, secure approvals by testing agencies or authorities having jurisdiction. Testing and inspection requirements shall include, but are not limited to:
   1. Inspections, tests, balancing, sterilization and cleaning of plumbing and HVAC systems.
   2. Inspections and tests of electrical power and signal systems.
   3. Inspections and tests of conveying systems, as applicable.

1.07 CERTIFICATE OF FINAL COMPLETION

A. When Architect determines that the list of items to be completed and corrected (punch list) is sufficiently complete for Owner to occupy the premises for the use to which it is intended, Owner will file a Notice of Completion with the County Recorder's Office.

B. Provide submittals that are required by governing or other authorities.

C. Submit final application for payment for 100 percent completion, less retainage, if any, identifying total adjusted Contract sum, previous payments, and sum remaining due.

1.08 ADJUSTING

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

1.09 PROJECT RECORD DOCUMENTS

A. Requirements for Project Record Documents are addressed in Section 01720 of this specification.

1.10 SPARE PARTS AND MAINTENANCE MATERIALS

A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.

B. Deliver not less than two sets to project site, bound in three-ring binders and indexed. Obtain receipt prior to final payment.

1.11 FINAL PAYMENT

A. After completion of all items listed for completion and correction, after submission of all documents and products, and after final cleaning, submit final Application for Payment, identifying total adjusted Contract Sum, previous payments and sum remaining due. Payment will not be made until the following are accomplished:
   1. Project record documents have been transferred and approved by the Owner.
   2. Extra stock and maintenance materials have been transferred and received by Owner.
   3. Warranty, guarantee and bonding documents and operation and maintenance data have been received and approved by Owner.
   4. All lien releases have been received by the Owner.
   5. All mechanics' liens not released have been legally bonded by Contractor.
   6. Contractor's surety has consented to final payment.

B. Final Payment will be made in accordance with Section 9, General Conditions.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION - 01700

SECTION 01710

CLEANING

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Cleaning during construction.
2. Cleaning requirements at Final Completion.
3. Final cleaning.

1.02 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Submit list of cleaning agents and materials for Final review and approval.

C. Submit description of cleaning processes, agents and materials to be used during construction and for final cleaning of the Work. Processes and degree of cleanliness shall be as approved by the Owner. All cleaning processes, agents and materials shall be subject to Owner's review and approval.

1.03 SCOPE

A. Provide complete cleaning and disposal for all work done under this Contract.

B. Conduct cleaning and disposal operations in compliance with all applicable codes, ordinances and regulations, including environmental protection laws, rules and practices.

C. Employ experienced workmen or professional cleaners, utilizing materials and cleaning techniques recommended and approved by the manufacturers of the surfaces to be cleaned.

D. Maintain premises and public properties free from accumulations of waste, debris and rubbish caused by operations.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.

B. Use cleaning materials only on proper surfaces recommended by manufacturer.

C. Use only those cleaning agents and materials which will not create hazards to health or property.

D. Comply with local Air Quality Management District regulations for maximum allowable volatile emissions of any product used for cleaning purposes.

PART 3 - EXECUTION

3.01 CLEANING PROCEDURES DURING CONSTRUCTION

A. Execute cleaning to ensure that building, grounds and adjacent public properties are maintained free from accumulations of waste materials and rubbish.

B. Wet down dry materials and rubbish periodically to prevent blowing dust.

C. Cleaning operations shall be performed daily during progress of work.

D. Provide on-site dump containers for collection of waste materials.

E. Do not utilize waste facilities belonging to, or leased to, the Owner or any adjacent property owner.

F. Handle materials in a controlled manner. Maximum drop for waste materials without use of chute shall not exceed five feet. Drops higher than five feet shall be controlled by substantially constructed sheet metal or wood chutes, deployed to receive the materials and direct the drop directly to dump containers, trucks or other suitable containers, located so as not to endanger workmen, staff or public.

G. Schedule cleaning operations to prevent dust and other contaminants from affecting newly painted surfaces or upon uncured materials.

3.02 CLEANING AT DATE OF FINAL COMPLETION

A. Execute a thorough cleaning prior to Date of Final Completion. Review all cleaning operations with Owner.

B. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program.

C. Execute cleaning prior to Date of Final Completion for each trade, or as approved by the Owner.

D. Remove waste and surplus materials, rubbish and temporary construction facilities, utilities and controls.

3.03 FINAL CLEANING

A. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program.

B. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels and other foreign materials from all visible interior and exterior surfaces caused by the work of this Contract.

C. Remove dust from all horizontal surfaces not exposed to view, including light fixtures, ledges and plumbing fixtures, as applicable.

D. Clean all horizontal surfaces to dust-free condition, including tops of door and window frames, tops of doors and interiors of cabinets and casework.

E. Clean building accessories, including toilet partitions, fire extinguisher cabinets, lockers, toilet accessories, plumbing fixtures and lighting fixture lenses and trim, as applicable.

F. Clean and buff all metalwork, to be free of soiling and fingerprints. Mirror-finished metalwork shall be buffed to high luster.

G. Clean interior and exterior glass surfaces exposed to view. Remove temporary labels, stains and foreign substances. Polish transparent and glossy surfaces. Replace chipped or broken glass and other damaged transparent materials.

H. Clean exposed exterior and interior hard surfaces to a dust-free condition, free of stains, films and similar foreign substances. Clean walls and ceilings of dust, dirt, stains, handmarks, paint spots, plaster droppings and similar contaminants.

I. Floor Cleaning:
   1. Exposed Concrete: Thoroughly sweep and wet-mop floors in enclosed spaces. At parking areas and ramps, sweep and hose-off floor surface.
   2. Ceramic Tile Flooring: Thoroughly sweep and mop tile flooring. Comply with specific requirements of the manufacture of the materials for types of cleaning materials.
   3. Resilient Flooring: Thoroughly sweep surfaces. Damp wash and wax, as applicable for the specified material.
   4. Vacuum carpeted and soft surfaces

J. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned. Clean and polish door and cabinet hardware and all metal surfaces.

K. Replace filters of operating equipment.

L. Clean site and construction staging area.

M. Wash down and scrub where necessary all paving soiled as a result of construction activities. Thoroughly remove mortar droppings, paint splatters, stains and adhered soil.

N. Sweep paved areas and rake clean landscaped surfaces. Remove excess soil. Comply with regulations of authorities having jurisdiction and safety standards for cleaning surfaces on public rights-of-way.

O. Burning of materials on the jobsite not permitted. Do not bury debris or excess materials on Owner's property or on any adjacent properties.

P. Remove waste and surplus materials, rubbish and construction facilities from the site. All disposals shall be lawful and without change in cost or time to the Contract.

Q. Where extra materials of value remaining after completion of associated work have become the Owner's property, arrange for disposition of these materials as approved by the Owner.

R. Ventilate all enclosed, habitable spaces. Provide written report to Owner describing any evidence of odorous spaces, areas or materials encountered.

3.04 CLEANING INSPECTION

A. Prior to either partial occupancy or final payment, Contractor and Owner shall jointly conduct an inspection of interior and exterior surfaces to verify that entire Work is acceptably clean.

B. Should final cleaning be inadequate, as determined by the Owner, and Contractor fails to correct conditions, Owner may order additional cleaning operations under separate contract, and costs for such work will be deducted from final payment.

END OF SECTION - 01710

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.1 The provisions of the Standard Specifications for Public Works Construction (SSPWC), latest Edition, apply except as modified herein.

1.2 Related Requirements Specified Elsewhere:

a. Project Meetings: Section 01200.
b. Construction Schedules: Section 01310.
c. Shop Drawings, Project Data, and Samples: Section 01340.
d. Products and Materials: Section 01600.
e. Project Closeout: Section 01700.

PART 2 – MAINTENANCE OF DOCUMENTS

2.1 Maintain at job site, one copy of:

a. Contract Drawings;
b. Specifications;
c. Addenda;
d. Reviewed Shop Drawings;
e. Change Orders;
f. Other Modifications to Contract;
g. Field Test Records;
h. Construction Schedules;
i. "As-Built" Drawings.

2.2 Storage:

a. Maintain documents in clean, dry, legible condition.

2.3 Use and Availability:

a. Not for construction purposes.
b. Available at all times for inspection by Engineer.

PART 3 – RECORDING

3.1 General:

a. Provide red ballpoint pen for all marking.
b. Label each document "PROJECT RECORD" in large, printed letters.
c. Keep record documents current.
d. Do not permanently conceal any work until required information has been recorded.
e. These drawings shall be up-to-date and so certified by the Project Inspector at each progress payment request submittal.

3.2 Marking:

a. Contract Drawings. Legibly mark to record actual construction:

1. Depths of various elements of foundation in relation to finish floor elevation;
2. Horizontal and vertical location of underground utilities and appurtenances referenced

to permanent surface improvements;

3. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure;
4. Field changes of dimension and detail;
5. Changes made by Change Order or Field Order;
6. Details not on original contract drawings.

b. Specifications and Addenda. Legibly mark up each section to record:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed;
2. Changes made by Change Order or Field Order;
3. Other matters not originally specified.

c. Shop Drawings. Maintain as record documents; legibly annotate drawings to record changes made after review.

d. "As-Built" Drawings. Owner will furnish the Contractor with one set of ozalid transparencies and one set of blue line prints showing all work required for the use of the Contractor as "as-built" drawings. The Contractor shall clearly mark on each set as specified above.

PART 4 – SUBMITTAL

4.1 At completion of project, deliver record documents to Engineer. Accompany submittal with transmittal letter, in duplicate, containing:

a. Date;
b. Project title and number;
c. Contractor's name and address;
d. Title and number of each record document;
e. Certification that each document as submitted is complete and accurate;
f. Signature of Contractor or its authorized representative.

NOTE: Prior to final payment, Contractor shall submit all Record Documents for review, correct all deficiencies, obtain required approvals, and deliver all approved Record Documents to the Engineer.

END OF SECTION - 01720

SECTION 01730

OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Compile product date and related information appropriate for Owner's maintenance and operation of products furnished under the Contract.
2. Prepare operating and maintenance data as specified herein and as referenced in other specification sections.
3. Instruct Owner's personnel in the maintenance and operation of equipment and systems.

1.02 FORM OF SUBMITTAL

A. Prepare data in the form of an instructional manual for use by Owner's personnel.
1. Format:
a. Size: 8-1/2 inches by 11-inches.
b. Paper: 20-pound, minimum, white, for typed pages.
c. Text: Manufacturer's printed data, or neatly typewritten.
d. Drawings:
(1) Provide reinforced punched binder tab, bind in with text.
(2) Fold larger drawings to the size of the text pages.
e. Provide fly-leaf for each separate product, or each piece of operating equipment.
(1) Provide typed description of product, and major component parts of equipment.
(2) Provide indexed tabs.
f. Cover: Identify each volume with types or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS." List:
(1) Title of project.
(2) Identity of general subject matter covered in the manual.
2. Binders:
a. Commercial quality three-ring binders with durable and cleanable plastic covers.
b. When multiple binders are used, correlate the data interrelated groupings.

1.03 CONTENT OF MANUAL

A. Table of Contents: Include in each volume, neatly typewritten.
1. Identify Contractor, name of responsible principal, address and phone number.
2. List each product included, indexed to the content of the volume.
3. List, with each product, the name, address and telephone number of:
a. Subcontractor or installer.
b. Maintenance contractor, as appropriate.
c. Identify area of responsibility of each of the previously mentioned parties.
d. Nearest source of supply for parts and replacement.

4. Identify each product by product name and other identifying symbols as set forth in the Contract Documents.

B. Product Data:
1. Include only those sheets which are pertinent to the specific product.
2. Annotate each sheet to:
a. Clearly identify the specific product or part installed.
b. Clearly identify the data applicable to the installation.
c. Delete references to inapplicable information.

C. Drawings:
1. Supplement product data with Drawings as necessary to clearly illustrate:
a. Relations of component parts of equipment and systems.
b. Control and flow diagrams.
2. Coordinate Drawings with information in project record documents to assure correct illustration of completed installation.
3. Do not use project record documents as maintenance drawings.

D. Written text, as required to supplement product data for the particular installation:
1. Organize in a consistent format under separate heading for different procedures.
2. Provide a logical sequence of instructions for each procedure.

E. Copy of each warranty, bond and service contract issued:
1. Provide information sheet for Owner's personnel, giving:
a. Proper procedures in the event of failure.
b. Circumstances which might affect the validity of warranties or bonds.

1.04 MANUAL FOR EQUIPMENT AND SYSTEMS

A. Submit eight copies of complete manual in final form, or quantity approved by Owner.

B. Content for each unit of mechanical equipment and each mechanical system, as applicable and appropriate, including but not limited to the following:
1. Description of units, or system and component parts:
a. Function, normal operating characteristics, and limiting conditions.
b. Performance curves, engineering data and tests.
c. Complete nomenclature and commercial number of replaceable parts.
2. Operating procedures:
a. Start-up, break-in, routine and normal operating instructions.
b. Regulation, control, stopping, shut-down and emergency instructions.
c. Summer and winter operating instructions.
d. Special operating instructions.
3. Maintenance procedures:
a. Routine operations.
b. Guide to "trouble-shooting."
c. Disassembly, repair and reassembly.
d. Alignment, adjusting and checking.
4. Servicing and lubrication schedule, with list of lubricants required.
5. Manufacturer's printed operating and maintenance instructions.

6. Description of sequence of operation by control manufacturer.
7. Original manufacturer's parts list, illustrations, current prices, recommended quantities to be maintained in storage, assembly drawings and diagrams required for maintenance.
   a. Predicted life of parts subject to wear.
   b. Items recommended to be stocked as spare parts.
8. As-installed control diagrams by controls manufacturer.
9. Contractor's and subcontractors' coordination Drawings. As-installed color-coded piping diagrams.
10. Charts of valve tag numbers, with the location and function of each valve.
11. Other data as required in the various specification sections.

C. Content, for each electrical and electronic system, as appropriate:
1. Description of system and component parts.
   a. Function, normal operating characteristics, and limiting conditions.
   b. Performance curves, engineering data and tests.
   c. Complete nomenclature and commercial number of replaceable parts.
2. Circuit directories of panelboards.
   a. Electrical service.
   b. Controls.
   c. Communications.
3. As-installed color-coded wiring diagrams.
4. Operating procedures:
   a. Routine and normal operating instructions.
   b. Sequences required.
   c. Special operating instructions.
5. Maintenance procedures:
   a. Routine operations.
   b. Guide to "trouble-shooting".
   c. Disassembly, repair and reassembly.
   d. Adjustment and checking.
6. Manufacturer's printed operating and maintenance instructions.
7. Original manufacturer's parts list, illustrations, current prices, recommended quantities to be maintained in storage, assembly drawings and diagrams required for maintenance.
   a. Predicted life of parts subject to wear.
   b. Items recommended to be stocked as spare parts.
8. Other data as required in the individual sections.

D. Prepare and include additional data as may be required for the instruction of Owner's personnel.

E. Additional requirements for operating and maintenance data: As may be specified in the individual Sections.

F. Provide complete information for products specified in the individual Sections.

1.05 INSTRUCTION OF OWNER'S PERSONNEL

A. Work requiring instruction of Owner's personnel is specified in the individual Sections.

B. Schedule instructional meeting or meetings after instructional manuals have been submitted, reviewed and approved by Owner.

C. Prior to Date of Final Completion, a fully qualified representative of the manufacturer shall fully instruct Owner's designated operating maintenance personnel in the operation, adjustment and maintenance of all equipment and systems.

D. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

END OF SECTION - 01730

SECTION 01740

WARRANTIES, GUARANTEES AND BONDS

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Preparation and submittal, general administrative and procedural requirements..
2. Time and schedule of submittals.
3. Certifications and other commitments and agreements for continuing services to Final are specified elsewhere in the Contract Documents.

1.02 DEFINITIONS

A. Warranty: Assurance to Owner by the Contractor, installer, supplier, manufacturer or other party responsible as warrantor, for the quantity, quality, performance and other representations of a product, system, service of the Work, in whole or in part, for the duration of the specified period of time.

B. Guarantee: Assurance to Owner by Contractor or product manufacturer or other specified party, as guarantor, that the specified Warranty will be fulfilled by the guarantor in the event of default by the warrantor.

C. Standard Product Warranty: Preprinted, written Warranty published by product manufacturer for particular products and specifically endorsed by the manufacturer to the Owner.

D. Special Project Warranty: Written Warranty required by or incorporated into Contract Documents, to extend time limits provided by standard Warranty or to provide greater rights for Owner.

E. Extended Warranty: Warranty which entails a longer period of time than the one year standard.

F. Correction Period: As defined in the General Provisions, as applicable. Unless otherwise specified, Correction Period shall be synonymous with Warranty Period, Guarantee Period or any similar terms as they appear in the technical Sections of the Specifications.

1.03 WARRANTIES AND GUARANTEES

A. General: Provide all Warranties and Guarantees with Owner named as beneficiary. For equipment and products, or components thereof, bearing a manufacturer's Warranty or Guarantee that extends for a period of time beyond the Contractor's Warranty and Guarantee, as required by the conditions for Extended Warranty, so state in the Warranty or Guarantee.

B. General Warranty and Guarantee Requirements: Warranty shall be an agreement to repair or replace, without cost or undue hardship to the City, work performed under the Contract which is found to be defective during the Correction Period (Warranty or Guarantee) period. Repairs and replacements due to improper maintenance or operation or due to normal wear, usage and weathering are excluded from Warranty requirements unless otherwise specified.

C. Specific Warranty and Guarantee Requirements: Specific requirements are included in product Specifications named in any Section of the technical specifications, including content and limitations.

D. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product Warranties and Guarantees shall not relieve Contractor of responsibility for Warranty and Guarantee requirements for the Work that incorporates such products, nor shall they relieve suppliers, manufacturers and installers required to countersign special Warranties with Contractor.

E. Related Damages and Losses: When correcting warranted Work that has been found defective, remove and replace other Work that has been damaged as a result of such defect or that must be removed and replaced to provide access for correction of warranted Work.

F. Reinstatement of Warranty: When Work covered by a Warranty has been found defective and has been corrected by replacement or rebuilding, reinstate the Warranty by written endorsement. The reinstated Warranty shall be equal to the original Warranty with an equitable adjustment for depreciation.

G. Replacement Cost: Upon determination that Work covered by as Warranty has been found to be defective, replace or reconstruct the Work to a condition acceptable to Owner, complying with applicable requirements of the Contract Documents. Contractor shall be responsible for all costs for replacing or reconstructing defective Work regardless of whether Owner has benefited from use of the Work through a portion of its anticipated useful service life.

H. Owner's Recourse: Written Warranties made to the Owner shall be in addition to implied Warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under law, nor shall Warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights or remedies.

I. Rejection of Warranties: The Owner reserves the right to reject Warranties and to limit selections to products with Warranties not in conflict with requirements of the Contract Documents.

J. Warranties as Condition of Approval: Owner reserves the right to refuse to approve Work for the project where a special Warranty, certification or similar commitment shall be required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.04 FORM OF SUBMITTALS

A. Bind in commercial quality, 8-1/2 by 11 inch three-ring side binders with hardback, cleanable, plastic covers.

B. Label cover of each binder with typed or printed title WARRANTIES AND BONDS, with title of project; name, address and telephone number of Contractor and equipment supplier; and name of responsible principal.

C. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification Section in which specified, and the name of the product or work item.

D. Separate each Warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

E. Refer to product Specifications Sections for specific content requirements and particular requirements for submittal of special Warranties.

F. Prepare standard Warranties and Guarantees, excepting manufacturers' standard printed Warranties and Guarantees, on Contractor's subcontractor's, material supplier's or manufacturer's own letterhead, addressed to Owner.

G. Warranty and Guarantee letters shall be signed by all responsible parties and by Contractor in every case, with modifications only as approved in advance by Owner to suit the conditions pertaining to the Warranty or Guarantee.

H. Manufacturer's Standard Forms: Manufacturer's Warranty or Guarantee forms may be used. Manufacturer's forms shall contain appropriate terms and identification, ready for execution by the required parties.

I. If proposed terms and conditions restrict Guarantee coverage or require actions by Owner beyond those specified, submit draft of Guarantee to Owner for review and acceptance before performance of the Work.

J. Signatures: Signatures shall be by the person authorized to sign Warranties, Guarantees and bonds on behalf of entity providing such Warranty, Guarantee or bond. All signatures shall be notarized.

K. Co-Signature: All installer's Warranties and bonds shall be co-signed by Contractor. Manufacturer's Guarantees will not require co-signature.

1.05 PREPARATION OF SUBMITTALS

A. Obtain Warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item or work. Except for items put into use with Owner's permission, leave date of beginning of time of Warranty until the Date of Final Completion is determined.

B. Verify that documents are in proper form, contain full information, and are notarized.

C. Retain Warranties and bonds until time specified for submittal.

1.06 TIME OF SUBMITTALS

A. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after certification of beneficial occupancy and Final Completion for the item placed into service.

B. Make other submittals within ten days after Date of Final Completion, prior to final Application for Payment.

C. For items of Work when acceptance is delayed beyond Date of Final Completion, submit within ten days after removal of the items from the punch list, listing the date of approval as the beginning of the Warranty period.

1.07 DURATION OF WARRANTIES

A. Unless otherwise specified or prescribed by law, Warranty periods shall be not less than the Correction Period required by the General Conditions, but in no case less than one year from the date established for completion of the Project at Final Completion.

B. Refer to Technical Sections of the Specifications for extended Warranty periods designated beyond the minimum one year duration.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION - 01740